

EO services contributing to SDGs

Biomass monitoring in India

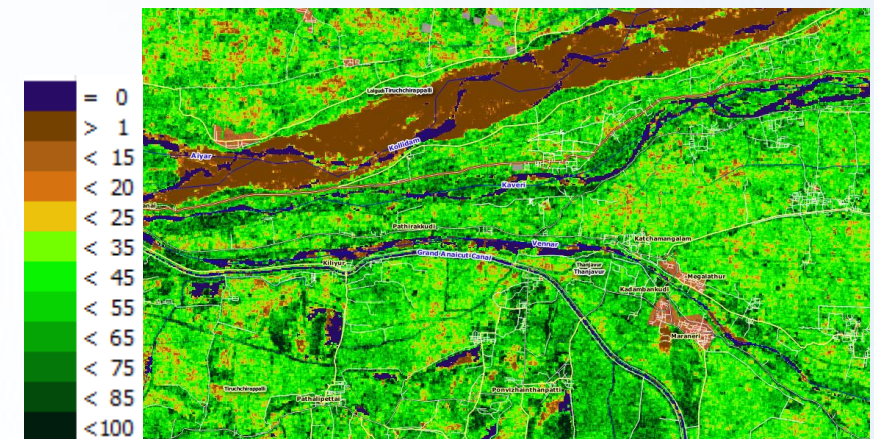


- User: Crop Insurance
- Challenge/Needs: Detect the deviation in biomass development from baseline
- Initiative: Microinsurance scheme
- Results: Low basic risk, due to regular and constant measurement
- Service Provider: cropix based on Sentinel-1 SAR data

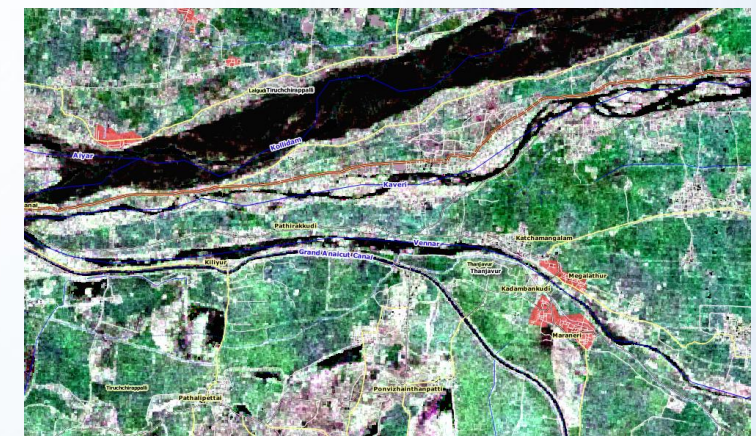
Target 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

Enhanced SAR Vegetation Index (ESVI) derived from Sentinel-1 SAR data

- Sentinel-1 acquires data on regular basis with a repetition of 12 days (20x20 m).
- Independent from atmospheric disturbances and daylight.
- Constant observation angle, energy and geometry. Ideal for change detection.
- ESVI reflects the spatial and temporal variability of fresh biomass.
- Derivates like EVO show the intensity and change of biomass over the past 24 days.
- Data of the past 7 years is available to derive a baseline.
- ESVI can be calibrated against yield, where reference data is available.



ESVI 23. January 2023



EVO 23. January 2023