

**RECOMMENDATIONS FOR THE MANAGEMENT OF  
GROUND WATER RESOURCE BASED ON THE FINDINGS OF  
GROUND WATER ASSESSMENT 2007**

Sl. No.	Recommendations	Departments to be Participated for implementation of recommendations
1.	<p><b>Paddy should be banned</b> under groundwater in Rabi season in all the over-exploited basins, which can be slowly extended to all semi-arid (in Telangana and Rayalaseema districts) and hard rock areas of the state. <b>Srivari</b> variety of paddy cultivation to be encouraged if farmers choice is only the paddy, to sustain ground water regime.</p> <p>However, it can be permitted in tank commands. Paddy cultivation under tank commands recharges groundwater to an extent of 40 to 60% of the applied water. It also traps about 20 to 40% of rainfall creating additional recharge to groundwater.</p> <p>As per NGRI Model studies 5% reduction in paddy cultivation can stretch the ground water availability by another decade.</p> <p>Agriculture Department to demonstrate alternate cropping pattern in farmers fields itself.</p>	<p>Agriculture Department, Irrigation Department and Panchayat Raj Department</p> <p>Revenue Department &amp; Irrigation /Panchayat Raj Department</p> <p>Agriculture Department</p>
2.	<p>All farmers should be <b>persuaded to recharge through their wells</b> except in canal commands or where water level is shallower than 5 metres in post monsoon. Liberal loaning and subsidies for this programme to be made available. NGO's and WUA to help in implementation of the programme on a time bound and massive scale.</p>	<p>Rural Development Department , Non Government Organizations &amp; Water Users Associations.</p>
3.	<p>In villages that have drinking water problem, reasons to be identified by a technical committee and appropriate solutions worked out. Cause to be immediately identified.</p>	<p>Ground Water Department and Rural Water Supply Wing of Panchayat Raj Department</p>
4.	<p><b>Identifying an area of 20 to 30 hectares</b> -with good hydrogeological characteristics- as drinking water sanctuary in every village. Only drinking water wells to be allowed in these areas, during emergencies.</p>	<p>Rural Water Supply Wing of Panchayat Raj Department &amp; Ground Water Department.</p>

5.	<b>Excess fluoride</b> in groundwater in areas of high groundwater exploitation brought to light by <i>groundwater resource estimation</i> as in Anantapur and Nalgonda districts. High fluoride in high groundwater exploitation areas is due to presence of fluoride bearing minerals in the rock. In these areas wells with permissible fluoride will have to be identified immediately.	Ground Water Department and Rural Water Supply Wing of Panchayat Raj Department
6.	In areas of low groundwater utilisation are in north coastal districts, Khammam and Adilabad districts; ground water development plans may be permitted.	All Welfare Departments dealing with Irrigation / Agriculture Banks, SC Corp., DRDA., Rural Development etc.
7.	Loaning and subsidy Priority for micro irrigation schemes should be given in areas of high groundwater utilisation(over exploitation) as brought out by the groundwater resource estimation.	All Welfare Departments dealing with Irrigation / Agriculture Banks, SC Corp., DRDA., Rural Development etc
8.	In all housing colonies common wells only be allowed to supplement Municipal water and individual wells to be dispensed.	Municipalities
9.	Recycling of water for some uses, especially in urban areas and Industrial Areas.	Municipalities , Industries Department, & Pollution Control Board.
10.	In <b>command areas exploitation of groundwater should always be encouraged and subsidised.</b> Surface water would cost more than the groundwater in all command area, but for the subsidy given for surface water(annexure-1)	Irrigation Departments & All Welfare Departments dealing with Irrigation / Agriculture, Banks, SC Corp., DRDA., Rural Development etc
11.	Groundwater exploitation must be encouraged in all areas where the water table stands shallower than 5 or 6 metres in post monsoon	All Welfare Departments dealing with Irrigation / Agriculture Department like Banks, SC Corp., DRDA., Rural Development etc
12.	Ground Water Infrastructure should be preserved in upcoming command areas. Eg., Jurala canal command which is in its infancy and has very good groundwater infrastructure with well density around 15 wells per square kilometre. Efforts must be made to keep this system of groundwater exploitation in place.	Irrigation Department