



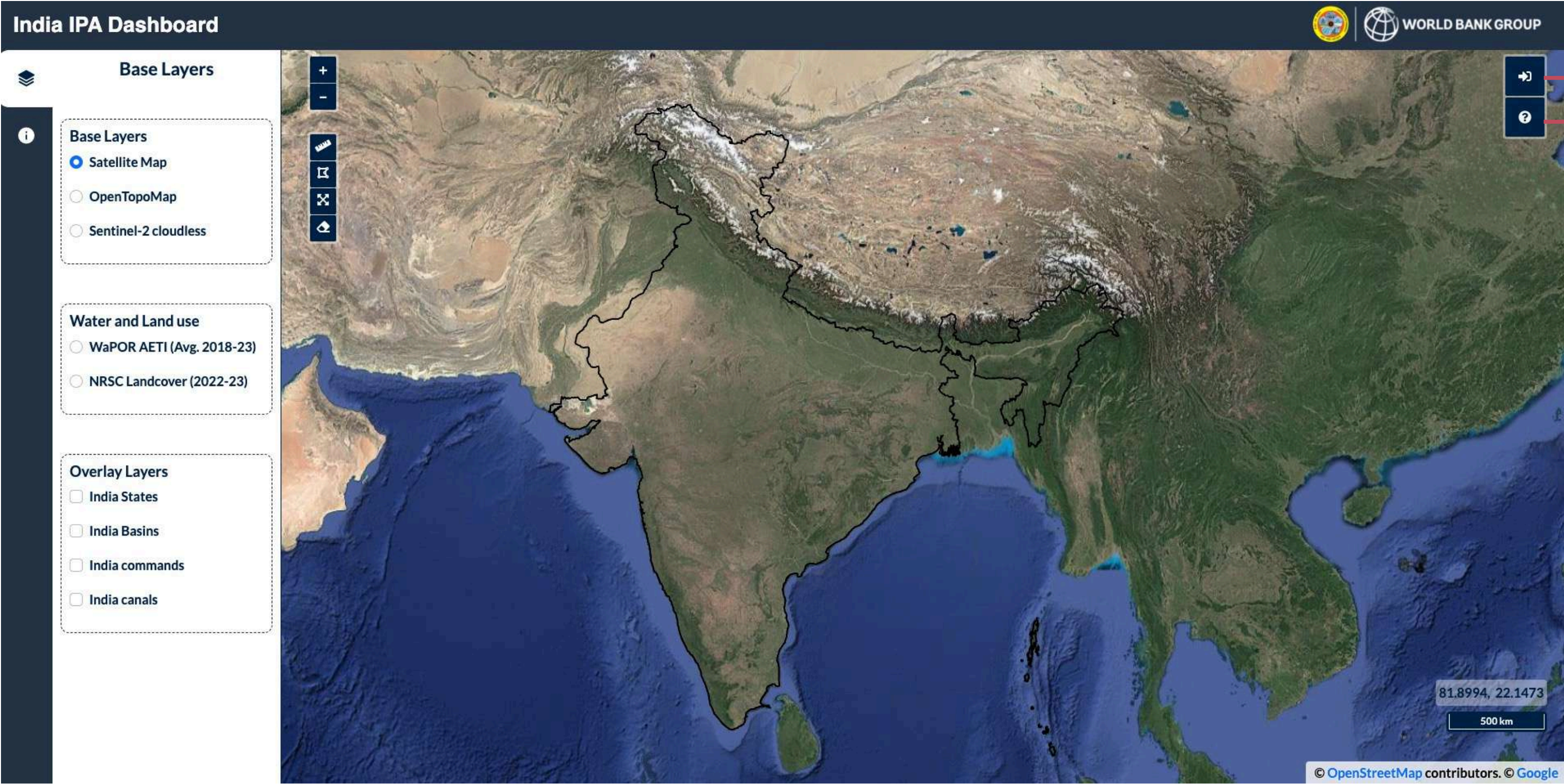
# User Guide

India Irrigation Performance Assessment Tool







# Home Page






# Login Page

India IPA Dashboard

 WORLD BANK GROUP



Username:

Password:

Login

India IPA Dashboard © 2024

Login using the provided credentials



After logging in, you can access all available options

**India IPA Dashboard**

WORLD BANK GROUP

**Base Layers**

- ☒ Satellite Map
- ☐ OpenTopoMap
- ☐ Sentinel-2 cloudless

**Water and Land use**

- ☐ WaPOR AETI (Avg. 2018-23)
- ☐ NRSC Landcover (2022-23)

**Overlay Layers**

- ☐ India States
- ☐ India Basins
- ☐ India commands
- ☐ India canals

Zoom controls

Measurement tools

Logout

User Guide

Add Vector layer

Task Progress

69.4824, 25.2973

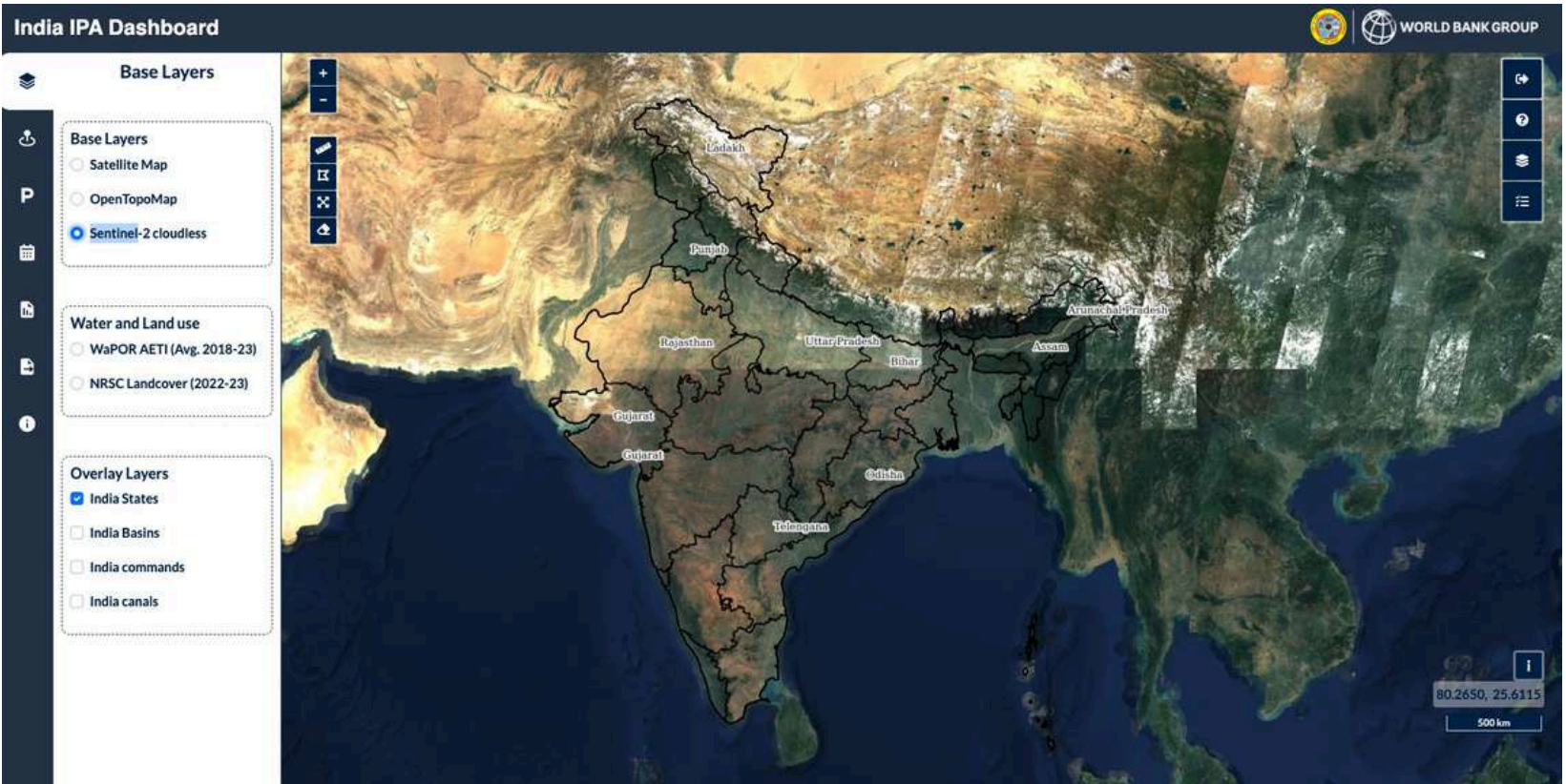
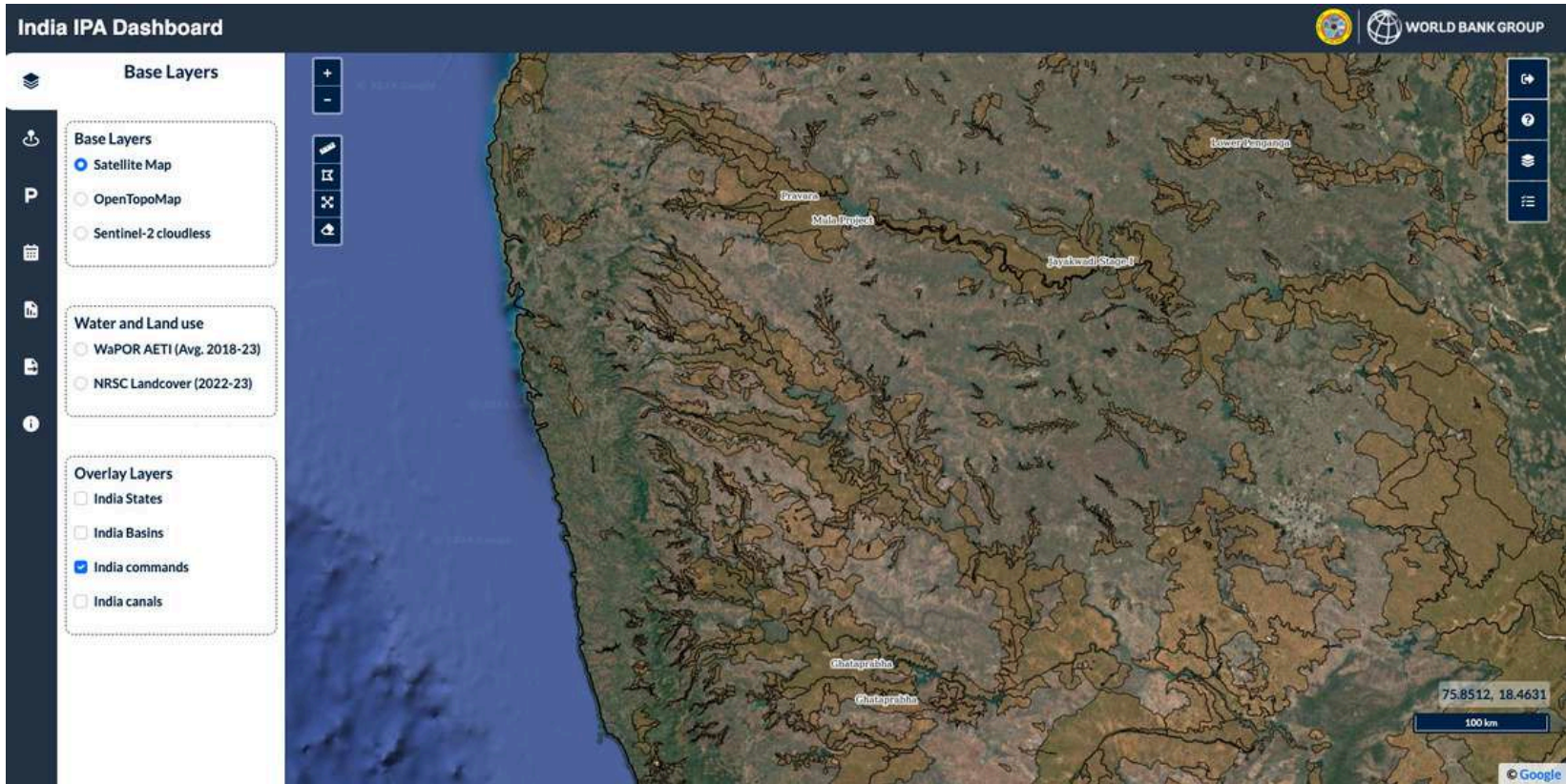
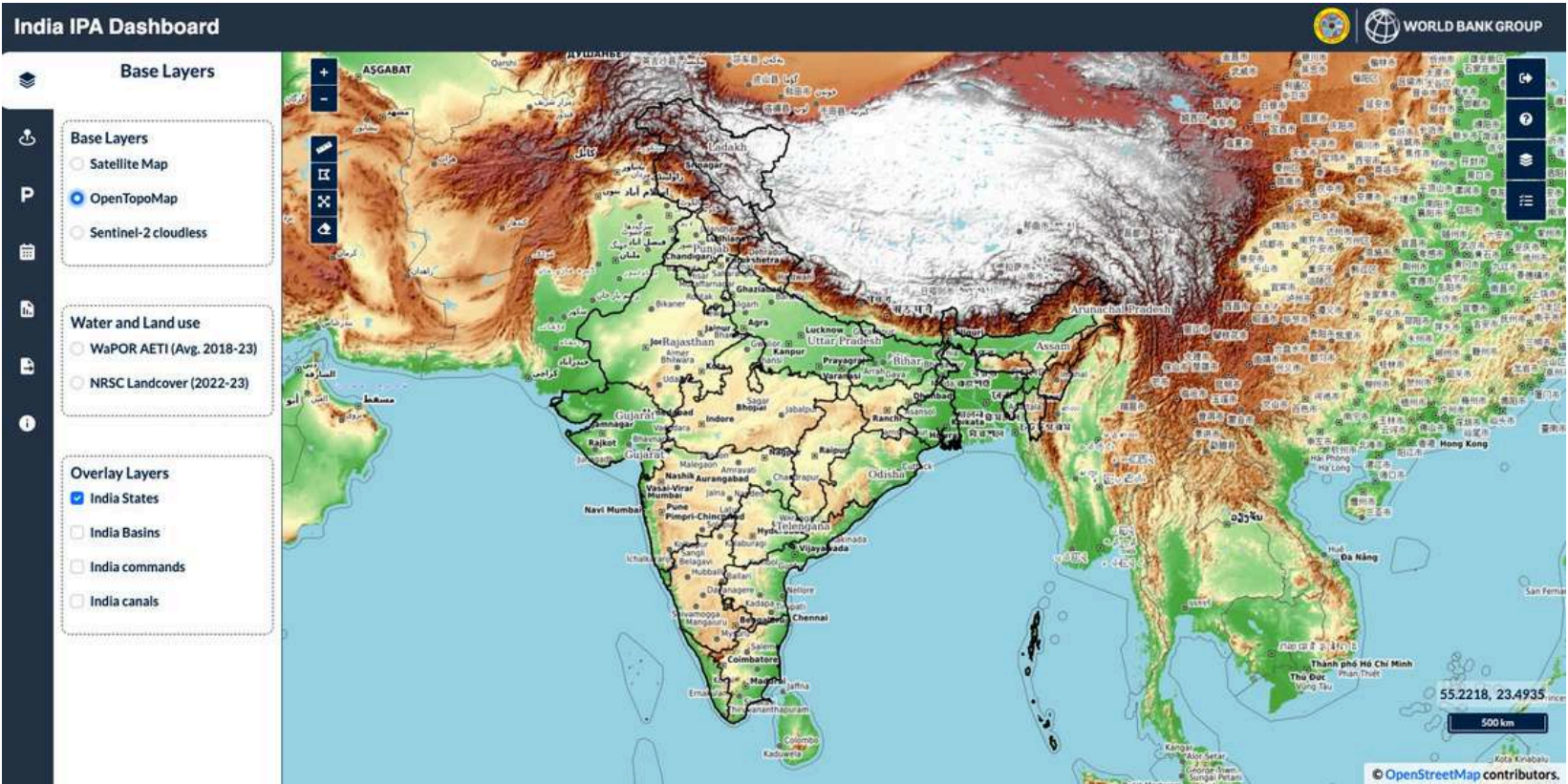
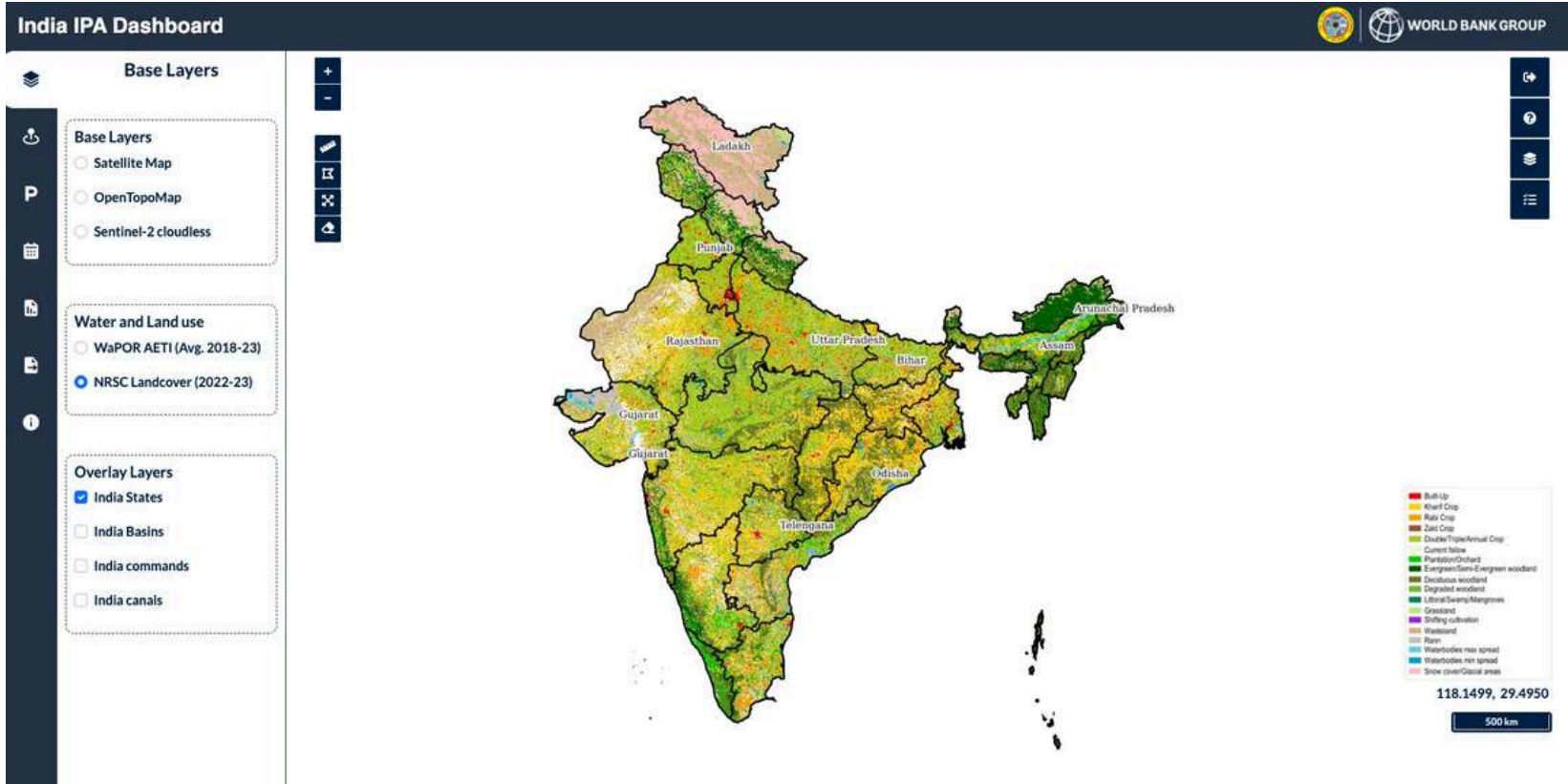
500 km

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The screenshot displays the India IPA Dashboard interface. On the left, a sidebar contains navigation icons and three main sections: 'Base Layers' with 'Satellite Map' selected, 'Water and Land use' with 'WaPOR AETI (Avg. 2018-23)' and 'NRSC Landcover (2022-23)', and 'Overlay Layers' with 'India States', 'India Basins', 'India commands', and 'India canals'. The main map area shows a satellite view of India and surrounding regions. Above the map, 'Zoom controls' (+/-) and 'Measurement tools' (ruler, area, distance) are visible. On the right, a vertical toolbar includes 'Logout', 'User Guide', 'Add Vector layer', and 'Task Progress'. The bottom right corner shows coordinates '69.4824, 25.2973', a '500 km' scale bar, and copyright information for OpenStreetMap and Google.



# Base maps





# Tool bars

Base Layers

Base Layers

☒ Satellite Map

☐ OpenTopoMap

☐ Sentinel-2 cloudless

Water and Land use

☐ WaPOR AETI (Avg. 2018-23)

☐ NRSC Landcover (2022-23)

Overlay Layers

☐ India States

☐ India Basins

☒ India commands

☐ India canals

Command Area

Select State

Select State

Select Command

Select Command

Add

Select Added Area

Select your added areas

Select an area

Data Products

Precipitation

IMD

Evapotranspiration

WaPOR v3

Time Range

Season start month

June

Season end month

September

Select Year

2022-23

Get Report

Previous Reports

Search report...

Tungabhadra Left Bank Canal  
2024-11-26 17:24:40

ViewPDFDelete

Narayanapura Left Bank Canal  
2024-11-26 17:22:43

ViewPDFDelete

Ghataprabha  
2024-11-26 17:21:06

ViewPDFDelete

Ghataprabha  
2024-11-26 17:19:30

ViewPDFDelete

Refresh

Overview Stats

Upload GeoJSON File

Choose fileNo file...osen

Select Year

2022-23

Precipitation: IMD

Evapotranspiration: WaPOR v3

LULC - NRSC 250k

Agricultural year: June - May

Submit

Previous Stats

File Name:

WRPCommand\_2022\_23\_sta

Created At: 2025-01-19 09:33:48

Tool Overview

Evapotranspiration based Quick Irrigation Performance Assessment (EQIPA) tool automatically generates an Irrigation Performance Assessment report for any selected command area by the user. The tool make use of remotely sensed datasets to generate various components of water balance laid over to a report in html and pdf format.

User Guide

# Generate an IPA Report

Step 1: Select a command area

Step 2: Select data products

Step 3: Select year, season start and end month

Step 4: Generate report

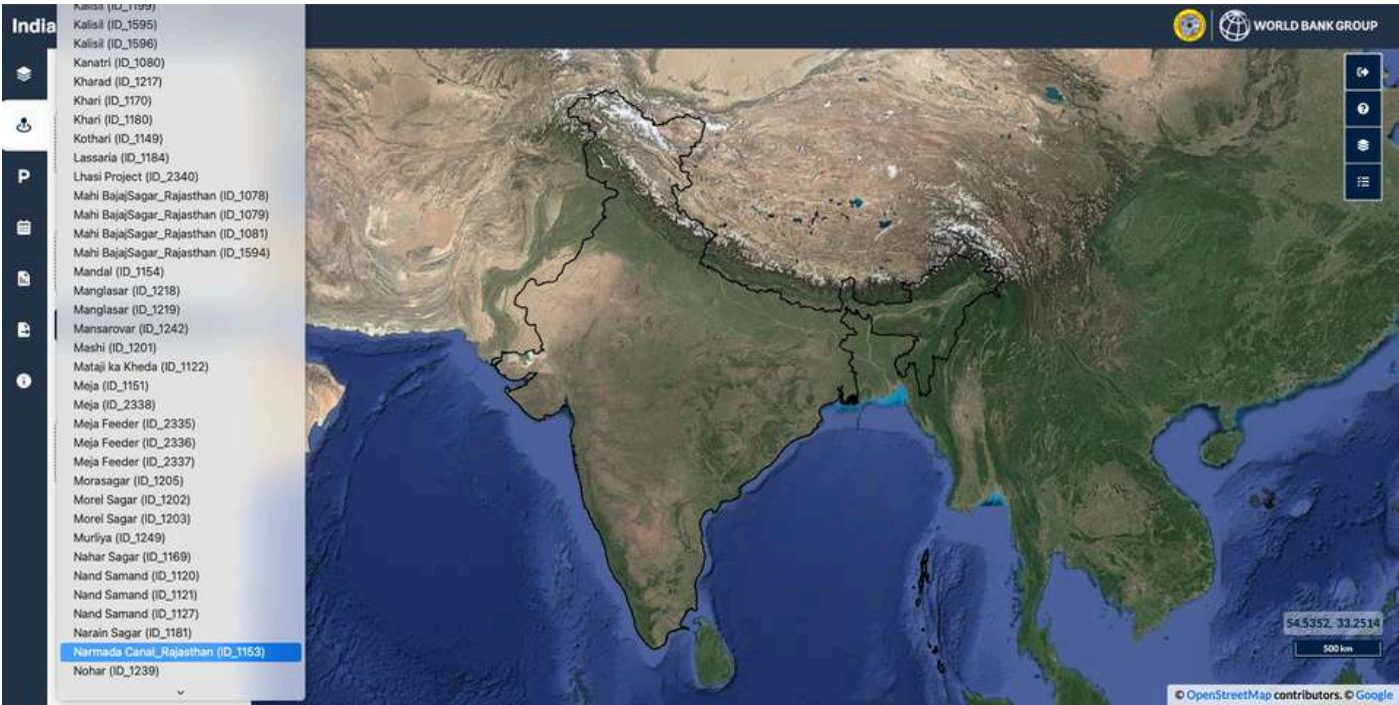


# 1. Select and Add Area

1. Select a state



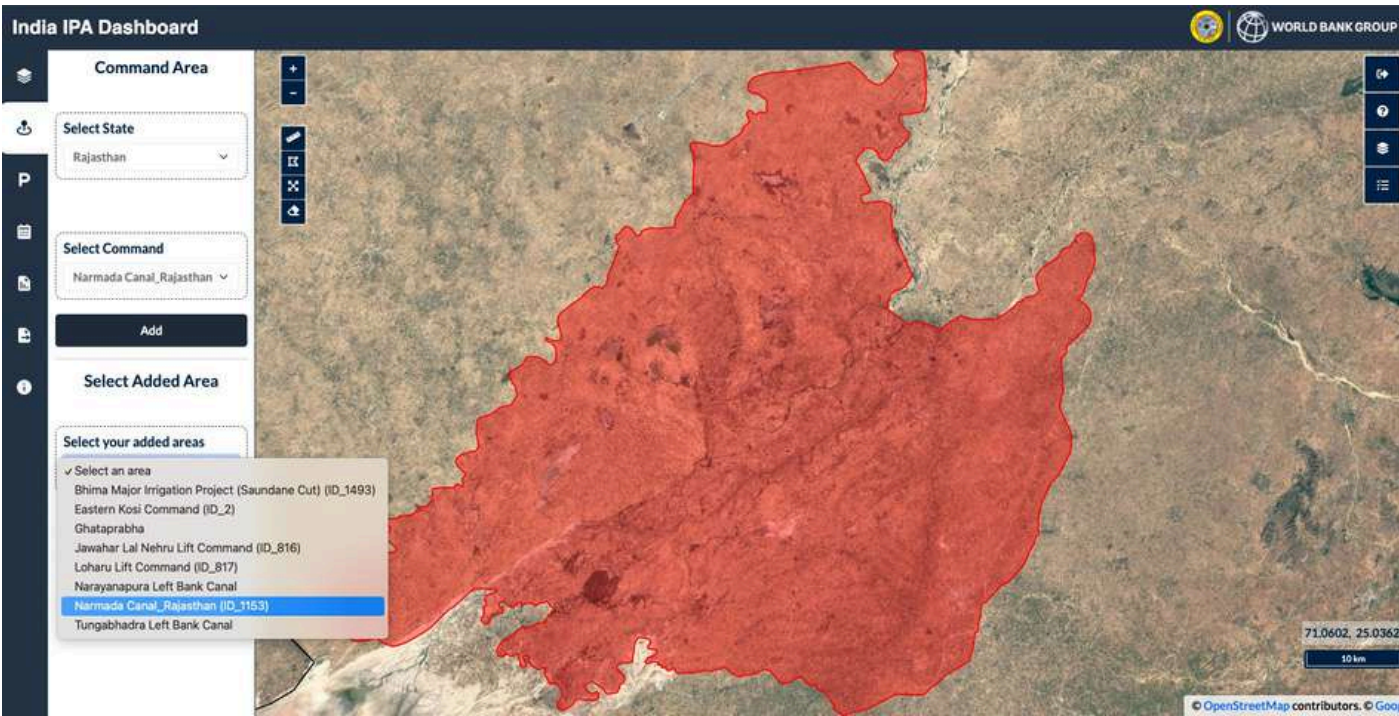
2. Select command area within selected state.



3. Click on Add to save the command in your area.



4. Now, choose the added command from your added areas.





- You can also upload an area using a GeoJSON file (ensure it contains only a single feature).
- The file must include the following required fields:
  - cname: Name of Command Area
  - state: State Name of Command Area
  - area\_ha: Area of command area in hectares

cname	type	status	cmdcode	area_ha	cca	prjcode	dist_benf	state
Ghataprabha	Major	Completed	CMDKA073	457838.007	NULL	JI02742	Belgaum	Karnataka

Example attribute table of GeoJSON file to be uploaded

India IPA Dashboard

Base Layers

Satellite Map

OpenTopoMap

Sentinel-2 cloudless

Water and Land use

WaPOR AETI (Avg. 2018-23)

NRSC Landcover (2022-23)

Overlay Layers

India States

India Basins

India commands

India canals

+

-

Full Screen

Layers

Layers

Layers

Layers

116.6794, 33.3528

500 km

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Add new area

Required Fields: The file should contain the following required fields:

cname: Name of Command Area

state: State Name of Command Area

area\_ha: Area of command area in hectares

Upload vector layer (GeoJSON)

Choose file

No file chosen

Close

Load data

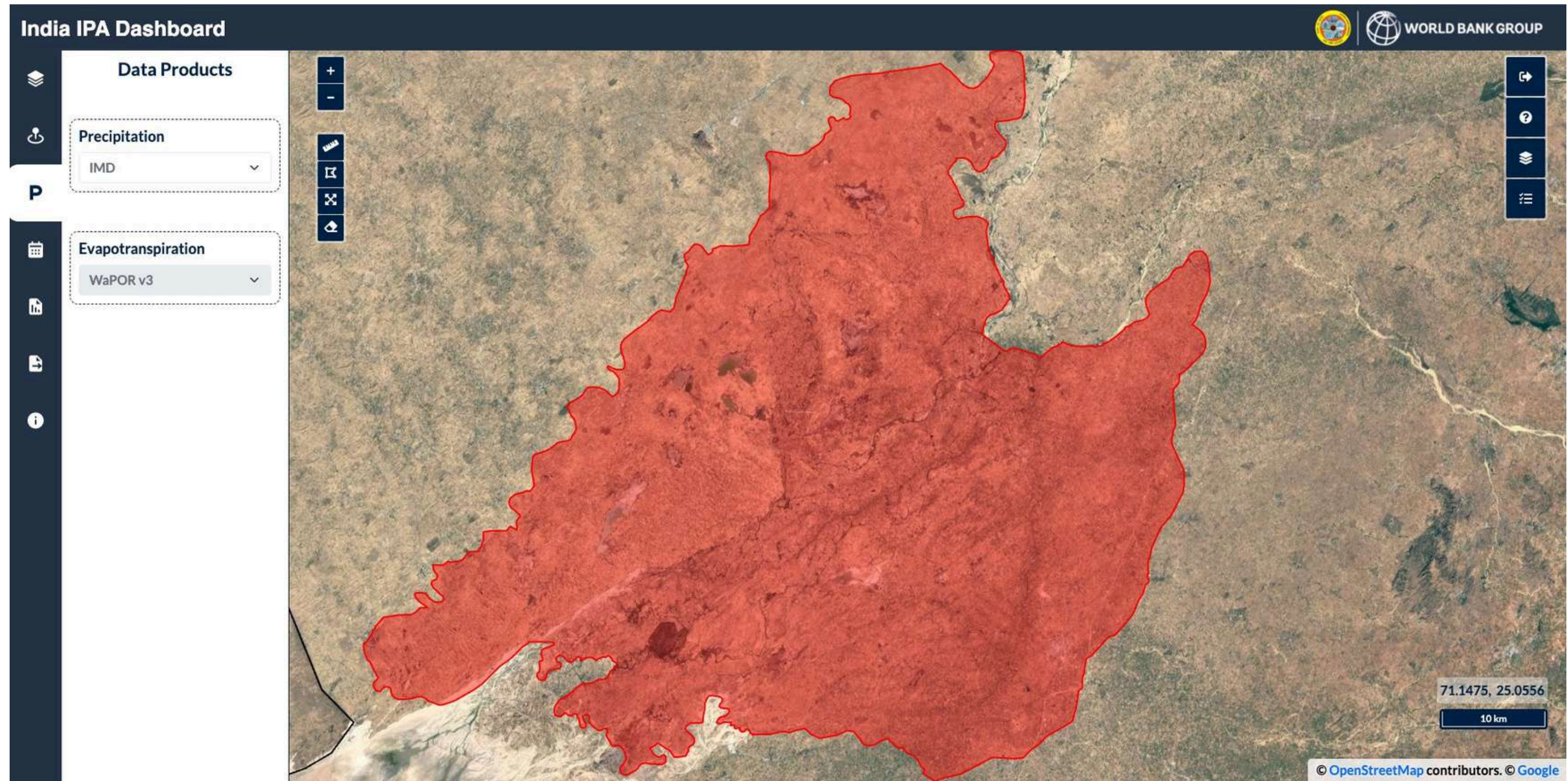
9



## 2. Select data products

Precipitation:  
1. IMD  
2. CHIRPS

Evapotranspiration:  
WaPOR v3

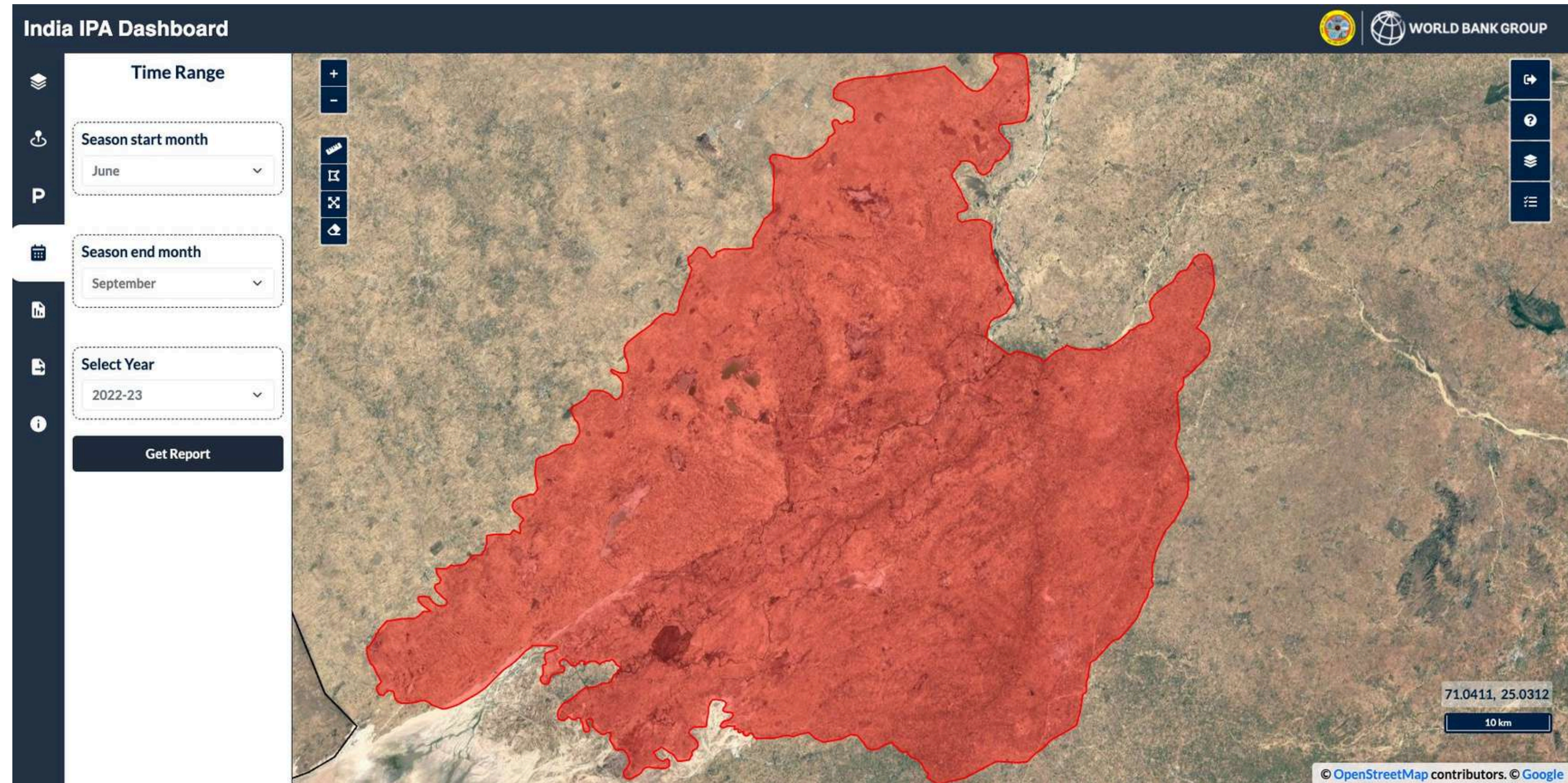




### 3. Select time range and generate report

```
Define season:
select season
strat and end
month
```

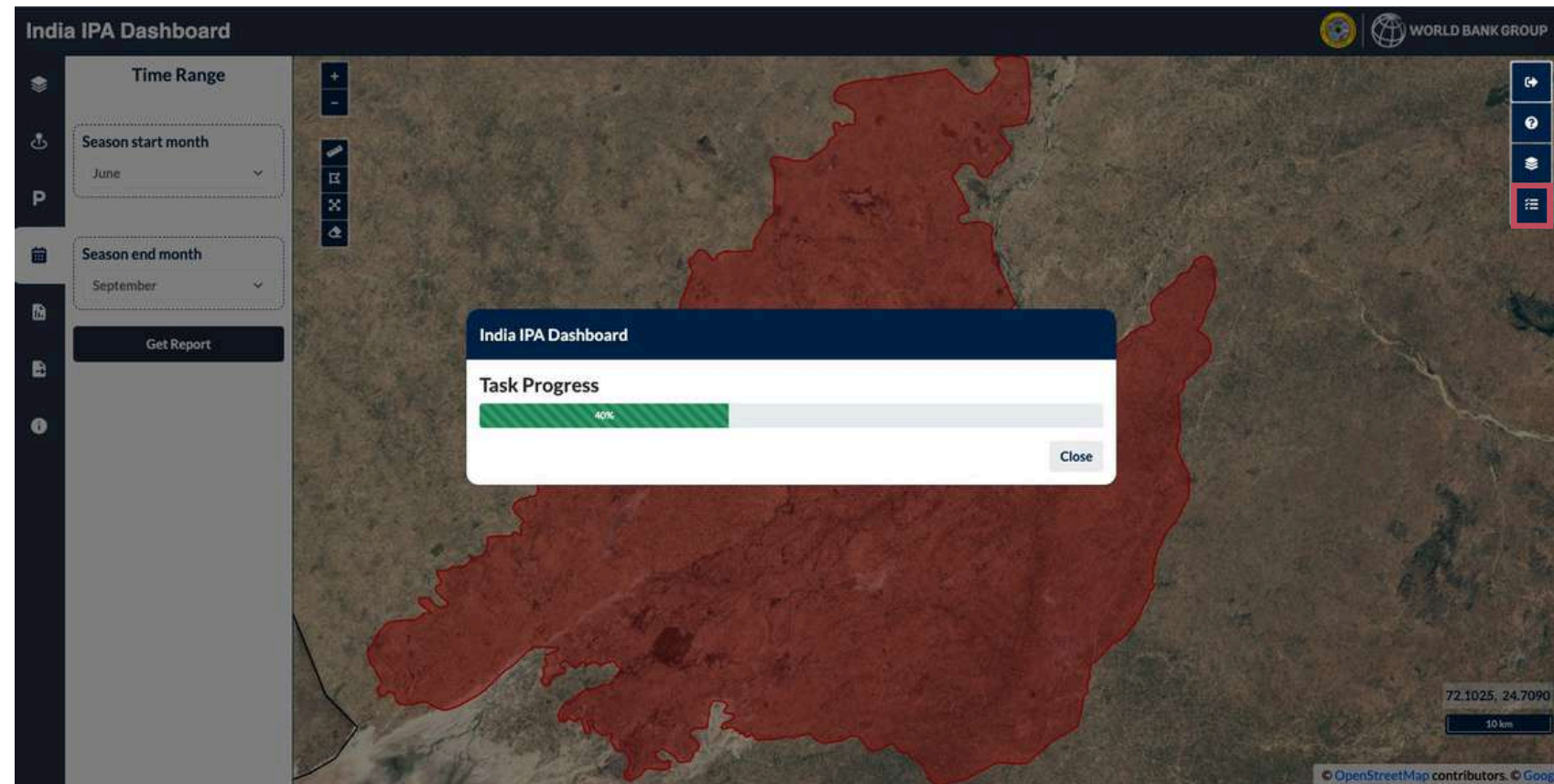
Click on Get Report to generate a report



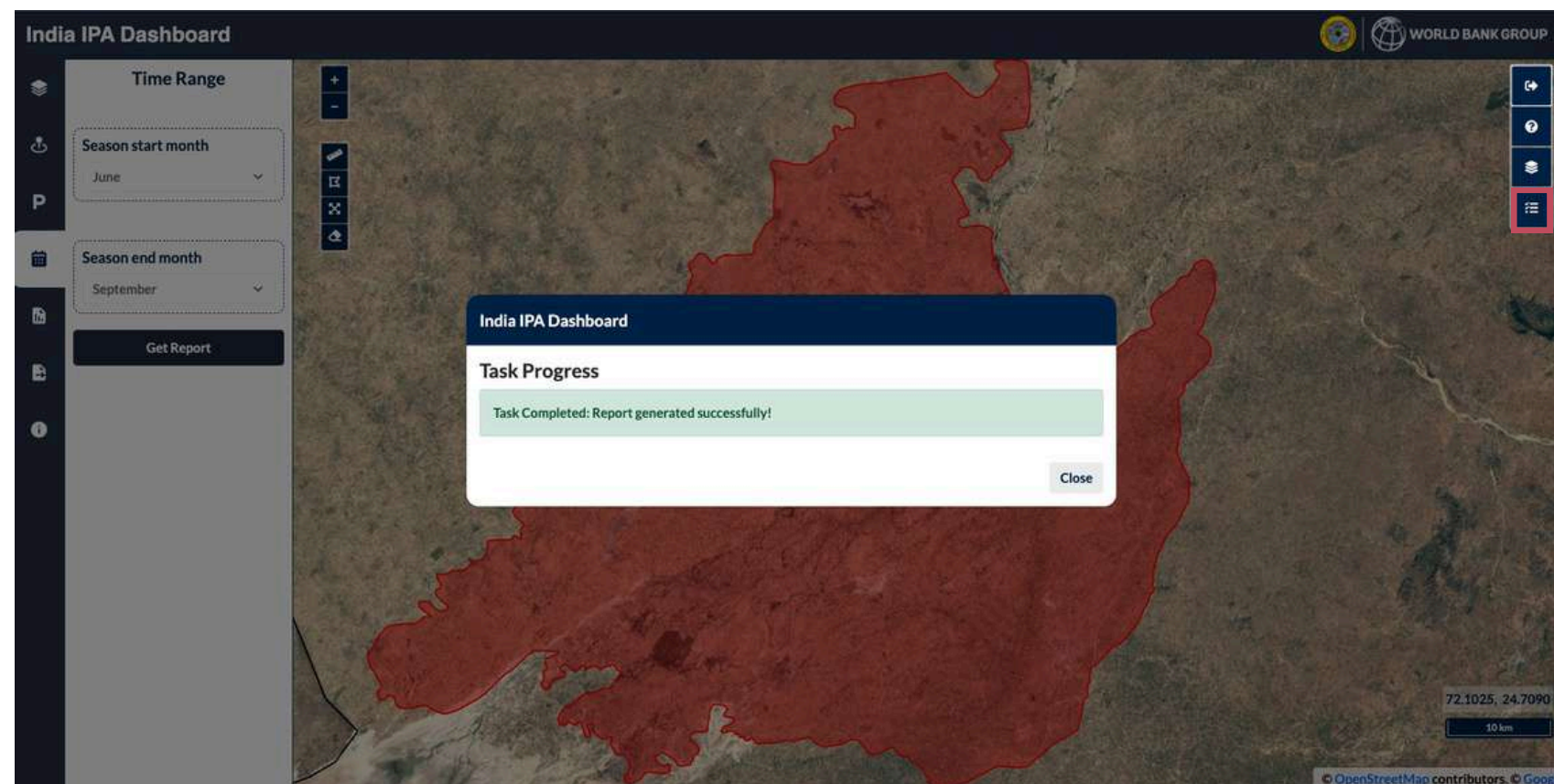
\*The agricultural year taken as June – May



# Task progress



- When you click the Get Report button, the report generation process begins.
- A dialog box appears, displaying the progress percentage of the task in real-time.
- Report generation time depends on the selected area; larger areas take more time.



Report generated successfully



# Previous reports

Generated report

India IPA Dashboard

P

Previous Reports

Search report...

Narmada Canal\_Rajasthan (ID\_1153)  
2024-11-27 12:36:29

View

PDF

Delete

Tungabhadra Left Bank Canal  
2024-11-26 17:24:40

View

PDF

Delete

Narayanapura Left Bank Canal  
2024-11-26 17:22:43

View

PDF

Delete

Ghataprabha  
2024-11-26 17:21:06

Refresh

72.1025, 24.7090

10 km

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# Generated: Web and PDF reports

Overview

Study area

Key Agro-Hydrological Parameters

Evapotranspiration

Partitioning ET green and into ET Blue

Precipitation

Water and land Productivity

Adequacy

Equity

Climate Change future projections

Data sources

Overview

Study Area	Narmada Canal_Rajasthan (ID_1153)
State	Rajasthan
Assessment Season	June to September
Assessment Period	June 2018 - May 2023
Geographical area (ha)	301984
Design Command Area (ha)	286339
Cropped Area (based on NRSC LULC (250K) - 2022-23) (ha)	110993
Cropped Area (based on Biomass) (ha)	88680
Mean Precipitation (IMD) (mm)	316
Mean Evapotranspiration (WaPOR v3) (mm)	94

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Irrigation Performance Assessment Report

Narmada Canal\_Rajasthan (ID\_1153) - June to September

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Irrigation Performance Assessment Report

Narmada Canal\_Rajasthan (ID\_1153) - June to September



# Generate overview/summary stats for multiple commands

This tool generates summary statistics in an Excel file for all features contained within a GeoJSON file. The stats include the following parameters:

Abbreviation	Definition	Unit
eta_a_average	Average annual Evapotranspiration (ETa) in the command area	mm/year
eta_a_cropland_average	Average annual ETa over cropland in the command area	mm/year
eta_a_cropland_coeff_var	coefficient of variance of annual ETa over cropland in the command area	mm/year
eta_a_cropland_stddev	standard deviation of annual ETa over cropland in the command area	mm/year
etb_a_average	Average annual Blue ET in the command area	mm/year
etg_a_average	Average annual Green ET in the command area	mm/year
tbp_a_average	Average annual Total biomass production in the command area	kg/ha/year
pcp_a_average	Average annual precipitation in the command area	mm/year
Equity	1- CV of ETa	%
Adequacy	ETa/ ETp, [ETp = 98 percentile of ETa]	%
BLP	Biomass land Productivity	kg/ha
BWP	Biomass Water Productivity	kg/m <sup>3</sup>

\***Cropland** = Kharif + Rabi + Zaid + Double/Triple Crop + Plantation/Orchard  
\***Agricultural year** =. June - May



# Generate overview/summary stats for multiple commands

The screenshot displays the 'India IPA Dashboard' interface. On the left, a dark sidebar contains navigation icons. The main content area is divided into two sections. The top section, 'Overview Stats', includes a file upload area with a 'Choose file' button and a 'No file...osen' label, a 'Select Year' dropdown menu currently set to '2022-23', and a list of parameters: 'Precipitation: IMD', 'Evapotranspiration: WaPOR v3', 'LULC - NRSC 250k', and 'Agricultural year: June - May'. A 'Submit' button is located below these options. The bottom section, 'Previous Stats', shows a table with one entry: 'File Name: WRPCommand\_2022\_23\_sta', 'Created At: 2025-01-19 09:33:48'. On the right, a map of India is shown with a large red-shaded region in the central part of the country. A scale bar at the bottom right indicates '20 km' and coordinates '71.1069, 25.1708'. The top right corner features the 'WORLD BANK GROUP' logo.

Upload a GeoJSON file

Select an agricultural year

Click on submit to get the overview stats of uploaded commands.

View Previously Generated Stats excel files.