



National Agromet Advisory Service Bulletin

based on

Extended Range Weather Forecast (ERFS)

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**AICRP on Agro-Meteorology (AICRPAM),
Central Research Institute for Dryland Agriculture (CRIDA),
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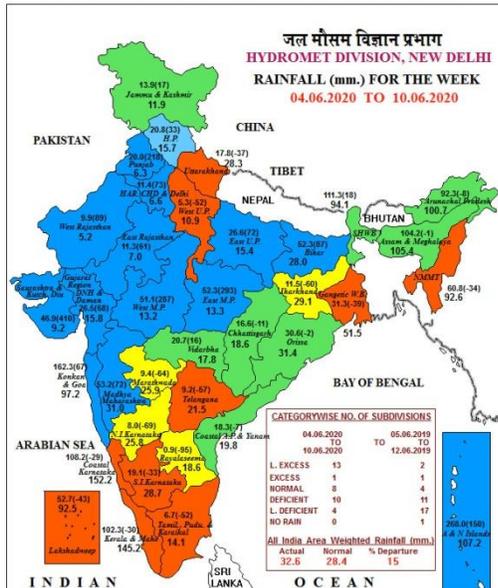
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**India Meteorological Department (IMD)
Earth System Science Organization**

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall (04 to 17 June, 2020)

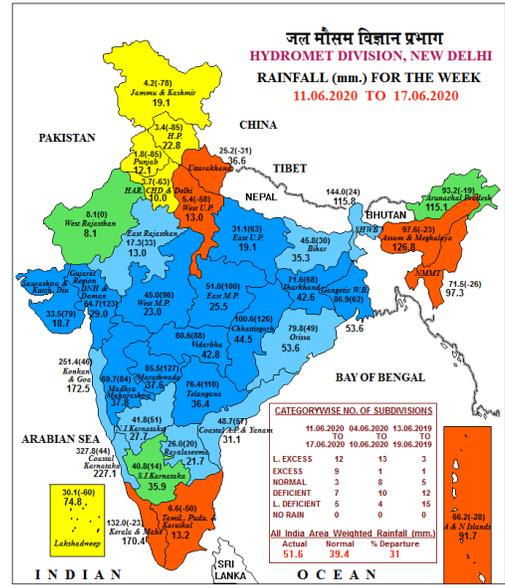
भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



LEGEND: L. EXCESS (+60% OR MORE) EXCESS (+20% TO +59%) NORMAL (+19% TO -19%)
DEFICIENT (-20% TO -59%) L. DEFICIENT (-60% TO -99%) NO RAIN (-100%) NO DATA

NOTES:
(a) Rainfall figures are based on operational data.
(b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
Percentage Departures of Rainfall are shown in Brackets.

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- Normal or above normal rainfall occurred in both the weeks in East Uttar Pradesh, Rajasthan, Gujarat, Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Konkan & Goa, Madhya Maharashtra, Vidarbha, Bihar, Odisha and Coastal Andhra Pradesh & Yanam.
- Normal or above normal rainfall occurred in either of the weeks in Jammu & Kashmir, Himachal Pradesh, Haryana Chandigarh & Delhi, Punjab, Jharkhand, Gangetic West Bengal, Assam & Meghalaya, Marathwada, Karnataka, Telangana, Rayalaseema and Andaman & Nicobar Islands.
- Below Normal rainfall occurred in both the weeks Uttarakhand, West Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura (NMMT), Kerala to Mahe, Tamil Nadu Puducherry & Karaikal and Lakshadweep.

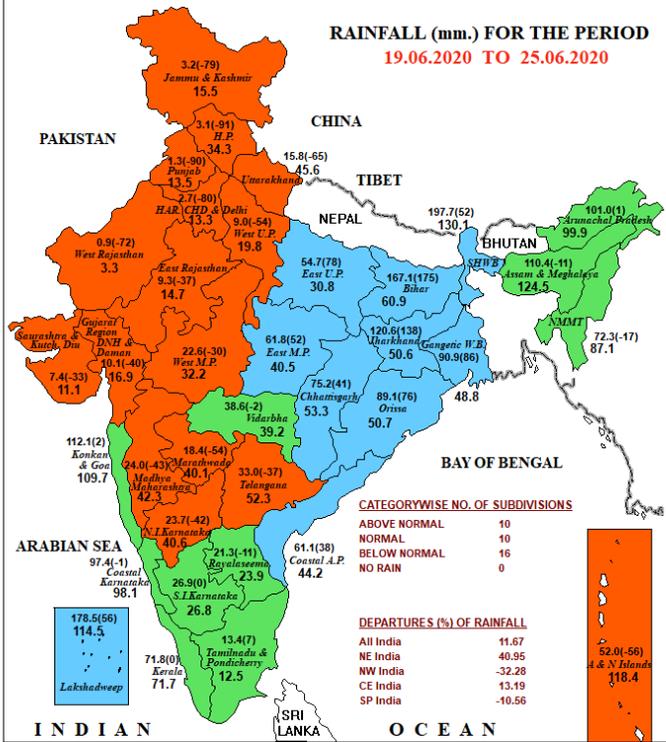
Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 17 June)

(19 June to 02 July, 2020)

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Rainfall Forecast Map - Normal RF Based Categories

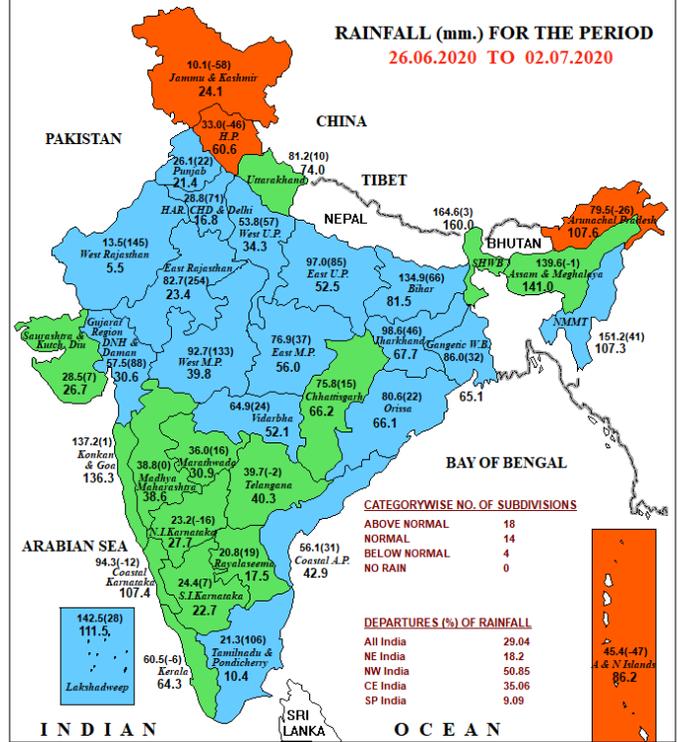


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)
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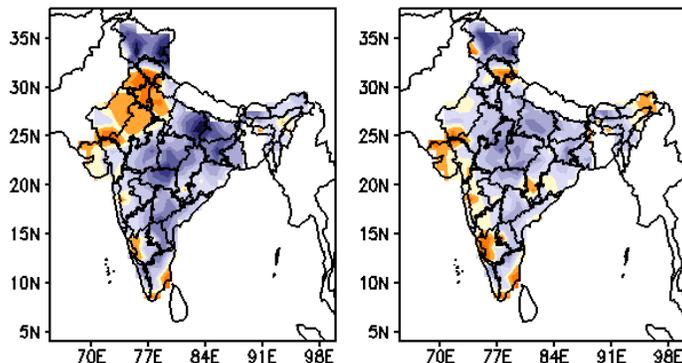
- **Week-1 (19.06.2020 to 25.06.2020):** Monsoon activity over northern eastern parts of India including the Indo-Gangetic Plain region will have normal to above normal rainfall. Normal rainfall likely over southern peninsula and north-eastern region. The northwest India and western parts of India will have below normal rainfall.
- **Week-2 (26.06.2020 to 02.07.2020):** Monsoon rainfall over northwest India will increase during the week and monsoon will reach to some parts of northwest India and thereby it will receive above normal rainfall over parts of northern and north-western India. Central parts of India and adjoining southern peninsula will receive normal rainfall.

**Maximum and Minimum temperature anomaly ($^{\circ}$ C) forecast
for next 2 weeks (IC -17 June)
(19 June to 02 July, 2020)**

MME forecast Tmax anomaly (Deg C)

(Week1: 19Jun-25Jun)

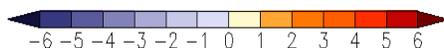
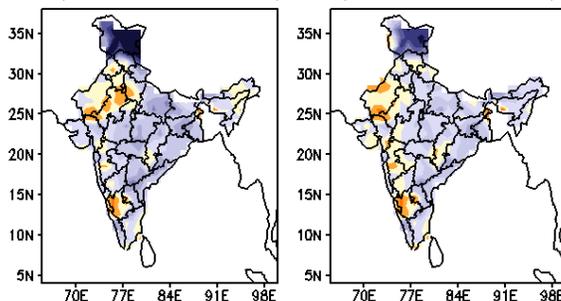
(Week2: 26Jun-02Jul)



MME forecast Tmin anomaly (Deg C)

(Week1: 19Jun-25Jun)

(Week2: 26Jun-02Jul)



Maximum Temperature (Tmax)

- **Week-1 (19.06.2020 to 25.06.2020):** Except some parts of Northwest India, where Tmax will be above normal, over the most of remaining parts of India Tmax will be below normal.
- **Week-2 (26.06.2020 to 02.07.2020):** Pattern of rainfall is almost similar to week-1. However, some isolated parts of western India and Indo-Gangetic region will have above normal to slightly above normal Tmax. Over the remaining parts it will be mainly below normal.

Minimum Temperature (Tmin)

- **Week-1 (19.06.2020 to 25.06.2020) and Week 2 (26.06.2020 to 02.07.2020):** The pattern of Tmin is almost similar to that of Tmax with northwest India indicating above normal Tmin in week-1. The week-2 Tmin pattern is similar to that of week-1 pattern.

Strategic Agricultural Planning based on rainfall during next two weeks till 02 July 2020

Agro-met Advisories

Kerala

Amount of rainfall received over Kerala is 336.0 mm (-11% deficit) during the period of 01 June 2020 - 18 June 2020. The extended range weather forecast for next two weeks (19 - 25 June and 26 June - 02 July 2020) is above normal for week-1 and week-2.

- Under prevailing weather, there is a chance of azhukal/capsule rot disease in cardamom. To control, it is advised to spray Bordeaux mixture (1%) and drench the plant basins with Copper oxychloride (0.2%).
- Due to high relative humidity, there is a severe attack of leaf rust disease in coffee. It is advised to spray Oxycarboxin (Plant vax 20 EC) @ 1 ml/litre or spray Bordeaux mixture (1%).
- Due to continuous rain, there is a chance of bud rot disease in coconut palm. It is advised to spray 1% Bordeaux mixture on the crown as a prophylactic measure.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 18.7 mm (-47% deficit) during the period of 01 June 2020 - 18 June 2020. The extended range weather forecast for next two weeks (19 - 25 June and 26 June - 02 July 2020) is below normal for week-1 and above normal for week-2.

- Present prevailing weather condition is favorable for Tristeza virus disease in citrus. It is advised to spray Streptomycin sulphate 500-1000 ppm or Phytomycin 2500 ppm or Copper oxychloride 0.2% at fortnight intervals.
- Due to anticipated weather condition, there is a chance of stem borer incidence in irrigated sorghum. To control, it is advised to apply Phorate 10 G 8 kg/ha or Carbofuran 3 G 17 kg/ha mixed with sand to make up a total quantity of 50 kg/ha and apply on leaf whorls.

Maharashtra

Rainfall received over Madhya Maharashtra is 164.6 mm (102% large excess), over Marathwada is 130.2 mm (74% large excess), Vidharbha is 112.3 mm (55% excess) and Konkan region 523.5 mm (65% large excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast for next two weeks (12 - 18 June and 19 - 25 June 2020) over Madhya Maharashtra and Marathwada is below normal and normal, over Vidharbha and Konkan is above normal for week-1 and normal over Marathwada, Madhya Maharashtra, Vidharbha and Konkan for week-2.

Madhya Maharashtra

- Under rainy weather condition, sowing of *kharif* crops viz., pigeon pea, black gram, green gram, bajra, sunflower is recommended.
- For prevention against wilt and root rot disease in pigeon pea, green gram, black gram, cowpea,

soybean, sunflower crops, farmers are advised to treat the seeds with Trichoderma @ 5 g/kg seed.

Konkan

- Due to rainy weather condition, farmers are advised to postpone the split application of urea in rice nursery.
- Due to chances of rainfall, it is advised to make arrangement to drain out excess water from vegetable crop nursery.

Vidharbha

- Farmers are advised to start the land preparation for nursery sowing of *kharif* rice in Eastern Vidharbha Zone.

Hisar

Amount of rainfall received over Hisar is 28.3 mm (39% excess) during 01 June 2020 - 18 June 2020. The extended range weather rainfall forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) over Hisar is below normal for week-1 and above normal for week-2.

- Under prevailing dry weather condition, farmers are advised to apply irrigation in vegetable and fruits crops.
- Farmers are also advised to go for sowing of sorghum, maize and lobia as fodder crops.
- Provide 50 g iodized salt and 50 to 100 g mineral mixture daily with animal feed/fodder to keep animals healthy.

Karnataka

Rainfall received during 01 June 2020 - 18 June 2020 over South Interior Karnataka is 83.2 mm (2% excess) and North Interior Karnataka is 87.7 mm (36% excess). The extended range weather forecast for next two weeks (19 - 25 June and 26 June - 02 July 2020) over South Interior Karnataka is normal and below normal over North Interior Karnataka for week-1 and normal over South Interior Karnataka and North Interior Karnataka for week-2.

South Interior Karnataka

- Farmers are advised for pruning of dried twigs and branches in mango to facilitate the sunlight to bear more fruits in next season.
- Farmers may go for sowing of medium to short duration double crop groundnut with varieties TMV-2, JL-24, KCG-6; cowpea with varieties TVX-944, KBC-1; green gram with varieties PS-16, PDM-84,178 and blackgram with varieties Karagao-3, T-9, Rashmi (LBG-625).

North Interior Karnataka

- Under prevailing rainy weather condition, sowing of the *kharif* crops like greengram, redgram, bajra, navane and groundnut (bunch type), castor, onion, chilli are recommended.
- Farmers are also advised to prepare soil and water conservation structures in the fields to conserve rain water.
- Farmers are advised to vaccinate livestock against foot and mouth disease (FMD vaccination), black quarter disease (BC vaccination) and *haemorrhagic septicaemia*.

Assam

Amount of rainfall received over Assam is 303.9 mm (5% excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Assam is normal for week-1 and week-2.

- Under prevailing heavy rainfall condition, farmers are advised to go for planting of fodder crops like hybrid napier with varieties NB 21, IGFRI-6, CO-2, Dinanath with varieties JP-12, Pusa 3, Pusa 19 and Setaria with varieties Kazungula, Nandi and PSS-1.

Jharkhand

Amount of rainfall received over Jharkhand is 114.1 mm (-33% deficit) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Jharkhand is above normal for week-1 and week-2.

- It is the optimum time for sowing of pigeon pea with varieties Birsa Arhar-1, I.P.A.-203, Upas and Bahar
- Direct sowing of rice is also advised with varieties Birsa Vikas Dhan 110 & 111, Vandana, Lalat, Sahbhagi, IR-64 (DRT-1).

Uttar Pradesh

Rainfall received during 01 June 2020 - 18 June 2020 over East Uttar Pradesh is 67.5 mm (60% large excess) and West Uttar Pradesh is 15.0 mm (-49% deficit). The extended range weather forecast for next two weeks (19 - 25 June and 26 June - 02 July 2020) over East Uttar Pradesh is above normal and West Uttar Pradesh is below normal for week-1 and above normal over East Uttar Pradesh and West Uttar Pradesh for week-2.

- Farmers are advised to sow *kharif* maize. Recommended varieties are Hybrid Dakan-107, Malveya-2, JH-3459, Prakash, PSM-5, Pro-303, KH-510, MMH-113 and composite varieties like Novjoti, Pusa-2, Prabhat and Azad uttam.
- Under prevailing weather condition, there is a chance of downy mildew in vegetables. Farmers are advised to spray Mancozeb @ 2g/ litre of water.

Odisha

Amount of rainfall received over Odisha is 130.6 mm (28% excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Odisha is above normal for week-1 and week-2.

- Under prevailing rainy weather condition, sowing of ragi in nursery is advised with varieties Divyasingh, AKP-2, AKP-3, AKP-7, Godavari, Neelachal, Bhairavi, Shubhra, and Chilika.
- It is the optimum time for sowing of pigeon pea with varieties Upas-120, PRG 176, VL Arhar-1, T-Arhar.

West Bengal

Amount of rainfall received over West Bengal is 163.8 mm (29% excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over West Bengal is above normal for week-1 and week-2.

- For the management of brinjal fruit borer and stem borer, farmers are advised to apply Triazophos 40 EC @ 1.5 ml or Spinosad 45 EC @ 0.2 ml or Cartap Hydrochloride @ 0.75 g/litre of water alternatively.
- Due to rainy weather condition, farmers are advised to maintain proper drainage channel in jute field.

Bihar

Amount of rainfall received over Bihar is 11.8 mm (48% excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Bihar is above normal for week-1 and week-2.

- Nursery sowing is advised for medium duration of rice. Recommended varieties are Sita, Santosh, Saroj, Rajshri, Prabhat, Rajendra suhasni, Rajendra kasturi and Rajendra bhagwati in North Bihar.
- To protect the summer vegetables from leaf feeder/fruit borer pest, spraying of Dimethoate 30 EC @ 1-1.5ml/litre of water is advised in clear days.
- Farmers are advised to harvest matured pods of early sown black gram/green gram. Regular monitoring should be done in late sown green gram/black gram against infestation of pod borer.

Punjab

Amount of rainfall received over Punjab is 28.0 mm (31% excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Punjab is below normal for week-1 and above normal for week-2.

- Due to prevailing hot weather condition, farmers are advised to irrigate sugarcane crop at 8 to 10 days interval.
- Farmers may also go for transplanting of rice.

Gujarat

Amount of rainfall received over Gujarat is 93.0 mm (74% large excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Gujarat is below normal for week-1 and above normal for week-2.

- Under prevailing rainy weather condition, sowing of pearl millet is advised. Recommended varieties are GHB558, 577, 538, 719, 732, 744.
- Sowing of pulse crops like pigeon pea (BDN-2, GT-100, GJP-1, Vaishali), green gram (GM-4, K-851, GAM-5) and black gram (Gujarat Adud-1, T-9) may be taken up.

Madhya Pradesh

Amount of rainfall received over Madhya Pradesh is 61.4 mm (218% large excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Madhya Pradesh is above normal for week-1 and week-2.

- In case of heavy rainfall areas, farmers are advised to drain out excess water from crop fields and newly planted fruit seedlings.
- Monitoring of insect pest and pest management practices against pod borers in okra, tomato, egg plant and chilli is also advised.

Jammu

Amount of rainfall received over Jammu is 25.8 mm (-36% deficit) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Jammu is below normal for week-1 and week-2.

- Due to rise in temperature, farmers are advised to protect young fruit plants from excess heat by providing thatches and cover.
- Under prevailing hot weather, it is advised to sprinkle water in animal sheds to reduce heat stress and provide adequate amount of drinking water to the animals at frequent intervals.

Rajasthan

Amount of rainfall received over Rajasthan is 34.2 mm (39% excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Rajasthan is below normal for week-1 and above normal for week-2.

- Under prevailing weather condition, farmers of southern parts are advised to sow maize and soybean. Recommended improved varieties of maize are Pratap QPM-1, HQPM-1, HQPM-5, PEHM-2 and Pratap hybrid maize-1, Pratap Makka-9, Pratap hybrid Makka-3 and improved varieties of soybean are Pratap soya-1, Pratap Raj soya- 24, NRC-37, RKS-45, RKS-18.
- Farmers of Western parts are advised to sow bajra and moth. Improved varieties of bajra viz., HHB-67, Raj-171, ICMH-356, RHB-121, RHB-173, RHB-154 &177 and moth are RMO-257, RMO-225, RMO-425, RMO-423, RMO-40.

Andhra Pradesh

Amount of rainfall received over Andhra Pradesh is 32.3 mm (14% excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Andhra Pradesh is above normal for week-1 and below normal for week-2.

- Farmers are advised to continue sowing of rice in nursery in North Coastal AP, Godavari zones, Krishna zone, Kurnool, Nellore districts.
- Farmers of Coastal AP and Kurnool are advised to take up sowing of green manure crops like Sunnhemp/ Daincha/ Pillipesara preceding to paddy.

Chhattisgarh

Amount of rainfall received over Chhattisgarh is 140.7 mm (93% large excess) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Chhattisgarh is above normal for week-1 and normal for week-2.

- Under prevailing weather condition, farmers are advised to arrange proper drainage facility in their fields.
- Farmers are advised to vaccinate the animal to prevent *Haemorrhagic septicaemia* and black quarter disease.

Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 33.5 mm (-27% deficit) during 01 June 2020 - 18 June 2020. The extended range weather forecast provided for next two weeks (19 - 25 June and 26 June - 02 July 2020) on rainfall over Himachal Pradesh is below normal for week-1 and week-2.

- It is advised to maintain room temperature of 18-22°C and relative humidity around 85% for successful cultivation of mushrooms.
- Due to increase in temperature, farmers are advised to harvest matured vegetables at morning and evening hours.

Disclaimer:

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