BRIEF NOTE ON WATER CONSERVATION MISSION (NEERU-MEERU)

INTRODUCTION

Water is a vital natural resource which forms the basis of all life. Further, water is a key resource in all economic activities ranging from agriculture to industry. With ever-increasing pressure of human population, there is severe stress on water resources. Due to lack of advance planning and improper utilization of available water, lands are getting either degraded or turning into waste land. In India, out of 3290 lakh hectares of geographical area, nearly fifty percent (50%) of land is either waste or degraded.

OBJECTIVE

The objective of the Water Conservation Mission is to make concrete efforts on the conservation and utilisation of water on sustainable basis.

- > Experience and recommendations of various experts led the Government to launch a focused onslaught on man made phenomenon of drought and water shortage.
- > Focus laid on sustainable development with holistic planning on river basin / sub-basin through convergence efforts of various departments at different levels.
- > Amalgamation of various wage employment programmes was devised at the district level with total emphasis on water conservation.
- > Government of Andhra Pradesh, to facilitate this task, set up Water Conservation Mission with the experts and eminent persons namely Sri Anna Saheb Hazare, Sri Chandi Prasad Bhatt, Sri Ch. Hanumantha Rao, Sri Vilas Rao Salunke, Sri Rajendra Singh, Sri T.Hanumantha Rao etc.
- > Meetings of the Mission are conducted regularly to deliberate and decide on important issues.

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EFFORTS FOR WATER CONSERVATION

- Massive ten-year watershed programme for development of all degraded and waste lands was launched during 1997 to treat 100 lakh hectares.
- 27 .50 lakh hectares of degraded and waste land has already been treated by 5472 watershed committees under Rural Development department.
- ➤ 16.6 lakh hectares of degraded forest land has already been treated by 6647 Vana Samrakshana Samithis (VSSs) under Forest department.

BACKGROUND OF NEERU-MEERU

- The Government brought all water conservation activities into campaign mode for ensuring convergence of the efforts of all water concerned departments in the name of Neeru-Meeru (Water and You) to promote water conservation on Mission basis.
- Neeru-Meeru concept envisages creation of awareness amongst people for ensuring their participation in water resource management.

IMPLEMENTATION PROCESS

The departments involved in executing Neeru-Meeru works are:

Rural Development

Forest

Minor Irrigation – I & CAD

Minor Irrigation (PR)

Rural Water Supply (PR)

Municipal Administration and Urban Development

Endowments

Medium Irrigation

Major Irrigation

VARIOUS ACTIVITIES UNDER NEERU-MEERU

- > Neeru-Meeru envisages to co-ordinate and guide the water conservation efforts initiated by various departments.
- Neeru-Meeru activities taken up by different departments are aimed at creating more filling space for harvesting rain water which contributes to additional ground water recharge.
- > The Departments involved in implementation of Neeru-Meeru programme are constructing the following structures to create the additional space filling and recharge of additional ground water.
 - Continuous contour trenching / continuous peripheral contour trenching / staggered trenching on hill slopes
 - Gally control works
 - Checkdams and percolation tanks
 - · Bunding in farmers' fields
 - Farm ponds
 - sunken ponds
 - dug-out ponds
 - · Rock fill dams
 - Feeder channels
 - supply channels
 - Desilting of tanks
 - Restoration of tanks
 - Breach closures etc.,

NEERU-MEERU (PHASE-I, II AND III) * (Department-wise Achievements)

SI. No	Department	Achlevement											
		Physical in Nos				Volume in lakh cum.				Financial (Rs.in lakhs)			
		Phase-I	Phase-II	Phase-III	Total	Phase-I	Phase-II	Phase-III	Total	Phase-I	Phase-II	Phase-lii	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Forest	117396	190624	140316	448336	77.89	716.84	152.03	946.76	3208.82	6499.49	3875.88	13584.19
2	Rural Development	179121	156918	131578	487617	467.02	291.97	228.57	987.56	10008.22	5720.52	4545.93	20274.67
3	PR • RWS	64601	108	1781	66490	3,07	2.16	62.07	67.30	814.87	19.28	834.10	1668.25
4	PR - Minor Irrigation	7057	2411	15219	24687	170.63	71.30	280.65	522,58	2360.25	1526,64	5820.47	9707.36
5	M.A and U.D.	48222	31071	282370	361663	14.29	7.68	40.51	62,48	1559.29	411.99	1366.42	3337.70
6	Endowments	6902	4228	461	11591	3.02	1.67	2.96	7.65	185.70	128.29	179,44	493.43
7	Minor irrigation	677	2391	3743	6811	65.50	80.44	223,76	369.70	880.79	2549.32	8925.10	12355.21
8	Medium Irrigation	0	0	14222	14222	0.00	0.00	5.42	5,42	0.00	0.00	173.78	173.78
9	Major Irrigation	0	Q	139828	139828	0.00	0.00	40.08	40,08	0.00	0.00	2237.79	2237.79
10	Others	0	0	12499	12499	0.00	0.00	19.80	19.80	0,00	0.00	494.74	494.74
	Total	423976	387751	742017	1553744	801.42	1172.07	1055.85	3029.34	19017.94	16855.53	28453.65	64327.12

(*Phase - I (1-5-2000 to 31-10-2000); Phase - II (1-11-2000 to 30-4-2001); Phase - III (1-5-2001 to 30-9-2001))

NEERU-MEERU (PHASE- IV)

Neeru – Meeru has become a continuing programme. Implementation of Neeru-Meeru Phase-IV is in progress with effect from 1.10.2001.

PRIORITISATION OF AREAS

- 399 water stress mandals identified by ground water department.
- Dark and Grey areas.
- Villages/Habitations which experience drinking water scarcity.
- Areas with groundwater beyond 20 meters from surface.
- Villages falling in very high priority watershed villages.

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IMPACT OF NEERU - MEERU

(i) ON GROUND WATER LEVELS

The Ground Water department has conducted impact analysis studies of works taken up under Neeru-Meeru on ground water levels and found that:

- Despite seven percent deficit rainfall, all districts registered rise in ground water levels varying between 0.19 to 6.34 meters during May to December, 2000 due to increase in ground water storage capacity.
- An incremental rise in water levels varying between 0.05 to 7.18 meters was recorded in influent zones of various rainwater harvesting structures between May to December, 2000.

(ii) ON DRINKING WATER SCARCITY

- Between the summer months of April / May in 2000 and 2001, the number of seasonal bore wells getting dried up have got reduced from 17627 to 12605.
- The number of drinking water transportation habitations got reduced from 1083 to 740 from May 2000 to May 2001.
- The number of defunct water supply schemes due to source failure got reduced from 153 to 109 from May 2000 to May 2001.

MAJOR INITIATIVES OF THE GOVERNMENT

(i) PEOPLE'S PARTICIPATION THROUGH COMMITTEES

- ➤ The Government have constituted committees at state, district, constituency, municipal, mandal and gram panchayat level duly involving elected representatives, officials, N.G.Os and other concerned agencies in order to facilitate peoples participation in water conservation movement.
- ➤ Neeru-Meeru works are executed by stake holder groups or committees, viz Vana Samrakshana Samithis, Water user associations, DWCRA, CMEY, Yuva Shakthi and village education committees are involved in the execution of Neeru-Meeru works.
- > The total no.of water conservation and utilisation

committees constituted

13099

> The total no.of meetings held

18650

➤ Committees meet at periodical intervals to chalk out the programme for effective conservation, peoples participation and creating awareness among people for judicious use of water.

(ii) TRANSPARENCY AND ACCOUNTABILITY

- Documentation and display of Neeru-Meeru works (Phase-I, II and III).
- The Principal Accountant General is carrying out concurrent audit on Neeru-Meeru works to ensure adherence to guidelines by the executing departments and also to ensure transparency.

> Engineering Staff College of India (ESCI) is undertaking inspection of Neeru-Meeru works and submitting reports to the Government.

(iii) VERIFICATION AND MAINTENANCE

- > Verification of works is being carried out through periodical inspections by (departmental) special teams in all the districts.
- Maintenance / repairs being undertaken by line departments regularly.

(iv) WATER AUDIT

> Simplified Procedures adopted to enable the local people to carry out Water Audit at village level and to take judicious decisions keeping in view the available water resources.

> WELLS (Ground Water Audit)

- Average draft from each wells and No.of wells.
- Recharge based on fluctuation noted.

> TANKS (Surface Water Audit)

- Water spread based recharge calculation.
- Wet and ID crop based utilisation.

(v) GREEN MANURE (COVER CROPS)

- ➤ 40% to 60% rainfall, retained in soil moisture is lost through evaporation and evapo-transpiration in rainfed areas.
- Cover crops can reduce this loss and improve soil fertility and water retention capacity.

➤ Suggested cover crops: The Department of Agriculture has prepared the prospective plan to cover the entire arable area in the state starting from 2001-2002 rabi season.

(vi) COST EFFECTIVE STRUCTURES

The WCM decided to increase the cost effectiveness by

- Adopting cost effective and locations specific structural designs as suggested by Sri T.Hanumantha Rao
- Training and capacity building of official and stake holders in all technical aspects.

(vii) A.P. WATER LAND AND TREES ORDINANCE - 2001

➤ Government of Andhra Pradesh have promulgated an ordinance on the 15th of December, 2000 and this ordinance is called the "Andhra Pradesh water, land and trees Ordinance, 2000".

This Ordinance is aimed at

- > To promote water conservation and tree cover.
- > Regulate the exploitation and use of ground and surface water for protection and conservation of water sources.
- > Land and Environment and matters connected therewith or incidental there to.