



# **ITC MISSION SUNEHRA KAL**

# NATURAL RESOURCE MANAGEMENT PROGRAMME THENI DISTRICT, TAMIL NADU



**Annual Report for FY: 2020-21** 

Submitted By:

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#### Introduction:

First up all, we the DRDCT owe our heartfelt thanks to ITC Ltd-MSK Division for its wonderful supports to implement the NRM activities till date in Theni district, Tamil Nadu state from the financial year 2014-15. As like past years, this financial year also is a milestone for ITC Ltd-MSK Division and as well as for DRDCT. The **Soil and Water Conservation Programs (SMC)** and **Intensive Agriculture Programme (IAP)** carried out in Theni district during this financial year 2020-21 also over welcomed by the beneficiary farmers. Now we can sure that 99% of the farmers of our core villages in Theni district are well known about ITC Ltd., and its CSR activities.

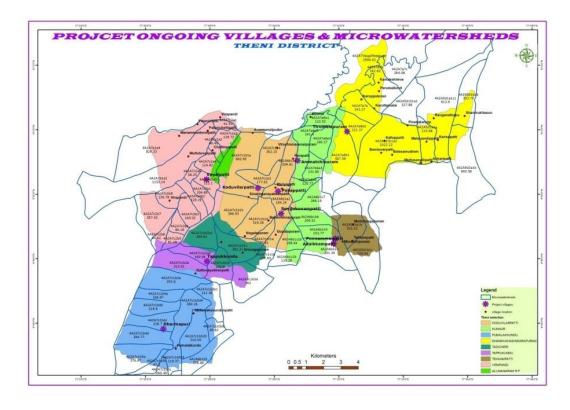
# **Project Title:**

The title and theme of the project for the year 2020-21 is;

Natural Resource Management program with an objective of **"Sustainable Development of Land and Agriculture through Effective Management of Natural Resources"** 

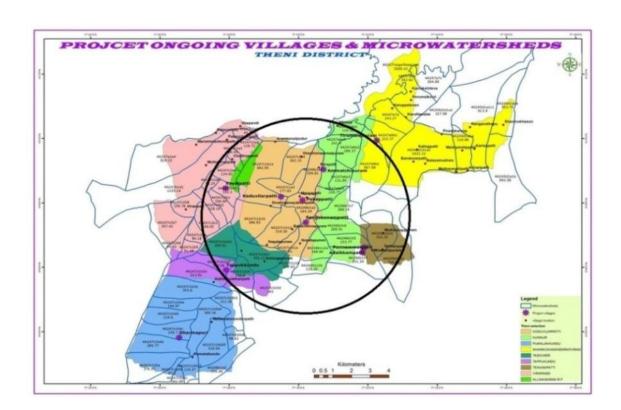
# Village Panchayaths Covered in FY: 2020-21:

This current financial year, we have worked in 10 Village Panchayaths of Theni district which are comes under Theni and Aundipatti blocks.

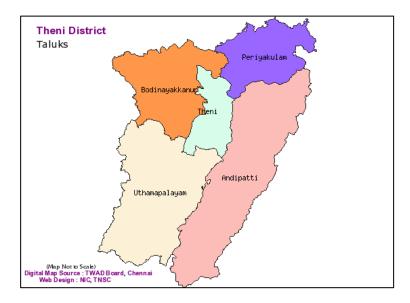


In this financial year, we have implemented our activities in 26 Micro-water sheds which covers 10 village Panchyaths included 45 village hamlets. The below map shows the selected micro water sheds in our target area.

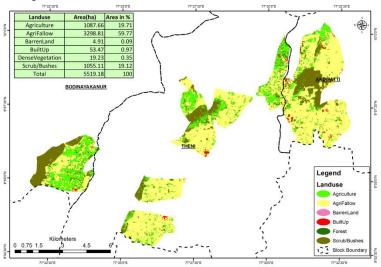
- 1. AMACHIYARPURAM
- 2. KODUVILARPATTI
- 3. KUNNUR
- 4. ARANMANAIPUTHUR
- 5. THEKKAMPATTI
- 6. MARIKUNDU
- 7. THADICHERI
- 8. Thappukundu
- 9. NAGALAPURAM
- 10. THIRUMMALPURAM



## **Theni District Map:**



# Project Area from 2015-2021:



Earlier we were working in vast areas with a focus on Bodinayakkanur assembly constituency and now we are working in 10 village Panchayaths to ensure 100% saturation. Mostly it will be saturated by FY: 2021-22 with SMC activities.

# Proposed Development Issues in the Project area:

- Acute water scarcity prevails in these our working areas due to the continuous deficit rainfall for the past five years. The groundwater table in these areas has gone down badly.
- Ground water depth crossed around 1000 feet; Out of 100% almost 69 % well were dried.

- Most of the irrigation tanks have not received sufficient water due to inadequate rainfall and also improper maintenance of the supply channel. Due to that most of the command area left fallow and occupied with prosodies weed.
- Though the district get rainfall in some time, But there is no proper structure & drainage line for rain water harvest. Some water storage structures are there, but it's all are not de-silted in a periodical interval by the government departments.
- The rain fed farming was affected severely due to the erratic change of rainfall pattern and also due to reduction of rainy days.
- Unaware on proper WUE-Water Use Efficiency.
- Lack of knowledge on nutrition management (soil management)
- The Livestock owners have to go in search of fodder also in addition to water. Non-availability of hay and green fodder has forced them to take their cows to sell out.
- The farmers and labourers whose were dependent on agriculture are slowly migrating to another livelihood for their survival. Seasonal and permanent migration for the want of employment also in increasing trend in these villages.
- There are no collective institutional arrangements and mechanisms to solve the development issues in the project villages.

#### PROPOSED SPECIFIC OBJECTIVE

- ► To saturate 10 drought prone village panchayaths in Theni & Aundipatti blocks of Theni District with community-led Conservation and Development.
- ▶ To contribute to renovation of 5 mini percolation tanks, improved agriculture practices in 200 acres and bio-diversity promotion with the approach of sustainable agriculture practices.
- ► To support around 400-500 families in both Theni & Aundipatti blocks for strengthening their livelihood through conserving water and improving agriculture.

#### Proposed Activities & Achievements in FY 2020-21:

#### **IRRIGATION TANK RENOVATION**

#### Proposed:

Water is elixir of life. Though it is available everywhere and the quantity is not equal but skewed. In the project area, harvesting every drop of water decides the village economy, as they struggle on a day-to-day basis for the want of water. Effective performance of tanks and its conditions are critical for survival. The proposed action addresses the recurring droughts and the on-going desertification process by alleviating the water shortages. The tank components like feeder

channel, tank bund, water spread area, sluice, field channel and surplus weir will be focused for renovation. One or more components will be renovated according to the needs and priority of the local community. During the last FY year 2019-20 totally 16 tanks were renovated and received less amount of water as first time after long gap during the south west monsoon. The livestock in and around the village of Koduvilarpatti having access for their drinking and fodder in the tanks due to the presence of water.

Due to Covid-19 pandemic situation, we have no sufficient time to do renovate the mini percolation tanks in our target area; because from April'2020 to Septmeber'2020 we had full time lockdown due covid-19. So we have proposed only 5 MPTs for renovation works. But the ITC gave 6 MPTs as our target for the FY 2020-21. In January'21, the ITC gave us revised budget with additional 5 MPTs. So the total target for this financial year is 11 MPTs.

#### **Achieved:**

We have renovated 13 MPTs in this financial year against the target of 11 MPTs. One MPT was renovated at Amachiyarpuram and there are 4 MPTs at Thadichery, 3 MPTs at Nagalapuram, 3 MPTs at Marikundu and 2 MPTs at Ettapparajapuram were renovated. Through these 5 MPTs we have created the storage of 2155945.85 Cubic Meter. Through these 13 renovated MPTs around 615 Hectares of land will get benefitted.





This current financial year 2020-21 renovated MPTs



#### **FARM POND CONSTRUCTION**

#### Proposed:

Farm Pond will provide lifesaving irrigation to the crops at the critical stage. Last year (2019-20) there are 83 farm ponds were done to demonstrate the benefits of the farm pond among the farmers. Most of the ponds received good amount of water. One farmer used the harvested water for fish rearing in his

pond and also using the bunds effectively for growing flowers, vegetables and fruit bearing trees. 75 farm ponds have been proposed to provide lifesaving irrigation to the crops in the poor water source lands during the year 2020-2021. As per the plan & budget we had the target of 15 farm ponds for this current financial year.

#### Achieved:

We have constructed 21 farm ponds against the target of 15 farm ponds in this financial year 2020-21. There are 21 farmers got benefits, among them 12 farmers are belong to scheduled caste and 2 farmers are females. 4961 CuM water storage was created through these 21 farm ponds.



#### INTEGRATING MGNREGS

The "Mahatma Gandhi National Rural Employment Guarantee Act", MGNREGA), is an Indian labour law and social security measure that aims to guarantee the 'right to work'. Over the last decade it has been observed that more than half the MGNREGA funds have been spent on water related projects. This was very much needed because water bodies have



been shrinking especially in rural India. Around Rs 20,000 Cr. under MGNREGA has been spent each year during the last decade on developing rural water bodies, wells, aquifers, catchment areas. The project team will work with integrating the MGNREGA in the project villages for maximizing the impact. The process steps for integrating MGNREGA will be followed as given below.

- \* Joint agreement with the Block/District administration will be made for the effective ways of integrating MGNREGA work and ITC MSK works.
- \* The left out components by the MGNREGA will be taken for saturating the development intervention in the identified water bodies.
- \* Plantation and soil conservation measures will be carried through MGNREGA.
- \* Sectioning, Consolidation of Bund and repairing works will be explored through the MGNREGA.





Awareness on Covid-19 Safety Measures





SMC works carried out in collaboration with MGNREGA during Covid-19 Pandemic period

Through the MGNREGA we have done the following SMC works in our core villages:

Awareness sessions conducted on Covid-19 -44 Sessions

Drainage line treatment -19 Hectares

New Sunken Pond -14 Numbers

Trench cum Bund -82 Hectares

New Cattle Ponds -12 Numbers

Common Land treatment -32 Hectares

Pit digging for plantation -486 CuM

Bush clearance -984 Sq.M

Sectioning of feeder channel -40 Rmf

New enrolment in MGNREGS -6113 Nos

#### **PROMOTION OF WUGS:**

#### Proposed:

Promoting village level organizations serves as foundation to achieve community-led development in drought prone areas of Theni district. The project intervention helps to restore community management on water bodies and improve the conditions of the irrigation tanks. These associations are independent organizations and they are led by the community. Under this project 9 tank associations were promoted since 2019. During 2019, totally 11 tank associations were promoted for the renovated tanks. The associations promoted under this project are expected to function beyond the project period and provide continuity to the project initiatives. So we have planned to promote 10 WUGs for the FY 2020-21.

#### Achieved:

We have promoted 9 Water User Groups in our core villages with 196 farmers as members of Water user groups. These WUGs are also called as ABCs which means Agri Business Clubs. Among these 196 farmers, 168 farmers are small and marginal farmers. We also introduced the group savings system among the farmers.

#### TRAINING / CAPACITY BUILDING

#### Proposed:

Capacity building is a continuous process and it is essential for the sustainability of the intervention. DRDCT staffs participated in various trainings at regular intervals. During 2019-20 various training programmes and exposure visit on commons restoration and digitalization of NRM activities were organized by the ITC which brought active participation of the members into the project.

During the year 2020-2021 Members and leaders of the organizations will be oriented on components of water bodies, leadership, finance and improved agriculture practices. Under this project, about 200 person of training will be organized for the leaders and members (Farmers) of the association.

#### Achieved:

Because of the worst pandemic situation of Covid-19, the government of India and as well as the government of Tamil Nadu announced the full time lockdown in this financial year and banned

the peoples gatherings also. So we were not able to conduct the training programs in this financial year.

From 3<sup>rd</sup> February'2021 to 5<sup>th</sup> February'2021, the staffs of DRDCT attended the ToT program on common land especially on by-laws for village institutions. The program was held at Karl Kuberl Institute for Development (KKID), Thadagam in Coimbatore. There 4 staffs from DRDCT were participated in the training program.





#### **Trench cum Bund:**

#### **Proposed:**

Totally 343 farmers did trench cum bund in their land which covered around 976 ha during the year 2019-2020. The erosion was drastically controlled within the lands and the soil moisture was improved and supported the rain-fed crops for completing the harvest successfully. Due to its suitability in the project location the land from the catchment area of 400 ha of the proposed tanks have been chosen for the treatment in 2020-2021.

#### Achieved:

The ITC MSK has given the target of TCB about 650 hectares for this financial year. But in this year we met so many struggles to achieve the target due to Covid-19 and very good rainfall in our core areas. But with the help of farmers we have treated 662 hectares of lands in our core villages.

There are 272 small and marginal farmers were benefitted and among them 31 farmers are women. And also 177 scheduled caste farmers also covered under the land treatment activity. There are 59094 CuM of water storage also created through this trench cum bund program.









# IMPROVED AGRICULTURE PRACTICES (IAP)

Vegetables, Drumstick, Corn maize, Cotton, Flowers, Pulses, Grains and Cereals are the major crops in 10 village Panchayaths being cultivates around 6000 ha which is around 70% of net cultivation area. Water is the major issue in these blocks as there is high fluctuation in rainfall. Improved soil nutrition, improved irrigation methods and improved soil conservation methods are highly required for better productivity in this block. Demonstration fields and Farm field schools will help the farmers to adopt suitable technologies for the farmers to get higher production with lesser investment.

#### Farmer Field Schools (FFS):

# **Proposed:**

For this financial year we have proposed 15 numbers of FFS sessions on vegetables and grains. This program is also aimed to give the training on cultivation and as well to prepare organic insecticides and organic manures.

#### Achieved:

Due to severe pandemic situation, we were not able to conduct the sessions as proposed. Because of the rules of the governments, the people gatherings were banned during the planned period. So we have organized 5 FFS sessions for the farmers on vegetables and grains.









# Dry Land Horticulture Promotion (Agro Forestry):

In this financial year, we have promoted 52 hectares of land with dry land horticulture crops like Neem, Pungan, Country teak, Guava, Teak, Tamarind and Mango etc., There are 52 farmers were benefitted through this activity including 42 scheduled caste farmers and 5 women farmers. There are 13900 saplings were planted through this activity. This is a milestone in our journey and this program was well received by the beneficiary farmers.









#### **Bund Plantation:**

Under this program, we have done plantation on the bunds of MPTs which were renovated through our project from the past three years. We also done plantation in common lands such as road side, burial ground and puramboke lands etc., We have planted 3170 plants through this activity. We have collaborated with local village Panchyath MGNREGS by using the labours for plantation and irrigation activities.





# Achievements against the proposed activities in the FY: 2020-21

# SMC – Proposed SMC Activities & Achievements: (2020-2021)

S.No	Particulars	UOM	Proposed 2020-21	Achieved	Reason for under achievement
1	Catchment Treatment				
2	Treatment (TCB) – Manual	На			
	Treatment (TCB) – Mechanical	На	650	662	
3	Foreshore/ Bund Plantation	NO.	6000	7470	
	Water Harvesting				
4	Structures				
	Minor Structures/Farm	NO.	15	21	
5	Ponds	NO.	(1)	۷1	
6	Large Tanks	NO.	11	13	
7	Masonry check dam	No.			
8	Water User Groups				
9	WUGs Formed	NO.	10	09	Covid-19 Pandemic
10	WUG Members - Total	NO.	300	196	
11	Impact Created				
12	Command Area	НА	500	800	
13	Area protected from erosion	НА	400	662	
14	Water Storage Capacity	cum	30000	2155946	
15	Coverage				
16	Beneficiaries	NO.	500-700	530	

IAP – Proposed Integrated Agriculture Practices (Demand Management Initiatives): 2020-2021: Achievements

Particulars	UoM	Proposed 2020-21	Achieved	Remarks
Farmer Field Schools/				
Demonstrations				
Total Farmer Field Schools /				Due to Covid-19,
demonstrations for	No.	15	5	not able to
agriculture				achieve the target
Total Farmer Field Schools /	No.			
demonstrations for Fodder	140.			
Convergence with Existing				
Government schemes				
Soil testing	No	200	200	
КСС	No	50	205	
PM-Kissan Samman Nidhi	No	300	868	
Enrolling PM- Fasal Bima Yojana (Crop Insurance)	No	300	1404	
Enrolment for Farmers Pension scheme	No	300	1426	

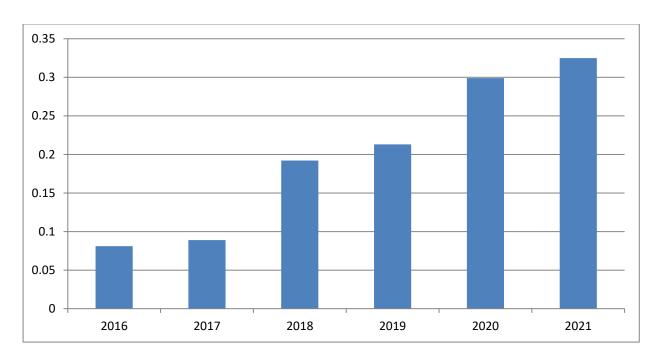
# Our total achievements from FY: 2014-15 to till date:

Achievements		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
S.No	Particulars	Qty							
1	Treatment (In Ha.)		203.2	696	390	801.69	970.66	662	3723.55
2	Farm pond/Sunken pond (In Numbers)	35	156	120	52	155	83	21	622
3	MPT					3	16	13	32
4	Common Land Development (Plantation in numbers)						4000	7470	11470
5	FFS (No. of Sessions)		5	4	7	9	10	5	40
6	Mechanization (For Groups)	4	6						10
7	ABC-Agri Business Centres		4	2			3	09	19
8	WUG- Water User Groups						6	09	15
9	Agro-Forestry (Plantation In Numbers)			1000	2100	13000	4000	13900	34000
10	NADEP (Structures)		100	130		50			280
11	Drip- Irrigation (Farmers)	5							5
12	Cattle Trough (Numbers)		2	2	4				8

## Impacts from our project:

## Impact on Soil Health:

From the year 2016, every year we are doing regular soil test for 200 farmers' fields to know the soil health of our core area especially about the growth of organic carbon level after the intervention of our soil and moisture conservation project. We are doing this soil tests in government soil test centre which is run by Department of Agriculture, Government of Tamil Nadu in Theni. From these tests we came to know that the OC percentage in the soil has been significantly increased when we compare with the year 2016 and 2021. At the time of starting SMC project in our core area in Theni, the OC level in soil was below 0.1 percentages. Due to an effective implementation of our SMC activities in the area, the OC level was significantly increased to above 0.3 percentages from 0.1 percentages.

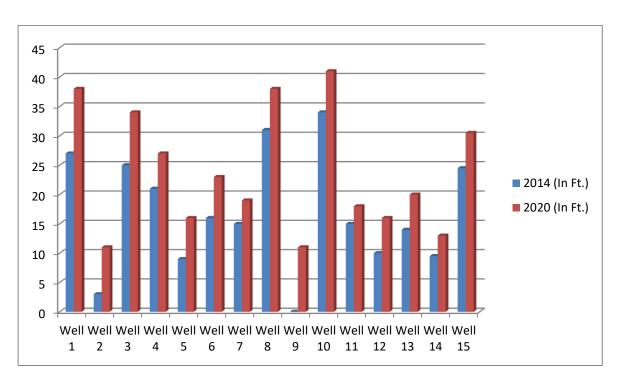


The above chart shows the increase of Organic Carbon (OC) level in our area

#### Impact on Water (Static Level of Well):

Main objective of our SMC program is not only to develop the soil and moisture levels and also to increase the ground water level in our project area. We strongly believe that this SMC works will surely leads to increase the vegetation area which means cultivation area will get increased. We have conducted a survey in five Panchayaths to know the ground water level from our intervention to till now. From this survey we found that the ground water level is increased through our SMC activities such as renovation of mini percolation tanks, construction of farm ponds in farmers' fields and soil treatment of trench cum bund. Some farmer's irrigation wells

were dried and there was no water in 2013 & 14, but now all these wells are having significant water level and they started cultivations. The land use is tremendously increased.



The chart showing the increase of water level (Well Static Level)

#### **Success Stories:**

# Improved conveyance infrastructure bringing back family agriculture

Mr.Rajeswaran from Vaaikalpatti village have 8 acre of agriculture land with one open well and bore well at highly elevated area in Theni district. Open well water availability failed one decade of years ago then they moved to bore well irrigation but bore well also yield 4 -6 hours per day due to high run off of water in this field. Earlier his full family is in agricultural activities only but due unavailability of water for irrigation family members were moved to other salaried work specially his younger generation who are educated.

After 2016, through ITC sponsored DRDTC project of SMC program facilitated the farmer in improved conveyance infrastructure (such as TCB, farm pond, or increased storage) has significantly reduce losses of water though run



off and increased water storage in land. In upper watershed areas, diversion and subsequent irrigation is often driven by water availability rather than irrigation needs. Proper regulation and storage offer the ability to time and more efficiently apply water. Outcomes could include economic growth, improved family safety and increased water availability which results directly in bringing his family back to agricultural. Mr.Ayyanar son of Mr.Rajeswaran has worked in IT Company quits his job

## **Appreciation from Panchayath Presidents:**

We have renovated 14 mini percolation tanks in Thekkampatti and Nagalapuram Panchayaths (Thekkampatti – 7 MPTs & Nagalapuram -7 MPTs). The Panchayath Presidents highly appreciated the ITC Limited and its social development activities for the well-being of farmers of their villages.



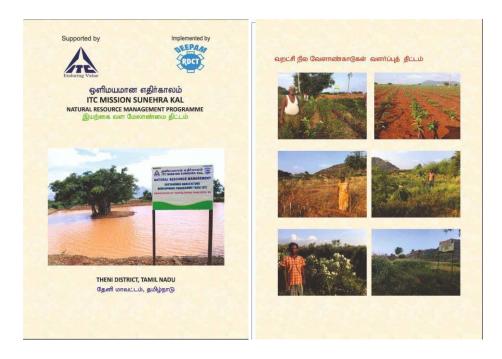
Mrs. J.Chandralekha President, Thekkampatti Panchayath



Mrs. P.Gnanamani President, Nagalapuram Panchayath

#### **Brochure:**

This year we have prepared a detailed brochure on our SMC activities carried out in our core villages from the beginning and also planned to release the brochure by the district collector of Theni. The brochure was prepared in Tamil and English languages.



# **Government Collaboration:**

The District Collector Office, Theni District

The District Rural Development Agency, Theni District

The Block Development Offices, Theni & Aundipatti

Department of Forest, Theni District, Government of Tamil Nadu

The Horticulture College and Research Institute, TNAU, Periakulam, TN

Department of Agriculture, Government of Tamil Nadu

Department of Horticulture, Government of Tamil Nadu