



Food and Agriculture Organization
of the United Nations

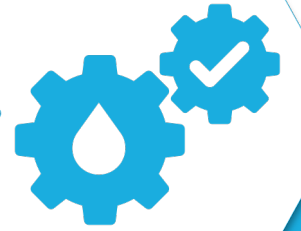
WALKTHROUGH – THE DIGITAL FEATURES – INTRODUCTION TO THE DIGITAL PRISM

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Regional gathering
Tunis, 12 – 16 December 2022



ITALIAN AGENCY
FOR DEVELOPMENT
COOPERATION



GOALS OF DEVELOPMENT

- Simplify a complex but well-defined, well-understood process.
 - **Expected return on irrigation investments**
- Data provision → Data extraction →
 - Data processing / analysis → Interpretation of results
 - **Intuitive web-based user interface (UI)**
 - **Composite indicator & multi-layer geospatial analysis**



HOW IT WORKS?

1. User to specify target areas

- Drawing on map / Uploading geographical features (GeoJSON)

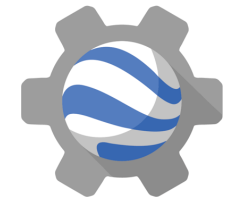


GEOJSON

```
{  
  "type": "Feature",  
  "geometry": {  
    "type": "Point",  
    "coordinates": [125.6, 10.1]  
  },  
  "properties": {  
    "name": "Dinagat Islands"  
  }  
}
```

2. Indicator extraction & processing, composite indicator

- High-performant components leveraging Google Earth Engine, Python



3. Results presented through informative charts

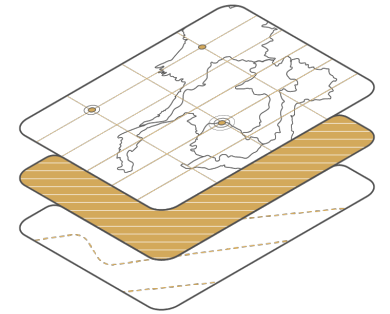
- Relative rating of target areas





GEOSPATIAL INDICATORS

- High-quality global datasets (raster & vector).
- Resolution between tens of meters and a few kilometers.
- Google Earth Engine assets & data extraction capabilities.
- Types of indicators:
 - Mean / Max of pixel values. (e.g. Precipitation / Food insecurity)
 - Ratio of area according to some condition. (e.g. Land Degradation)
 - Distance from geospatial features (e.g. Acces to water storage)





DEMO



NEXT STEPS

- Integration of field data
- Support for popular vector formats to upload areas
- Country-PRISM



THANK YOU.