







# **SECHA SAHABHAGITA 2.0**

Reaching the Last Mile





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REACHING THE LAST MILE

### **FOREWORD**



Pani Panchayat Pakhya is observed across the state from 16<sup>th</sup> January to 30<sup>th</sup>" January every year to acknowledge the immense contribution made by the Pani Panchayats and farmers in the water sector.

From a modest 700 Water Users' Associations formed during 1995-2002 to more than 39,000 Pani Panchayats now, water management in our state is getting growingly participatory and inclusive.

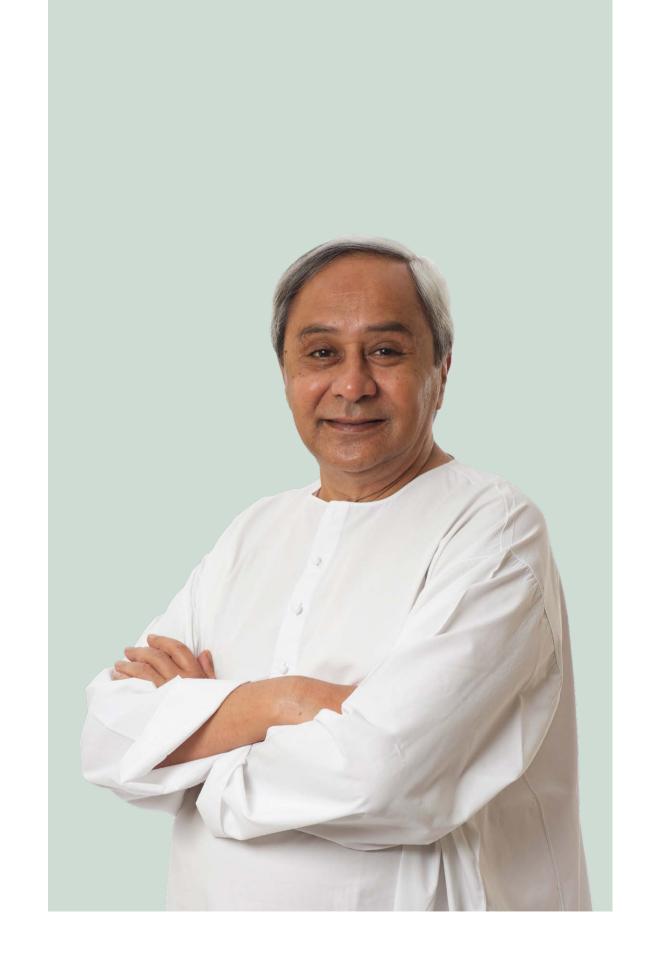
In the meanwhile, the Odisha Pani Panchayat Act. 2002 has been amended to include formation of Pani Panchayats under the Mega Lift Irrigation Projects and inclusion of spouses of land holders to increase representation of women. This has led to empowerment of women that is playing a crucial role in taking participatory water management to the next level.

Pani Panchayats also facilitate promotion of improved crop productivity; adoption of resilient agricultural practices and technologies; diversification of crops and adaptation to climate change; efficient use of water; availing good quality, better yielding and resilient seeds and many more supportive mechanisms.

In the recent times, a slew of big water infra projects have been dedicated to the state. Besides, nearly Rs 600 Crore has also been allocated from the state funds to take up command area development during 2021-22 to 2023-24. This reflects the government's commitment to make water available to the tail end farmers.

I am happy to know that the Department of Water Resources is bringing out a Coffee Table Book that will help all the stakeholders to know the progress being made in the command area sector.

NAVEEN PATNAIK



NAVEEN PATNAIK

CHIEF MINISTER, ODISHA

## **MESSAGE**



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

The annual Pani Panchayat Pakhya is observed across the state during 16<sup>th</sup> January of 30<sup>th</sup> January for demonstrating the power of participation and partnership of more than 39000 Pani Panchayats in the state. I convey my sincere thanks to all the functionaries of the Department responsible for organising various events organised during this fortnight and the Pani Panchayats, farmers and stakeholders for their overwhelming participation.

The recent amendments of the Act have paved the way for participation of greater number of women in water governance and formation of Pani Panchayats under Mega Lift Irrigation Projects.

The Department of Water Resources is focussing on functioning of Pani Panchayats under various Irrigation Projects and ensuring greater participation of farmers in participatory irrigation management. Many new initiatives are being taken up for effective monitoring of activities in the command area development front and in promoting sustainable agriculture.

I am happy to know that, the Department of Water Resources is published this version to showcase the achievements surrounding Pani Panchayats. I also extend my appreciation to the officials involved in bringing out this coffee table book.

(TUKUNI SAHU)

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## **MESSAGE**



**Shri Pradeep Kumar Jena, IAS** Chief Secretary, Government of Odisha

I am glad to know that the Department of Water Resources, Odisha is bringing out a Coffee Table Book on the occasion of the Pani Panchayat Pakhya-2024. I convey my greetings to all the stakeholders associated with the successful conduct of the Pakhya.

Pani Panchayats in the State operate as successful models in decentralised water governance at the grass root level. They are key to providing timely and assured irrigation, focusing on equity, efficiency and inclusion. The Pani Panchayats, 39,000 in number today, are instrumental in the agricultural growth of our State. With so many water infra projects dedicated in the recent past and many more in the offing, this number will grow even higher.

The Odisha Pani Panchayat Act, 2002 has been amended to ensure formation of Pani Panchayats under the Mega Lift Irrigation Projects and inclusion of spouses of land holders to increase representation of women in Pani Panchayats. Operationalisation of the e-CAD application also help track functioning of Pani Panchayats and infrastructures being built by them.

I hope, this edition will highlight the success stories and best practices for the benefit of all the stakeholders.

(PRADEEP KUMAR JENA)

## **MESSAGE**

**Smt. Anu Garg, IAS**Development Commissioner and Additional Chief Secretary
Department of Water Resources
Government of Odisha



The Pani Panchayat Pakhya is being observed across 117 Divisions and 30 districts of the state during the second fortnight of January every year to acknowledge the contributions of Pani Panchayats in water governance, participatory irrigation management and ensuring equity at the grassroot level. On this occasion, the message of the Hon'ble Chief Minister gets circulated; chariots, bearing IEC-SBCC content move across the hinterland; banners/brochures/logo/ slogans/ tagline/ anthem/ oath get circulated; debates, essays, paintings, quizes, exhibitions and competitions get organized and the best Pani Panchayats and farmers get felicitated by the Hon'ble Chief Minister. Pani Panchayats are key to development and maintenance of irrigation infrastructure and optimum utilisation of water by farmers. In the last one year and a half alone, more 25,000 Pani Panchayats have been activated by conduct of elections/ re-elections. The Pani Panchayats have together built 13,016 KMs of field channels covering 13. 25 lakh Ha across verticals and over the years.

The Department focussing on 5T by being transformational in completing projects with scale; ensuring team work by the stakeholders; giving thrust on transparency by reducing human interface in tendering and getting feedback through 'Mo Sarkar' and using technology such as Water ERP, SCADA, UGPL, micro irrigation etc and completing projects on time. Taking this mantra forward, a number of reforms have been initiated in the Command Area Development sector keeping the tail end in

mind. The Odisha Pani Panchayat Act, 2002 has been amended multiple times to broadbase it's members by including fishermen; Mega Lift Irrigation Projects; one third women in the Executive Committees and spouses of land holders. e-CAD application has been introduced to track real time tracking of activities of Pani Panchayats and infrastructure built by them. 'Sinchita', a comprehensive training module has been introduced to impart training in a structured manner. Exposure visits are also organised within and outside the state to learn from best practices.

The reforms in the pipeline include interalia volumetric pricing; reforms in elections; buildings for Pani Panchayats; reorganisation of CAD offices among others. Through projects such as Odisha Integrated Project for Climate Resilient Agriculture, Pani Panchayats are being initiated to promoting climate smart agriculture; using new technologies and implements; sourcing resilient seeds etc. It is for these efforts that, the rise of Pani Panchayats finds mention in prestigious publications such as the 'India Today' and e-CAD felicitated at the national forum. The Pani Panchayats of the state today, many women-led, grow high value crops; diversify crops; practice rotational irrigation; adopt conjunctive use of water for intensive cropping; adopt modern technology, implement, seeds etc for climate smart irrigation.

(ANU GARG)

I wish all the Pani Panchayats all the very best for their relentless pursuits towards participatory irrigation management.





#### **Pani Panchayat Movement in Odisha**

– A Saga in Sustainable Water Use

Efficient maintenance of irrigation infrastructure and optimum utilization of water are possible when farmer's organizations takes the ownership. It is with this belief that Government of Odisha enacted the Odisha Pani Panchayat Act, 2002 for constitution of Pani Panchayats to ensure equitable supply and distribution of water and for improved agricultural production

The Act, 2002 has, in the meanwhile, been amended multiple times to make it more inclusive and to obliterate operational challenges

Pani Panchayats at the primary level consist of all the water users within a specified hydraulic boundary of all categories of Irrigation Projects

The major functions of Pani Panchayats include preparation of suitable cropping programme; planning for maintenance of irrigation system; carrying out the maintenance works of distributary system; managing the Lift Irrigation Points; regulating the use of water among various pipe outlets confirming to the 'warabandi' schedule; promoting efficiency in water allocation; assisting the revenue functionaries in fixing the water rates; resolving disputes; maintenance of records; assisting to conduct elections, formation of forums, etc.

e-CAD, a web and mobile app based application has been introduced for real time monitoring of Pani Panchayats and it's infrastructure, so as to enhance the efficiency. Such efforts have also been well recognized at national level

Through the Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA), Pani Panchayats are provided with handholding support to promote improved crop productivity; adoption of climate resilient agricultural practices and technologies; diversification of crops; judicious use of water; better yielding and resilient seeds, etc.

The Pani Panchayat Pakhya or fortnight is observed across 117 Divisions and 30 Districts and at the State level during 16-30th January,2024 every year to acknowledge the immense contribution being made by the Pani Panchayats and farmers in the water sector

While Government is doing whatever it could to build water infrastructure, cover more area under irrigation command and take legislative measures to strengthen Pani Panchayats, they are motivated to ensure judicious and equitable distribution of water among various water users; promote a culture of conserve- reuse- recycle of water; diversify crops and increase crop intensity; adopt technology for efficient water use; bring in inclusion and equity in water management; assign women leadership role in water governance and resolve differences in water sharing amicably.





#### **Growth Trajectory of Pani Panchayats**

From a modest 700 Water User Associations formed during 1995-2002 covering 3.32 lakh hectares, more than 39,000 Pani Panchayats have now been formed in the state covering 23.15 lakh hectares in the Major, Medium, Minor and Lift Irrigation Projects. Following the enactment of the Odisha Pani Panchayat Act,2002 and subsequent amendments thereto in 2008, 2014 and 2023 respectively the Pani Panchayat has emerged as a change maker in irrigation management. These amendments will ensure formation and higher farmers' bodies in Mega Lift Irrigation Projects, covering commanded area of 500 to 2000 Ha and greater representation of women in various bodies/ committees and hence greater in water governance besides other aspects.









#### Pani Panchayats as Water Governors at the Cutting-Edge

Odisha is one of the first among Indian states to provide legislative support to Pani Panchayats. Government of India adopted the National Water Policy in 1987. Based on the policy, the government of Odisha adopted a similar policy of Participatory Irrigation Management in its State Water Policy of 1994, which emphasizes irrigation management to farmers. From being a mere provider of water the state has moved into a paradigm of sustainable water resources management with a focus on people's participation. The Pani Panchayats were registered as legal bodies to provide the required legitimacy and identity. The Pani Panchayat Act is the facilitating tool for farmer participation in the management of irrigation system to improve agricultural production.





Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA) intends to benefit farmers by providing them with reliable irrigation infrastructure, thereby supporting their livelihoods and promoting sustainable agricultural practices. The objective is to improve crop productivity through adoption of resilient agricultural practices and technology with efficient use of water. Institutional strengthening of Pani Panchayts, development of tank reaches, promotion of livelihood activities, maintenance of community based Irrigation infrastructures, etc are some of the features of the project. Physical and IT infrastructure and logistic support are being provided for to ensure efficient operationalisation of the Pani Panchayats. OIIPCRA has roped in some of the leading national and international organizations like CGIAR and ICAR, for capacity building of various stakeholders of Pani Panchayats.

Pursuing Climate Resilient Agriculture

Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA) is tank-based project assisted by World Bank. The project aims at demonstrating climate smart agriculture in irrigation command of about 56,400 Ha of command area under 538 minor irrigation projects and about 70,000 Ha of rain-fed area for augmenting the capacity of production and income of the farmers in the project area.





# Consultative Group on International Agricultural Research (CGIAR)

Climate smart rice based systems play a crucial role in enhancing climate resilient agriculture. The system brings prosperity and resilience in Odisha (Climate PRO), is being implemented as a collaborative effort of the International Rice Research Institute (IRRI) and the Government of Odisha. Under this project the OIIPCRA along with CGIAR have been working together with Pani Panchayats to promote the diversification of rice-based systems as a way of enhancing climate resilience. Freedom of deciding their own cropping pattern and timely operation and maintenance through the project has ensured better farming systems for the farmers of our Pani Panchayats.



Multi-location Evaluation, Minikit Testing and Release

Multi-location evaluation, mini-kit testing and release of ICCV 14102 and ICCV 14106 in Odisha state for commercial cultivation



Positioning Green Pod Chickpea

Development of green pod value chains by deployment of NBeG 47, ICCV 14102 and ICCV 14106 in Odisha State



Promoting Women's Livelihoods

Capacity building of women SHG members; livelihood support through greenpod chickpea cultivation in target districts



Enhancing Green Pod Chickpea Value Chains

Developing marketlinkages for green pod chickpeas in other districts. Developing market linkages within and outside Odisha



Strengthening Seed Systems for Green Pod Chickpea

Supply of Certified Seeds through a formal seed system of Breeder Seed production, and SHGs led seed production to meetthe local demand



# International Crops Research Institute For the Semi-Arid Tropics (ICRISAT)

Bringing the economic and nutritional benefits of green pod chickpea for enhancing livelihood and resilience through cropping systems intensification in Pani Panchayats

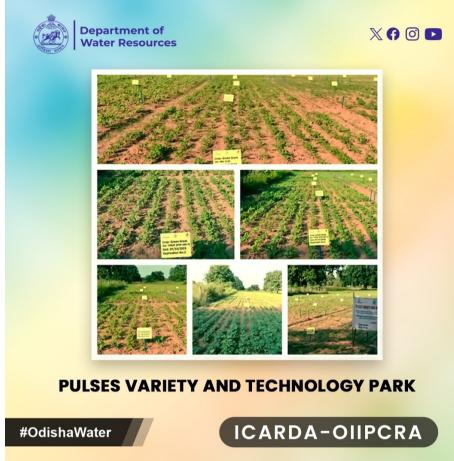
Two chickpea lines selected such as ICCV 14106 and ICCV 14102, for Odisha climatic condition and can be a better option for rice fallow management with residual moisture. Focus on identification, release and demonstration of sustainable and climate resilient varieties of chickpea to adapt in local conditions.











# International Centre for Agricultural Research in the Dry Areas (ICARDA)

ICARDA in collaboration with OIIPCRA in Keonjhar, Bargarh and Kalahandi district focuses on crop intensification, planning and execution in tank command areas through introduction of suitable climate smart pulse crop verities, technologies and management practices and market functions. Formation and strengthening of Farmer Producer Groups (FPGs)/ Farmers Producer Organizations (FPOs) and market linkages is the key to project implementation.

122 FPGs and 2 Farmer Producer Companies (FPCs) formed, 98 FPGs have marketed 38.65 quintals of pulse crops amounting to Rs 2.53 lakh and additional income of Rs 1.52 lakh from the base prices (2022- 23)

326.59 Ha crop area covered in Kharif and 1524 Ha planned under (blackgram, greengram, chickpea, grasspea, lentil and fieldpea).













### Scientific Fish Farming Through WorldFish

In order to focus on the capacity building for project beneficiaries and stakeholders and to bolster their exposure to the best practices in aquaculture, WorldFish has been roped in to intensify aquaculture production, enhance climate resilience and elevate water productivity in targeted areas. The endeavor is to secure improved livelihoods for small farmers, cooperatives and vulnerable groups in the state.









Water testing kit to monitor water quality parameters for adaptive measures to increase fish production in this climate changing scenario

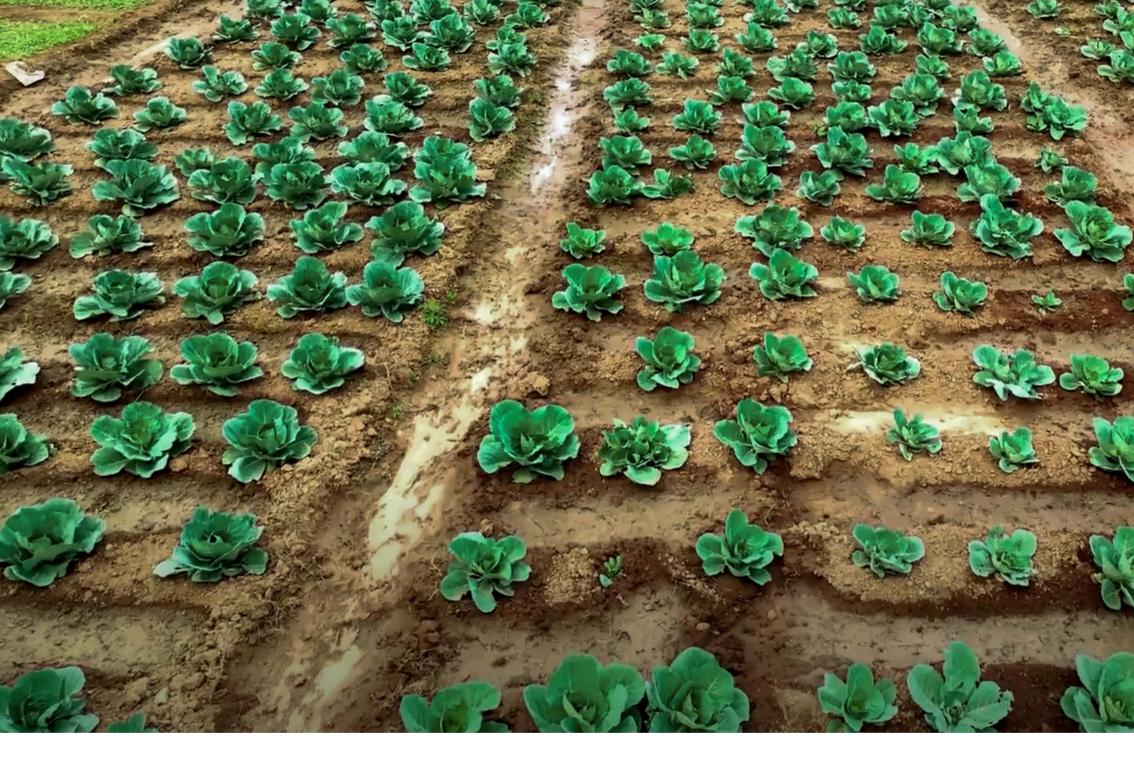


#### International Rice Research Institute(IRRI)

A collaboration has been established with IRRI for the implementation of ClimatePRO, a programme for promoting diversification of rice-based systems as a way of enhancing climate and livelihoods resilience amongst the smallholder farmers in Ganjam, Mayurbhanj and Bolangir districts in Odisha. The pathway carved for the purpose include implementing sustainable intensification and improved climate resilience amongst incubated women FPC, training on rice seed production and processing, FPO management, Women Entrepreneurship Programme etc. IRRI is also evaluating the existing moisture/ temperature regime in tank command areas of MIPs to help farmers decide what crop and varieties to grow under rainfed conditions and with protective irrigation.

Two improved stress tolerant rice varieties have been released by National Rice Research Institute in association with IRRI. The varieties are CR dhan 211 and 212 for a better option for rice fallow management with residual moisture.





## Intensified and Diversified Cropping in the Tank Command /Influence Areas

Pani panchayats have successfully implemented crop diversification strategies in order to cultivate oil seeds and high value crops. By expanding their agricultural practices beyond traditional crops, such as rice and wheat, farmers of Pani Panchayats have been able to improve their livelihoods and generate higher incomes. Additionally, the cultivation of oil seeds has helped to reduce the dependency on a single crop, minimizing the risks associated with mono-cropping. Pani Panchayats have played a crucial role in providing guidance, training, and support to farmers, enabling them to adopt these new cultivation techniques successfully.





Heat Tolerant Sesame



Pre Rabi Crop Rapeseed



High Yielding Ground Nut











Demonstrating sunflower, groundnut, sweetcorn, pulses in rice fallows with existing moisture / temperature regime in the tank command areas of MIPs





#### Indian Council of Agricultural Research (ICAR)-Central institute for women in agriculture (CIWA)

## Women-Friendly Climate Smart Agriculture Technologies

In collaboration with the ICAR-CIWA, the project has designed agricultural innovations and practices to cater to specific needs and ameliorate constraints for a more inclusive and sustainable farming system. The women farmers have been initiated to battery operated sprayers to lessen their drudgery.











#### National Rice Research Institute(NRRI)

OIIPCRA in collaboration with NRRI is involved introducing Rice field cultivation, Village Knowledge Centre, F2F seed programme, demonstration of climate resilient improved cultivars of paddy and oilseeds. Climate resilient technologies like Alternate Wetting and Drying, mechanised dry Direct Seeded Rice, Integrated Pest Management, Integrated Nutrient Management, Integrated Farming System etc are also the collaborative practices by both the organizations. Senior scientists from NRRI, IRRI, Krishi Vigyan Kendra, etc are made accessible to the farmers utilizing the digital technologies. Rice Fish culture have also been promoted.

The state has been focusing relentlessly on scaling heights in the water utility front through a host of pathbreaking initiatives in effecting legislation; embracing multi-sectorality; ensuring equity; fostering inclusion; leveraging technology; galvanizing livelihood and income augmentation; honing human resources etc. In order to achieve these Command Area Development and Participatory Irrigation Management (CAD and PIM) Directorate under the Department of Water Resources, Odisha has been set up to synergize the activities of CAD and PIM and formulation of strategy and programmes for PIM, Pani Panchayats and CAD.

Aspirational Water Users







# Fruits and Vegetables

Odisha is favorable for different long and short duration fruits depending on different agro-climatic conditions. Intensified effort taken up by OIIPCRA for increased availability of suitable varieties of fruits such as banana, strawberry and vegetables such as brinjal, tomato, chili, cabbage, cauliflower, capsicum and beans.









Green manure crops such as Dhanicha is grown for building and maintaining soil fertility and helping arrest of soil erosion









Banana plantation with effective use of water through deep bore wells by Sunari Sikuan, Nuapada















Successful diversification of crop planting a mix of vegetables such as tomato, chilli, capsicum etc





Krishak Kalyan, Bhawanipatna and Safal Chasi, Junagarh, the FPCs of Kalahandi helping smallholder farmers in getting the produced banana get access to markets and greater price realisation.



# **Linkage with Market**

Exclusive vendor codes have been opened for the FPOs for sustained and profitable trading of vegetables by the farmers to bigbasket. Corporate linkage of M/s Smart Tech FPC has been established with bigbasket leading to reduction of the gap between the producing farmers and customers.



#### **Sustainable Agricultural Practices-Direct Seeded Rice**

DSR is seen to be one of the most efficient, sustainable, and economically-viable rice production systems used today. Compared to the conventional puddled transplanted rice, DSR delivers faster planting and maturing, conserves scarce resources like water and labor, is more conducive to mechanization, and reduces emissions of greenhouse gases that contribute to climate change. It is less labor intensive and free from drudgery, hence more attractive to youth and women farmers.



Climate resilient rice varieties appropriate for direct seeding and transplanting with market demand have been developed and promoted. Risk-reducing agronomic practices such as DSR has been identified, integrated with suitable varieties, weed, and nutrient management leading to competitive yield.









### **Custom Hiring Centres**

Provides access to small and marginal farmers to take up farm operation on time in the adverse climatic conditions. Under OIIPCRA, assistance is provided up to 50% the cost of machinery such as pump sets, tractor mounted sprayers, seed drills, zero till seed drills to varying degrees. They are basically a unit comprising a set of farm machinery, implements and equipment meant for custom hiring by farmers. 113 custom hiring centers established. Different farm machineries have been made available on hire to the farmers at nominal charges.

Field channels are vital man-made waterways constructed within agricultural fields to distribute irrigation water efficiently and minimizing water wastage. Field channels can be made of earthen or concrete. The Centrally Sponsored Command Area Development Programme (CADP) was introduced in December, 1974 to improve the irrigation potential utilization and optimize the agricultural production and productivity through integrated and coordinated approach of efficient water management.

The On-Farm Development (OFD) component of CADP work includes development of field channels and field drains within the command of each outlet. Operation and maintenance—This refers to the activities involved in keeping water management systems, like field channels, pumps, and wells, functioning properly. It includes regular inspections, cleaning, repairs, and replacements as needed to ensure optimal performance. Training farmers in best practices for equipment use and maintenance fosters sustainability and prolongs the lifespan of agricultural infrastructure. Furthermore, implementing community-based management strategies can enhance collective responsibility and ensure the longevity of shared resources.

The Micro Water Infra Builders

### **Micro Irrigation**

Drip and sprinkler Irrigation is one of the most efficient systems to deliver water and other nutrients to growing crops, produce higher yields while saving water, electricity, fertilizers. It minimizes wastage of water by supplying the amount of water required by the plant directly to its roots. It represents a paradigm shift in water management by delivering water directly to the root zone of crops and reducing the risk of diseases associated with traditional flood irrigation. The precision of micro irrigation also enables farmers to optimize fertilizer application, leading to improved crop yields. Despite the initial investment, the long-term benefits of water conservation and increased productivity make micro irrigation systems a sustainable choice for modern agriculture. Per Drop More Crop component of PMKSY aims to enhance water use efficiency and extend irrigation coverage by promoting micro irrigation like drip and sprinkler.







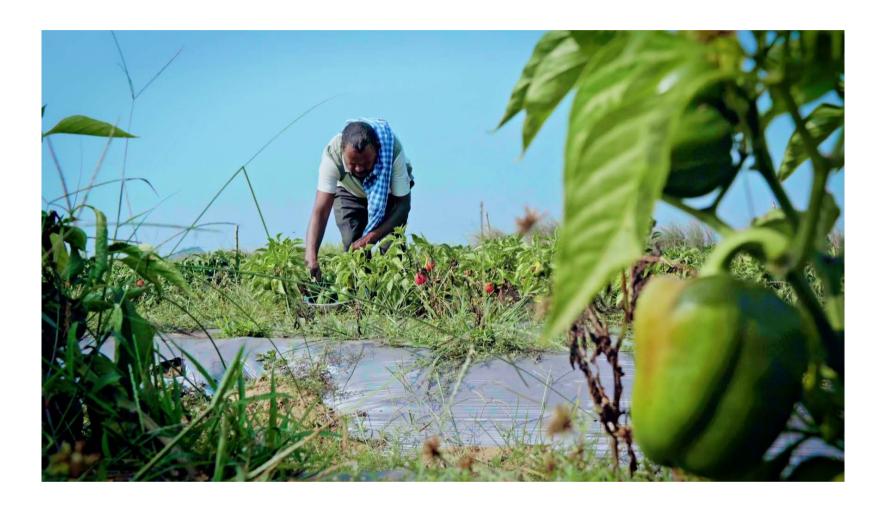




# **Ground Water Recharge Wells**

Pani Panchayats focus on community-based groundwater management using boreholes to artificially recharge groundwater aquifers. Water is diverted from surface sources or rainwater harvesting systems and directed into the well to replenish depleted groundwater reserves.





Enhanced paddy to non-paddy cultivation like vegatables and pulses covering 2000 Ha in 26 villages under Megalift Irrigation, Routrapur, Jajpur





Sustainable harnessing of ground water resources through installation of Deep Borewells in water deficit areas



## **National Adoption Fund for Climate Change (NAFCC)**

Conserve water through the management of run-off in the river basin to reduce vulnerability and enhance resilience for traditional livelihood in Nuapada

The project aims to prosper 'Climate Resilience Livelihoods' through promotion of plantation, water conservation, crop diversification, pisiculture, animal husbandry, solar induced drip irrigation, capacity building through community based institutions Palli Vikas and SG Foundation.





Nursery/sappling in polyhouse under controlled environmental condition and solar induced irrigation system. The system is found cost effective, water saving and reduction in the use of fertilizers

Hybrid cows have been provided to the farmers of Nuapada for commercial dairying. They have now become self reliant by selling milk at the nearby market at Khariar.







#### **Green Climate Fund (GCF)**

Green Climate Fund (GCF) has been introduced to ensure "Ground water recharge and solar micro irrigation to ensure food security and enhance resilience in vulnerable tribal areas of Odisha". It promotes low-emission and climate resilient development. The major focus is to enhance groundwater recharge in the community ponds through structural adaptation measures and use of solar pumps for micro irrigation to ensure water security and food security. 10,000 tanks in 15 districts are covered under this.

Training reinforce the existing skill, level of awareness and provides motivation to Pani Panchayats become more productive. Exposure visits enable farmers from different regions to interact with and learn from each other, allowing them to view practical examples of successful integration of sustainable practices in farming communities like their own.

**Building Capacity** 





Training of officials on climate resilient agriculture and District level Training program on Direct Seeded Rice(DSR)

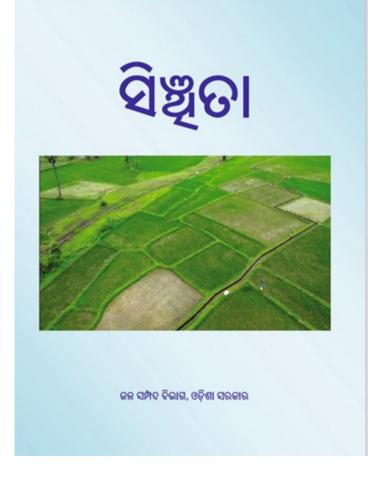


### **Hands-on Training on SAMANWAYA Application**

"Samanwaya" is an extended irrigation management practices dashboard system for ensuring assured irrigation. It is an interactive query-based system for officials and a mobile application for users. It involves and produces spatial data sets, geotagging, integrating data from various scales, organizing data structures, and establishing GIS database for MIPS.







Training of Pani Panchayat
Office Bearers on PP Act and
Rules at WALMI, the nodal
training centre

Training Module "Sinchita" is developed for training of various stakeholders



Demonstration on mechanized Direct Seeded Rice



Awareness on Agrientrepreneurship and identifying opportunities for sustainability

# Pani Panchayats in Farmers Producer Groups

The aim is to enhance farmers' competitiveness and increase their advantage in emerging market opportunities. It provides support to small farmers with end-to-end services covering almost all aspects of cultivation from inputs, technical services to processing and marketing.

Training on Farmers Producer Organization management and governance system to enhance the ability for emerging market opportunities.













Exposure visit to Central Institute of Agricultural Engineering, Bhopal on advance on-Farm Water Management



Value added products from high qualitynutritious rice varieties and facility built to breed varieties with the speed of climate change, exposure visit to IRRI, ISARC Varanasi











An integrated team consisting of Functionaries from WR, A&FE and F&ARD visiting WBADMIP, West Bengal



Climate resilient paddy being demonstrated in the Rice Varietal Cafeteria at Loisingha, Bolangir. It is an effective method for selection of new varieties suitable for growing on farmland.











Field visit of World Bank team to Mayurbhanj, Ganjam and Keonjahr under OIIPCRA

Legal status has been provided to Pani Panchayts by enacting the Odisha Pani Panchayat Act, 2002 and Rules, 2003 with subsequent amendments in 2008, 2014 and 2023. Some of the important salient features of the amendments are Inclusion of Mega Lift Irrigation Projects and enabling formation of Pani Panchayats and higher farmer's bodies, inclusion of spouses of the water users to increase women participation and greater representation in various bodies / committees , making the tenure of Chak Committee and Executive Committee of the Pani Panchayats five years.

**Equity and Inclusion** 

### **Women Led Pani Panchayats**

The State in its Sustainable Development Goals (SDG) vide 5.5.3\_OD has provided for presence of more women members and office bearers in Pani Panchayats through a slew of legislations in the Odisha Pani Panchayat Act, 2002 and Rules, 2003 and subsequent amendments thereto in 2008, 2014 and 2023. Accordingly, now a large number of Pani Panchayats are spearheaded by women and are also represented in almost all committees and sub-committees.





### **Women in Water Governance**

By actively involving women in decision-making processes and providing them with adequate training and resources, their full potential could be harnessed and a more inclusive and sustainable future be created.



Harvests following crop diversification and efficient water use.



With the recent amendment, women are being included in the participatory process resulting in a greater say in water governance, ensuring inclusion and equity





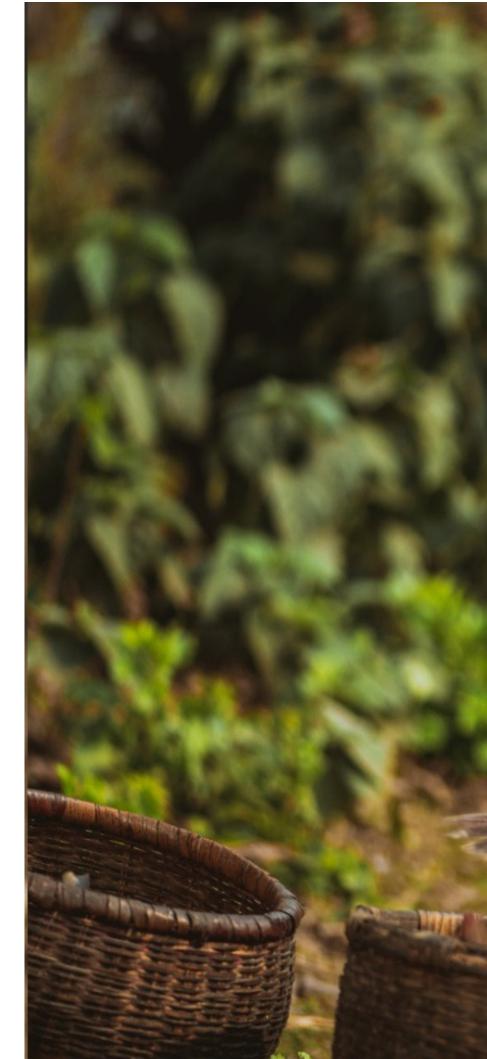
Giving women in agriculture greater autonomy has enhanced the adoption of sustainable agricultural techniques

Significant contributions of women in crop diversification and adopting sustainable agricultural practices





Empowering women in scientific fish farming bring a range of benefits and promote greater equity









The Pani Panchayat Pakhya is being observed across 117 Divisions and 30 districts of the state during the second fortnight of January every year to acknowledge the contributions of Pani Panchayats in water governance, participatory irrigation management and ensuring equity at the grassroot level.

On this occasion, the message of the Hon'ble Chief Minister gets circulated; chariots, bearing IEC-SBCC content move across the hinterland; banners/brochures/logo/slogans/ tagline/ anthem/ oath get circulated; debates, essays, paintings, quizes, exhibitions and competitions get organized and the best Pani Panchayats and farmers get felicitated by the by the Hon'ble Chief Minister.

Celebrating the Pani Panchayat Pakhya













Flagging off Pani Panchayat Chariots to create mass awareness among the stakeholders













Felicitation of winners by the Hon'ble Chief Minister

Capturing the theme of the exhibition 'An innovative technique for improving water use efficiency'.









Under OIIPCRA women SHGs are provided with three/four wheelers to minimize or eliminate market access constraints and enhance their ability to supply quality fish to the market on time.

Extensive information dissemination has not only facilitated change of behaviour among the members of Pani Panchayats, but it has also helped in motivating the farming community as a whole in maximizing the participation. A strategic SBCC plan has been also developed which aims to create massive awareness and disseminate information on the schemes, activities and benefits provided by the Government. For effective implementation of IEC/SBCC, Chariots bearing content such as the message of the Hon'ble Chief Minister, banners, brochures, logo, slogan, tagline, anthem, oath etc get flagged off by Hon'ble Ministers/ MPs/ MLAs in presence of the local PRI representatives and eminent persons and the community; various competitions such as debate, essay, painting, quiz, exhibitions get held amongst school children; exhibitions and community functions get organized. The event gets culminated at the state level function graced by the Hon'ble Chief Minister where the best Pani Panchayats, farmers, winners of competitions, officers etc get felicitated.

Social and Behaviour Change Communication

### **Observation of Jal Mahosthav**

The Youth4Water Campaign was organized in association with Centurion University to commemorate World Water Day. This campaign aimed to cultivate awareness among young people about the importance of water conservation and sustainable water management. The campaign also emphasized in empowering the youth to drive positive change in water conservation practices. The Campaign served as a catalyst for inspiring young individuals to take action and make a difference in securing a sustainable future for water resources. On the occasion pledge was taken to conserve the water resources and it's sustainable use.









### Youth4Water

This innovative campaign provides a conducive platform for youths to become thoughtful and innovators for water management. Department of Water Resources and UNICEF jointly conducted a brainstorming session with youths from Youth4Water for their participation in water management. The session was titled "Meet and Greet: Connect + Network + Collaborate: Ideation and achievement sharing session with 30 youths of Odisha on Pani, Swachta and Climate Change.

11 youths were awarded for their innovative ideas. The logo and mascot 'Jolly', which has been inspired by the concept of 'Jal se Jolly', typifies a young Odia girl on a mission to promote the cause of water, sanitation and climate change.









# ଓଡ଼ିଶା ପାଣିପଞ୍ଚାୟତ (ସଂଶୋଧନ) ଅଧନିୟମ ୨୦୨୩ ର ପୁମୁଖ ସଂଶୋଧନମାନ

### ମେଗାଲିଫ୍ ପ୍ରକଳ୍ପର ଅନ୍ତର୍ଭୂକ୍ତକରଣ:

- ଗୋଟିଏ କିୟା ଗୋଟିଏଉ ଅଧିକ ନିର୍ଗମ ପଥ ବାରା ଜଳସେଟିଡ କ୍ଷେତକ ନେଇ ଚକ ଗଠନ କରାଯ ଇପାରିବ ।
- ବ୍ୟତ ଜଠାଇଳସେଟନ (Megalift) ପ୍ରକଳ୍ପର ଅଡଭୁଁକ୍ତକରଣ ସହ ଏହାକୁ ପାର୍ଣ ପଞ୍ଚାୟତ ଓ ଜଳତର କୃଷକ ସଂଗଠନ ଗଠନ ନିମନ୍ତେ ସକ୍ଷମ କରାଯାଇଛି ।

#### ମହିଳା ସଦସ୍ୟ ବଦ୍ଧି:

- ଓଡ଼ିଶା ସର୍କେଷ୍ଠଣ ଓ କନ୍ଦୋବୟ ଅଧୁନିୟମ, ୧୯୫୮ କିଲା ରାଜ୍ୟରେ କଳକ୍ତର ଅନ୍ୟ କୌଣସି ଅଧୁନିୟମ ଅନୁଯାୟୀ ଖଡିଆନରେ ଭୂମିର ମାଲିକ ବା ପ୍ରଜା ବା ଉଭୟରୂପେ ଅଭିଲିଖିତ ହୋଇଥିବା ସେପରି ଭୂମିର ମାଲିକ ବା ପଳା ବା ଉଭୟ ଭ୍-ଧାରକ ହୋଇପାରିବେ ।
- ପାଣି ପଞ୍ଚାୟତ କ୍ଷେତ୍ର ମଧ୍ୟରେ ଥିବା ଜଳ ବ୍ୟବହାରକାରୀ ଭୂ-ଧାରକ ମାନଙ୍କର ସାଂସ୍ୱାମୀ ମାନଙ୍କ ଅନ୍ତର୍ଭୁଦ୍ରକରଣ ସହ ମହିଳାମାନଙ୍କ ସହରାଗୀତା ବୃଦ୍ଧି କରିବା ଏବଂ ବିଭିନ୍ନ ନିଜାୟ / କମିଟି ମାନଙ୍କରେ ପ୍ରତିକିଧିତ୍ର ବୃଦ୍ଧି କରିବାରେ ସହାୟକ ହେବ ।
- ଯଦି ଜଣେ ସଦସ୍ୟ ଗୋଟିଏ ଚଳରେ ଅବା ତାଙ୍କର ସକ ଜମିକ ବିକି ବଲିଲ ମାଧ୍ୟମରେ ବିକି କରନ୍ତି ସେ ଆଉ ର-ଧାରକ ସଦସ୍ୟ ହୋଇ ରହିବେ ନାହିଁ । ଏବଂ ଯଦି ସମ୍ପଦ୍ଧ ଚକ କିମ୍ଲା ପାଣି ପଞ୍ଚାଣତରେ କୌଣସି ପଦ ପଦବୀରେ ଥାବି ତେବେ ବଲିଲ ସମ୍ପାଦନ କରିବା ତାରିଖ ଠାରୁ ସେହି ପଦବୀର ଇଞ୍ଚଫା ଦେବେ ।

#### ଓଡ଼ିଶା ଇଞ୍ଜିନିୟରିଂ ସେବାର ପନର୍ଗଠନ:

ଓଡ଼ିଶା ଇଞ୍ଜିନିୟରିଂ ସେବାର ପୁନର୍ଗଠନ ପରେ ଜପସ୍ତୁଲ ୟରରେ ବିଭାଗୀୟ ଅଧିକାରୀମାନଙ୍କୁ ଦାର୍ଯିତ୍ୱ ସମ୍ପତ୍ର କରିକାରେ ସହାୟକ ହୋଇଛି । ଫଳତଃ, ମୁଖ୍ୟ ନିର୍ମାଣ ଯହା । ଅତିରିକ୍ତ ମୁଖ୍ୟ ଯହା ପାଣି ପଞ୍ଚାୟତ କ୍ଷେତ୍ର ପୋଷଣା ଏବଂ ନହାଙ୍କନ କରିପାରିକେ । ଅଧ୍ୟଣ ଯହା / ନିର୍ଦ୍ଦାହୀ ଯହା ପାଣି ପଞ୍ଚାୟତ ନିର୍ଦ୍ଦାତନ ଅଧକାରୀ ହେବେ ।

### ପାଣି ପଞ୍ଚାୟତ କାର୍ଯ୍ୟକାଳ:

- ୩ ବର୍ଷ ଓ ୬ ବର୍ଷର ସଦେହ ଦୂର କରି ସମୟଙ୍କୁ ସମାନ କରିବା ପୂର୍ବକ ବଳ କମିଟି ଓ ପାଣି ପଞ୍ଚାୟତର କାର୍ଯ୍ୟକାନକ୍ ୫ ବର୍ଷ କରାଯାଉଛି ।
- ଓଡ଼ିଶା ପାଣି ପଞ୍ଚାୟତ (ସଂଶୋଧନ) ଅଧୁନିୟମ, ୨୦୨୩ ର ଅବ୍ୟବହିତ ପୂର୍ବରୁ ଉପ-ଧାରା ୪(୧) କିଥା ଉପ–ଧାରା ୪(୬) ଅଧୀନରେ କୌଣସି ପାଣି ପଞ୍ଚାୟତର ନିର୍ବାଚିତ ହୋଇଥିବା ଚକ କମିଟି କିଥା ନିର୍ବାହୀ କମିଟିର ସଦସ୍ୟାମାନେ ସେମାନଙ୍କ ୬ ବର୍ଷର କାର୍ଯ୍ୟକାଳ ପ୍ରଶଣ ପର୍ଯ୍ୟନ୍ତ କାର୍ଯ୍ୟ ସମ୍ପାଦନ କରି ବାରିବେ ।
- କ୍ଷକ ସଂଗଠନର ଯେଉଁ ସଦସ୍ୟମାନେ ଭୋଟବେବାକୁ ହକଦାର ଅଟଡି ସେମାନଙ୍କ ମୋଟ ସଂଖ୍ୟାର ଅନ୍ୟୁନ ଏକ ଡଡ଼ୀୟାଂଶ ସଦସ୍ୟମାନଙ୍କ ହାରା ସ୍ନାକ୍ଷରିତ ରିଖ୍ଞତ ନୋଟିସ ବିହିତ ରୀତିରେ ଦିଆଯାଇ କୌଣସି କଷ୍ପକ ସଂଗଠନର ସଭାପତି, ସମ୍ପଦନ ଓ କୋଷାଧ୍ୟକ୍ଷଙ୍କ ପ୍ରତ୍ୟାହାର ପାଇଁ ସାଧାରଣ ନିକାୟର ଏକ ସୂହତ କୈଠନ ଡକାଯିବାଲାଟି ପଞ୍ଜାବ ଆଗଡ କରାଯାଇ ପାରିବ ।

ଜଳ ସମ୍ପଦ ବିଭାଗ, ଓଡ଼ିଶା







## ପାଣି ପଞ୍ଚାୟତ ପକ୍ଷ ୨୦୨୪ ଅବସରରେ ମାନ୍ୟବର ମୁଖ୍ୟମନ୍ତୀ ଶ୍ରୀ ନବୀନ ପଟ୍ଟନାୟକଙ୍କ ବାର୍ତ୍ତା

ପାଣି ପଞ୍ଚାୟତ ପକ୍ଷ ୨୦୨୪ ଅବସରରେ ମୁଁ ପାଣି ପଞ୍ଚାୟତର ସମୟ ସବସ୍ୟ ଓ ରାଜ୍ୟର କୃଷକ ଭାଇ ଓ ଉଉଣୀମାନଙ୍କୁ ମୋର ଶୁଭେଚ୍ଛା

ଆପଣମାନଙ୍କ ସହଯୋଗ ଓ ସକ୍ତିୟ ଅଂଶଗହଣରେ ଏହି କାର୍ଯ୍ୟକମ ୨୦୨୪ ଜାନୁଆରୀ ୧୬ ର ୩୦ ତାରିଖ ପର୍ଯ୍ୟନ୍ତ ସାରା ରାଜ୍ୟରେ ପାଳିତ ହେଉଛି । ଜଳ ପରିଚାଳନା କ୍ଷେତ୍ରରେ ଆପଣମାନଙ୍କ ଗୁରୁତ୍ୱପୂର୍ବ ଅବଦାନକୁ ସମ୍ମାନ ଓ ସ୍ୱୀକୃତି ଜଣାଇବା ପାଇଁ ଏହା ଏକ ସ୍ତନ୍ଦର

ଆପଣମାନେ ଜାଣ୍ଡି ୧୯୯୫ ର ୨୦୦୨ ମଧ୍ୟରେ ରାଜ୍ୟରେ ମାତ୍ ୭୦୦ ଜଳ ବ୍ୟବହାରକାରୀ ସଂଘ ଥବା ବେଳେ ଆଜି ୩୯,୨୮୯ର ଅଧିକ ପାଣି ପଞ୍ଚାୟତ ଗଠନ ହୋଇପାରିଛି । ଏଥର ପମାଣିତ ସେ ଜଳ ପରିଚାଳନା ଏବେ ଅଧିକ ସହଭାଗିତା ଭିଭିକ ହୋଇପାରିଛି ।

ଡେିଶା ପାଣି ପଞ୍ଚାୟତ ଆଇନ ୨୦୦୨କୁ ଏହା ମଧ୍ୟରେ ସଂଶୋଧିତ କରାଯାଇ ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ଯେପରି ଅଧିକ କନ ବ୍ୟବହାରକାରୀ ସାମିଲ ହୋଇ ପାରିବେ ସେଥିପାଇଁ ସୁଯୋଗ ସୃଷ୍ଟି କରାଯାଇଛି । ବୃହତ ଉଠାଜନସେଚନ ପ୍ରକଳ୍ପରେ ପାଣି ପଞ୍ଚାୟତ ଗଠନର ବ୍ୟବସ୍ଥା ମଧ୍ୟ କରାଯାଇଛି । ଏହା ସହିତ ପାଣି ପଞ୍ଚାୟତରେ ମହିଳାମାନଙ୍କ ଅଂଶଗହଣ ବର୍ଦ୍ଧ ପାଇଁ ଚାଷୀମାନଙ୍କ ପରିବାରର ମହିଳା ସଦସ୍ୟାମାନଙ୍କ ମଧ୍ୟ ଏଥିରେ ସାମିଲ କରାଯାଇଛି ।

e-CAD ନାମକ ଏକ ମୋବାଇଲ ଭିରିକ ଆସ୍ଥିକେସନର ବ୍ୟବହାର କରି ପାଣି ପଞ୍ଚାୟତ ଓ ବିଭିନ୍ନ ଭିଭିଭ୍ରମି କାର୍ଯ୍ୟକ୍ରମକୁ ପ୍ରକୃତ ସମୟରେ ତଦାରଖ କରାଯାଇ ପାରୁଛି । ଏହା ଦ୍ୱାରା ପାଣି ପଞ୍ଚାୟତର ପରିଚାଳନା ସହଜ ହୋଇପାରିଛି ।

ସମ୍ପ୍ରତି ରାଜ୍ୟବାସୀଙ୍କ ପାଇଁ ଉତ୍ସର୍ଗ ହୋଇଥିବା କଳାହାଷି ଜିଲ୍ଲାର ଅପର ଇନ୍ଦ୍ରାବତୀ ବାମପାର୍ଶ୍ୱ କେନାଲ, ନୂଆପଡା ଏବଂ ବରାଙ୍ଗିର ଜିଲ୍ଲାର ଲୋୟର ଇହ ପଳନ୍ଧ, ମୟରଭଞ୍ଜ ଜିଲ୍ଲାର ଦେଓ ଜଳସେଚନ ପଳନ୍ଧ, କୋରାପଟ ଜିଲ୍ଲାର ତେଲେଙ୍ଗିରି ଜଳସେଚନ ପଳନ୍ଧ, ହଳଦିଆ ସମେତ ମୟରଭଞ୍ଜ ଏବଂ ବାଲେଶ୍ୱର ଜିଲ୍ଲାର ସୁବର୍ଷରେଖା ଜଳସେଚନ ପ୍ରକଳ୍ପ, ସୁନ୍ଦରଗଡ ଜିଲ୍ଲାର ରୁକୁରା ଜଳସେଚନ ପ୍ରକଳ୍ପ ଏବଂ କଳାହାଣ୍ଡି ଜିଲ୍ଲାର ରେତ୍ ଜଳସେତନ ପ୍ରକଳ୍ପ ପରି ବୃହତ ଜଳସେତନ ଭିଭିଭୂମି ପ୍ରକଳଗୁଡିକ ହାରା ସମ୍ପୃକ୍ତ ଅଞ୍ଚଳର ଜନସାଧାରଣ ଓ କୃଷକମାନେ ବହୁକଭାବେ ଉପକୃତ ହେଉଛଡି ।

ରାଜ୍ୟ ସରକାର ଏସବୁ ଜଳସେଚନ ଭିଭିଭୂମି ନିର୍ମାଣ ଦ୍ୱାରା ଅଧିକରୁ ଅଧିକ ଜମିକୁ ଜଳସେଚନ ସୁବିଧା କରିବା ସହିତ ପାଣି ପଞ୍ଚାୟତ ବ୍ୟବସ୍ଥାକୁ ମଧ୍ୟ ଆଇନଗତ ଭାବେ ସୁବୃତ୍ତ କରିବା ପାଇଁ ପଦକ୍ଷେପ ନେଉଛଡି ।

ନ୍ୟାୟ ସଙ୍ଗତ ଓ ସମାନତା ଭିରିରେ ବିଭିନ୍ନ ଜନ ବ୍ୟବହାରକାରୀଙ୍କ ମଧ୍ୟରେ ଜନ ବ୍ୟକ ପ୍ରକ୍ରିୟାକୁ ସୁବ୍ୟବସ୍ଥିତ କରିବା ପାଇଁ ମୁଁ ଆପଣମାନଙ୍କର ସହଯୋଗ କାମନା କରୁଛି। ଏହା ଦ୍ୱାରା ଜଳ ସଂରକ୍ଷଣ, ଜଳର ପୁନର୍ବ୍ୟବହାର ସହିତ ପସଲର ବିବିଧକରଣ ଜରିଆରେ ଅଧିକ ପ୍ରକାର ଫସଲ ଉତ୍ପାଦନ, ଜଳର ସୁବ୍ୟବହାର ପାଇଁ ବୈଷୟିକ ଜ୍ଞାନକୌଶକର ପ୍ରୟୋଗ, ସମାନ ଓ ନ୍ୟାୟୋଚିତ ଜଳ ପରିଚାଳନା, ଜଳ ପରିଚାଳନା କ୍ଷେତ୍ରରେ ମହିନାଙ୍କ ଭୂମିକାକୁ ଗୁରୁତ୍ୱ ଏବଂ ଜଳ ଆବଶ୍ୟନ କ୍ଷେତ୍ରରେ ସୃଷ୍ଟି ହେଉଥିବା ମତାତ୍ତରର ଆପୋଷ ସମାଧାନ ସ୍ତନିଶ୍ୱିତ ହୋଇପାରିବ ।

ପାଣି ପଞ୍ଚାୟତ - ସଫଳ କୃଷି, ସଶକ୍ତ କୃଷକ

ଆପଣଙ୍କର दराद्र नहितात्र श ମୁଖ୍ୟମତା, ଓଡ଼ିଶା

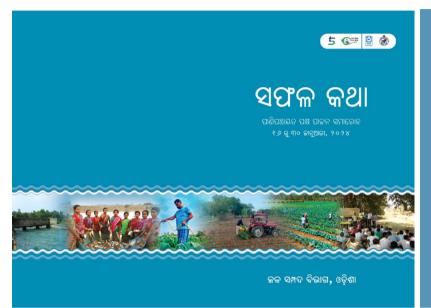
@ @naveen\_odisha ( ) @naveen.odisha ( ) @naveen\_odisha



ଜଳ ସମ୍ପଦ ବିଭାଗ, ଓଡ଼ିଶା

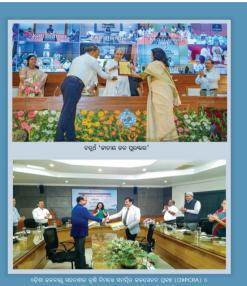


ଜଳ ସମ୍ପଦ ବିଭାଗ, ଓଡ଼ିଶା









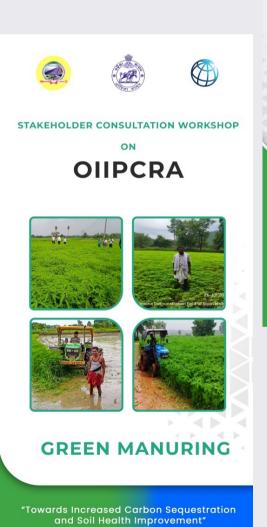


କୃଷି ଓ ଆନୁସଙ୍ଗିକ କାର୍ଯ୍ୟର ସର୍ବାଙ୍ଗୀନ ବିକାଶ ପାଇଁ ପାଶି ପଞ୍ଚାୟତ

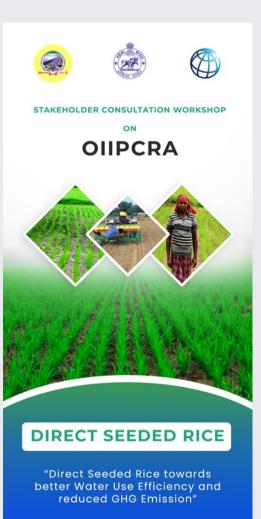


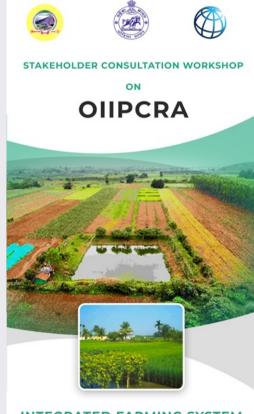
ବଂଶାଧିତ ପରି ଅଞ୍ଚଳର ଅଧୂତିୟାନ \* ୨ ୩୩, ପରି ଅଞ୍ଚଳର ଶେହ୍ ମଧ୍ୟର ପୂଚା ତେ ବାବତଳାରୀ କୁ ଧାରତ ମାନ୍ତର (Spouse) ଆସ୍ୱାମୀ ମନଙ୍କ ଅଧ୍ୱର୍ଣ୍ଣିକରଣ ସହ ମହିଳା ମନଙ୍କ ସବରାଗଣ କୁ ବାହିର ବଂଶ୍ୱର ବିଳୟ ନମିଥି ମନଙ୍କର ପ୍ରତିପିଷ୍ଟା କୁହି ବର୍ତିତର ସହଳର ସହଳ । ମା ବର୍ଣ ୬ ୬ ବର୍ଷିତ ସହଳର ବୃହିର ବୃହିର ବୃହିର ସହଳର ସହଳ । ମା ବର୍ଣ ୬ ୬ ବର୍ଷିତ ସହଳର ବୃହିର ସହଳର ସହଳ । ବହିର ପରି ଅଞ୍ଚଳର ବହିର ପରି ଅଞ୍ଚଳର ବହିର ପର ଅଧ୍ୱର ବହିର ବହିର ବହିର ଅଧ୍ୱର ଅଧ୍ୟର ଅଧ୍ୱର ଅଧ୍ୟର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୟର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୟର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୱର ଅଧ୍ୟର ଅଧ୍ୱର ଅଧ୍ୟର ଅଧ୍ୟର ଅଧ୍ୱର ଅଧ୍ୟର ଅଧ୍











#### INTEGRATED FARMING SYSTEM

"Integrated Farming System for better nutrient management and waste recycling and resiliency to biotic and abiotic shocks" eCAD, a 5T initiative was conceived by the Department, for real time monitoring of CAD-PIM activities in the state. eCAD The module is an end-to-end process flow based automated system for all stakeholders and to track in real time formation of Pani Panchayats; status of election/re-election; details of executive/project committee; command area; infrastructure; water use; records management; financial management; capacity building; livelihood activities; grievance redressal etc. Pani Panchayats module consist of both Web and Android Based mobile application to facilitate the entry of the data into the system by the concerned stakeholders.

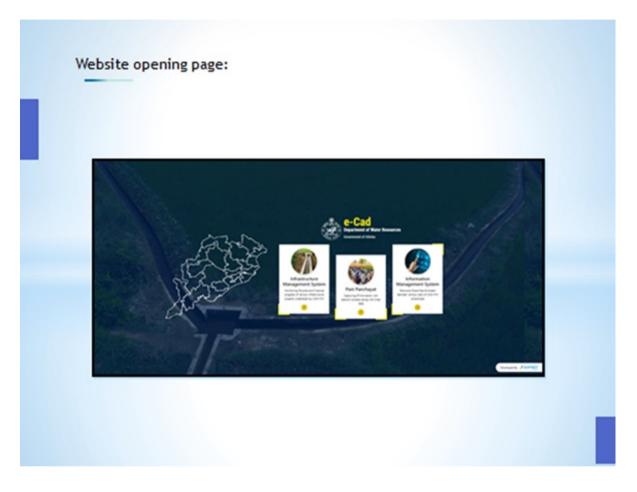
'Samanwaya' application has been developed for capturing real time command area information of cropping, water availability, development work and stakeholders status

Leveraging Technology



A decision support system, combining web-based MIS and GIS, has been created to track both the physical and financial advancements of the project. Additionally, a mobile application has also been designed to gather on-site data, including geo-tagged photographs of the tank and the count of installed groundwater recharge wells. To enhance and ensure transparency in payments, a unique "Auto Bill Generation" module has also been developed.





eCAD Infra and IMS modules have been developed for addressing the digital transformation. It aims at digitalizing all the legend data for effective management and audit which will enable swift action on the programmers and project envisioned.



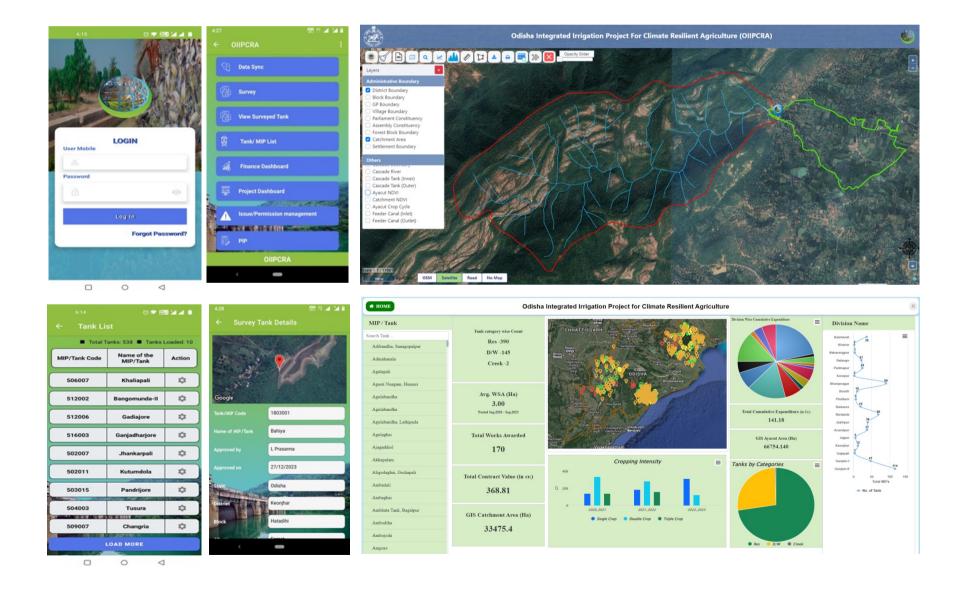




#### Samanwaya

An integrated web based application is developed for real time command area information of cropping, water availability, development work and stakeholders status. It covers 538 MIPS in the irrigated command area of 56,400 hectares under the 538 minor irrigation projects in 15 districts across the state and about 70,000 Ha of rainfed area around these tanks.

OCTDMS has developed an web based GIS and MIS application named "Samanwaya" for monitoring the physical and financial progress. It includes both Web based and Mobile Application for monitoring activities under OIIPCRA and GCF.







## Water ERP(Go Water) Integration with eCAD

Water ERP (GOWATER) is a flagship program envisioned by the Department of Water Resources under the 5T initiatives of the Govt. of Odisha, leverage latest technology for planning and operation of the water resources of the state. It is an umbrella system that host all IT systems pertaining to realtime dashboards, hydrological systems, planning and operational systems, project monitoring systems, human resources systems, irrigation management system, farmer engagement and grievance systems etc.

The Pani Panchayat MIS and GIS data is integrated with Canal monitoring system to create an end-to-end process flow based automated system to actively plan, monitor, and manage canal irrigation operations on a regular basis for Pani Panchayt areas. The system is designed to assist Water user Associations in obtaining water release schedules, dates, and other useful advisories also.

Canal monitoring system integrated with e-CAD enable the department to improve efficiency in water supply to the last mile and will help to increase the ayacut area. The System provides analytics on seasonal/ actual rainfall, rainfall forecast, ground water, soil Moisture, total projected seasonal water demand, water supplied till date through canal system and water release advisory etc.

State Hydrological Data Centre Inaugurated by Hon'ble Chief Minister at Rajiv Bhawan. This centre will ensure scientific analysis of meterological data for better management of water resources







An inspiring action that made a positive change in people's lives: Despite frequent drought, flood and scanty rainfall, the farmers of our Pani Panchayats have adapted themselves with the climatic resilient agriculture practices as quickly and effectively as possible based on the prevailing climatic conditions. Sustainable farming methods and practices have been shared through extension services to improve the productivity and skill in a better way by developing a more appropriate strategy.

The Trailblazers





### **Women Empowerment and Crop Diversity**

Various crops are being demonstrated in rice fallows especially sunflower, groundnut and sweet corn by the women farmers of Pani Panchayat from Ganjam have enhanced resilience to climate change and market variability. Demonstrations like these are crucial in promoting sustainable agriculture practices and providing farmers with valuable insights into alternative crop options.



200% cropping intensity with paddy and dry & green (50% each) chickpea

#### **Achieving 200% Cropping Intensity**

Bringing the economic and nutritional benefits of green pod chickpea among the Pani Panchayats for enhancing their livelihood and resilience in Rayagada and Mayurbhanj districts. Higher quality 'chana' command a greater demand in the market and incentive farmers to increase cultivation.





Vertical farming under controlled atmospheric conditions minimise the occurrence of pest infections with reduced use of water, chemicals and pesticide





#### **Pack-house**

Pack-houses, having specialized physical structures where harvested produce is consolidated, treated and prepared, have been built for storage before transport and distribution of farm produce to markets. It is a platform for farm business which maximizes economy of scale, improves market access, and facilitates technical and agri-business development interventions.



#### **Controlled Irrigation Uniformity and Parity**

Mahurikalua Pani Panchayat consists of 192 members in the General Body and 10 members in it's Executive Committee. 47 women members find place in the General Body and 3 in it's Executive Committee symbolizing inclusion and equity. Most importantly more than 90% farmers of this belong to tribal community.

The Pani Panchayat has a designated ayacut area of 103 Ha. An additional 30.21 Ha has been covered by micro irrigation. It is also levying an affordable water rate with the consent of its members. A Standard Operating Procedure for canal maintenance and repair of structures has been shared also covering maintenance of canal distribution system and building of their capacity. 85% of irrigation efficiency; 100% ayacut area is cultivated during Kharif and 25 Ha during Rabi. Short duration crop varieties promoted during Kharif to pave way for pulses and oilseeds by leveraging residual moisture.

# Demonstration of Direct Seeded Rice (DSR) in Ranajahli Village, Ganjam

Farmers from the Dahaninala Pani Panchayat are extremely happy receiving agricultural implement at the CHC. Some of the implements received are DSR, thresher, rotavator, hand winding machine, power tiller. This enables to take up farm operation on time.













### Smart Village: Crop intensification/diversification with suitable sequence crops after rice harvest at Balan-

gir, Mayurbhanj and Ganjam

Pani Panchayats have been involved in several activities to address short duration, sustainable, and resource-efficient water projects in the landscape. One key focus has been on implementing Short Term Resource Variability (STRV) measures to manage water resources effectively. These measures include rainwater harvesting, construction of check dams and ponds, and groundwater recharge techniques. Pani Panchayats have also been actively promoting the cultivation of crop varieties that are suitable for the local climate and require less water. Through these initiatives, they have ensured the long-term availability of water resources while supporting agricultural practices in the region.



IRRI organized two client-based rice varietal cafeterias with the Women Self-Help Group(WSHG) Maa Thakurani and the Reliance Foundation. The members cultivated 16 stress-tolerant rice varieties along with local varieties using similar management practices.

The Pani Panchayats are facilitated in a myriad ways to realise their full potential. e-CAD application has been introduced to track real time tracking of activities of Pani Panchayats and infrastructure built by them. 'Sinchita', a comprehensive training module has been introduced to impart training in a structured manner. Exposure visits are also organised within and outside the state to learn from best practices.

The reforms in the pipeline include interalia volumetric pricing; reforms in elections; buildings for Pani Panchayats; reorganisation of CAD offices among others.

Through projects such as Odisha Integrated Project for Climate Resilient Agriculture, Pani Panchayats are being initiated to promoting climate smart agriculture; using new technologies and implements; sourcing resilient seeds etc.

It is for these efforts that, the rise of Pani Panchayats finds mention in prestigious publications such as the 'India Today' and e-CAD felicitated at the national forum.

**Excellence and Laurels** 



The State of Odisha has been conferred with

Second Rank in Best State Category in 4th

National Water Award – 2023 by the Ministry of

Jal Shakti, Department of Water Resources, River
development and Ganga Rejuvenation.



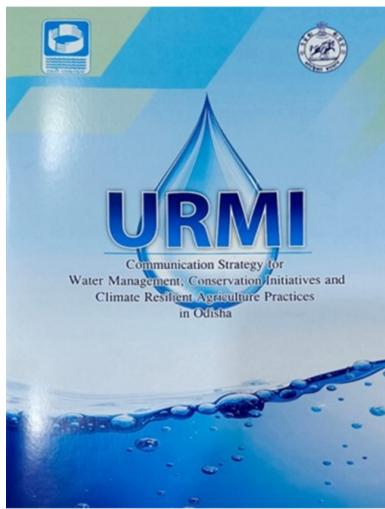






Memorandum of Understanding between OIIPCRA and IIT, Roorkee in the presence of Smt Anu Garg, Development Commissioner-cum-Additional Chief Secretary for capacity building of the Engineers on water sector under OIIPCRA.





Water Communication Strategy, "URMI" has been launched by Hon'ble Minister, Water Resources, Commerce and Transport Smt Tukuni Sahu on the World Water Day. It has been developed after a series of consultations held with key stakeholders, including the PRI members; Pani Panchayats; farmers; state officials; adolescents; Jal Sahayaks, sanitation volunteers, workers and civil society organizations to get behavioural insights from the key players associated with water management at the institutional, community and household levels.



Memorandum of Understanding(MoU) between Department of Water Resources and Indian Institute of Tecnology, Guwahati, Assam for Physical and Mathematical River Modeling Study for Brahmani River Delta Rejuvnenation. The mid-term review of OIIPCRA was conducted with the World Bank in presence of the Chief Secretary and Development Commissioner-cum-Additional Chief Secretary. The review covered various aspects, including project implementation, financial management, community engagement and impact assessment. The findings and recommendations will help further improving the implementation of the project.



Mass media is very effective and powerful tool for disseminating information to a large audience. Large scale dissemination will lead to the phenomenon of virality. Now social media platforms like twitter and facebook have become the primary means of sharing information to a large number of people at once.

Dissemination Through Mass Media





Officers in talk shows themed "Role of Women in Participatory Irrigation Management"

Officers of the Department in All India Radio Talk show themed "Role of Pani Panchayat in doubling the income of farmers"

Officers in talk shows themed "Lift Irrigation is the only to unreachable land of farmer"











Officers in talk shows themed "optimum utilization of water for higher crop yield"

Officers of the Department in All India Radio Talk show themed "Role of Pani Panchayat in doubling the income of farmers"

Officers of the Department in All India Radio Talk show themed "Role of Pani Panchayat in doubling the income of farmers"

Officers of the Department in All India Radio Talk show themed "Role of Pani Panchayat in Optimum use of water"

























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