

## Weekly SAHF Forecasters' Forum #23

Date: 21 July 2022

### Discussion Notes

<p><b>Realized Weather (15-21 July 2022)</b></p>	<ul style="list-style-type: none"> <li>• Under the influence of shallow westerly waves, the northern parts of Afghanistan experienced scattered to fairly widespread rain/thundershowers with rest of places experiencing dry and hot weather.</li> <li>• Under the influence of moderate to strong monsoon currents, much of Pakistan observed scattered to fairly widespread rain/thundershowers with isolated heavy rain/thundershowers over some places. Places like Lahore, Kasur, Narowal and Gujranwala received a total rainfall over 200 mm during the week (14-21 July 2022).</li> <li>• Under the influence of south easterly wind flow Bhutan and Nepal received scattered rain/thundershowers with most of the places experiencing hot and dry weather.</li> <li>• Due to persistence of strong south westerly wind flow from Bay of Bengal, Bangladesh experienced scattered to fairly widespread rain/thundershowers over much of the areas.</li> <li>• Under the influence of moderate to strong south westerly winds over Myanmar, the country experienced scattered rain/thundershowers over most of the places with fairly widespread and isolated heavy rainfalls in some places</li> <li>• Under the influence of moderate south westerly and north westerly winds much of Sri Lanka and Maldives experienced scattered and isolated rain/thundershowers over much of the places. The capital city of Maldives, Male, received 83 mm of rainfall in 3 hours and nearby places around Male observed around 147 mm of rainfall in 24 hours. However, no casualties were reported.</li> <li>• Southern atolls of Maldives experienced isolated cases of inland flood due high swell waves during the same period.</li> <li>• Low pressure systems formed off Odisha and West Bengal coast and Sauastra/Kutch.</li> </ul>
<p><b>Salient synoptic features in the coming week</b></p>	<ul style="list-style-type: none"> <li>• A shallow westerly wave is expected over Afghanistan during the coming week.</li> <li>• Monsoon currents approaching to north and central parts of Pakistan.</li> <li>• Moderate south westerly winds likely to occur from Bay of Bengal to north-eastern region at lower levels.</li> <li>• Strong monsoonal wind flow over Myanmar likely to continue during the coming week.</li> <li>• Moderate to strong monsoonal westerly winds likely to continue over Sri Lanka and Maldives.</li> <li>• Moderate to strong cross equatorial wind flow in the south Asian region likely during the coming week.</li> <li>• Strong westerly winds (low level jet) likely over Arabian Sea.</li> <li>• The monsoon trough likely to shift gradually towards south during the latter part of the coming week.</li> </ul>

<p><b>Rainfall outlook</b></p>	<ul style="list-style-type: none"> <li>• Isolated and scattered rain/ thundershowers likely over northern parts of Afghanistan with much of the areas likely to experience hot and dry weather.</li> <li>• With the monsoon currents becoming active, Pakistan is likely to experience scattered to widespread rain/thundershowers with heavy rainfalls over some areas. The rainfall activity likely to increase during the subsequent days over the coming week.</li> <li>• Bhutan and Nepal likely to experience scattered and fairly widespread rain/thundershowers with gradual increase in rain/thundershowers expected during the coming week.</li> <li>• Bangladesh and Myanmar likely to experience scattered and fairly widespread rain/thundershowers over the coming week with some places expected to receive isolated heavy rainfalls.</li> <li>• Maldives and Sri Lanka expected to experience gradual increase in rain/thundershowers over the coming week.</li> </ul>	<p><b>Extended Range Outlook (until 03 August 2022)</b></p> <ul style="list-style-type: none"> <li>• Probability of rainfall (&gt;25mm) likely over Myanmar, Maldives, Bhutan, Nepal, Bangladesh and most parts of central India and isolated pockets of Sri Lanka and Pakistan towards the week ending of 27 July 2022.</li> <li>• Probability of rainfall (&gt;25mm) likely to continue over Bhutan, Nepal, Bangladesh, and most parts of Maldives and Myanmar, and pockets of India, Pakistan and Sri Lanka towards the week ending of 03 August 2022.</li> </ul>
<p><b>Temperature outlook</b></p>	<ul style="list-style-type: none"> <li>• No significant anomalies</li> </ul>	<p><b>Ocean Watch</b> <i><b>Ocean Surface Forecast during past week</b></i></p> <ul style="list-style-type: none"> <li>• High wave alerts/warnings issued for west coast of India.</li> <li>• Depression was formed and dissipated in the northern Arabian sea.</li> <li>• Winds were far higher in the Arabian sea (15-20 m/s) as compared to Bay of Bengal (&lt;15m/s).</li> <li>• Higher winds observed in the southern tropical Indian Ocean (15-20 m/s).</li> <li>• Waves were higher in the Arabian sea (4-6 m) compared to Bay of Bengal (2-4m).</li> <li>• High period swell waves (15-18 sec) propagated to Bay of Bengal from the southern Indian Ocean.</li> <li>• Gyres and eddies observed in the southern Arabian sea with</li> </ul>

		<p>conspicuous cooling by upwelling in the western Arabian sea.</p> <p><b>Forecast for coming week (21-27 July 2022)</b></p> <p><b>Wind Speed</b></p> <ul style="list-style-type: none"> <li>• While wind speed in the Arabian sea and southern Indian ocean is likely to be around 15-18m/s, in the Bay of Bengal it is likely be less (9-10m/s).</li> </ul> <p><b>Wave Heights</b></p> <ul style="list-style-type: none"> <li>• Higher wave heights are likely in the Arabian sea (5m) and southern Indian ocean (6.5m) and normal in the Bay of Bengal.</li> </ul> <p><b>Swell Waves</b></p> <ul style="list-style-type: none"> <li>• Coastal areas of Sri Lanka, Myanmar and Bangladesh are likely to experience swell waves with a maximum period of 18-19 secs.</li> </ul> <p><b>Sea Surface Temperature</b></p> <ul style="list-style-type: none"> <li>• While the sea surface temperature is likely to be higher in the Bay of Bengal (20-30°C) than in the Arabian sea (27-28°C), the southern Indian ocean is likely to experience normal temperature.</li> </ul>
<p><b>Monsoon watch</b></p>	<ul style="list-style-type: none"> <li>• Currently monsoon is active and vigorous over Myanmar and Pakistan, and active over Bangladesh, Bhutan, Nepal and is moderate over Maldives and Sri Lanka.</li> <li>• Currently, a moderate to strong and moderate cross equatorial flow is persisting over Arabian sea and over Bay of Bengal respectively with increase of wind speed over Arabian sea and offshore trough over west coast of India. A cyclonic circulation/low pressure system and monsoonal trough near to its normal position is observed.</li> </ul>	