

6. Dashboards

a) What a dashboard is

The dashboard is a separated informative environment of MapX that contains and visualizes relevant data that complement and / or synthesize the information visualized on map. Dashboards are associated to views. Each view can be featured with one dashboard at maximum. Dashboards are composed of a number of widgets. Widgets are fields where data can be visualized. Each widget can hosts text, charts and media. There is almost no restriction on the way data can be visualized.

b) Who can create-edit-see dashboards

In order to maintain the environment as flexible as possible the creation and edition of dashboard is addressed to developers as coding skills are needed. The visualization of a dashboard is guaranteed for users that can see the view. Users that can edit the view cannot edit the dashboard. It is however possible to delete and move components of the dashboard for a personal session. The dashboard will be restored to its original version as soon as its parental view is switched off and on again. The effect of shift and deletion is restrained to the computer of the user and does not affect other users.

c) How to access dashboards

Every time one switches-on a view that is featured with a dashboard, the dashboard is visualized on screen, together with the data on map. The dashboard environment can be switched off (and on) manually by clicking on the button "Toggle Dashboard" which is located on the top-left of the page (Figure 33).

d) What is the link between dashboards and platform data

The data that can be visualized in the dashboard of a view are strictly related to the source layer associated to the view. Data from source layers other than the one specific to that view cannot be used. On the contrary, external data to the MapX environment can be used (e.g. images or videos with urls, data from other documents that can be downloaded from web).

e) Potential uses of dashboards

Dashboards can be used at different scales (e.g. global, national, site environments) depending on the nature of the dataset that is associated to the selected view and on the type of interaction demanded between the attribute table of the source layer and each widget. The independent nature of widgets allows working at different scales simultaneously. For a global view with each feature representing a country, a widget can display information that concern the totality of the dataset (global information), a certain ensemble of countries, and selected features (national information). On the same line, for a national view with each feature representing provinces or districts or sites, information can be shown for the totality of the dataset (national information), for an ensemble of features, and for selected features (province, districts or site information).

f) Ways of interaction with the attribute table of the available source layer

Each widget can display data on the basis of two major types of interactions with the map:

i. Static widgets

The static widgets show values that do not change with zoom or at click. The user interaction with the map is null. The static widgets can show data that are either absolutes (completely unlinked with the dataset → specifically stated by the developer) or that summarize the selected attribute that is displayed on map. This type of widget produces a result that is a statistical analysis of the values of the selected attribute because it applies to several features being queried simultaneously. The static widgets are used for synthetizing the information displayed on map (Figure 33).

ii. Dynamic widgets

The dynamic widget allows interacting with the map through 1) zooming in and out and 2) clicking on specific features (Figure 34, Figure 35).

Widgets of the first kind apply to an ensemble of features like the static widgets. Therefore, they produce a statistical summary of the values of a selected attribute. However, the ensemble of features that is considered for the statistical analysis changes dynamically and depends on the features that are shown on map. When the map is moved and or zoomed in/out, the widget automatically updates its value.

Widgets that interact with the map through clicking are able to report the exact value of the selected attribute of a specific feature. The information on the widget changes every time a feature is clicked on map (Figure 34, Figure 35).

In both cases, the attribute to be queried can be selected manually or dynamically via the pop-up window that appear when clicking on a feature. The selected attribute can be one that is not used for rendering the view on map. Therefore, this type of widgets is used for complementing the information shown on map.

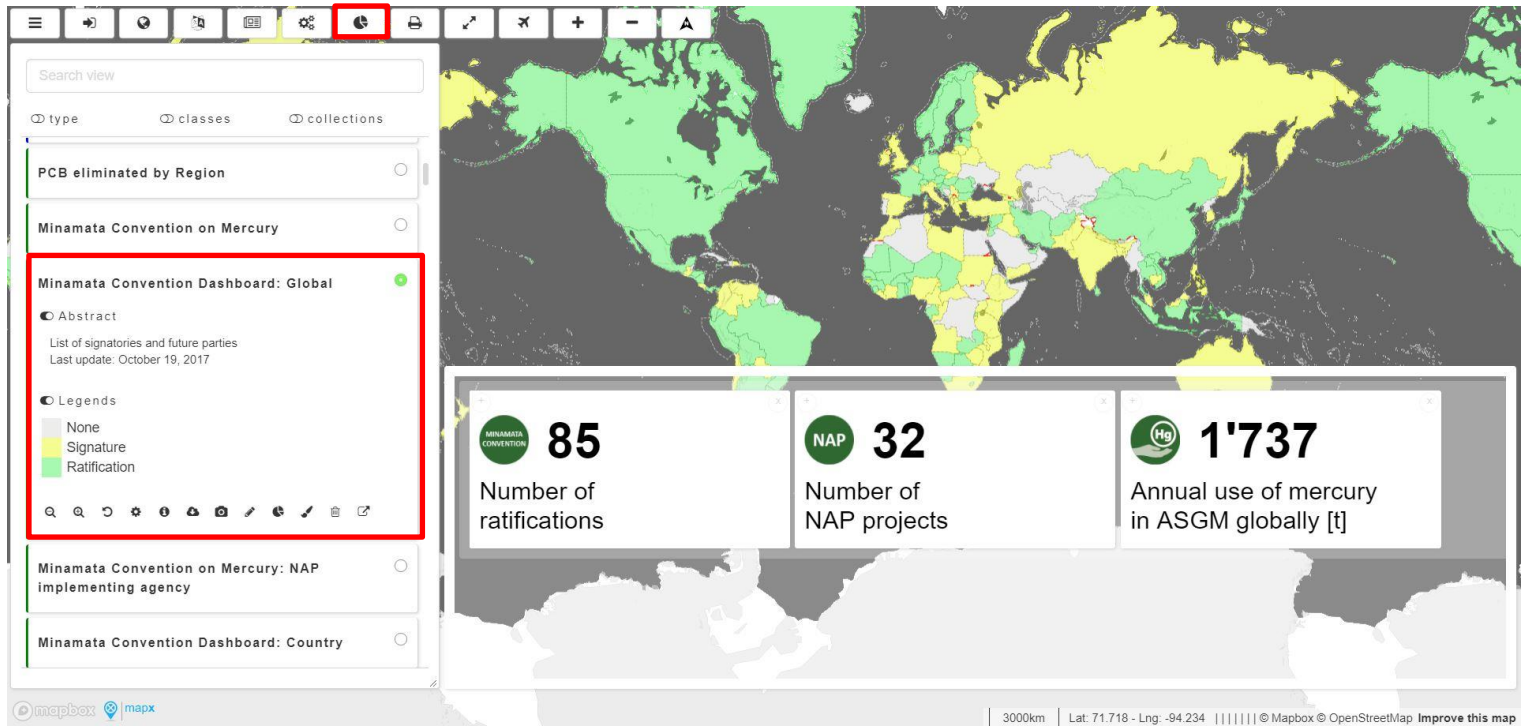


Figure 33: Global dashboard. Three static widgets showing data summarized from the selected attribute that is shown on map. Their content does not change when interacting with map.

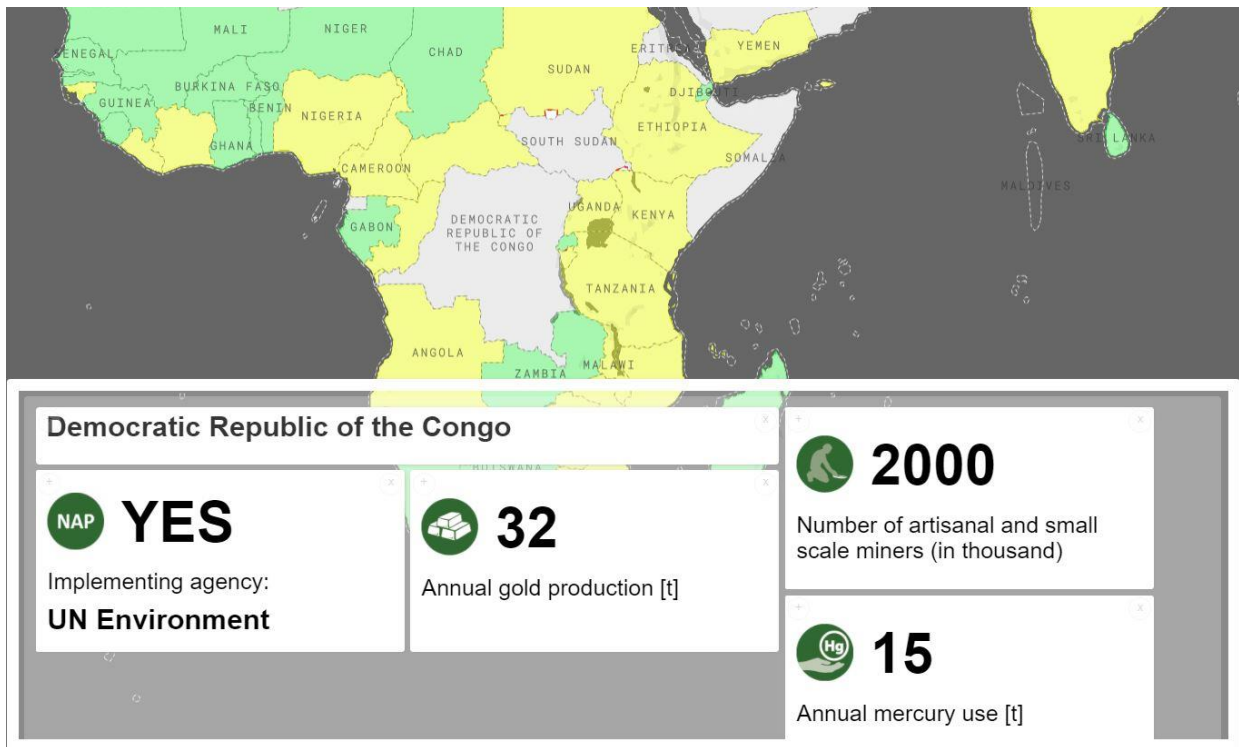


Figure 34: National dashboard. Dynamic widgets showing information related to a specific feature that is selected at click. Information in the widgets is updated when clicking on another feature (country).

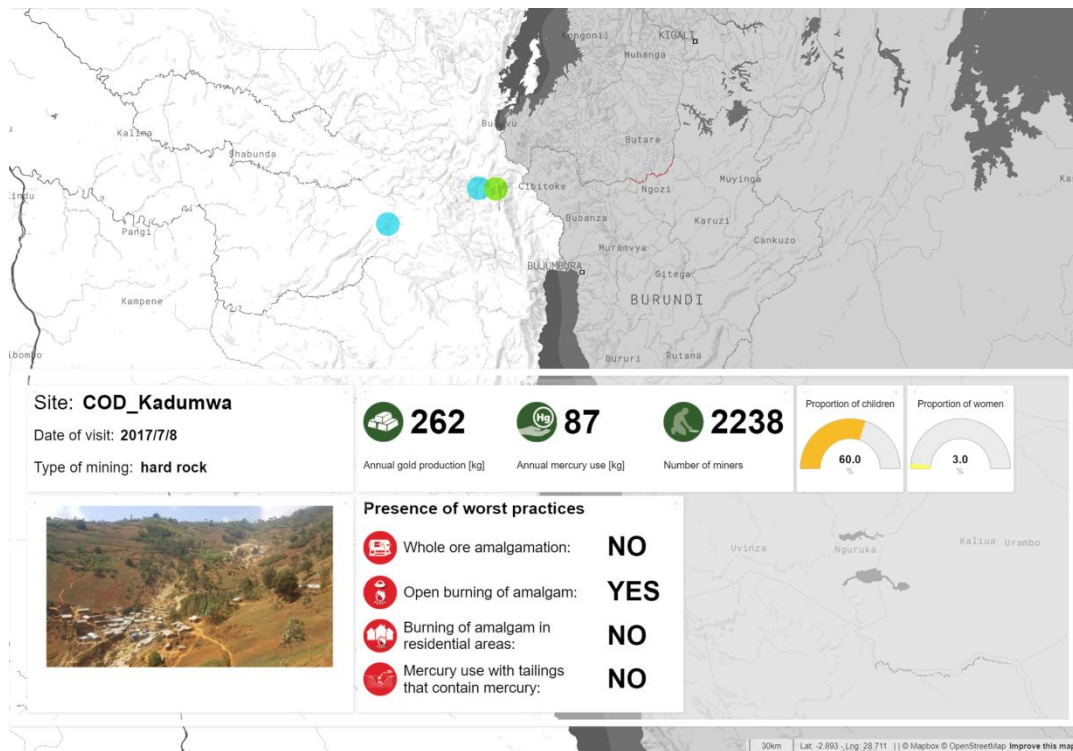


Figure 35: Site dashboard. Dynamic widgets showing information related to a specific feature that is selected at click. Information in the widgets is updated when clicking on another feature (site).