Deliverable 2.2 v2.0 – Customisable features for indicator development

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Issue	Version	Date	Comments
1	1.0	13/06/2024	First version of the deliverable for internal submission
1	2.0	16/07/2024	Internal edits approved

1. Purpose of this document

This document outlines suggested features, parameters, and variables for the EO-based indicator for SDG 6.3.2 and its dashboard. This document corresponds to deliverable 2.2 of the UNEP WWQA "EO pathway for SDG 6.3.2" Lake Tanganyika pilot, informing Activity 2 (indicator design) and Activity 3 (dashboard design), both shaped by Activity 1's user co-design process.

2. Introduction

An Earth observation derived indicator for Sustainable Development Goal 6.3.2 could be achieved using many different methodologies. At the core of this project is the co-design process with the end-users (Activity 1), who include SDG focal points and other key decision-makers. It is, therefore, essential that the indicator development team (Activity 2) are able to demonstrate what features can be made customisable (i.e. the user can select or deselect), and allow the users to determine which features they require control over. Too many customisable features can be confusing for users and can create unnecessary variety or clutter on a dashboard. Not all of the features on this list will be included as customisable features for the users, but rather this list serves as a ‘menu’ for the users to selectfrom. The user input can then inform the development of the indicator (Activity 1), and the design of the dashboard (Activity 3).

List of customisable features

Feature	Description
Water variables	Users have the option to select or deselect water variables (e.g., turbidity, chl-a etc) to be included in the calculation of the composite indicator or not.
Temporal aggregations	Users have the option to select the temporal aggregation of their result (e.g., annual averages, monthly averages, seasonal average)
Climatology or timeseries	Users have the option to select the result as a climatology (i.e. a seasonal trend over available years) or a timeseries

Years / reporting period	Users have the option to select the reporting period of interest, and to exclude years or reporting periods that they do not want in the result
Geographic region	Users will have the option to select the geographic region of relevance. This might also be offered at different scales. In this study we will just have one lake, but for a future development, the users could have the option to select 1) country, 2) single water body
Absolute or relative calculation	Users have the option to determine water quality target values based on 1) absolute values, or 2) baseline change.
Threshold value	Users have the option to input their own threshold value for each water quality variable. For example, if the country has a self-defined national target. A default threshold value could also be chosen as per SDG 6.3.2 guidelines, which derives from WHO drinking water thresholds for the given water quality variable.
Output format	Users have the option to select the result they want, which would include; 1) classification “good” and “bad”, 2) quantitative result, 3) reference text, 4) metadata document (this document would include a brief introduction and a description of how the indicator was calculated and the user selections)
Input in situ data	Users have the option to input their own in situ data and to compare this data on the same graph as the EO derived result.

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