

**ICAR-Indian Institute of Water Management, Bhubaneswar**  
**AICRP on Irrigation Water Management**

**Fortnightly Agro-advisory to Farmers on Water Management during COVID-19**  
**(21.4.2020 to 5.5.2020)**

Sl. No.	Centre name	Agro-advisory on water management to farmers
1	<b>Chiplima (Odisha)</b>	<ol style="list-style-type: none"> <li>1. Field crops should not be subjected to any moisture stress during their growth period in Hirakud command area irrigated through surface irrigation system. Farmers should irrigate observing social distance norms.</li> <li>2. For close spaced vegetable crops use micro-sprinkler system while for under spaced vegetable crops use dripper or micro tubes. Growing vegetables by micro irrigation system saves water by 40-100%, irrigation efficiency increases by 80-90% and enhances the yield by 20-100%.</li> </ol>
2	<b>Junagadh (Gujarat)</b>	<ol style="list-style-type: none"> <li>1. The duration from April to June is the best potential period for the execution of soil and water conservations works.</li> <li>2. For conservation of rain water, the farmers should repair the field bunds and for groundwater recharge technologies the farmers can contact Junagarh Agricultural University.</li> <li>3. The farmers should be asked, motivated and educated through various e-routes for adopting the technologies on NRM namely soil conservation, water harvesting and irrigation water management.</li> <li>4. The communication with farmers during this critical period can be made through e-medias.</li> <li>5. Farmers are suggested to follow directions provided in the following extension articles on irrigation water management in vernacular language (Gujarati) published in KRUSHI Magazine. <ul style="list-style-type: none"> <li>• “Watershed based water conservation” article published in Krishijivan magazine (Feb.-2020, pp.22-25) by GSFC Ltd, Vadodara available online at: <a href="http://www.gsfcagrotech.com/wp-content/uploads/2020/03/Feb-20-Guj.pdf">http://www.gsfcagrotech.com/wp-content/uploads/2020/03/Feb-20-Guj.pdf</a></li> <li>• The “Enhancing the fertilizer and water use efficiency” article published in Krushi Jagaran magazine (Feb.-2020, pp.232-37) by Jagaran Group available online at: <a href="https://reader.magzter.com/reader/qt3cijc5h6iz4gpwvviya41245114515355/412451#page/32">https://reader.magzter.com/reader/qt3cijc5h6iz4gpwvviya41245114515355/412451#page/32</a></li> </ul> </li> <li>6. Farmers are also suggested to follow directions provided in following videos uploaded in Youtube and radio talks. <ol style="list-style-type: none"> <li>(1) Videos on various agricultural technology made by university scientists including AICRP-IWM are uploaded on YouTube and links are put on our JAU website.</li> </ol> </li> </ol>

		<ul style="list-style-type: none"> <li>○ <a href="https://www.youtube.com/user/jaujnd">https://www.youtube.com/user/jaujnd</a></li> <li>○ Suitable technologies of groundwater recharges by Prof. PB Vekariya link at: Documentary on “Groundwater recharge methods suitable for Saurashtra region” “ભૂગર્ભજળ રિચાર્જ ની સૌરાષ્ટ્ર વિસ્તાર માટે સાનુકુળ પદ્ધતિઓ”, uploaded to youtube by Junagadh Agricultural University - Junagadh, link : <a href="https://www.youtube.com/watch?v=FToDXBP1hng">https://www.youtube.com/watch?v=FToDXBP1hng</a></li> <li>○ Documentary on “water harvesting and its efficient utilization ” જળ સંચય અને તેનો કાર્યક્ષમ ઉપયોગ” uploaded to youtube by Junagadh Agricultural University -Junagadh, link: <a href="https://www.youtube.com/watch?v=xVDjMNBRNcs">https://www.youtube.com/watch?v=xVDjMNBRNcs</a></li> </ul> <p>(2) Expert radio talk being broadcasting by Junagadh Janvani-(Radio broadcasting station of JAU, Junagadh)</p> <ul style="list-style-type: none"> <li>○ The radio talks by JAU experts including AICRP-IWM scientist on various technologies of water management are broadcasted by JAU and put on the website : link on <a href="http://janvani.jau.in/">http://janvani.jau.in/</a></li> <li>○ “Water Conservation methods” radio talk (33.57 minutes) broadcasted by Junagadh Janvani station and put as link : <a href="http://janvani.jau.in/janvani_programs.php?cont_id=11&amp;cat_id=3">http://janvani.jau.in/janvani_programs.php?cont_id=11&amp;cat_id=3</a></li> <li>○ “Water Conservation methods” radio talk (33.57 minutes) broadcasted by Junagadh Janvani station and put as link : <a href="http://janvani.jau.in/janvani_programs.php?cont_id=120&amp;cat_id=3">http://janvani.jau.in/janvani_programs.php?cont_id=120&amp;cat_id=3</a></li> </ul>
3	<b>Pantnagar (Uttarakhand)</b>	<ol style="list-style-type: none"> <li>1. Wheat - Avoid/stop irrigation in late sown wheat crop as crop is maturing.</li> <li>2. Maize- Spring season maize is approaching towards the tasseling stage. Hence, keep the soil moist and irrigate the maize crop once in a week in light texture soil and at 7-10 days in heavy texture soil.</li> <li>3. Sugarcane- Keep the soil moist and irrigate the spring season sugarcane at 10- 15 days interval.</li> </ol>
4	<b>Gayeshpur (West Bengal)</b>	<ol style="list-style-type: none"> <li>1. Renovation/excavation of silted rural ponds/reservoirs and other agricultural activities using 100-day work programme (MGNREGS) (with rationalized involvement of rural people for employment and income generation).</li> </ol>
5	<b>Coimbatore (Tamilnadu)</b>	<ol style="list-style-type: none"> <li>1. Artificial recharge techniques to reduce the decline in water table in the over exploited blocks of Noyyal basin.</li> <li>2. Rainwater harvesting and drainage line treatment measures to improve the groundwater quality in hard rock areas of Noyyal and Bhavani basin.</li> </ol>
6	<b>Navsari (Gujarat)</b>	<ol style="list-style-type: none"> <li>1. Provision of irrigation to summer crops at critical stages.</li> <li>2. Plastic mulch use in muskmelon and watermelon crops to reduce irrigation water and control weeds and also less incidence of pest.</li> </ol>

7	<b>Udaipur (Rajasthan)</b>	<ol style="list-style-type: none"> <li>1. Maintain sufficient soil moisture for summer greengram and blackgram and field should be irrigated at 8-10 days interval.</li> <li>2. After harvest of <i>rabi</i> crops, water conservation measure and groundwater recharge structure may be constructed.</li> </ol>
8	<b>Kota (Rajasthan)</b>	<ol style="list-style-type: none"> <li>1. In <i>zaid</i> greengram and blackgram crop, sprinkler irrigation at IW/CPE ratio of 1.2 (8-10 days interval) for a period of 3.0 hours.</li> <li>2. In summer sugarcane, irrigation at IW/CPE ratio 0.75 (15-20 days interval) for proper germination after paired row planting or line sowing.</li> </ol>
9	<b>Morena (M.P)</b>	<ol style="list-style-type: none"> <li>1. In <i>summer</i> greengram, provide irrigation at interval of 6-9 days depending upon soil and climatic conditions. Irrigation must be provided at flowering and pod formation stages.</li> </ol>
10	<b>Sriganganagar (Rajasthan)</b>	<ol style="list-style-type: none"> <li>1. Drip irrigation should be applied for 2 hours and 11 minutes on alternate days in paired planting of tomato crop in April.</li> <li>2. In paired planting of brinjal crop, drip irrigation timing is 3 hours and 5 minutes on alternate days in April.</li> <li>3. Drip operational timing for paired planting chilly crop in April is 2 hours and 19 minutes on alternate days.</li> </ol>
11	<b>Pusa (Bihar)</b>	<ol style="list-style-type: none"> <li>1. Provide irrigation to okra and Cucurbitaceous crops which are in flowering / fruiting stages as per soil moisture status.</li> </ol>
12	<b>Dapoli (Maharashtra)</b>	<ol style="list-style-type: none"> <li>1. Irrigation in field crops should be done either in early morning or late in evening in isolation.</li> </ol>
13	<b>Faizabad (U.P)</b>	<ol style="list-style-type: none"> <li>1. Farmers sow their <i>zaid</i> crops on raised beds and irrigate through furrows at about 10 days interval.</li> <li>2. Farmers should use mulch for moisture conservation which will also manage the weeds.</li> </ol>
14	<b>Jorhat (Assam)</b>	<ol style="list-style-type: none"> <li>1. If transplanting of sugarcane had been delayed due to present COVID-19 pandemic, planting of sugarcane setts can be done in furrows and subsequently mulching the ridges with 50 micron plastic film for better harvesting rain water.</li> <li>2. For important standing orchard crops like Assam lemon and banana, soil moisture level at around 75% EPR (Evaporation replenishment) for banana and around 100% EPR for Assam lemon is optimum.</li> </ol>
15	<b>Almora (Uttarakhand)</b>	<ol style="list-style-type: none"> <li>1. If irrigation is available, then start sowing okra seeds from last week of April to last week of May.</li> <li>2. The farmers presently having irrigation facility may start growing vegetables like pumpkin, round gourd, cucumber, ridge gourd and bitter gourd.</li> <li>3. At present, the interested farmers should go for construction of one farm pond</li> </ol>

		before the next cropping season, for which they should dig the land now. Farmers are requested to contact the scientists of ICAR- VPKAS for construction of LDPE film lined tank developed by VPKAS under AICRP on Irrigation Water Management scheme.
16	<b>Belavatagi (Karnataka)</b>	<ol style="list-style-type: none"> <li>1. Border strip method of irrigation in wheat and chickpea with cut-off of irrigation water at 80% of the length of the border strip thereby saving 15-20% irrigation water.</li> <li>2. Adoption of drip irrigation method for commercial crops (Chilli + Onion/Groundnut/Garlic/Turmeric, etc.) in Malaprabha command area enhances yields and saves water.</li> </ol>
17	<b>Palampur (H.P)</b>	<ol style="list-style-type: none"> <li>1. Tomato crop may be transplanted under protected conditions during May, drip irrigated at 0.8 PE and fertilized with water soluble fertilizers at weekly intervals.</li> </ol>
18	<b>Rahuri (Maharashtra)</b>	<ol style="list-style-type: none"> <li>1. Irrigate the suru sugarcane with 8-10 days interval. In case of shortage of water irrigate with alternate furrow or use drip.</li> <li>2. Irrigations for vegetable crops should be given through micro irrigation system.</li> <li>3. The crops should be irrigated during early morning, evening or at night to avoid loss of water by evaporation.</li> <li>4. Apply protective irrigations as per critical growth stages for summer crops.</li> <li>5. Use mulch for maintaining soil moisture e.g. sugarcane thrash, straw, dry leaves, etc.</li> <li>6. Adopt open well and borewell recharge technology for groundwater recharge which will help in <i>rabi</i> seasonal crop irrigation water management.</li> </ol>
19	<b>Ludhiana (Punjab)</b>	<ol style="list-style-type: none"> <li>1. As per the prediction from IMD, Pune, the rainfall for the coming monsoon season is expected to be normal. So, the farmers are advised to go for rooftop water harvesting for groundwater recharge.</li> <li>2. The sowing of summer moong can be done till third week of April and provide 3-5 irrigations depending upon rainfall distribution to complete its crop cycle.</li> <li>3. Ensure adequate water supply during pre-tasseling, silking and grain filling stage in summer maize.</li> </ol>
20	<b>Raipur (Chhatisgarh)</b>	<ol style="list-style-type: none"> <li>1. Farmers are advised to go through the required maintenance work of different soil and water conservation structures within their premises for efficient rainwater harvesting and conservation along with raising bund heights in uplands)</li> <li>2. Maintenance of all irrigation pumps and equipment has to be done during this period.</li> <li>3. Drip and sprinkler irrigation system parts are to be dismantled from the fields and to be kept safely after proper cleaning for using them in the next season.</li> </ol>