Water Security & Climate Adaptation Project- Tamil Nadu (A bilateral project of MoRD, MoJS, BMZ Implemented by GIZ -India)

4th District Level Steering Committee Meeting, Ramanathapuram

Date 08-02-2021 Time: 4.00 PM to 5.30 PM

The 4th District Level Steering Committee (DLSC) meeting of Ramanathapuram district was conducted on 8th Feb 2021 at Ramanathapuram under the chairmanship of Additional Collector (Dev), Ramanathapuram. The progress made under different components of WASCA was shared by the technical partners and the experts.

The detailed plan and work progress on the innovative water actions under Climate Resilient Measures that are undertaken at the district level was presented by Additional Collector. These CRM measures are addressing the issues related to public and common land management and rural infrastructure across 11 blocks. The 429 Gram Panchayats based CWRM plan was integrated at the block level and the key outputs of the analysis on key water challenges and the water action works were shared by MSSRF. The water action works were grouped in three categories: public and common land, agriculture and allied sector development, and rural infrastructure. In addition, based on the identified water action works, total number of works, budget as well as person days was estimated. These values have been presented as perspective plan for the three years (2021-2024) and an operational plan for the year 2021-22. Besides, the Climate Vulnerability Matrix in which CWRM variables aligned with the SDGs and NDCs was presented and discussed. The ground water study undertaken in the district was shared by Executive Engineer, Surface and Ground water Board PWD, Chennai. He highlighted the current status of ground water and traditional storage structures. In addition, he pointed out the potential scope and recommended relevant methods for ground water harvesting, storage and recharge. The key findings of the sea water intrusion study based on primary samples collected in the district during pre and post monsoon time intervals was explained by an expert from SDMRI.

Besides, Dr.Manivannan, Soil and water conservation expert provided technical inputs to strengthen the water actions works for both coastal and non-coastal blocks of the district. From the private sector side, Dr.Chandran from Madurai suggested the need for establishing good baseline and documentation of the progress. The line departments officials from Department of Agriculture, Horticulture, Agriculture Engineering, Animal Husbandry, State Rural Livelihoods Mission, TWAD boards etc and shared the relevant schemes and scope for convergence in WASCA.

Following are the key points discussed and approved for further action.

Minutes of the meeting

- The CWRM plans including spatial, non-spatial and KML was completed for all 429 Gram Panchayats and approved
- Using CWRM planning to conserve and recharge water effectively under MGNREGS for WASCA totally 7,92,654 number of works has been identified (Annexure 2). These categories of works further divided in to as given below

		Cost estimate	
CWRM themes	No of works	(Rs in Lakhs)	Person days
1. Public and common	6,10,798	12,94,519	214,38,42,438
land development	(77.06)	(72.16)	(92.68)
2. Agriculture and			
Allied sector	1,38,116	4,91,559	16,79,65,748
development	(17.42)	(27.40)	(7.26)
3. Rural water	43,740	7,897	12,38,510
management	(5.52)	(0.44)	(0.10)
Total for the district	7,92,654	17,93,975	231,30,46,696

Summary of the number of works, estimated budget and person days

* Figures in parenthesis are percentage to the total

- 3) All the above works identified in a scientific manner will be added in to shelf of projects (SOP) in every GP. The SOP will be available for GP to implement the works as per the priority and following the guidelines of MGNREGA (Annexure 2) as perspective plan.
- Administrative Sanction can be provided to these works following the guidelines of MGNREGA for the works listed in Annexure 3 for the financial year 2021-22 for implementation.
- 5) The meeting approved the activities proposed for the year 2021-22 (Annexure 3). A total of 1.90 CR persons days are proposed which is duly approved

- 6) To implement WASCA plans, the cooperation and convergence of all line departments is important (Annexure 6). Hence, all the line departments are requested to provide necessary support at the block level to implement the works using WASCA plans as a base to come together in the areas of sharing the available schemes and technical capacities.
- 7) To enhance the Climate Resilient measures following works are discussed and agreed. For technical support GIZ is committed to provide support through M.S. Swaminathan Research Foundation, Prime Meridian, SDMRI, Tamil Nadu Agriculture University etc.
- 8) The facility created at WASCA Resource Centre and the outputs can be utilized by all district officials at the block as well as other line departments and
- 9) The detailed district report (draft) was submitted by GIZ and MSSRF is accepted.
- 10) The GP wise and block wise, works and person days will be communicated by the Additional Collector, Ramanathapuram for necessary approvals and implementations to BDOs and Asst. Engineers at the block level.

The meeting concluded with the remarks and approval by the Chair person.

Annexures

- 1. Agenda of the 4th DLSC meeting
- 2. Summary of works and detailed works, estimated cost and person days based on CWRM plans
- 3. Total List of works for the financial year 2021-22
- 4. Priority works discussed for the financial year 2021-22 with DLSC members
- 5. List of Climate Resilient Measures
- 6. List of Illustrative Areas of convergence and associated line department

Annexure 1

WASCA - 4th District Level Steering Committee Meeting Ramanathapuram -Tamil Nadu

Date 08-02-2021 Time: 4.30 PM to 5.30 PM

Agenda of the Meeting

No.	Торіс	Presentation By
1	Welcome Address	Assistant Project Officer (MGNREGS) DRDA, Ramanathapuram
2	WASCA, Climate resilient models Progress and future plan	Thiru. M. Pradeepkumar I.A.S Additional Collector (Development) Ramanthapuram
3	Presentation of Activity plan for 429 GP progress and plan	Dr R. Rengalakshmi, MSSRF, Technical Support Agency WASCA – TN (Participation Online)
4	Presentation by Technical Partners	 Soil and water Conservation Dr. Manivannan, Principal Scientist, ICAR- Indian Institute of Soil and Water Conservation, Ooty (Online participation) Sea water intrusion Studies Dr. Gladwin Gana Asir, Assistant Professor, Suganthi Devadason Marine Research Institute, Tuticorin (Online participation) Ground water studies Mr. Raja, EE- Surface and Ground Participation water Board PWD, Chennai (Online participation) Climate and SDG matrix Dr Radha Priya P, WASCA, GIZ (Online participation)
5	Private Sector Partnerships	Members of CII - Special Invitees from Suzlon, Thiagarajar College of Engineering, Madurai and Shreen polymers
6	Areas of Convergence and Linkages	District Level Steering Committee Members and heads of all line departments
7	Remarks and approval of the GIS based GP Plans, Integration into LB- MGNREGS- Works and Estimates	Thiru. M. Pradeepkumar I.A.S., Additional Collector (Development) Ramanthapuram
8	Vote of Thanks	Assistant Project Officer (MGNREGS) DRDA, Ramanathapuram

Annexure 2:

PERSPECTIVE PLAN - WASCA- TN- RAMANATHAPURAM Detailed total number of Works, estimated cost and person days (2021-2024)

S.NO	Name of the work	No of works	Estimated cost of proposed work as per RSSR-TN in Lakhs	Estimated Person Days	
	CWRM Water Action 1. Public and common land development				
1	Afforestation (Ha)	11217	84128	32866044	
2	Contour Continuous Bunds (Mts)	43894	1097	438941	
3	Composting (Number)	11931	2028	178965	
4	Drainage Line Treatment (Mts)	23248	697	116238	
5	Silvi-pasture Development (Ha)	191	3048	1190688	
6	Linear Plantation (km)	754	1358	530185	
7	Avenue plantation (km)	1801	3242	1266137	
8	Block Plantation (Community)- Ha	29487	294873	115177394	
9	Mulching (Community) - Ha	17154	17154	6707073	
10	Fencing (Ha)	6919	692	159137	
11	Deepening of waterbodies (Ha)	31316	313163	1223308918	
12	Desiltation of waterbodies(Ha)	31316	313163	611638801	
13	Waterbody Bund strengthening(Ha)	16	47	15298	
14	Inlet development with silt trap of Waterbodies(Ha)	31316	156582	61160748	
15	Surplus/waste weir(Number)	1147	5735	895807	
16	Artificial Recharge Structure(Number)	4627	11568	1809174	
17	Canal Bund Plantation (Ha)	2618	19636	7671161	
18	WC - Irrigation channels - Desilting (mts)	157589	1182	472766	
19	WC- Irrigation channels - canal side plantation (Mtr)	157589	2364	945533	
	C	OASTAL WATER	SHEDS		
20	Agro forestry (HA)	1614	12106	4729577	
21	Check Wall (Numbers)	27	41	6318	
22	Mangrove plantations (Ha)	135	2159	843375	
23	Riverside plantation(Ha)	8193	14747	5759679	
24	Fish Drying Yard(Numbers)	34	72	11254	
25	Bird Watching Tower (Numbers)	14	30	4620	

	Fish Processing			
26 Unit(Numbers)		34	77	11390
27	Sand Dune Development (Ha)	57	143	55689
28	Nursery development -			
	plantation(Numbers)	12	248	96745
29	Shelter belts (Ha)	16	120	46880
30	Coastal wetland - Bund strengthening (KMs)	22579	1411	22059781
	Bund Plantation wet lands	22319	1411	22039781
31	(Kms)	10964	2056	32124520
32	Wetland plantation (inner)(Ha)	133	998	389823
33	Wetland Inlet improvement			
33	works(Numbers	2856	28556	11153778
	Sub Total	610798	1294519	2143842438
	CWRM Water Action	2: Agricultural an	d allied Sector developr	nent
1	Farm Bunding(Ha)	32926	41157	19294437
2	Micro Irrigation(Ha)	3081	3081	0
3	Construction of farm			
	ponds(Number)	10084	20168	7875604
4	Mulching (Individual)(Ha)	16149	16149	6314368
5	Land development(Ha)	12668	82342	49481325
6	Nutri Garden 5 plants per HH(Sq.km)	9769	146531	22897950
7	Cattle Shelters(Number)	2329	4937	770899
8	Goat Sheep Shelters(Number)	19385	44004	6881675
9	Fodder development for cattle(Ha)	2329	3447	5459176
10	Azolla units(Number)	2329	349	53567
11	Cattle Trough(Number)	2329	3144	491419
12	Poultry shed(Number)	5949	2380	154674
13	Dry land Horticulture/Agro- forestry (Ha)	16460	123450	48227771
14	Vermi compost(Number)	2329	419	62883
Sub Total		138116	491559	167965748
			Water Management	
1	Soak pits (Community) (Number)	3895	506	77900
2	Soak pits (Individual)(Number)	38985	3899	623760
3	Roof rain Water Harvesting(Number)	858	3432	536250
4	Tanka - community level	2	60	600
+	Sub Total			
	District Total	43740	7897	1238510
	District 1 otal	792654	1793975	2313046696

S.NO	Name of the work	No. of. Works from	Estimated Person Days
		CWRMP (2021-2022)	(2021-2022)
	CWRM Water Action 1. Public		
1	Afforestation (Ha)	112	328660
2	Contour Continuous Bunds (Mts)	439	4389
3	Composting (Number)	119	1790
4	Drainage Line Treatment (Mts)	232	1162
5	Silvi-pasture Development (Ha)	2	11907
6	Linear Plantation (km)	8	5302
7	Avenue plantation (km)	18	12661
8	Block Plantation (Community)- Ha	295	1151774
9	Mulching (Community) - Ha	172	67071
10	Fencing (Ha)	69	1591
11	Total number waterbodies for renovation	0	0
12	Deepening of waterbodies (Ha)	313	12233089
13	Desiltation of waterbodies(Ha)	313	6116388
14	Waterbody Bund strengthening(Ha)	0	153
15	Inlet development with silt trap of		
15	Waterbodies(Ha)	313	611607
16	Surplus/waste weir(Number)	11	8958
17	Artificial Recharge Structure(Number)	46	18092
18	Canal Bund Plantation (Ha)	26	76712
19	WC - Irrigation channels - Desilting (mts)	1576	4728
	COASTAL WATERSHEDS		
20	Agro forestry (HA)	113	331070
21	Check Wall (Numbers)	2	442
22	Mangrove plantations (Ha)	9	59036
23	Riverside plantation(Ha)	574	403178
24	Fish Drying Yard(Numbers)	2	788
25	Bird Watching Tower (Numbers)	1	323
26	Fish Processing Unit(Numbers)	2	797
27	Sand Dune Development (Ha)	4	3898
28	Nursery development - plantation(Numbers)	1	6772
29	Shelter belts (Ha)	1	3282
30	Coastal wetland - Bund strengthening (KMs)	1581	1544185
31	Bund Plantation wet lands (Kms)	767	2248716
32	Wetland plantation (inner)(Ha)	9	27288
33	Wetland Inlet improvement works(Numbers	200	780764
	SUB TOTAL	8908	26076030
	CWRM water action 2. Agricultur	re and Allied sector devel	
1	Farm Bunding(Ha)	659	385889
2	Micro Irrigation(Ha)	62	0
3	Construction of farm ponds(Number)	202	157512
4	Mulching (Individual)(Ha)	323	126287
5	Land development(Ha)	253	989627
6	Nutri Garden 5 plants per HH(Sq.km)	195	457959
7	Cattle Shelters(Number)	47	15418

Annexure 3: IMPLEMENTATION PLAN 2021-22, WASCA- TN -RAMANATHAPURAM

8	Goat Sheep Shelters(Number)	388	137634
9	Fodder development for cattle(Ha)	47	109184
10	Azolla units(Number)	47	1071
11	Cattle Trough(Number)	47	9828
12	Poultry shed(Number)	119	3093
13	Dry land Horticulture/Agro-forestry (Ha)	329	964555
14	Vermi compost(Number)	47	1258
Sub total 2762 33593			
CWRMP Action 3. Rural Infrastructure			
1	Soak pits (Community) (Number)	234	4674
2	Soak pits (Individual)(Number)	2339	37426
3	Roof rain Water Harvesting(Number)	51	32175
4	Community tanks	0	36
	Sub total	2,624	74,311
	Total - District wise 14,295 2,95,09,656		

Annexure 4:

List of Prioritized work for the financial year 2021-2022, WASCA- TN- Ramanathapuram

- Cascade of tanks in R.S.Mangalam
- Catch rain Campaign- Develop 9000 farm ponds
- Promotion of 110 Horticulture park in 11 blocks
- Develop MGNREGS livelihood park
- 436 Village level Nursery
- Oxygen Park

Annexure 5.

List of Climate Resilient Measures - WASCA - TN- Ramanathapuram 2021-2022

Sl.No Name of the CRM		GP and block	Details
		1). Public and Common La	nd Development
	Mini forest: (500		 Promoted 5 lakhs trees in 250 acres 33 native species are grown
1	saplings/unit)	1000 mini forest units in 11 blocks covering all 429 GPs	• Promoted 162 mini forest in schools and maintained by women and students

2 Horticulture Park: 11 thematic parks in 11 blocks- 3 In the IFS model -included allied enterprises such cattle rearing, goat rearing, Mushroom production, organic inproduction, compost production, organic inproduction and cultivation of vegetables, fruits at medicinal plants, fodder in organic farming 3 Nursery at the district level Vendoni, Paramakudi block 4 Avenue plantation 1) Parthibanur (Ramnad district border)- 40 Kms (double side - 80 kms) 4 Avenue plantation 2) Parthibanur to Paramakudi-15 kms(double side - 30 kms) 3 2) Parthibanur to Paramakudi-15 (Thoothukudi district border)- 70 (140kms)
3 Nursery at the district level Vendoni, Paramakudi block District 4 Avenue plantation 1) Parthibanur (Ramnad district border starting) to Kamuthi (Viruthunagar district border)- 40 Kms (double side - 80 kms + 4,00,000 trees will be transplanted in 370 Km - cons of 100 big trees and 200 small trees per 1000 m and completed areas and SHGs are given responsibility for transplanted in the maintenance
3 level vendom, Paramakudi biock 20 varieties of native species are maintained and Scientific management of Nursery was imparted 4 Avenue plantation Parthibanur (Ramnad district border) - 40 Kms (double side - 80 kms) Parthibanur to Paramakudi - 15 kms(double side - 30 kms) Ramanathapuram to Sayalkudi (Thoothukudi district border) - 70 (140kms) Ramanathapuram to Sayalkudi 4 (Avenue plantation
4 Avenue plantation 1) Parthibanur (Ramnad district border) to Kamuthi (Viruthunagar district border) 40 Kms (double side - 80 kms) 4 Avenue plantation 2) Parthibanur to Paramakudi- 15 kms(double side - 30 kms) 3) Ramanathapuram to Sayalkudi (Thoothukudi district border) 70 (140kms) 4 <l< td=""></l<>
4 Avenue plantation border starting) to Kamuthi (Viruthunagar district border)- 40 Kms (double side - 80 kms + 4,00,000 trees will be transplanted in 370 Km - cons of 100 big trees and 200 small trees per 1000 m and completed areas and SHGs are given responsibility for transition maintenance 4 Avenue plantation - 3) Ramanathapuram to Sayalkudi (Thoothukudi district border)- 70 (140kms) + 4,00,000 trees will be transplanted in 370 Km - cons of 100 big trees and 200 small trees per 1000 m and completed areas and SHGs are given responsibility for transition
4 Avenue plantation 2) Parthibanur to Paramakudi-15 kms(double side- 30 kms) of 100 big trees and 200 small trees per 1000 m and completed areas and SHGs are given responsibility for trees maintenance 3) Ramanathapuram to Sayalkudi (Thoothukudi district border)- 70 (140kms) of 100 big trees and 200 small trees per 1000 m and completed areas and SHGs are given responsibility for tree
3) Ramanathapuram to Sayalkudi (Thoothukudi district border)- 70 (140kms) maintenance
4) Ramnad toThondi (border of Sivagangai district)- 60 (120 kms)
5Cascade of tanksR.S Mangalam block is selected for cascade tank - Planned to work in 15 cascade tank• Discussed with PRADHAN- a NGO expertise in cascade tank- NGO will support to renovate (planning an implementation)
Established in 25 acres of land
 6 Integrated Food park Thaduthalankottai, Paramakudi Navthanya (millets and pulses) cultivation as processing
 Moringa cultivation and value added products-
Traditional Vegetable seed production- 70 varieties vegetable and Flowers crop cultivation
 Coastal watersheds list of villages are given in Annexure 1 tist of villages are given in Annexure 1 Three pilots have been identified and discussion initiated for comprehensive planning. Activities includ Wetlands, Coastal bio-shields, mangroves, coastal san dune management, coastal plantation, river cree management, eco-tourism, local sea grass cultivation etcomplexes
8 River bank stabilization through plantation Paramakudi block Paramakudi block prove areas
9Oxygen parkPlanned in 10 acres (8000 trees) of land at Ramnathapuram block• Planned to promote Bamboo for increasing the oxyge and Moringa trees and its value
10 Mini nursery in all Promoted fruit and flower seedlings in 429 panchayats 450000 seedlings will be produced in six months
Mandapam block - Developing + Traditional food court
11 Traditional life park models of five types geo-based land (Kurunji, Mullai, Marutham,
Neithal and Palai)

			□ Total area 7.5 acres
12	Mega forest - 5000 saplings/unit	four GPs	□ Block plantation in degraded lands
13	River rejuvenation	Kottakariyar river sub basin	Artificial recharge Structures and check dams - potential sites have been identified
14	Sea water intrusion control and soil erosion	Coastal GPs	5 GPs in the coastal areas where salinity is higher
CWRM water action 2. Agriculture and Allied sector development			
2	Livelihood Activity centers	Planned to promote 50-60 types of enterprises covering one Livelihood activity in each GP (in 429 Gps)	 Building a center using local available resources like mud, Prosopis sticks and Palm leaves
CWRMP Action 3. Rural Infrastructure			
3	TANKA - Community level	Chitturvadi in R. S. Mangalam and Thillainendhal, Thiruppullani	□ Storage capacity is 30000 lits/ tanka

Annexure 6.

List of Illustrative Areas of convergence and associated line department, WASCA - TN-Ramanathapuram

S No	Name of the Department	Areas of Convergence
1	Department of PWD -	Traditional water harvesting structures restoration,
	WRO	Canal network improvements
2	Department of Agriculture	Fallow land – individual development, IFS and Water
		management – Micro irrigation
3	Department of Agriculture	Farm ponds and Micro watersheds
	Eng	
4	Department of Horticulture	Dry land horticulture – fallow land dvt, crop
		diversification with reduced WR
5	Department of Forest	Shelter belt and mangrove plantations
6	Department of Animal	Silvi pasture development in common lands, livelihood
	Husbandry	activity centres - technical support for fodder
		development in individual lands
7	Department of Fisheries	Alternate livelihoods
8	NABARD	Coastal watersheds

Thiru. M. Pradeepkumar I.A.S., Additional Collector (Dev.) District Rural Development Agency (DRDA) Ramanthapuram