



*Catalysts Of Change -
Telangana's Infrastructure Revolution*



राष्ट्रीय कृषि और ग्रामीण विकास बैंक
NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT
तेलंगाणा क्षेत्रीय कार्यालय, हैदराबाद
TELANGANA REGIONAL OFFICE, HYDERABAD



विज़न

ग्रामीण समृद्धि के लिए राष्ट्रीय विकास बैंक.

मिशन

सहभागिता, संधारणीयता और समानता पर आधारित वित्तीय और गैर-वित्तीय सहयोगों, नवोन्मेषों, प्रौद्योगिकी और संस्थागत विकास के माध्यम से समृद्धि लाने के लिए कृषि और ग्रामीण विकास का संवर्धन.

VISION

Development Bank of the Nation for Fostering Rural Prosperity.

MISSION

Promote sustainable and equitable agriculture and rural development through participative financial and non-financial interventions, innovations, technology and institutional development for securing prosperity.

मुझे यह कहते हुए बहुत खुशी हो रही है कि नवजात राज्य तेलंगाणा की विकास यात्रा में नाबार्ड एक प्रमुख हितधारक रहा है। किसी भी क्षेत्र के समग्र विकास में आधारभूत सुविधाओं का विकास एक प्रमुख घटक होता है। माननीय वित्त मंत्री, भारत सरकार ने 2023-24 के बजट भाषण में "बुनियादी ढांचे और निवेश" के महत्व पर प्रकाश डाला और इसे सात प्राथमिकताओं/"सप्तऋषियों" में से एक के रूप में मान्यता दी, जो अमृत काल के दौरान हमारा मार्गदर्शन करेगा।

भारत सरकार और राज्य सरकारों ने देश में ग्रामीण अवसंरचना के विकास के लिए अनेक प्रयास किए हैं। ग्रामीण क्षेत्रों में ऋण वितरण में सुधार लाने के उद्देश्य से 1982 में नाबार्ड का गठन किया जाना ग्रामीण क्षेत्रों के विकास के लिए देश द्वारा दी गई प्राथमिकता को रेखांकित करता है।

यद्यपि कृषि ऋण के द्वारा निजी निवेश का प्रवेश हुआ, फिर भी ग्रामीण क्षेत्रों में अवसंरचना परियोजनाओं में राज्य सरकारों द्वारा सार्वजनिक निवेश में कमी आई थी। इस मुद्दे को संबोधित करने की दृष्टि से भारत सरकार ने वर्ष 1995-96 में ग्रामीण आधारभूत सुविधा विकास निधि (आरआईडीएफ) की स्थापना की थी जिसमें प्राथमिकता प्राप्त क्षेत्र ऋण वितरण में आने वाले कमियों को ऋण के रूप में ग्रामीण आधारभूत सुविधाओं के निर्माण के लिए राज्य सरकारों को दिया जाता है।

बाद में, नाबार्ड ने एक कदम आगे बढ़ाया और नाबार्ड आधारभूत सुविधा विकास सहायता (नीडा) के नाम से समर्थन की एक नई खिड़की खोली जिससे ग्रामीण क्षेत्रों में और अधिक बुनियादी ढांचा परियोजनाएं शुरू करने के लिए राज्य सरकारों/राज्य के स्वामित्व वाले संस्थानों/निगमों के अतिरिक्त मांग को पूरा कर सकें।

आरआईडीएफ और नीडा के तहत नाबार्ड ने तेलंगाणा में ग्रामीण बुनियादी ढांचे के विकास के लिए मिशन काकातिया, मिशन भागीरथा, टीएस सूक्ष्म सिंचाई परियोजना, चेक बांधों का निर्माण और सरकारी स्कूलों में बुनियादी ढांचे के विकास के लिए विभिन्न हस्तक्षेपों का समर्थन किया है। इन हस्तक्षेपों से कुल सिंचित क्षेत्र 2014-15 में 62.48 लाख एकड़ से बढ़कर 2021-22 में 135 लाख एकड़ हो गया है, सभी ग्रामीण बस्तियों में स्वच्छ पेयजल की आपूर्ति हुई है और सरकारी स्कूलों में नामांकन दर 2020-21 में 43.47% से बढ़कर 2021-22 में 49.77% हो गई है।

मैं पाठक के सामने यह पुस्तिका प्रस्तुत करती हूँ, जिसमें आरआईडीएफ और नीडा के तहत नाबार्ड की सहायता से तेलंगाणा सरकार द्वारा किए गए इन हस्तक्षेपों और इस युवा और उज्ज्वल राज्य की ग्रामीण आबादी पर उनके प्रभाव पर प्रकाश डाला गया है।

श्रीमती सुसीला चिंतला

मुख्य महाप्रबंधक

नाबार्ड

तेलंगाणा क्षेत्रीय कार्यालय

Foreword

NABARD has been a key stakeholder in the development journey of the youngest state, Telangana. Infrastructure development is a key component in the holistic development of any region. Hon'ble Finance Minister, Government of India, in 2023-24 budget speech highlighted the importance of “Infrastructure and Investment” and recognised it as one of the seven priorities/ “saptarishis”, which will guide us through the Amrit Kal.

Government of India and State Governments have undertaken multiple interventions for the development of rural infrastructure in the country. Formation of NABARD in 1982, with a view to improve credit delivery to rural areas underlines the priority accorded by the country for the development of rural areas.

Even though agricultural credit led to private investment, there was a shortfall of public investment by State Governments in infrastructure projects taken up in rural areas. With a view to address this issue, Government of India, in the year 1995-96 instituted Rural Infrastructure Development Fund (RIDF), channelizing the shortfall in the priority sector lending in the form of loans to the State Governments for building rural infrastructure.

Later on, NABARD took a step further and opened a new window of support viz., NABARD Infrastructure Development Assistance (NIDA), to cater to the additional demand from State Governments /State owned institutions/ corporations for taking up more infrastructure projects in rural areas.

NABARD, under RIDF and NIDA has supported various interventions for development of rural infrastructure in Telangana like Mission Kakatiya, Mission Bhagiratha, TS Micro Irrigation Project, Construction of Check dams and Development of Infrastructure in Government Schools. These interventions led to increase in net irrigated area from 62.48 lakh acres in 2014-15 to 135 lakh acres in 2021-22, supply of clean drinking water to all the rural habitations and increase in enrolment rates in government schools from 43.47% in 2020-21 to 49.77% in 2021-22.

It gives me immense pleasure to present this booklet, which highlights the interventions undertaken by the Government of Telangana with assistance from NABARD under RIDF and NIDA and their impact on the rural populace of this young and vibrant state.

Smt. Suseela Chintala,
Chief General Manager,
NABARD,
Telangana Regional Office.

Introduction

..... when you spend on infrastructure and do capital expenditure, for every rupee that you spend approximately 2.95 is what you will get as a multiplier.....

- Smt. Nirmala Sitharaman, Hon'ble Finance Minister, Govt. of India

Infrastructure development is a necessary pre-condition for holistic Rural Development. National Bank for Agriculture and Rural Development (NABARD), the apex institution for agriculture and rural development in the country, supports State Governments in their efforts to improve the infrastructure in rural areas.

In a young state like Telangana, with more than 60% of its population in rural areas, development of rural infrastructure becomes the backbone of development of its economy and well-being of its people. Govt. of Telangana has undertaken multiple flagship interventions for the development of rural infrastructure viz.,

- i. *Mission Kakatiya: Launched in 2015 with a tagline “Mana Ooru Mana Cheruvu” which translates to “My village My Pond”, it is a massive project to revive 46,531 tanks with capacity of storing 265 TMC of water. Under RIDF, NABARD sanctioned ₹664.28 crore to 1778 projects.*
- ii. *Mission Bhagiratha: Launched in 2016 with a vision of ensuring safe and sustainable piped drinking water supply for all households in the state including the tribal hamlets, NABARD is the single largest lender to this program, with a cumulative assistance of ₹9,678.94 crore under Rural Infrastructure Development Fund (RIDF) and NABARD Infrastructure Development Assistance (NIDA).*
- iii. *Telangana State Micro Irrigation Project (TSMIP): With a view to enhance the crop productivity and production by improving the water use efficiency through micro irrigation systems, TSMIP was launched to provide subsidy to eligible farmers, for installing micro irrigation units. NABARD, under NIDA, sanctioned ₹874.00 crore out of a total project cost of ₹1,092.00 crore for covering an area of 1,39,000 ha under MI systems (both drip and sprinklers).*
- iv. *Construction of Check dams: In order to reduce the return of regenerated water to streams and also to improve the ground water table Government of Telangana undertook construction of 1200 checkdams across 4th to 8th order streams in a phased manner. NABARD, under RIDF sanctioned 483 checkdams with a total loan of Rs. 2120.82 crore.*
- v. *Development of Infrastructure in Government Schools: With an objective to improve infrastructure in Government Schools in a phased manner, Government of Telangana, in 2022 launched “Mana Ooru Mana Badi” which translates to “My village My school”. NABARD, under RIDF sanctioned a loan of ₹2456.29 crore for development of infrastructure facilities such as additional classrooms, drinking water facilities, Solar panels and digital classrooms etc.*

Although the document highlights the aforementioned interventions, NABARD has been instrumental in supporting the State Government in various other sectors like oil palm area expansion in the State, infrastructure development in Veterinary and Fisheries colleges, improving infrastructure in residential schools, improvement of rural roads etc., with a total loan of ₹11,602.30 crore (4047 projects) sanctioned under RIDF since the inception of the State. Similarly, under NIDA various projects like Telangana Drinking Water Supply Project and Kaleshwaram Irrigation Project with a total loan of ₹14516.65 crore have been sanctioned. This booklet highlights five interventions undertaken by Government of Telangana with assistance from NABARD under RIDF and NIDA.

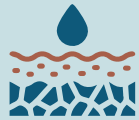




Mission Kakatiya



Mission Kakatiya- Reflections of Revival



Background

- *Almost 80% of the Annual Rainfall in the state is received during South West Monsoon. This necessitates effective conservation and management of alternate sources of water.*
- *The topography and rainfall pattern in Telangana have made tank irrigation an ideal type of irrigation for storing and regulating water flow for agricultural use.*
- *Numerous tanks were constructed during the rule of different dynasties such as the Kakatiyas, Qutbshahis and Asafjahis. Over time, due to lack of proper maintenance and siltation, most of the tanks fell into disuse leading to the almost collapse of these valuable and extensive resources.*
- *The disappearance of village institutions that were managing the tanks, encroachment on the tank foreshore area, deforestation in the catchment area, poor operating condition of the upper sluices, defective tank structures and weak farmers organization lead to decline of tank performance.*



Intervention

- *Mission Kakatiya (Mana Ooru – Mana Cheruvu) - massive project for revival and restoration of all 46,531 tanks with capacity of storing 265 TMC of water*



Objectives

- *Enhance the development of agriculture based income for small and marginal farmers by*
 - *Accelerating the development of minor irrigation infrastructure,*
 - *Strengthening community based irrigation management*
 - *Adopting a comprehensive programme for restoration of tanks.*





Activities involved in the project:

- Silt Removal from the tanks & Silt Application in agriculture fields.
- Restoration of Feeder Channel to the tank (Part of chain of tanks)
- Repairs to Bund, Weir & Sluices
- Re-sectioning of Irrigation Channels & Repairs.
- Raising of Full Tank Level, wherever possible/necessary.



NABARD's role

- Under RIDF, NABARD sanctioned ₹664.28 crore and disbursed ₹510.06 crore to Irrigation & Command Area Development Department, Government of Telangana State for 1778 projects, restoring more than 3000 MI ponds and tanks with command area of 80,000 hectares.



Unique Features

- Restoration of tanks involves no land acquisition and is not capital intensive
- Effectively maintained using community participation which fosters a sense of ownership
- Augments the ground water aquifers and increases cropping intensity in the command area.
- Tanks occupy vital role in the local ecosystem of arid and semi arid regions.
- The silt, which can be used as a fertiliser, was often transported by the farmers themselves to the field ensuring community participation fostering sense of ownership.



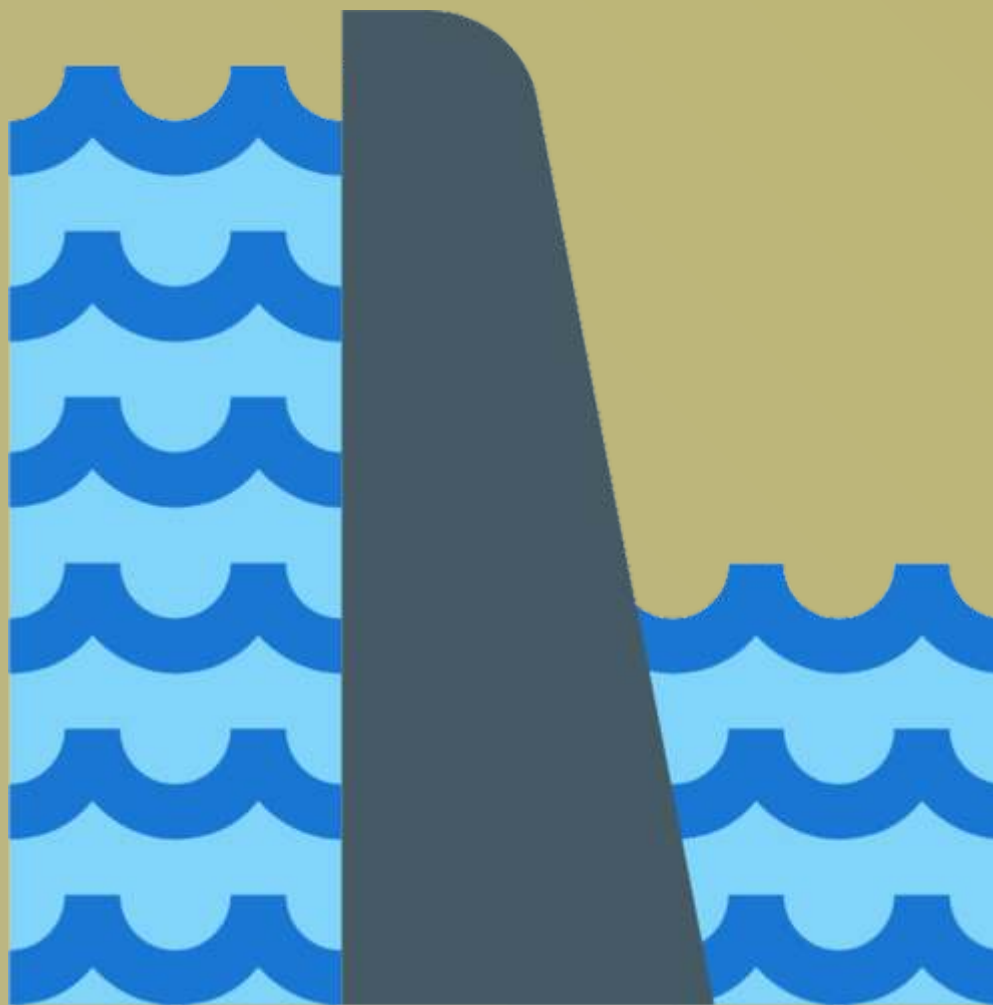
Impact



- Tank silt application reduced consumption of chemical fertilizers by 35 – 50% and expenditure on fertilizers by 27.60% over the base year. [NABCONS impact assessment]
- In Southern Telangana, area under tank irrigation increased by 29.69% and shift towards commercial crops such as paddy, cotton and maize was witnessed[International Journal of Environment and Climate Change, Volume 13, Issue 11, Page 742-748, 2023; Article no.IJECC.107350].
- During 2017 to 2022, as per National Compilation on Dynamic Ground Water Resources of India,
 - annual groundwater recharge increased from 13.62bcm to 21.27 bcm,
 - annual extractable groundwater resource from 12.37bcm and 19.25 bcm and
 - stage of groundwater extraction came down from 65% to 41%
- Increase in irrigated area and yields led to increase in household agricultural income by 78.50% and Improved water retention capacity in the tanks led to increase in irrigation intensity by 45.60% during the initial three years of implementation[<https://pmksy-mowr.nic.in/>]
- Improved yield in the fisheries activities owing to longer retention of water in the storage structures.







Checkdams



Checkdams- Harvest Water, Harvest More



Background

- It is estimated that 20 – 25% of water supplied to the field would return to the streams as regenerated water from the command areas of projects.
- After formation of Telangana State, the Government of Telangana took up re-engineering Irrigation Projects and formulated various Barrages, Reservoirs, and Lift Schemes.



Intervention:

- To harness this regenerated water, Govt. decided to construct 1200 Check Dams estimating Rs. 3825 crore across 4th to 8th order streams to recharge the ground water table and to stabilize tail end ayacut of projects where ever necessary.



NABARD's Role

- NABARD under RIDF has sanctioned 483 check dams to Irrigation & Command Area Development Department, Government of Telangana, (06 in Tranche XXV, 281 in Tranche XXVI and 196 in Tranche XXVII) with a total RIDF loan of Rs. 2120.82 crore.

The Impact:

- The indirect command area created by construction of checkdams is **71,473ha**.
- The project has benefitted a total population of **7.60 lakh in 995** villages.
- Helped in recharging ground water table by **4 meters** and improved water availability in bore wells and dug well etc
- Increase in soil moisture level led to increase in crop production and productivity.
- Increase in agricultural yield by stabilization of existing rain fed ayacut, proportionately increased revenues from fish rearing and livestock.
- Reduced poverty of beneficiaries by providing irrigation facilities
- Water for Agriculture available for extended period beyond rainy season.



Transforming land from Barren to Fertile and lives from Bane to Boon – A Success story of RIDF check dam constructed across Dindi River near Ghattukinda Thanda village, Chandampet mandal, Nalgonda District

- Transforming land from Barren to Fertile and lives from Bane to Boon – A Success story of RIDF check dam constructed across Dindi River near Ghattukinda Thanda village, Chandampet mandal, Nalgonda District
- NABARD sanctioned a RIDF loan of ₹1059.73 lakhs in the year 2021-22 under tranche XXVII to Irrigation and Command Area Development (I&CAD) department for construction of check dam across Dindi River near Ghattukinda Thanda village, Chandampet mandal, Nalgonda District.
- Dindi river is a seasonal river and is an important source of irrigation for farmers in the region. However, the absence of assured irrigation by any check dam across the river prevented farmers from putting the barren land into cultivation.
- The construction of check dam across Dindi River near Ghattukinda Thanda village, Chandampet mandal, Nalgonda District was completed in March 2023.
- Due to construction of check dam, there has been an increase in ground water table by around 5 to 6 meters.
- The check dam project helped bring around 700 acres of barren land into cultivation and generated livelihood for around 230 farmers in the village with many farmers now cultivating even during the second crop season.
- Crops such as Groundnut, Mirchi and cotton are being cultivated using tube well and few farmers are drawing water directly from the check dam upto a distance of 1-2 kms for cultivation of crops.
- With availability of water, a few farmers are also growing fish in the check dam and generating additional income.



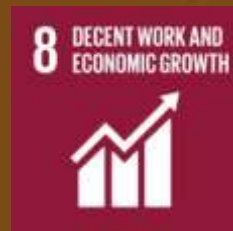
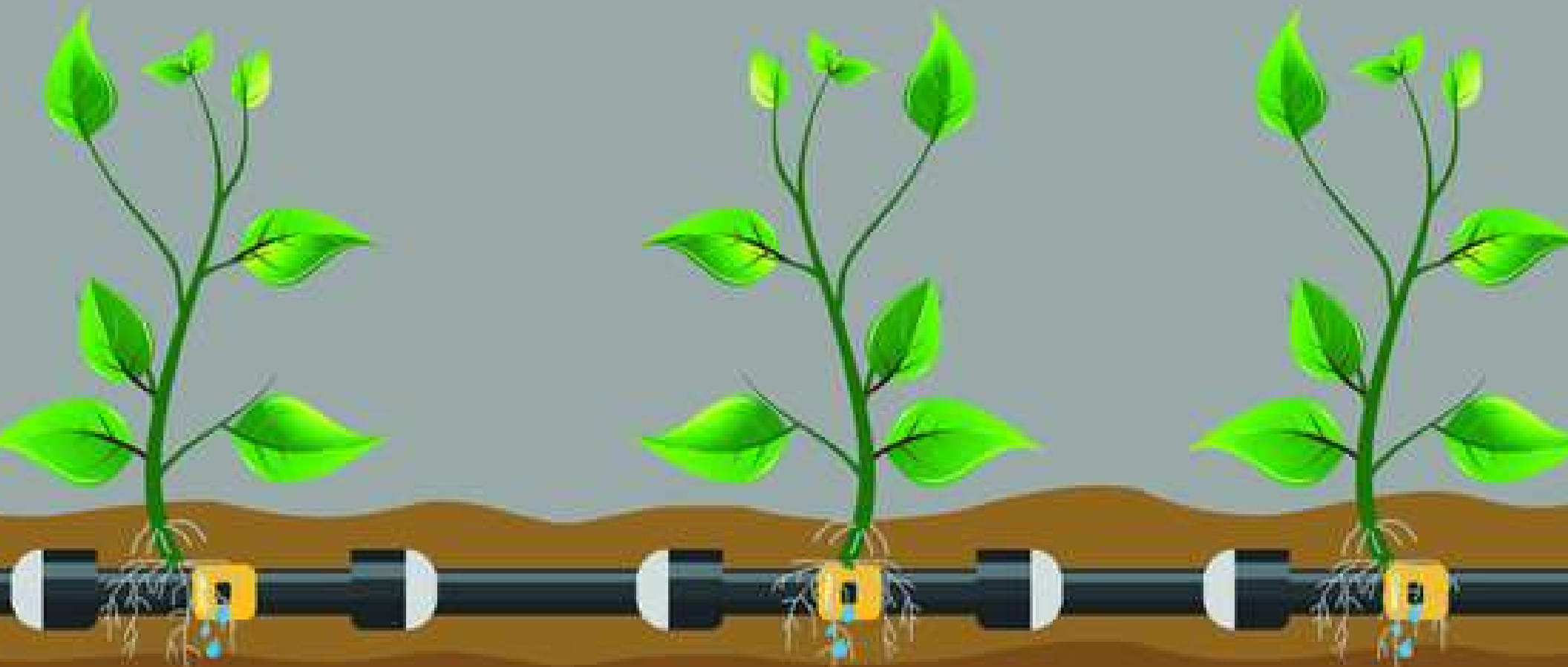
Construction of Check Dam across Kakaravani Vagu near Bomraspet(V), Bomraspet(M) of Vikarabad(Dist).

Latitude: 17 09' 53" Longitude: 77 43' 38"





Telangana State Micro Irrigation Project



Telangana State Micro Irrigation Project

Small Drops, Big Impact:



Background

- *Telangana state, has a semi-arid geographical area with predominantly hot and dry climate and skewed distribution of rainfall.*
- *This caused acute scarcity of water for irrigation purposes, leading to effects ranging from reduction in quantity and quality of yield and even large scale crop losses.*
- *Agriculture being the lifeline of the state, alternate irrigation methods were required to tackle the problems associated with the availability of water for irrigation. Micro-irrigation was one such method envisioned by Telangana government to solve this problem.*
- *As per the records of department of horticulture statistics, The estimated potential of 11.62 lakh ha was available for micro irrigation.*
- *In order to accelerate the area under micro irrigation in the State, the Govt. of Telangana has formed a SPV viz. Telangana State Horticulture Development Corporation Limited (TSHDCL) in 2016*



Intervention

To address the distress faced by the farmers due to erratic rainfall and to ensure effective utilization of water, micro irrigation project was launched in 2003 in the erstwhile Andhra Pradesh.

TSMIP was continued in Telangana with 100 % subsidy to SC/ST farmers, 90% to BC farmers and 80% to others.



Objective:

Enhancing the crop productivity and production to achieve sustainable improvements in living standards of small and marginal farmers of state by improving the water use efficiency through micro irrigation systems







NABARD Assistance

- Under NIDA, NABARD sanctioned 80% of the total project cost i.e, ₹874.00 crore to TSHDCL.
- Target: covering an area of 1,39,000 ha under MI systems



Project outcome/impact created at ground level

- Covered an area of 1,50,395.00 ha (Drip-1,06,845 Ha, Sprinkler-43,550 Ha)
- Number of farmers benefitted- 1,37,355
- Number of villages benefitted- 7166
- 46500 Ha additional area brought under Irrigation
- Water savings of 43.8% i.e, 25.54 TMC ft of water equivalent to ₹7235 cr @Rs. 0.1/Ltr,
- Power savings to the extent of 33% i.e, power equivalent of ₹76.67 cr @Rs. 4.5/kwh
- Savings in time and reduction in labour.
- Net income increased to the extent of 53.66% i.e, Additional income of 2143.7 cr.
- Total savings by adopting drip irrigation is ₹9455.4 Cr (Source: Impact Assessment study by NABCONS)
- Production increased to the extent of 52.3% i.e, 25.65 Lakh MT of production
- The installation of micro irrigation systems has helped in conservation of precious water resources through application of water in scientific manner and crop diversification.
- Adoption of micro irrigation systems led to soil quality improvement by reducing soil erosion and nutrient run-off compared to traditional irrigation systems.
- Fields irrigated by drip irrigation had less weed growth and less incidence of fungal diseases because of application of water only to the targeted root zone of crops.



Success Story- 1

Sl. No.	ITEM	Particulars	
1	Name of the Farmer	Dyagala Sharadha	
2	Address	Quileshapur (V), Raghunathpally(M), Jangaon	
3	Category	BC	
4	Crop Name	Ridge Gourd	
5	Area in Ha.	1.00	
6	Type of MI System	Drip	
7	Subsidy Received	97,492/-	
	Subject	With Conventional Irrigation	With Drip Irrigation
14	Yield (per ha.)	12 Tons	21 tons
15	Total Expenditure (per ha.)	Rs.70,000/-	Rs.55,000/-
16	Sale price (per Ton.)	Rs.18,000/-	Rs.25,000/-
17	Total value of the crop (per ha.)	Rs.2,16,000/-	Rs.5,25,000/-
18	Net Income (per ha)	Rs.1,46,000/-	Rs.4,70,000/-
19	Additional income with Micro Irrigation (per ha)		Rs.3,24,000/-

(Source: Telangana State Horticulture Development Corporation)



Success Story- 2

Sl. No.	ITEM	Particulars	
1	Name of the Farmer	Madana Laxminarayana	
2	Address	Thimmapur(V), Thimmapur(M), Karimnagar	
3	Category	BC	
4	Crop Name	Bittergourd	
5	Area in Ha.	0.60	
6	Type of MI System	Drip	
7	Subsidy Received	63624	
	Subject	With Conventional Irrigation	With Drip Irrigation
9	Yield (per ha.)	11.50 Ton	20 Ton
10	Total Expenditure (per ha.)Rs.	Rs.75,000/-	Rs.82,000/-
11	Sale price (per Ton.)Rs.	Rs.25,000/-	Rs.25,000/-
12	Total value of the crop (per ha.)Rs.	Rs.2,87,500/-	Rs.5,00,000/-
13	Net Income (per ha)Rs.	Rs.2,12,500/-	Rs.4,18,000/-
14	Additional income with Micro Irrigation (per ha)Rs.		Rs.2,05,500/-









Mission Bhagiratha



Mission Bhagiratha- Drinking water- Last mile connect



Background

- *Telangana, a semi-arid geographical area with predominantly hot and dry climate and skewed distribution of rainfall, faced severe problems with its water resources, in terms of both availability as well as quality.*
- *There were incidents of numerous droughts due to less rainfall and poor water retention of water bodies, leading to a scarcity of water for both drinking and irrigation purposes.*
- *Most districts in the State recorded more than 4 metres depletion in groundwater during the period from 2006-2016, which led to ecological imbalances.*
- *As many as 967 villages were affected by fluoride toxicity at the time of formation of the state.*



Intervention

- *Mission Bhagiratha was launched in 2016 with a vision of ensuring safe and sustainable piped drinking water supply for all households including the tribal hamlets in the state.*

Objectives

- *The mission had twin objectives of addressing the acute water scarcity and improving public health by delivering clean and hygienic drinking water in both urban and rural areas, to bring about a paradigm shift in the lives of millions.*
- *The mega project involved all round development of infrastructure required for creating a network for sustainable supply of water in the state starting from construction and integration of pipelines, water treatment plants, reservoirs, overhead tanks, etc.*
- *The major sources of water is Krishna and Godavari Rivers and their tributaries and the scheme endeavours to replace groundwater sources, especially bore wells, with surface water sources.*
- *The mission integrated all existing and ongoing drinking water projects and 10 per cent of water in all irrigation sources was reserved for drinking water supply.*







Steps involved in the water supply chain

- Sourcing water from major rivers or reservoirs, Purifying the raw water in Water Treatment Plants
- Pumping treated water to the major OHBRs (Over Head Balancing Reservoirs) and Sumps at the highest points and then transmitting through secondary pipeline network to all the habitations
- Finally distributing to households through intra-village network through tap connections



Salient Features

- The project comprises 26 segments spread over 32 districts covering a geographical area of 1.11 lakh Sq. km
- Total pipeline network - 1.50 lakh Kms
- Intake Structures - 69 Nos
- Water Treatment Plants(WTPs) - 113 Nos
- Major Structures - 1708 Nos
- Village OHSRs - 35,260 Nos
- Power Requirements - 187 MW
- 98% of transmission & distribution systems function by gravity
- The supply of water was aimed at the rate of
- 100 LPCD (litres per capita per day) for rural areas,
- 135 LPCD for Municipalities
- 150 LPCD for Municipal Corporations and
- 10% of total quantity allocation for Industrial requirements



NABARD Support

- NABARD is the single largest lender for 'Mission Bhagiratha' with a total assistance of ₹9,678.94 crore
- This includes sanctions of ₹4,262.26 crore for 04 Grid Projects and 405 Intra-Village projects under RIDF and ₹5,416.68 crore under NABARD Infrastructure Development Assistance (NIDA)



Highlights of the project

- 53,744 kilometres of transmission pipelines and 56,305 kilometres of distribution pipelines have been laid
- Rural households covered - 54.06 Lakhs
- Total Population benefitted - 2.72 crores
- Constituencies covered - 96
- Urban Local Bodies covered with water supply - 121
- Rural Habitations covered - 23,890
- 22,882 schools and 27,310 anganwadi centres along with other government institutions are provided with functional tap connections
- Total expenditure of 35,836 crore has been incurred



Impact- A catalyst for positive change for communities

Sustainable development goals

- The project achieved five SDGs viz., SDG -3: Good Health and Wellbeing, SDG - 6: Clean water and sanitation, SDG- 11: Sustainable cities and communities, SDG-12: Responsible consumption and production and SDG-17: Partnership for the goals.



Access to Safe Drinking Water

- Provided access to clean and safe drinking water from a dependable source in adequate quantities.



SDGs

Health and Sanitation Improvement

- Eliminated the incidence of Fluorosis in the State, villages affected brought down to Zero from 967.
- Overall improvement in hygiene leading to healthy children and healthier communities.



Transformative Social Impact

- Catalyst for community development fostering a sense of hope, dignity and optimism and improving quality of life



Women and Child Empowerment

- Reduced burden of fetching water, more time for children and women for education and income generation activities



Community Awareness and Participation

- Active community involvement to foster a sense of ownership among beneficiaries in maintaining the infrastructure created.



Economic Development

- Fostering industrial and economic growth in project areas by allocating 10% water for industrial requirements



Educational Advancements

- Improved educational outcomes due to reduced absenteeism



Mana Ooru



Mana Badi



Mana Ooru-Mana Badi:

Transforming Education Sector in Telangana

Background

- As per 2011 census, the literacy rate of Telangana was 66.54%, lower than all India average of 74.04%.
- Telangana had the seventh lowest percentage of people receiving free education in the country.
- In contrast, the State has one of highest proportion of students studying in private institutions.
- The government schools in the state faced problems like inadequate infrastructure, lack of basic amenities, low enrollment rate and general lack of community involvement in educational process.
- Issues of insufficient teaching staff and challenges in providing quality education existed, especially in rural areas.



Intervention

Mana Ooru-Mana Badi-

- The programme was launched in 2022 in a phased manner for three years.
- 26,065 schools including 18,240 primary, 3,164 upper primary and 4,661 high schools benefiting around 23 lakh students across the State, over a period of three years from 2021-22 at an estimated Rs.7,289.54 crore
- KGBVs set up in educationally backward blocks (EBBs), where the female rural literacy is below the national average and gender gap in literacy is more than the national average.
- Grid connected rooftop solar electric connection to ensure uninterrupted power supply to facilitate digital education and ensure proper lighting and ventilation in classrooms.







Objectives

Comprehensive development of schools:

- ✓ Providing quality education.
- ✓ Improving attendance of students.
- ✓ Encouraging students to continue their studies for higher classes.
- ✓ To introduce digital media education for better academic results.



Activities involved

- Construction of additional classrooms, toilets, dining halls, drinking water facilities, compound walls, kitchen sheds, etc.
- Taking up repairs, renovation and painting of existing buildings.
- Setting up digital classrooms for promoting digital interactive learning.
- Providing furniture to students and staff, green chalk boards.
- Setting up Solar panels



NABARD's Role

- NABARD under tranche XXVII to XXIX of RIDF has sanctioned a total of ₹2456.29 crore to School Education Department, Government of Telangana, towards MOMB.
- Supported in development of infrastructure facilities such as :
 - ✓ Additional classrooms.
 - ✓ Drinking water facilities.
 - ✓ Solar panels and digital classrooms.
 - ✓ Co-location of Anganwadi centres.
 - ✓ Additional infrastructure facilities in 475 Kasturba Gandhi Balika Vidyalyas.
 - ✓ Development of playgrounds in 127 High Schools.







Impact

i) Improving the Infrastructure in the schools

- The programme has aided in improvement of infrastructure facilities in Primary, Upper Primary, and High Schools in the State.
- Conducive learning ambience is created for the students, so that better rate of enrolment, attendance and retention along with quality educational output are achieved.
- Creative use of spaces inside the classroom, verandas, outdoor natural environment and play areas serve to support learning.
- Clean drinking water facility, which is crucial for students health and well-being is provided under the project.
- Separate toilets for girls equipped with environmentally safe incinerators are provided for the girl students at the upper primary stage.



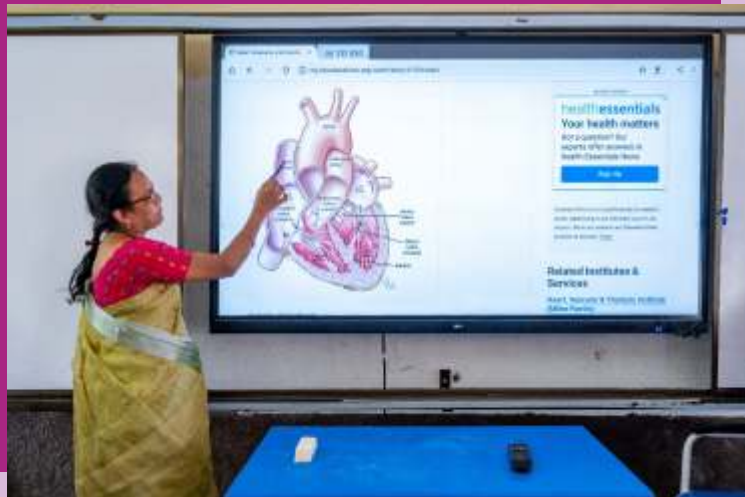
ii) Providing Infrastructure facilities in 475 existing Kasturba Gandhi Balika Vidyalayas (KGBV)

Provision of infrastructure in KGBV helped in:

- Bridging Social and Gender Gaps in School Education
- Ensuring equity and inclusion at all levels of school education
- Ensuring safe, secure and conducive learning environment

iii) Development of playgrounds

- Engaging in sports has helped in students overall growth and development.
- It has helped them to learn life skills such as teamwork, leadership, accountability, patience, self-confidence, social interaction, discipline, effective time management, a more positive outlook on life and academic excellence.
- Active Body, Healthy Mind.



iv) Digital classrooms


- Digital education enables students in their learnings with smoother experience through animations, gamification, and audio-visual effects.
- Impact of digital classrooms includes:
 - o Visualizing Complex Concepts, making topics easier to grasp.
 - o Bridged the gap between rural and urban educational standards.
 - o By replacing traditional chalkboards, more environmental friendly and healthier classroom.
 - o Seamless content sharing.
 - o Immersive learning experiences.
 - o Gamified learning.
 - o Innovative pedagogies.

v) Providing On-grid solar electric connection

Installation of solar panels in schools resulted in:

- Generation of 34.71 GW power in one year. Out of which, 17.355 GW excess power fed to the grid.
- Improvement of standards of education by uninterrupted power supply through renewable energy reducing carbon emission.
- Efficient and effective use of new teaching methods in Digital mode, proper lighting, ventilation and operating other electrical appliances in the rural schools.
- Reduction of power bill of the school due to grid connectivity.





“Mana Ooru Mana Badi ” succeeded in achieving the mandate of Right to Education promulgated by Government of India by providing quality education to every child in the State at appropriate age and helped in reduction of school dropouts.







YELLAREDDYPET SCHOOL CAMPUS

పల్లెటూరు పాఠశాల కేంద్రం

పల్లెటూరు పాఠశాల కేంద్రం

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