Assessing mariculture sustainability at the global level is difficult, because information is not available for every country regarding which species are grown, where that takes place, what methods are used, and what local environmental impacts and maximum sustainable yields could be expected for each species/Location/method combination.

The Mariculture Sustainability Index (MSI) (Trujillo 2008) was developed as a framework for evaluating the sustainability of aquaculture production using a score between 1 (poor) and 10 (very good). MSI comprises 13 indicators, covering ecological, economic and social aspects of the industry, for 359 country-species combinations, involving 60 countries and 86 species.

The MSI score is obtained as a combination of all 13 indicators. The Ocean Health Index used one subset of MSI indicators to calculate mariculture sustainability and another subset to calculate mariculture regulations. Additionally, the indicator on genetic escapees was used to estimate the pressure of mariculture upon the delivery of the biodiversity goal.