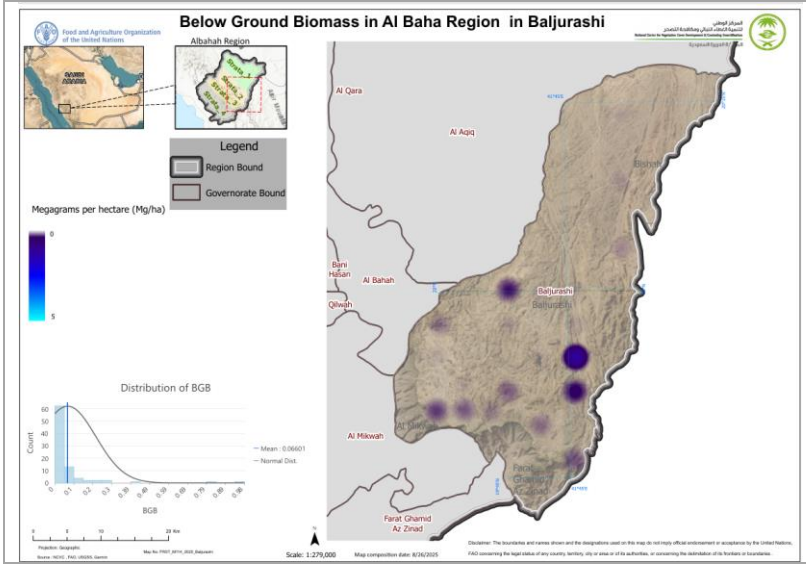
Metadata – Below-Ground Biomass (BGB) in Baljurashi Governorate, Al Baha Region, Saudi Arabia

Part 1: Basic Metadata (Mandatory)

1.01 Thumbnail

Prepare small thumbnail that represents this dataset. Create and save thumbnail. Insert thumbnail in the space provided and indicate the file name.

Create and save thumbnail	***Enter file name***
	

1.02 – Title

Descriptive title for this data. Should provide sufficient information to external users.

Enter Data Title

Below-Ground Biomass Mapping in Baljurashi Governorate, Al Baha Region, Saudi Arabia

1.03 – Abstract

Provide a short and concise abstract which summarizes what this data is about. Similar to the abstracted provided in a scientific paper.

Enter data abstract

This dataset presents the spatial distribution of below-ground biomass (BGB) in Baljurashi Governorate, Al Baha Region, Saudi Arabia. BGB values are expressed in megagrams per hectare (Mg/ha) and derived from field measurements and allometric models. The data supports assessment of root biomass, carbon storage, and soil–vegetation interactions. The map highlights spatial variation in BGB, offering insights for carbon accounting, ecosystem modeling, and sustainable land management.

1.04 – Date type

Provide all three type of dates - Creation date, Publication date, and Revision date.

Identification of when a given event occurred

Creation	***2024***
Publication	***2025***
Revision	***2023***
relevant date	***2023***

1.05 – Group

The group, department or unit to which this data belongs.

Enter group name

Registered Members,
FAO Spatial Data Group,
Natural Resources Management Component NRM - FAO KSA

1.06 – Category	1.07 – Free-text Keywords
Provide one primary category to which this data belong. Select from the list provided. Possible categories related to the SRADP project are highlighted in green color.	*Keywords helps Search Engines such as Google find data requested by users. Use FAO AGRIS to select the most appropriate keywords for this data. To make the data discoverable, provide a minimum of 5 keywords.*
Field declared Mandatory by the Metadata Schema	*A space or comma-separated list of keywords. Use the Widget to select from Hierarchical tree.*
Select one of the following : (highlighted by Yellow)	*REQUIRED: Common-use word or phrase used to describe the subject of the data set. (Provide 5 keyword minimum)*
Imagery Base Maps Earth Cover	*NCVC*
Society	*Below Ground Biomass*
Economy	*Baljurashi*
Utilities Communication	*Al Baha*
Environment	*Forest*
Oceans	*Monitoring*
Biota	*Vegetation*
Health	*Cover*
Elevation	*Remote*
Geoscientific Information	*Sensing*
Planning Cadastre	*Carbon*
Inland Waters	*Stock*
Boundaries	*Natural*
Structure	*Resources*
Transportation	*FAO*
Intelligence Military	
Location	-
Climatology Meteorology Atmosphere	-
Farming	-

Population	-

Part 2: Location and Licenses (Mandatory)

2.01 Language

Provide data language

Language used within the dataset

Enter data language

English

2.02 License

Provide the type of license under which this data is published and intended to be used.

License of the Dataset

Select one of the following License: (highlighted by Yellow)

NextView

Not Specified

Open Data Commons Open Database License / OSM

Public Domain

Public Domain / USG

Varied / Derived

Varied / Original

2.03 Attribution

Identify the entity or agency with authority and responsibility over this data.

Authority or function assigned, as to a ruler, legislative assembly, delegate, or the like.

**Field declared Mandatory by the Metadata Schema*

Enter attribution for this data

The Geospatial Department of the Food and Agriculture Organization (FAO) of the United Nations in Saudi Arabia, in collaboration with the NCVC, produced this dataset. Tree root data were derived from field measurements and modeled relationships based on established allometric equations. Use of this dataset requires prior approval from FAO and NCVC.

2.04 Regions

Identify the region that the data covers. You can provide several regions.

Enter global or specific regions

Baljurashi Governorate, Al Baha Region, Kingdom of Saudi Arabia

2.05 Data quality statement

Statement on the data quality. This allows any known issue about the data quality to be documented and shared with data user so that they can use the data appropriately.

Provide data quality statement

Below-ground biomass (BGB) values were calculated using established biomass–root ratio models. These estimates provide consistent, spatially referenced values for below-ground biomass monitoring. Results are suitable for scientific and planning purposes but are not official national statistics unless validated by FAO–NCVC.

2.06 Restrictions

Indicate any know restriction on this data. You could consideration the following when assessing data restriction:

(1) Exclusive right to the publication, production, or sale of the rights to a literary, musical, or artistic work, or to the use of a commercial print or label, granted by law for a specified period of time to an author, composer, artist, distribution
(2) Rights to financial benefit from and control of distribution of non-tangible property that is a result of creativity
(3) Formal permission to do something
(4) Government has granted exclusive right to make, sell, use or license an invention or discovery
(5) Produced or sold information awaiting a patent
(6) Withheld from general circulation or disclosure
(7) Name, symbol, or other device identifying a product, officially registered and legally restricted to the use of the owner or manufacturer
(8) Other restrictions

Limitations Placed upon the access or use of the data

** Field declared Mandatory by the Metadata Schema*

Enter any know data use restriction information

(3) Formal permission to do something

This data can be viewed and used for analysis and presentations. For any modification or redistribution, coordination with the GIS Department at FAO–NCVC in Saudi Arabia is required.

2.07 Other constraints

Identify any other constrains on this data that would be important to document and share with the data users

Enter other constrains on this data

Root-to-shoot ratio assumptions may vary by vegetation type and site condition. The dataset provides modeled estimates and does not account for seasonal soil moisture variation.

Part 3: Other Data Description (Optional)

3.01 Edition

If the data is linked or resulting from work that has editions, indicate the edition for this dataset.

Version of the cited resource

Enter Edition

Version 1

3.02 DOI

The DOI (Digital Object Identifier) will be assigned by the Metadata Administrator.

DOI will be added by Admin before publication

Create and enter the data DOI

DOI to be assigned by FAO Metadata Administrator prior to publication.

3.03 Purpose

The purpose for which this dataset and related studies were undertaken.

Provide data purpose

The dataset supports estimation of below-ground biomass, carbon stock assessment, and soil–vegetation interaction studies in Saudi Arabia. It provides critical information for carbon accounting and sustainable land-use planning.

3.04 Maintenance frequency

The frequency for data update.

Frequency with which modifications and deletions are made to the data after it is first produced

Select one of the following : (highlighted by Yellow)

Frequency of maintenance for the data is not known
Data is repeatedly and frequently updated
There are no plans to update the data
Data is updated each day
Data is updated every year
Data is updated as deemed necessary
Data is updated each month
Data is updated every two weeks
Data is updated in intervals that are uneven in duration
Data is updated on weekly basis
Data is updated twice each year
Data is updated every three months

3.05 Spatial representation type

How the spatial data is presented, Method used to represent geographic information in the dataset

Select one of the following : (highlighted by Yellow)

Grid data is used to represent geographic data
Three-dimensional view formed by the intersecting homologous rays of an overlapping pair of image
Textual or tabular data is used to represent the geographic data
Triangulated irregular network
Vector data is used to represent geographic data
Scene from a video recording

3.06 Supplemental information (Remarks)

Provide any additional supplemental information about this data that could help the user when using this data

Enter supplemental information / Remarks

- BGB is expressed in Mg/ha
- Estimated range: 0 – 8 Mg/ha (as per legend)
- Derived from modeled relationship with AGB
- Mean BGB = 0.118 Mg/ha

3.07 Temporal extent Start and End

Provide temporal extent start and end that may have bearing on this data.

Temporal extent start		***Temporal extent end***	
Date	***Time***	***Date***	***Time***
Enter temporal start date	*Enter temporal start time*	*Enter temporal end date*	*Enter temporal end time*

3.08 Responsible Parties / Point of Contact

Who can be contacted about this data? This is usually the metadata administrator.

Admin Name

Enter Metadata Admin

Dr. Njeru Jeremiah – Chief Technical Advisor of Natural Re Management NRM – FAO KSA
Dr. Ouerchefani, Dalel - TECHNICAL ADVISER, FAOSA
Mr. Gabriel Vincent Sanya – GIS / RS and Land Cover Mapping Expert -FAOSA
Mr. Haitham Abdullah – GIS Specialist – FAO KSA

3.09 Responsible and Permissions / Owner

Who is the responsible over this data? This is usually the person that led or supported the creation of the data

Data Responsible / Owner

Enter data owner

FAO
NCVC Geo-Spatial Unit
MoEWA

3.10 Metadata Author

Who is the author of the metadata? This is usually the person that led or supported the creation of the data.

Data Responsible / Owner

Enter Metadata Admin

GIS Department in Food and Agriculture Organization of the United Nations (FAO) in Saudi Arabia

Part 4: Part 4 - Data Attributes (Optional)

4.01 Key data features and attributes

Detailed description of the data layer features and attributes will be provide in a separate custom template for data features and attributes description. Here, the key features and attributes (objects) for this data are provided.

Description of key features and attributes

Attribute / Feature	***Description***
Enter the attributes of this Layer	*Enter the description of the attributes*
x	*Longitude coordinate in decimal degrees (WGS84)*
y	*Latitude coordinate in decimal degrees (WGS84)*
BGB	*Below-Ground Biomass value in tonnes per hectare (Mg/ha); derived from field and model calculations*
fld_name	*Field code: BGB*
fld_title	*Field title: Above-Ground Biomass*
fld_unit	*Measurement unit: tonnes (Mg/ha)*
min_val	*Minimum recorded BGB value: 0 Mg/ha*
max_val	*Maximum recorded BGB value: 18.013 Mg/ha*
data_pt	*Total number of field plots (418) used for calculation and model validation*
region	*Al Baha Region (Baljurashi Governorate)*
country	*Saudi Arabia*