Image: Thar Desert, India

June 16 2017

The Copernicus Sentinel-2A satellite brings us over northwest India with this false-colour image captured on 4 March 2017.

The Indian city of Bikaner is visible in the lower part of the image, surrounded by a varied landscape of agricultural structures and sand dunes.

The city lies in the Thar Desert, an arid region covering about 320 000 sq km in India and Pakistan. Most of the desert is covered by large, shifting sand dunes, some which are visible in the upper part of the image. The high winds also carry dry soils to neighbouring fertile lands, degrading them.

Archaeological evidence suggested that the region was once lush countryside, but the over-exploitation of land and water resources by humans over thousands of years drastically changed the landscape into what we see today.

In recent times, India has turned its attention to restoring the ecology and curbing the desertification of the region. For example, the Indira Gandhi Canal bringing water to the area pictured was built to keep the desert from spreading to the fertile areas, and to reclaim the land with irrigated planting projects. In this false-colour image, vegetation appears red.

Every year, 17 June marks the World Day to Combat Desertification and Drought.
ESA helps the UN Convention to Combat Desertification by providing annual global datasets on land cover and land cover changes. ESA also supports the development of operational guidelines for countries to engage in the Convention's Land Degradation Neutrality initiative.

Provided by European Space Agency


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