



ABC-Map Quick User's Guide

The Adaptation, Biodiversity and Carbon Mapping Tool

Agrifood Systems & Interlinked Challenges

Climate adaptation, mitigation, and biodiversity loss are interlinked challenges that must be addressed in synergy. These issues significantly affect agrifood systems and, without urgent action, pose a threat to food security.

ABC-Map, the Adaptation, Biodiversity and Carbon Mapping Tool, was developed to support project designers, and policy makers to assess the impact of policies, plans and investments in the agriculture, forestry, and other land use (AFOLU) sector.

ABC-Map answers the need for a holistic view of environmental impacts, providing a tool that is open-source and easy to use, with limited input data needed.

Strengthening the impact of Agricultural Projects

ABC-Map is designed to support project teams and policymakers at the ideation and design phase through:

1. Showing past trends in land use, climate, biodiversity and carbon.
2. Identifying potential risks and contributing to safeguarding actions.
3. Assessing potential impacts of planned actions on biodiversity and carbon.
4. Identifying possible synergies and trade-offs between adaptation, mitigation and biodiversity actions.

Three Sections

ABC-Map is separated into three sections:



ADAPTATION

The adaptation section provides information on climatic and geophysical data, as well as an aggregate climate risk score. This section helps users to identify and understand climatic trends, hazards and exposure.



BIODIVERSITY

The biodiversity section is composed of complementary indicators which give a holistic view of pressures and impacts on biodiversity: trends in land-use change, mean species abundance, and natural capital. Key Biodiversity Areas and Protected Areas are also geo-localised, aiding identification of Critical Habitats.



CARBON

The carbon section of ABC-Map follows the methodology of FAO's NEXT tool, providing indicators for both total carbon stock and the social value of carbon.

Key steps to undertake an ABC-Map analysis

ABC-Map can be accessed online at www.abc-map.org. The tool is divided into two key stages of analysis: the **baseline**, which identifies past trends and the current status of your area, and the **project**, where the impact of planned actions is calculated.

STEP 1: BASELINE ANALYSIS

Source: abc-map.org

1 Name your analysis

2 Select your map resolution and discount rate

Higher resolutions will provide finer-scale analyses, but data will be available for a shorter period of time and may not be global. The discount rate is the interest rate used to determine the present value of future cash flows and affects all indicators expressed in US dollars. We recommend leaving these as the default values: 300m resolution and 0% discount rate unless you have specific values.

3 Define your area of interest

Your “area of interest” is the overall area your project targets. It will be used to provide a baseline for assessing your project’s effects and must encompass all areas where interventions will occur. For example, if you want to measure the impact of your project at municipality level, the area of interest should be the entire municipality.

There are three ways you can select your area on the map:



1. Upload a **polygon** in GeoJSON format.



2. Select an **administrative boundary** at either country, region, or district level.



3. **Draw an area** directly on the map.

4 Click “next” to run the analysis on your area, and view the baseline indicators.

STEP 2: PROJECT ANALYSIS

- 5 Click on the “**activities**” tab.
- 6 Specify **project dates** by entering the first and last year of your project.
- 7 **Plot project activities.** Each project activity must be added individually inside your area of interest. Click “**add plot**” on the left-hand panel to add your first area. You can either upload a polygon or draw an area. If you choose to draw, you have two options: “**draw a polygon**” lets you outline your area by clicking directly on the map, while “**add by area**” allows you to input the total area covered by your activity and then click on the map to locate it, generating a polygon of the specified area around the selected point automatically.
- 8 **Define project activities*.** After drawing a plot, you need to describe the objectives of the project within that area, outlining the intended final land use and the proposed land management practices.
- 9 **Add another project activity by clicking “add plot”.** You can add up to 30 activity plots. However, all activities must occur within your area of interest, and the plots for different project activities must not overlap.
- 10 Once you have added all your project activities click “**next**”, and view the project indicators.

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START BASELINE **ACTIVITIES** PROJECT

Project details

Start Year - End Year

Plots and objectives ⓘ

Plot name

Choose an option to identify the location of the activity on the map.

DRAW OR **UPLOAD**

Source: abc-map.org

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9

10

Choose from the below options to identify your project's activities for this plot

Choose from the following options


DELETE

+ ADD PLOT **NEXT**

Source: abc-map.org

*DEFINING PROJECT ACTIVITIES

When describing the project activities, you must select the land use and management practices that will exist at the end of the project, as a result of the project interventions. For example, a forest restoration project that is aiming to improve the condition of a degraded forest area may select “Forest; Forest; High Integrity”. Whereas, a project that is aiming to introduce agroforestry practices may select “Cropland, perennial; Shaded perennial; no tillage; high input”.

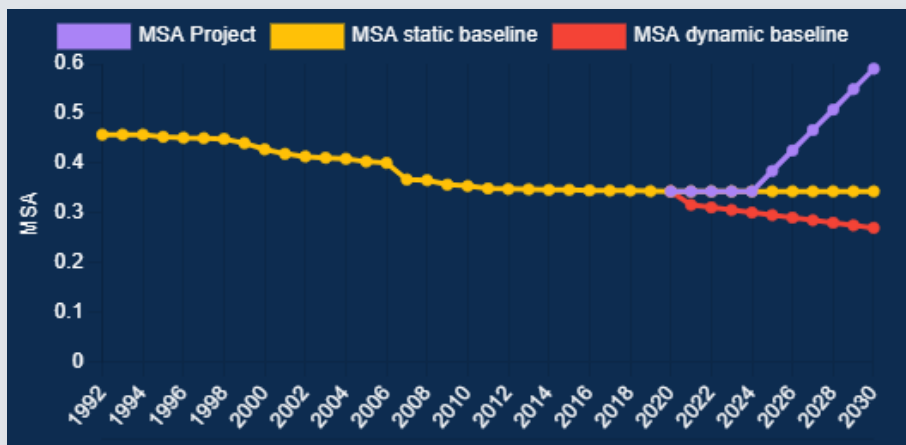
 **IMPORTANT:** Project plots must be added to the map in areas where the current land use shown on the map matches the land use targeted by the project. The map of current land uses can be displayed using the Layers and Legends panel on the right side of the interface. For example, if the project aims to enhance crop management practices, the plotted area for the project activities should correspond to an existing area of intensive cropland.

INTERPRETING PROJECT GRAPHS

For the project analysis, some of the charts will show three separate lines:

1. The **dynamic baseline** shows a continuation of past trends;
2. The **static baseline** keeps the value constant from the last year of data before project implementation;
3. And the **project impact**.

The values from both the static and dynamic baseline can be used to compare with the predicted project impact.



Source: abc-map.org

INTERACTING WITH THE INTERFACE



On the right-hand side of the interface, you can click this button to **view the legends of all the layers on the map**, as well as to toggle on or off the layers, or to fade them using the sliding bar.



Click here to **expand the graphs** and view them in more detail. You can also hover your mouse over graphs to view specific values.



Hover your mouse over this button to **view definitions and sources of the indicators** used in ABC-Map.



ABC-Map is available in multiple languages. Click on this icon at the top to **change the language**.



Click here to visit the **ABC-Map help center** for resources, FAQs, and to submit questions.

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For any questions or to request training, the ABC-Map team can be contacted at abc-map@fao.org



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