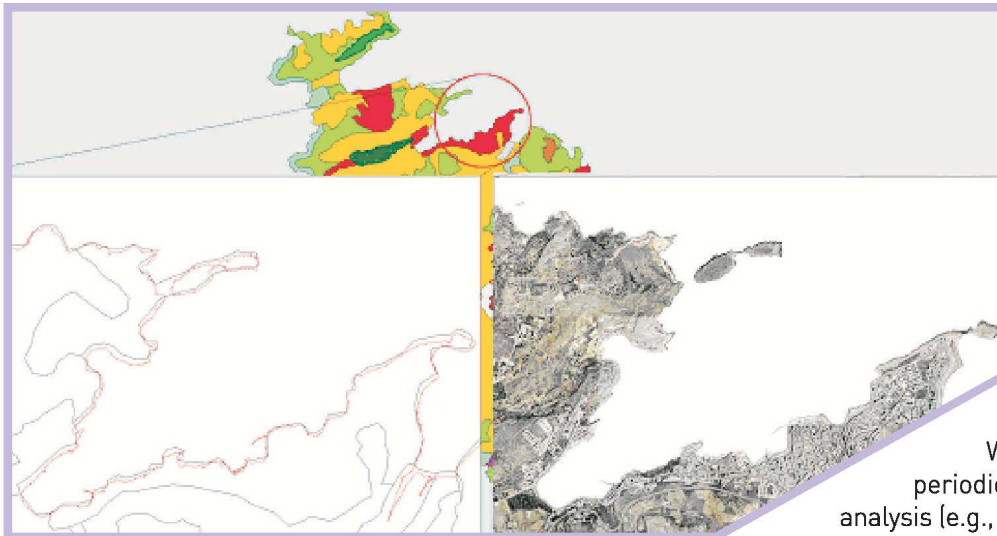> > >

DATA QUALITY AND AVAILABILITY

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With the CLC scale, the boundaries do not coincide with national basemaps, which creates problems for analysis in areas where coastal pressures are high and the operating scales are smaller, such as Malta.

The experience of DEDUCE partners so far has brought to surface a number of data-related issues that influence the process of developing an indicator-based approach to sustainable coastal management at the European level.

Calculation of indicators at regional, national, and local levels depends a lot on data, in terms of availability, format, scale, rules of measurement, reliability and repeatability, data currency, suitability, and sourcing. Testing of the methodology developed in the Standard Indicator Format also helps to identify the issues pertaining to data, to assist the development of a homogenous and consistent approach to this set of coastal indicators. This would ensure that each indicator can be measured through statistical means, that the datasets do represent the measurement requirement, and that the process can be repeated in the same manner over a number of years.

Perhaps the first question asked when working with indicators is related to the **availability of reliable data**. Very little raw data is made available in a regularly updated process, and where available, it is likely to have been collected to satisfy a different purpose. This requires some degree of data manipulation in order to make such third-party products suitable to address the coastal parameters required by the DEDUCE indicators. In other cases, data quality is highly dependent on the use of surrogate data, which – though not-strictly topic-relevant – serves as a good alternative to this requirement.

A case in point is the use of unemployment data to analyse poverty. Another data quality issue that will affect the use of these indicators concerns **data currency:** when was the data created and is it still valid for current analysis? While some data sets may be collected periodically and allow for an annual trend analysis (e.g., bathing water quality), other data sets may spread over longer periods; a case in point being the decennial time frame of the Census. This introduces gaps in the interpretation when trying to relate the different indicators. The issue may be compounded when trying to compare the same indicators between different Member States. **Comparability** is also an issue when dealing with data sets from different countries which is gathered at different scales and projections.

One major issue that has emerged from DEDUCE is the need to have data at the **relevant scale** that actually makes the coast and related issues visible. One such case is the difficulty of using the highly generalised scale of the Corine Land Cover (CLC) data to analyse trends in intensive agricultural land use on the coast. Calculation of these indicators and the subsequent interpretation are therefore dependent on highly-detailed maps ideally being generated from dedicated large-scale (high detail) data layers rather than from generalised small-scale maps that lose out on detail.

The testing of these sustainability indicators within DEDUCE has brought to the fore the importance of having suitable data, which depends primarily on data quality and availability in order to have a workable and functional indicator set that can truly aid to assess sustainability within the national and European scale. The proposed INSPIRE Directive may help to develop measures that could resolve such data issues but it may take a long time before we can see the desired results of such projects.