

From

Dr. K.S.Palanisamy, I.A.S.,
Member Secretary / Convenor, Director,
Rural Development and Panchayat Raj,
Panagal Building, Saidapet,
Chennai -15

To

1. Managing Director, Tamil Nadu Water Supply and Drainage Board, Chennai
2. Director, Agriculture Department, Chennai
3. Director, Horticulture Department, Chennai
4. The Principal Chief Conservator of Forests, Saidapet, Chennai
5. Director, Department of Environment, Saidapet, Chennai
6. Director, Fisheries Department, Chennai
7. Vice Chancellor, Tamil Nadu Agriculture University, Coimbatore
8. Engineer-in-Chief, Water Resources Department(PWD), Chennai
9. Director, NRM Division, GIZ, New Delhi
10. Additional Director (MGNREGS)
11. Superintending Engineer (MGNREGS)
12. Regional Director, Central Ground Water Board, Chennai.
13. Regional Director, Indian Institute of Soil and Water Conservation Research Centre, Ooty(SR)
14. Director, Water Technology Centre, TNAU, Coimbatore
15. Director, Centre for Climate Change and Disaster Management (CCCDM), Anna University
16. Director, Centre for Water Resources, Anna University
17. Director, Confederation of Indian Industry(CII)
18. Chief Engineer, Agricultural Engineering, Department of Agriculture Engineering, Nandanam.
19. Prof Kavi Kumar, Madras School of Economics, Madras University
20. Director, M.S.Swaminathan Research Foundation

21. The Collector, Ramanathapuram District
22. The Collector, Tiruvannamalai District
23. Chief General Manager, National Bank for
Agriculture and Rural Development
(NABARD)

Rc.No.60138/2019/MGNREGS-I-1, Dated: 21.10.2020

Sir/Madam,

Sub: RD & PR - Mahatma Gandhi NREGS - Water Security and Climate Adaptation(WASCA), a MoRD & GIZ Project - in Rural areas of Tamil Nadu - the 3rd State Level Steering Committee meeting on Water Security and Climate Adaptation (WASCA) held on 09.10.2020 at Additional Chief Secretary Chamber, RD & PR Department held on 09.10.2020 at Secretariat - Minutes Communicated - Reg.

- Ref :
1. This Office Lr.No.60138/2019/ MGNREGS-I-1, dated.06.10.2020
 2. Minutes of the 3rd State Level Steering Committee meeting on Water Security and Climate Adaptation (WASCA) held on 09.10.2020

I invite your kind attention to the reference above cited.

I enclose herewith a copy of the minutes of the 3rd State Level Steering Committee meeting on Water Security and Climate Adaptation (WASCA), a MoRD & GIZ Project in Rural areas of Tamil Nadu under Mahatma Gandhi NREGS held on 09.10.2020 at Additional Chief Secretary Chamber, RD & PR Department, Secretariat, Chennai.

Encl:- Minutes of the meeting.

Sd/-K.S.Palanisamy
Director

Nr 
for Director


24/10/20

(Zero draft)

Rural Development and Panchayat Raj Department
Minutes of the Third State Level Steering Committee meeting –
Water Security Climate Adaptation (WASCA) – Tamil Nadu

Date: Held on 9th Oct 2020,

Venue:ACS Chamber, Rural Development and Panchayat Raj Department,
8th floor, Secretariat, Chennai- 600009

Chairperson: Thiru.Hans Raj Verma IAS
Additional Chief Secretary, Rural Development & Panchayat Raj
Department

1. The Third SLSC meeting was held at ACS Chamber, 8th Floor, Secretariat on 9th Oct 2020. The members of the state level steering committee participated and discussed on progress and actions plan of the WASCA Tamil Nadu for the FY 2020-2021 in the two districts namely Ramanathapuram and Tiruvannamalai. The meeting began with a welcome address by Tmt.G.Muthumeenal, Additional Director (MGNREGS), Rural Development and she briefed about the WASCA initiatives in both the districts. The respective district officials, members who stay outside Chennai have joined in virtual mode and members who are in Chennai joined the face to face meeting.
2. **District Presentation – Ramanathapuram – Presentation by – the District collector and WASCA Chairperson for Ramanathapuram, ThiruVeeraRaghavarao IAS**
 - a. The District Collector of Ramanathapuram explained the biophysical profile of the district as it is primarily a rainfed agroecosystem with a long coastal line of 271 km in length and 6 out of 11 development blocks are located in the coast.

- b. He updated the on-going progress of WASCA initiatives in the district both on the CWRM plan preparation as well as climate resilient models. Under CWRM planning, till now 24% of the 429 total Gram panchayats planning was completed and actions are being promoted under convergence mode. Also, efforts are taken to complete the planning in the remaining GPs by mid November 2020.
- c. Under climate resilient models, importance was given to management of degraded land development as well as coastal resources enhancement under convergence mode. The notable models are:
- d. Mini forest is being promoted, so far 1000 units were established, 18000 women were engaged under MGNREGA and 220-240 acres were covered.
- e. Coastal watersheds - planned to pilot three models
- f. River Bank stabilization
- g. Development of Horticulture Parks - a comprehensive horticulture and allied sector integrated activities, aimed to generate a revenue to the tune of Rs 1 lakh per month per park
- h. Rainwater harvesting by replicating the *Tanka* model of Rajasthan

3. District Presentation – Tiruvannamalai – Presentation by – the District collector and WASCA Chairperson for Tiruvannamalai, Thiru K.S. Kandasamy IAS

- a. The District Collector of Tiruvannamalai explained the progress achieved in the district: the topographic survey was completed for all the GPs which is useful while planning the actions for water harvesting and recharge.
- b. As there is no perennial river in the district, the available water has to be used efficiently. Under JJM, with proper planning equal distribution of water for drinking is ensured by standardizing the consumption needs, hence water requirement for drinking has come down.

- c. Similar planning is necessary for agriculture as the district is predominantly cultivating paddy, sugarcane and groundnut. Here to promote efficient use of water, technologies like micro irrigation (drip, raingun and sprinkler), direct sowing of rice, System Rice Intensification (SRI) are facilitated among farmers to carefully use groundwater resources. The saved water can be effectively used to bring additional area under irrigation especially the fallow land can be brought back under cultivation. In this context, water literacy among farmers are crucial, the district is taking steps to facilitate the same.
- d. Also, importance of soil health is another dimension requires attention of farmers and other stakeholders - rejuvenation of soil health with integrated management needs attention and priority
- e. Under water management technology modification and upgradation is needed especially for water harvesting in Drainage lines and sluice and weirs
- f. In the past traditional waterbodies were the main source of water, now the borewells has replaced its importance and ultimately the ecosystem approach in water management is lost.
- g. Hence reviving the ecosystem based approach in water management with improved technologies are need of the hour.

4. Presentation on Agroforestry & Farm Forestry Potential in WASCA By Dr. Balasubramanian Professor FCRI, Mettupalayam

Dr. Balasubramanian has shared the importance of agroforestry in water and soil management interventions. He said there are 26 different types of agro-forestry models are with different functional use and farmers can choose the appropriate one based on relevance and need. Tree crops that meet the requirements such as fodder, non-timber forest produces, fruits, green manure quality, suitability to grow as fence crop etc are the

preferred species. For example Velvel + Cenchrus intercropping system is an excellent for meeting fodder requirement in dry region as well as soil protection due to the growth pattern of the grass species. Similarly different management practices are available which doesn't affect the productivity of the main annual crops (stool coppice fodder model, pollarding model etc).

5. SLSC Members Key Point Discussion

a. Dr.Pannerselvam, Director, Water Technology Centre, TNAU

- Dr Pannerselvam shared the NEM forecast; in case of Tiruvannamalai , it will be 520 mm, that is 40 mm is higher than the longterm average, while in Ramanthapuram district it is 500 mm where 20 mm lower than the longterm average rainfall, accordingly the preparedness have to be facilitated among farmers.
- There are facilities available in the IAMWARM scheme of Govt of Tamil Nadu that can be leveraged appropriately to strengthen the water bodies in both the districts.
- In the crops, increasing water use efficiency is the primary objective and hence technologies such as micro irrigation, alternate wetting and drying etc are to be focussed in a mission mode approach to see the benefits at the higher level.

b. Prof. Kavikumar, Madras School of Economics, Chennai

- Prof Kavikumar shared that the CWRM plan is 'a comprehensive one encompasses social, hydrological, and biophysical elements while estimating water budget. This tool can be made available in digital form to enhance the hands-on experience which helps to understand the plan better.

- In this, the whole concept of pricing is overlooked, as the demand for agriculture is expanding, considering the existing price, kind of crops and are it should be adjusted and estimated.
- It helps to introduce appropriate pricing signals for promoting low water requiring crops which also helps in crop diversification. Same time it is essential to focus water use at water level considering the social aspects.

C. Principal Chief Conservator of Forests, Department of Forest

- PCCF, Govt of Tamil Nadu has appreciated the effort and suggested to promote native species in the foreshores of the waterbodies. Also shown interest to partner with WASCA in addressing the issue of invasive species management especially Prosopis in the waterbodies and common land. Also advocated the business approach while doing the replacement of the vegetation.
- The Agro Forestry models with value added components such as livestock with appropriate water management helps to strengthen the resilience capacity of farmers in the marginalised areas
- The efforts of Mini Forest as a block plantation model is also appreciated and it can be expanded in a scale at both the districts.

D. Dr. S. Subramanian, Sr. Scientist, Centre Ground Water Board

Informed that they have prepared groundwater atlas for all river basins of Tamil Nadu. Also, has shared that they have developed ground water management model for Tiruvannamalai district and for Ramanathapuram the work was completed, and report preparation is underway and which will also be shared sooner.

E. Mr.S.Raja, E.E, Ground and Surface Water Data Centre, PWD & National Water Mission

Suggested that all the engineers of the DRD should be familiar with ground water assessment tools. The knowledge on the ground water geometry helps to make informed decisions while planning.

The nodal officers National Water Mission further informed that he is technically supporting in their request in finding out the ground water assessment in firka wise. It can be further clipped into hydrological subunits level for practical decision making. He is further informed that he can support in the training of RD and other officials.

Ms.Jayashree Venkatesan, Care Earth, Chennai

- A special invitee representing Care Earth shared the plan of Neithal - Muttukadu, a restoration plan prepared to address the Chennai's vulnerability against flooding. The study area proposed is Kovalam sub basin which is a semi-arid river basin and the detailed assessment and mapping on the proposed work was shared briefly.
- She shared the importance of coastal watersheds and insisted the need for ecological zone management to revise its ecosystem functions. In Ramanathapuram wetlands are more and interdisciplinary approach is essential to revive and sustain its core values and functions. The key climate risk here is extended period of dryness and measures are needed to address the such issues.

F. Ms.Sri Vidya, Deputy Director, Dept of Agriculture

- Dy. Director shared the available scheme of Govt of Tamil Nadu to restore the cultivation in fallow lands. It has 50% subsidy to remove the bushes, ploughing and seed sowing, and 100% subsidy for micro

irrigation, the allocation for Ramanathapuram is 350 Ha and 315 ha for Tiruvannamalai which can be leveraged under WASCA initiatives.

6. National Perspective of WASCA – By Mr. Rajeev Ahal, Director, NRM and Agro Technology, GIZ, New Delhi

- **Mr. Rajeev Ahal** complemented the Govt of Tamil Nadu's effort in encouraging the convergence of schemes which helps to bring new ideas and shared understanding on the issues.
- WASCA is promoting stronger partnerships with CII for promoting water stewardships and financing. As a part of its support to expand the institutional linkages; National Institute of Disaster Management has developed a good response system against the climate risks and with IWMI on public private partnerships.
- Also, he suggested to showcase our experience at the next level policy forums such as World Water Week, forthcoming COPs on IPCC.
- GIZ is replicating the CWRM planning in Bundelkhand region of MP state under partnership mode. Also it works with Peru and Malawi under Digital Innovation Hub model to strengthen the soil water nexus theme in the climate change context.
- He highlighted the need to develop standards of using less water to reiterate the soil water nexus and suggested branding of produces that consumed less water.
- GIZ undertook Ravine reclamation in Chambal basin @ 6 lakh ha.
- Developing knowledge products - CWRM plans and Exploring co-financing opportunities with the partnership of International Water Management Institute
- WASCA - CWRM centres are coming up in the district offices to promote comprehensive planning and best practices will be shared through knowledge products including websites.

7. Progress Report and Action Plan: WASCA – TN (PPT Shared during the SLSC)

Revised Action Plan for 2020-21 as per NSC Meeting

S NO	Activity	Target	Time Line
1	Four GPs per block, CWRM planning works to be taken up during the season	44 GPs in Ramanathapuram; 72 GPs in Tiruvannamalai	Sep – Oct 2020
2	GP Level CWRM Planning	1289 GPs in two districts	15 November 2020
3	CWRM Plans also to include all Non-NRM works	All GPs	15 November 2020
4	Integrating GP plans to Block, Watershed & Rive Sub-basin level	Both the District	15 December 2020
5	All CWRM GPs uploading to MoRD GIS plan portal (after due verification & approval by GP)	1289 GPs	30 November 2020
6	Base Line for WASCA (One GP per Block)	One GP per block	30 Oct 2020
7	District WASCA plans	Both Districts	15 December 2020
8	Coastal Micro Watershed development	Three Pilots in RMD	Oct2020 – Feb 2021
9	Silvi-pasture development	2 Ha per GP	Oct 2020 – Feb 2020
10	Green Fodder & Livestock Shelters	As per CWRM GP Plan	Oct 2020- Feb 2021
11	Block Nursery for supporting all plantations	One Nursery per block (one lakh number)	Oct 2020- June 2021
12	Horticulture Development Dry lands	Policy Framework	10 Nov 2020
13	Agro-Forestry (Community & Individual)	Policy Framework	10 Nov 2020

14	Cascading Tanks	Policy Framework	10 Nov 2020
15	Two River Sub basin Rejuvenation model plans	Framework	30 Oct 2020
16	Identification of Hillocks for afforestation	Framework plan	Feb 2021
17	Sea Water Intrusion Reduction (including drinking water challenges/ solutions)	Framework plan	30 Nov 2020
18	Artificial Recharge - GW Recharge	Framework plan	30 Nov 2020
19	District and State Convergence and Financing Meetings	Online Web Meeting	15 Dec 2020
20	Capacity Building for RD Engineers on ground water assessment tools and ground water geometry	Virtual training	15 Dec 2020

Note: All the timeline should be strictly followed by DRDA, MSSRF, PM, SDMRI

8. Key Address by Dr. K.S. Palanisamy IAS, Director, Rural Development and Panchayat Raj Department and Member Secretary of WASCA, Tamil Nadu

- **Dr.K.S. Palanisamy, IAS** shared that the premise of the district selection which used 18 indicators to arrive at the vulnerability to climate change. WASCA initiatives helps to build ground water table, increase vegetation and biodiversity as co-benefits of the interventions.
- He insisted to restore the existing pasture land productivity by introducing appropriate Agro- forestry models
- Improving the water quality and quantity and sensitise the farmers to efficiently use water, initiatives like use of micro irrigation and increase the area under cultivation

- promote interventions to increase the water percolation and reduce the withdrawal
- As the WASCA is adopting a partnership approach wherein scientists, planners, executives are working together and in future it can be replicated to all district in Tamil Nadu.

**9. Key messages and Concluding Remarks by Shri. Hans Raj Verma
IAS Additional Chief Secretary, Rural Development Department,
Govt TN and Chairperson WASCA- TN**

- The ACS, Govt of Tamil Nadu suggested to tie up with NABCONS and **NABFINS**a subsidiary of NABARD for financing to strengthen the Realtime water management information systems (soil moisture, ground water table and surface water bodies).
- In the post COVID-19 phase the demand and relevance for AI and emerging Technology like block chain ML, AR/VR etc., technologies will be more and in WASCA we need to integrate such advanced technologies to monitor the prime indicators of water and climate factors on regular and Realtime basis.
- Climate Proofing of Livelihoods of People is the end goal, we are all discussing about the means, however the end goal should be the driving element in these initiatives. Tamil Nadu is a thought leader and the WASCA Model of Tamil Nadu should emerge as a National / International Model.
- He reiterated the convergence and use of technologies which is a multiplier of outcomes, WASCA has to harness the power of Artificial Intelligence and emerging technologies like IoT, Data Analytics for better planning, execution and monitoring.
- The targets and suggestions received from the district are approved

- The Fourth SLSC meeting will be conducted in the month of December 2020
- Chief General Manager NABARD Thiru.Selvaraj to be invited as a Special Invitee


19/11/2020

Annexure 1

Actions Taken on 2nd SLSC Meeting

SNo	Resolution as per SLSC	Action Taken
1	Works identified from districts to be undertaken with immediate effect	90 GPs in Ramanathapuram & 148 GPs in Tiruvannamalai submitted for verification
2	As and When GPs CWRM plan gets approved may be taken up for implementation	Teams of line departments, EE, AE formed for verification
3	CWRMP plans to be done at GP level, but the analysis and assessment of data can be done at revenue village	Gram Panchayats falling under Type 2, Type 3, Type 4 and Type 5 data is collected as per this guideline, planning started
4	Both the Districts focus on water conservation works, traditional water bodies restoration and supply channels, natural drainage lines to be brought under soil and water conservation works.	CWRMP priority is given for identification of these works in all GPs
5	Necessary support from revenue department through district collector orders for removal of encroachment of water body courses to be taken up Committee with line department at Block level.	To be taken up at the district level with the support of District Collector.
6	All Line departments share their plan of action and area of intervention so that convergence will be done	14 GPs in Ramanathapuram joint teams are formed to verify draft plans and scope for convergence.
7	Ramanathapuram district to focus on series of water storage	CWRMP focus on construction of farm ponds

	structures as per contour, watershed and construct new water storage structures at saturation mode.	
8	District Collector to facilitate convergence meetings at block and district levels for schemes to support CWRMP holistic water plans implementation, wherever necessary, joint technical team visits to be undertaken for works identification.	DLSC meetings organised to facilitate convergence. Teams formed by District Collector for joint visits.
9	Plantations to be given high priority. All water conservation and soil conservation work invariably to have vegetative measures and plantations with livelihood and employment generation.	Mini forest, Mangroves, Silvi-pasture, Greening of hillocks, Avenue plantation, Horticulture etc are given priority in all CWRM plans at GP level.
10	Identification of private sector partnership with CII.	CII National level Meeting conducted on 3 rd September 2020 on private partnership by GIZ, CII, MoRD, MoJS Director RDPR, ADRD (MGNREGS), District Collectors Tiruvannamalai, Ramanathapuram, SE (MGNREGS), Project Director, Tiruvannamalai, EE (MGNREGS) participated. A follow-up meeting exclusive to TN is planned,
11	Monthly reviews of progress of WASCA to be conducted and reports to be submitted by 24 th of every month to this office.	Monthly reports generated and shared with State and District Officers
12	Monthly State Level Review with GIZ and Chairperson shall be taken up on 25 th of every month.	9 th July 2020 State Level review meeting was conducted 23 rd July NSC meeting was conducted.

13	Coastal watershed formation of Committee and Nodal Officer at Ramanathapuram	Committee Constituted
14	Three Pilot Works to be started on Coastal Watershed	One Pilot Area, Works identified using GIS
15	Participation in NSC	Targets revised as per submission by GIZ in the NSC

Annexure II

List of Participants

No.	Name of the Participant	Institution
1.	Thiru. Hans Raj Verma IAS	ACS, RD&PR Department, Tamil Nadu
2.	Thiru. Palanisamy IAS	Director, RD&PR Department
3.	Tmt. Muthumeenal	ADRD, RD&PR Department
4.	Thiru. Kuttalingam	SE, RD&PR Department
5.	Thiru. VeeraRaghavarao IAS	The District Collector, Ramanathapuram
6.	Thiru. K.S. Kandasamy IAS	The District Collector, Tiruvannamalai
7.	Mr. M. Pradeepkumar IAS	Additional Collector, Ramanathapuram
8.	Tmt. P. Jayasudha	Project Director, Tiruvannamalai
9.	Mr. Bajju Kurup	General Manager, NABARD
10.	Ms. Sri Vidya	DD, Department of Agriculture
11.	Dr. Pannerselvam	Director, Water Technology Centre, TNAU, Coimbatore
12.	Prof. Balasubramanian	Forestry College and Research Institute, Mettupalayam
13.	Mr. Kayarat Mohandas, IFS (PCCF, Social forest and Extension)	Forest Department
14.	Mr. Sugatto Dutta, IFS	CEO, CAMPA, Forest Department
15.	Mr. John,	Dept of Environment
16.	Prof. Kavikumar	Madras School of Economics, Chennai
17.	Mr. S. Raja	State Ground Water Board, Chennai
18.	Dr. S. Subramanian	Central Ground Water Board
19.	Dr. R. Rengalakshmi	M.S. Swaminathan Research Foundation, Chennai
20.	Mr. R. Nagarajan	M.S. Swaminathan Research Foundation, Chennai
21.	Dr. Patterson	SDMRI, Tuticorin
22.	Ms. Jayashree Venkatesan	Care Earth, Chennai
23.	Mr. Kannan	Director, Chennai, CII,
24.	Mr. Rajeev Ahai	Director, NRM, Agro Ecology
25.	Mr. V. Sowmithri,	TE, GIZ
26.	Dr. Vaibhav Sharma,	TE, GIZ
27.	Dr. Radha Priya Jr.	TE, GIZ

Agenda

4:00 pm	Welcome to Members: Tmt G. MuthuMeenal , Additional Director (MGNREGS) & State Nodal Officer, WASCA – TN
4:00 pm to 4:05 pm	Chairperson Opening Remarks: Thiru Hans Raj Verma IAS Additional Chief Secretary, Govt of TN
4:05 pm to 4:10 pm	Action Taken Report (2nd SLSC): Dr Radha Priya P , JTE, WASCA-TN
4:10 pm to 4:20 pm	CWMP: Analysis & Action Plan: Dr R.Rengalakshmi , Director, JRD Tata Eco Technology Centre, MS Swaminathan Research Foundation, Chennai
4:20pm to 4:30 pm	District Presentation: Thiru. K.S. Kandasamy IAS , District Collector, Tiruvannamalai
4:30 pm to 4:40pm	District Presentation: ThiruK. Veera Raghava Rao IAS , District Collector, Ramanathapuram
4:40 pm to 4:50 pm	WASCA Thematic Presentation: Cascading of Tanks: Prof K. Palanisami , Agriculture Economist & Water Management, Former Dean TNAU, former Director IWMI (International Water Management Institute) & Professor Emeritus University of Minnesota, USA
4:50 pm to 5: 00 pm	WASCA Thematic Presentation: Agroforestry: Dr. A. Balasubramanian, Prof & Head, Department of Silviculture, Forest College and Research Institute, TNAU, CBE
5:00 pm to 5:15 pm	Convergence & Partnerships: SLSC Members Views , NABARD, CII
5:15 pm to 5:20 pm	National Perspective: Mr. Rajeev Ahal , Director, NRM & Agroclimatic Division, GIZ, New Delhi.
5:20 pm to 5: 25 pm	Key Address by Dr.K.S. Palanisamy, I.A.S. , Director, RD&PR & Member Secretary WASCA – TN
5: 25 pm to 5:30 pm	Concluding Remarks: Thiru Hans Raj Verma IAS Additional Chief Secretary, Govt of TN
	Vote of Thanks: Thiru. A. Kuttalingam, SE (MGNREGS) , State Nodal Officer WASCA – TN