Media Update
1 February 2018

FAO
Press Release

Satellite Data to be used in Monitoring and Managing Drought in Pakistan

Agriculture in Pakistan is most affected by natural disasters such as floods, earthquakes, droughts and landslides. With a 20% percent share of the national GDP and a 43 percent share of Pakistan’s total workforce, it is crucial that the sector is able to prevent and mitigate the impact of disasters. The Food and Agriculture Organization of the United Nations (FAO) has developed a tool to assist countries in monitoring agricultural drought and in managing its risk. This tool uses satellite data to detect agricultural areas where crops could be affected by drought. The “in-country” version of the tool is based on the general methodological principles of the Agricultural Stress Index System (ASIS).

In order to promote institutional ownership of the agricultural drought monitoring system, at the national level, FAO in collaboration with Pakistan Meteorological Department (PMD) conducted a training workshop in Islamabad.

Highlighting the importance of this collaboration Ms Minà Dowlatchahi, FAO Representative in Pakistan said “ASIS-Pakistan and the partnership with PMD is a cornerstone in the efforts towards an early warning system to support the transformation of the Indus Basin agriculture through innovative climate resilient agriculture practices and climate smart water management”. 27 technical staff members from PMD Islamabad, PMD Punjab and PMD Sindh took part in the training where they were informed of ways to monitor the drought in agriculture properly and in turn enable decision makers to implement drought mitigation activities in agriculture on a timely basis.
ASIS aims to simulate the analysis that would be performed by a remote sensing expert, and simplify the results in the form of maps for end-users. The country-level ASIS was created to help countries strengthen their agricultural drought monitoring and early-warning systems.

Welcoming participants, Mr Nasar Hayat Assistant FAO Representative said: “FAO is building capacity of key stakeholders on use of its global Agriculture Stress Index System (ASIS) to detect areas with a high likelihood of prolonged dry periods and drought.”

Drought monitoring is continuous and FAO provides satellite data every ten days, which is an ideal time frame for monitoring annual crops because it takes account of the water contributed by groundwater reserves. The final results are summarized in easy-to-interpret maps enabling decision-makers to implement drought mitigation activities in agriculture on a timely basis. These results are also useful for guiding public investments such as water harvesting, irrigation and water reserves.