6(d). Model of agro advisory for 54 selected weather window of Tamil Nadu for rice

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Crop Stages	Past observed 6 days weather data (anyone of the following SWW will happen)	Weather Forecast for 6 days (any one of the following SWW will happen	Agromet Advisory
R1: Nursery Preparation	Rainfall from 0.1 to >30mm and other weather elements not considered	-	**AA 1.** Rainfall received in past six days may be used to puddle the soil for nursery bed preparation to save irrigation water and achieve higher rainfall use efficiency
	-	Rainfall from 0.1 to >30mm and other weather elements not considered	**AA 1.** The anticipated rainfall may be used for preparing rice nursery **AA 2.** For the sown rice nursery, anticipating rainfall, impound water over the seeds sown in the nursery during evening and drain it by next day morning so as to prevent somersaulting of sown seeds with rainfall against poor germination
	Rainfall from 0.1 to 30mm and other weather elements not considered	Rainfall from 0.1 to >30mm and other weather elements not considered	**AA 1.** Continuous rainfall situation may affect nursery preparation and hence impound the rainwater in the field where ever possible. **AA 2.** For the sown rice nursery, anticipating rainfall, impound water over the seeds sown in the nursery during evening and drain it by next day morning so as to prevent somersaulting of sown seeds against poor germination

R2: Two leaf stage seedlings	**Rainfall >30 mm and other weather elements not considered**	**Rainfall >30 mm and other weather elements not considered**	**Considering the receipt of heavy rainfall and also with anticipating heavy rainfall, provide drainage to rice nursery against rotting of seedlings with water stagnation. Close all water entry points in the field against flooding.**
R3: Three to four leaf stage seedlings	Maximum temperature >35.1°C with RH >40% and other weather elements not considered	Maximum temperature >35.1°C with RH >40 % and other weather elements not considered	The prevailing and anticipated weather with high temperature and high relative humidity may result in thrips and jassid attack in young rice seedlings. Monitor the pest population and adopt plant protection measures in consultation with extension specialist.
	Minimum temperature <15 °C with RH >40 % and other weather elements not considered	Minimum temperature <15 °C with RH >40 % and other weather elements not considered	The prevailing and anticipated weather with low temperature and high relative humidity may affect rice seedlings with fungal diseases. Monitor the disease intensity and take plant protection in consultation with Agricultural Specialist.

R4: Preparation of the main field and transplanting	**Rainfall from 0.1 to >30 mm and other weather elements Not considered**	**-**	**Prepare the main field for transplanting rice with the amount of rainfall received so as to save both ground and surface water sources.**
	-	Rainfall from 0.1 to >30 mm and other weather elements not considered	**AA1** Anticipating heavy rainfall prepare the main field for transplanting rice so as to save both ground and surface water sources. **AA2** Make provision of drainage in the freshly transplanted rice field to drain out excess water from anticipated rainfall otherwise the planted seedlings will get uprooted and get floated. **AA3** If not planted, postpone the transplanting by 2 to 3 days.
	Rainfall >30 mm and other weather elements not considered	Rainfall >30 mm and other weather elements not considered	**AA1** If green leaf manure has already been applied in the puddled field, considering the rainfall already received and to be received, plug all water outlets in the field since it may drain out the nutrients from the field. **AA2** If green leaf manure has not been applied, arrange proper drainage before its application. **AA3** In case of prediction of likely wet spell, stop transplanting and also don’t apply basal application of NPK fertilizer.

R5: Established seedlings and tillering stages	**Rainfall >30 mm and other weather elements not considered**	**Rainfall >30 mm and other weather elements not considered**	**Under the situation of continuous wet spell of heavy rain, provide drainage.**
	Maximum temperature >35.1 °C with RH >40 % and other weather elements not considered	Maximum temperature >35.1 °C with RH >40 % and other weather elements not considered	The prevailing and anticipated weather with high temperature and high relative humidity may result in thrip and jassid attack on rice seedlings. Monitor the pest population and take plant protection in consultation with extension specialist.

R6: Maximum tillering and panicle initiation stage	**Wind speed > 5kmph and other weather parameters not considered**	**Wind speed > 5kmph and other weather parameters not considered**	**Since the wind speed is more than 5 kmph do not top dress the crop with nutrients through broadcasting. May go for foliar application of Nitrogen and Potash if need arises.**
	Wind speed <5kmph and RH >40 % + no rain+ maximum temperature >20 °C	Wind speed <5kmph and RH >40 % + no rain+ maximum temperature >20 °C	Since the weather is calm and dry, may top dress the Nitrogen and Potassium fertilizers
	-	Rainfall >30mm and other weather elements not considered	**AA1** In view of anticipating heavy rainfall provide drainage as the rice is in maximum tillering stage and flooding may result in poor tillering . **AA2** May postpone top dressing of N and K fertilizers in view of the anticipating heavy rainfall.
	Maximum temperature >35.1 °C with RH >40 % and other weather elements not considered	Maximum temperature >35.1°C with RH >40 % and other weather elements not considered	The prevailing and anticipated weather with high temperature and high relative humidity may favour attack of worms in rice. Monitor the pest population and take plant protection in consultation with extension specialist.
	Rainfall from 0.1 to 30mm with RH >40 %and other weather elements not considered	Rainfall from 0.1 to 30mm with RH >40 % and other weather elements not considered	The cloudy weather with rainfall may favour infestation by leaf folder and brown plant hopper in rice. Take plant protection measures under expert advice.
	Temperature <15 °C + Rainfall >30mm + RH >40 %	Temperature <15 °C + Rainfall >30mm + RH >40 %	The weather with rainfall, high relative humidity and low minimum temperature may cause blast and *Helminthosporium* leaf diseases in rice. Consult extension specialist for undertaking the plant protection measures.
	Rainfall >30 mm and other weather elements not considered	Rainfall >30 mm and other weather elements not considered	The prevailing weather situation may result in flooding under low land. Consult extension specialist for expert advice for

R7: Flowering stage	**Minimum temperature <15 °C and other weather elements not considered**	**Minimum temperature <15 °C and other weather elements not considered**	**AA1** **As the prevailing night temperature are low, to enhance the growth of rice spray 120 ppm Salicylic acid (120 mg in 1 litre of water)** **AA2** **The prevailing low night temperature is likely to favour blast disease and sheath rot disease of rice. Take expert advice from extension specialist for plant protection measures to be adopted.**
	Maximum temperature >35.1 °C with RH >40 % and other weather elements not considered	Maximum temperature >35.1°C with RH >40 % and other weather elements not considered	The weather with high temperature and high relative humidity may favour stem borer and brown plant hopper attack. Consult Extension specialist for appropriate control measures.
	-	Rainfall >30 mm and other weather elements not considered	In view of the anticipated heavy rainfall don't go for top dressing of nutrients in rice.

R8: Milking and grain development stage	**Maximum temperature >35.1 °C with RH >40 % and other weather elements not considered**	**Maximum temperature >35.1°C with RH >40 % and other weather elements not considered**	**The weather with high temperature and high relative humidity may invite earhead bug. Consult extension specialist and take necessary plant protection measures as per advice.**
	Minimum temperature <15 °C + RH >40 % and weather elements are not considered	Minimum temperature <15 °C + RH >40 % and other weather elements are not considered	The prevailing and anticipated weather with low temperature and high relative humidity may favour blast and bacterial blight diseases. Monitor the disease intensity and take plant protection in consultation with extension specialist.

R9: Maturity and harvesting stage	**-**	**Rainfall >30 mm and other weather elements not considered**	**AA1** **In view of anticipated heavy rainfall, may postpone the harvest and provide drainage.**
	-	Rainfall > 30mm + wind speed > 5kmph	Anticipating heavy rainfall with heavy wind, press the matured plants inward to centre of the field along the border to avoid lodging and also provide field drainage.
	Minimum temperature <15 °C + RH >40 % and other weather elements are not considered	Minimum temperature <15 °C + RH >40 % and other weather elements are not considered	The prevailing low temperature with high relative humidity may lead to discoloration of the matured rice grains. Monitor the grain colour and if required adopt plant protection measures in consultation with extension specialist.
	No rainfall + Maximum temperature > 20 °C	No rainfall + Maximum temperature > 20 °C	The prevailing weather is conducive for rice harvesting and hence may undertake harvesting, winnowing and drying operations as the case may be.