

Metadata – Above-Ground Biomass (AGB) 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

Above-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 above-ground biomass (AGB) in Baljurashi Governorate, located in Al Baha Region of Saudi Arabia. AGB values are expressed in megagrams per hectare (Mg/ha) and derived from field surveys, field measurements, and geospatial modeling. The map highlights localized biomass variations, providing critical insights for forest monitoring, carbon stock assessment, and sustainable land management. A distribution graph is included to summarize AGB variability across sampled plots.

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

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.

Field declared Mandatory by the Metadata Schema

Select one of the following : (highlighted by Yellow)

Imagery Base Maps Earth Cover
 Society
 Economy
 Utilities Communication
Environment
 Oceans
Biota
 Health
 Elevation
 Geoscientific Information

1.07 – Free-text Keywords

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.

A space or comma-separated list of keywords. Use the Widget to select from Hierarchical tree.

REQUIRED: Common-use word or phrase used to describe the subject of the data set. (Provide 5 keyword minimum)

NCVCAbove-Ground
 Baljurashi
 Al Baha
 Forest
 Monitoring
 Vegetation
 Cover
 Remote
 Sensing
 Carbon

Planning Cadastre	Stock
Inland Waters	Natural
Boundaries	Resources
Structure	FAO
Transportation	Biomass
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 density data were provided by NCVC. No reproduction, modification, or redistribution is permitted without 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

Above-ground biomass (AGB) values were calculated, from field data and satellite observations using standard allometric equations. These estimates support monitoring and planning activities but do not represent official national statistics unless validated by FAO–NCVC.

Above-Ground Biomass (AGB)

- Refers to the tree biomass above ground.
- Formula (Chave et al., 2014):
$$AGB = 0.0673 \times (\rho \times DBH(cm)^2 \times Height)^{0.976}$$
where ρ = wood density (g/cm³).
- Unit: kilograms (kg/tree).

2.06 Restrictions

Indicate any know restriction on this data. You could consider 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 used for presentation and View, if there is any kind of modification, coordination with the GIS Department in organization's office in Saudi Arabia is required.

2.07 Other constraints

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

Enter other constraints on this data

Basal area values are aggregated per polygon and may not capture seasonal or interannual variability.

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

3.03 Purpose

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

Provide data purpose

The dataset supports biomass estimation, forest monitoring, carbon accounting, and sustainable land-use planning in Saudi Arabia.

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
<ul style="list-style-type: none"> • AGB is expressed in Mg/ha • Range: 0 – 18 Mg/ha (as per legend) • Distribution chart included in the map shows mean AGB = 0.23574 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 - GISRS 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
<i>Enter the attributes of this Layer</i>	<i>Enter the description of the attributes</i>
<i>x</i>	<i>Longitude coordinate in decimal degrees (WGS84)</i>
<i>y</i>	<i>Latitude coordinate in decimal degrees (WGS84)</i>
<i>AGB</i>	<i>Above-Ground Biomass measured in tonnes per hectare (Mg/ha); derived from field and modeled estimates</i>
<i>fld_name</i>	<i>Field code: AGB</i>
<i>fld_title</i>	<i>Field title: Above-Ground Biomass</i>
<i>fld_unit</i>	<i>Measurement unit: tonnes (Mg/ha)</i>
<i>min_val</i>	<i>Minimum recorded AGB value: 0 Mg/ha</i>
<i>max_val</i>	<i>Maximum recorded AGB value: 18.013 Mg/ha</i>
<i>data_pt</i>	<i>Total number of field plots (418) used for calculation and model validation</i>

<i>region</i>	<i>Al Baha Region (Baljurashi Governorate)</i>
<i>country</i>	<i>Saudi Arabia</i>