Goal 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development

(Updated on 7 April 2016)

Table of Contents

Target 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution. ................................................................. 2

Target 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans. ............................................................................... 3

Target 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels ........................................................................................................ 4

Target 14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics. .................................................................................. 5

Target 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information. ................................................ 7

Target 14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation. ........................................................................................................... 14

Target 14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism. ........................................................................................................ 17

Target 14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small Island developing States and least developed countries. .................................................................................................................. 18

Target 14.b Provide access for small-scale artisanal fishers to marine resources and markets ................................................................. 19

Target 14.c Enhance the conservation and sustainable use of oceans and their resources by implementing law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want. ......................................................................................... 23
Target 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

Indicator 14.1.1: Index of coastal eutrophication and floating plastic debris density

From UNEP:

“Index of Coastal Eutrophication (ICEP)”

“Floating Plastic Debris (Particles/Km2)”

UNEP is available to assist operationalizing these proposed indicators through the Global Nutrient Partnership and Marine Litter Partnership working with IOC, GESAMP, others etc. The earlier proposed indicator on Nitrogen Use Efficiency is to some extent embedded with the broader Index of Coastal Eutrophication (ICEP).

Moreover, 18 Regional Seas Conventions and Action Plans are currently working to develop a core set of common indicators to be used across regional seas for routing monitoring and reporting on the status of the marine environment. Several proposed indicators are relevant to 14.1, for example: (a) Chlorophyll a concentration as an indicator of phytoplankton biomass; (b) Locations and frequency of algal blooms reported; (c) Trends for selected priority chemicals including POPs and heavy metals; (d) Quantification and classification of beach litter items, as well as indicators related to management of marine pollution and debris.

This coordinated effort across Regional Seas, which builds on several already existing indicators and monitoring efforts can support delivery and monitoring of 14.1. Further details are at: http://www.unep.org/ecosystemmanagement/water/regionalseas40/Meetings/RegionalSeasIndicatorsWorkingGroup/tabid/1060470/Default.aspx
Target 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.

Indicator 14.2.1: Proportion of national exclusive economic zones managed using ecosystem-based approaches

From UNEP:

While requiring some further development for practical implementation, the indicator is similar to UNEP indicators to monitor progress on marine and coastal EBM under its biannual programme of work. UNEP, IOC and FAO are available to support countries in operationalizing the indicator. Linkages can be explored with IUCN’s ‘Green List’ and the ‘Ocean Health Index’. A technical working group to finalise the details could be supported by UNEP, IOC, FAO winter/spring 2016.

Moreover, 18 Regional Seas Conventions and Action Plans are currently working to develop a core set of common indicators to be used across regional seas for routing monitoring and reporting on the status of the marine environment. Several proposed indicators are relevant to 14.2, for example: (a) National ICZM guidelines and enabling legislation adopted; (b) Number of existing national and local coastal and marine plans incorporating climate change adaptation; (c) % national adaptation plans in place; (d) Fisheries measures in place (by-catch limits, area-based closures, recovery plans, capacity reduction measures); (e) Trends in critical habitat extent and condition; (f) Population pressure/urbanization: Length of coastal modification and km2 of coastal reclamation.

This coordinated effort across Regional Seas, which builds on several already existing indicators and monitoring efforts can support delivery and monitoring of 14.2. Further details are at: http://www.unep.org/ecosystemmanagement/water/regionalseas40/Meetings/RegionalSeasIndicatorsWorkingGroup/tabid/1060470/Default.aspx
Target 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

Indicator 14.3.1: Average marine acidity (pH) measured at agreed suite of representative sampling stations

No metadata received on current indicator formulation
Target 14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

Indicator 14.4.1: Proportion of fish stocks within biologically sustainable levels

From FAO:

1. Precise definition of the indicator

The indicator we propose is the “proportion of fish stocks within biologically sustainable levels”, not limits. It is therefore slightly different from the indicator 7.4 currently included in the Millennium Development Goals. The FAO Committee on Fisheries has requested changes (see the 2012 and 2014 Reports of the 30th and 31st Sessions of the Committee on Fisheries in the description of the status of the stocks based on sustainability to ensure clarify and reduce misunderstandings by the general public.

The concept of “within biologically sustainable levels” means that abundance of the fish stock is at or higher than the level that can produce the maximum sustainable yield.

We estimated 584 fish stocks around world, representing 70% of global landings. Each stock was estimated using the method described in FAO Technical Paper 569. If the stock has abundance below the level that can produce maximum sustainable yield, it was counted as overfished. The indicator measures the % of the assessed stocks are within biologically sustainable levels.

2. How is the indicator linked to the specific TARGET as worded in the OWG Report?

The indicator is measuring directly the biological sustainability of fish production, therefore it is monitoring well target 14.4 according to which fisheries and aquaculture resources are to be conserved and used sustainably to contribute to food security.

Indeed, when a stock is overfished (i.e., abundance dropping below the sustainable level), its productivity will be reduced. As such, the biodiversity and the functioning of the fishery ecosystem will be impaired. In addition, this will have a negative impact on food supply.

3. Does the indicator already exist and is it regularly reported?

Yes, FAO has maintained and reported this indicator since 1974.

---

1 As opposed to the language used in the Aichi Targets of the Convention on Biological Diversity (CBD).
3 Report of the 30th Session of the Committee on Fisheries (2012), paragraph 17: The Committee expressed concern regarding the way in which fish stock status was often reported particularly the negative notion given by reporting of a high percentage of stocks being fully- or overexploited. In order to ensure accurate interpretation by the general public and avoid the risk of overemphasizing a negative perspective, the Committee recommended the FAO Secretariat consider a simpler classification of stock status, based on sustainability of their exploitation. Report of the 31st Session of the Committee on Fisheries (2014), paragraph 9: The Committee welcomed the new categorization of the status of marine stocks, as requested by the 30th Session of COFI. Most Members were encouraged by the results in SOFIA 2014.
4 http://www.fao.org/docrep/015/i2389e/i2389e.pdf
The global fish stock assessment program has been carried out by the Fishery Department and has been incorporated into its regular program activities. The assessment is usually done every 2 or 3 years.

4. **Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.**

**Reliability**

This is probably the most quoted and used indicator on fisheries (e.g. the Global Biodiversity Outlook\(^5\), reports from the Millennium Development Goal process, etc.) and the most widely accepted indicator at the global level. This because it was the earliest indicator established and it uses the most comprehensive approach in comparison with other recently emerged indicators and methodologies.

**Coverage**

It is global, covering about 57% of the global catch. But it is not conducted by country. There are no current plans to do this by country because 1) fish migrates across areas beyond national jurisdictions, and 2) we don’t want to get into political problems. But, there would be some hope to attempt this if funds are made available.

**Comparability across countries**

The assessment is not at country level, so not comparable among countries.

**Sub-national estimates**

No such estimates currently exist.

5. **Is there already a baseline value for 2015?**

There are a number of targets have been proposed for this indicator. For instance, the World Summit on Sustainable Development proposed reaching 100% by 2015, while the Convention on Biological Diversity (CBD) Aichi proposed the 100 percent target by 2020.

---

Target 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.

Indicator 14.5.1: Coverage of protected areas in relation to marine areas

From IUCN:

**Definition and method of computation**

**Definition**
The percentage of marine sites contributing significantly to the global persistence of biodiversity that are wholly covered by designated protected areas. It is a thematic disaggregation of the multi-purpose indicator for protected area coverage of important sites.

**Concepts**
Protected areas, as defined by the International Union for Conservation of Nature (IUCN), are clearly defined geographical spaces, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. Importantly, a variety of specific management objectives are recognised within this definition, spanning conservation, restoration, and sustainable use:

- Category Ia: Strict nature reserve
- Category Ib: Wilderness area
- Category II: National park
- Category III: Natural monument or feature
- Category IV: Habitat/species management area
- Category V: Protected landscape/seascape
- Category VI: Protected area with sustainable use of natural resources

The status "designated" is attributed to a protected area when the corresponding authority, according to national legislation or common practice (e.g., by means of an executive decree or the like), officially endorses a document of designation. The designation must be made for the purpose of biodiversity conservation, not de facto protection arising because of some other activity (e.g., military).

Sites contributing significantly to the global persistence of biodiversity are identified following globally standard criteria applied at national levels. Two variants of these standard criteria have been applied in all countries to date. The first is for the identification of Important Bird & Biodiversity Areas (IBAs), that is, sites contributing significantly to the global persistence of biodiversity, identified using data on birds, of which >12,000 sites in total have been identified from all of the world’s countries. The second is for the identification of Alliance for Zero Extinction sites (AZEs), that is, sites holding effectively the entire population of at least one species assessed as Critically Endangered or Endangered on The IUCN Red List of Threatened Species. In total, 587 AZE sites have been identified for 920 species of mammals, birds, amphibians, reptiles, conifers, and reef-building corals. A global standard for the identification of key biodiversity areas (KBAs) unifying these approaches along with other mechanisms for identification of important sites for other species and ecosystems is in the final stages of development and anticipated to be in place by the end of 2015. Marine sites are defined as those identified for marine species or ecosystems, as documented in the IUCN Red List Habitats Classification Scheme.
Method of computation
The indicator is computed by dividing the total number of KBAs wholly covered by protected areas by the total number of KBAs in each country, and multiplying by 100. "Wholly protected" is defined as >98% coverage to allow for resolution and digitisation errors in the underlying spatial datasets.

Rationale and interpretation
The safeguard of important sites is vital for stemming the decline in biodiversity. The establishment of protected areas is an important mechanism for achieving this aim, and this indicator serves as a means of measuring progress toward the conservation, restoration and sustainable use of marine ecosystems and their services, in line with obligations under international agreements. Importantly, it is not restricted to any single marine ecosystem type, and so faithfully reflects the intent of SDG target 14.2.

Levels of access to protected areas vary among the protected area management categories. Some areas, such as scientific reserves, are maintained in their natural state and closed to any other use. Others are used for recreation or tourism, or even open for the sustainable extraction of natural resources.

In addition to protecting biodiversity, protected areas have become places of high social and economic value: supporting local livelihoods; protecting watersheds from erosion; harbouring an untold wealth of genetic resources; supporting thriving recreation and tourism industries; providing for science, research and education; and forming a basis for cultural and other non-material values.

This indicator adds meaningful information to, complements and builds from traditionally reported simple statistics of territorial area covered by protected areas, computed by dividing the total protected area within a country by the total territorial area of the country and multiplying by 100. Such percentage area coverage statistics do not recognise the extreme variation of biodiversity importance over space, and so risk generating perverse outcomes through the protection of areas which are large at the expense of those which require protection.

Sources and data collection
Protected area data are compiled by ministries of environment and other ministries responsible for the designation and maintenance of protected areas. They are compiled globally into the World Database on Protected Areas (WDPA) by the UNEP World Conservation Monitoring Centre (UNEP-WCMC). They are disseminated through the Protected Planet knowledge product http://www.protectedplanet.net/, which is jointly managed by UNEP-WCMC and IUCN and its World Commission on Protected Areas (WCPA).

KBAs are identified at national scales through multi-stakeholder processes. Data on IBAs are managed by BirdLife International, and are available online at http://www.birdlife.org/datazone/site/search. Data on AZEs are managed by the Alliance for Zero Extinction, and are available online at http://www.zeroextinction.org/. Both datasets, along with the WDPA, are also disseminated through the Integrated Biodiversity Assessment Tool for Research and Conservation Planning, available online at https://www.ibat-alliance.org/ibat-conservation/login.

Disaggregation
Given that data for the global indicator are compiled at national levels, it is straightforward to disaggregate to national and regional levels, or conversely to aggregate to the global level. The indicator can also be reported in combination across marine (and terrestrial and freshwater) systems, or disaggregated among them. However, protected areas, IBAs, and AZEs can encompass terrestrial, freshwater, and marine systems simultaneously, and so determining the results is not simply additive. Finally, it can be disaggregated according to different protected area management categories (categories I–VI) to reflect differing specific management objectives of protected areas.

In addition to the aggregation of the coverage of protected areas across terrestrial and freshwater systems as an indicator towards SDG 15.1, other disaggregations of coverage of protected areas of particular relevance as indicators towards SDG targets include:

SDG 6.6 Coverage of protected areas (freshwater).
SDG 14.2 Coverage of protected areas (marine).
SDG 15.4 Coverage of protected areas (mountain).

Protected area coverage data can be combined with other data sources to yield further, complementary, indicators. For example, protected area overlay with ecoregional maps can be used to provide information on protected area coverage of different broad biogeographical regions. Protected area coverage of the distributions of different groups of species (e.g., mammals, birds, amphibians) can similarly provide indicators of trends in coverage of biodiversity at the species level. Protected area coverage can be combined with the IUCN Red List Index to generate indicators of the impacts of protected areas in reducing biodiversity loss. Finally, indicators derived from protected area overlay can also inform sustainable urban development; for example, the overlay of protected areas onto urban maps could provide an indicator of public space as a proportion of overall city space.

**Comments and limitations**

The indicator does not measure the effectiveness of protected areas in reducing biodiversity loss, which ultimately depends on a range of management and enforcement factors not covered by the indicator. A number of initiatives are underway to address this limitation. Most notably, numerous mechanisms have been developed for assessment of protected area management effectiveness, which can be synthesised into an indicator of management effectiveness. This is used by the Biodiversity Indicators Partnership as a complementary indicator of progress towards Aichi Biodiversity Target 11 ([http://www.bipindicators.net/pamanagement](http://www.bipindicators.net/pamanagement)). More recently, approaches to “green listing” have started to be developed, to incorporate both management effectiveness and the outcomes of protected areas, and these are likely to become progressively important as they are tested and applied more broadly.

Data and knowledge gaps can arise due to difficulties in determining whether a site conforms to the IUCN definition of a protected area, and some protected areas are not assigned management categories. Moreover, “other effective area-based conservation measures”, as specified by Aichi Biodiversity Target 11 of the Strategic Plan for Biodiversity 2011–2020, recognise that some sites beyond the formal protected area network, while not managed primarily for nature conservation, may nevertheless be managed in ways which are consistent with the persistence of the biodiversity for which they are important. However, standard approaches to documentation of “other effective area-based conservation measures” are so far still in their infancy. As these are consolidated, “other effective area-based conservation measures” will be included into the WDPA and thus this indicator accordingly.
Regarding important sites, the biggest limitation is that site identification to date has focused on specific subsets of biodiversity, for example birds (for IBAs) and highly threatened species (for AZEs). While IBAs have been documented to be good surrogates for biodiversity more generally, the unification of standards for identification of important sites across different levels of biodiversity (genes, species, ecosystems) and different taxonomic groups remains a high priority. This umbrella standard for identification of key biodiversity areas is anticipated to be finalised by the end of 2015, building strongly from existing approaches.

Dates of establishment are not recorded for some protected areas in some countries, generating uncertainty around changing protected area coverage over time. This is reflected in the indicator by assigning dates of establishment for undated sites by selecting dates at random from those for other protected areas in the same country, repeating this 1,000 times, and plotting the 95% confidence intervals around mean protected area coverage accordingly.

**Gender equity issues**

There are no direct gender equity issues associated with the indicator for coverage of important sites for biodiversity by protected areas. However, it is essential to recognise that women play a central role in the conservation, management and use of biodiversity. In many rural areas of developing countries, women’s daily tasks are often tied closely to biodiversity. They are often responsible for gathering edible wild plants (fruits, leaves and roots of native plants) to feed their families as a supplement to agricultural grains, especially during unfavourable situations such as famine, conflicts and epidemics. Women often also gather medicinal plants, firewood and other bush products for medicine, fuel, house-building, paint and even manure and pesticide. Women’s knowledge of biodiversity is immense and broad, because their communities’ well-being depends on it, and preservation of this knowledge is crucial for maintaining biodiversity. Yet, their contribution is often overlooked. They are typically “invisible” partners from grassroots to policy level. There is therefore an urgent need to consider gender issues in development efforts, to promote true partnership and ensure the sustainable conservation and use of biodiversity.

**Data for global and regional monitoring**

UNEP-WCMC is the agency in charge of calculating and reporting global and regional figures for this indicator, working with BirdLife International and IUCN to combine data on protected areas with those for sites of importance for biodiversity. UNEP-WCMC aggregates the global and regional figures on protected areas from the national figures that are calculated from the WDPA and disseminated through Protected Planet. The WDPA and Protected Planet are jointly managed by UNEP-WCMC and IUCN WCPA.

UNEP-WCMC produces the UN List of Protected Areas every 5-10 years, based on information provided by national ministries/agencies. In the intervening period between compilations of UN Lists, UNEP-WCMC works closely with national ministries/agencies and NGOs responsible for the designation and maintenance of protected areas, continually updating the WDPA as new data become available.

Quality control criteria are applied to ensure consistency and comparability of the data in the WDPA. New data are validated at UNEP-WCMC through a number of tools and translated into the standard data structure of the WDPA. Discrepancies between the data in the WDPA and new data are resolved in communication with data providers. Processed data are fully integrated into the published WDPA.
The WDPA is held within a Geographic Information System (GIS) that stores information about protected areas such as their name, size, type, date of establishment, geographic location (point) and/or boundary (polygon).

Protected area coverage is calculated using all the protected areas recorded in WDPA whose location and extent is known. Protected areas without digital boundaries are excluded from the indicator.

IBAs are places of international significance for the conservation of biodiversity, identified using data for birds. IBAs are identified using a standardised set of data-driven criteria and thresholds, relating to threatened, restricted-range, biome-restricted and congregatory species. IBAs are delimited so that, as far as possible, they: (a) are different in character, habitat or ornithological importance from surrounding areas; (b) provide the requirements of the trigger species (i.e., those for which the site qualifies) while present, alone or in combination with networks of other sites; and (c) are or can be managed in some way for conservation.

AZEs are sites meeting three criteria: endangerment (supporting at least one Endangered or Critically Endangered species, as listed on the IUCN Red List); irreplaceability (holding the sole or overwhelmingly significant (≥95%) known population of the target species, for at least one life history segment); and discreteness (having a definable boundary within which the character of habitats, biological communities, and/or management issues have more in common with each other than they do with those in adjacent areas). Hence AZEs represent locations at which species extinctions are imminent unless appropriately safeguarded (i.e. protected or managed sustainably in ways consistent with the persistence of populations of target species).

The IBA and AZE site networks are, by definition, areas of particular importance for biodiversity as referred to in Aichi Biodiversity Target 11, and represent the only networks of such sites that have been identified systematically worldwide. Hence, they represent important areas to consider designating as formal protected areas.

References


Target 14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation.

Indicator 14.6.1: Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing

From FAO:

1. What is the precise definition of the indicator?

The indicator focuses on the effort to combat IUU fishing through the effective implementation of key international instruments relevant to IUU fishing.

The indicator is based on FAO member country responses to the Code of Conduct for Responsible Fisheries (CCRF) survey questionnaire which is circulated by FAO every two years to members and IGOs and INGOs. This indicator is calculated on the basis of the efforts being made by countries to implement key international instruments aiming to combat IUU fishing, as reported in a given year of the survey.

Indicator variables

1. Development and implementation of national plan of action (NPOA) to combat IUU fishing in line with the IPOA-IUU
2. Ratification and implementation of the 2009 FAO Agreement on Port State Measures
3. Ratification and implementation of the 1993 FAO Compliance Agreement

Indicator calculation

The weight given to each of the variables in calculating the indicator value for each country are as follows:

- Variable 1 – 40%
- Variable 2 – 40%
- Variable 3 – 20%

Scoring

---

Progress on the implementation of the FAO Code of Conduct for Responsible Fisheries is being reported on by FAO member countries using a self-assessment survey conducted every two years and presented to the biennial sessions of the Committee on Fisheries (COFI). All data is collected via the Code of Conduct of Responsible Fisheries [CCRF] questionnaire that is administered by FAO/FI.
The absence of an NPOA and the lack of ratification of the binding Agreements will automatically result in a “zero” score for the respective variables, unless there is evidence that efforts to address the matter are being made (in which case some points are awarded). For each variable, the maximum score will be obtained if implementation is also present, as reported. As this indicator would be reported in the biannual CCRF survey, difference in score as compared to the preceding year of the previous survey response will reflect the progress made during the survey periods.

2. **How is the indicator linked to the specific TARGET as worded in the OWG Report?**

The indicator is not directly linked to a given specific target, but IUU fishing is addressed both in Targets 14.4 and 14.6. Information on progress made in combating IUU fishing through implementation of international instruments however can be compiled and presented to serve as essential data for monitoring of efforts towards achieving the said Targets.

3. **Does the indicator already exist and is it regularly reported?**

There is currently not such an indicator but FAO’s biannual survey on CCRF implementation already compiles responses by Members on the above mentioned instruments. Therefore, survey responses and results on this indicator could be reported and presented every two years to COFI. This information could serve the purposes of monitoring on Targets 14.4 and 14.6.

4. **Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.**

**Reliability**

As long FAO Member Countries do respond to the CCRF Survey, as managed by FI, and responses are reviewed and compiled and presented by FI to COFI, the reliability and comprehensiveness of the global information and data set provided will enjoy significant and growing political recognition among FAO's Member Countries and the general public.

**Coverage**

The proposed indicator on IUU fishing would be global, covering all FAO members.

**Comparability across countries**

It would be possible to compare across countries and regions.

**Sub-national estimates**

Currently not available

5. **Is there already a baseline value for 2015?**

As indicated, the proposed indicator is new, although the CCRF survey has been including questions on efforts undertaken against IUU fishing. The new indicator would need a baseline which could be formulated for the next survey period.

6. **Additional FAO comments on implementation:**
Partnerships: FAO collaborates closely with and supports Regional Fishery Bodies (RFBs) and Regional Fisheries Management Organizations (RFMOs), including the Regional Fishery Body Secretariats Network (RSN).

Data collection: The indicator is based on FAO member country responses to the Code of Conduct for Responsible Fisheries (CCRF) survey questionnaire which is circulated by FAO every two years to members and IGOs and INGOs. This indicator is calculated on the basis of the efforts being made by countries to implement key international instruments aiming to combat IUU fishing, as reported in a given year of the survey.

Capacity development needs in countries will vary but are likely to be very significant. FAO does provide support to countries and regions presently through several awareness raising and capacity development activities including regional workshops on the Port State Measures Agreement (PSMA) to prevent, deter and eliminate IUU fishing. FAO can arrange and support targeted initiatives for the purposes of SDG14 monitoring and review of IUU fishing combating efforts at national and regional levels, provided that resources are made available.
Target 14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.

Indicator 14.7.1: Sustainable fisheries as a percentage of GDP in small island developing States, least developed countries and all countries

No metadata received on current indicator formulation
Target 14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small Island developing States and least developed countries.

Indicator 14.a.1: Proportion of total research budget allocated to research in the field of marine technology

No metadata received on current indicator formulation.
Target 14.b Provide access for small-scale artisanal fishers to marine resources and markets

Indicator 14.b.1: Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries

From FAO:

1. What is the precise definition of the indicator?

The indicator is formulated as Progress by countries in adopting and implementing a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries. This indicator measures the “access rights” aspect of the target.

It is a composite indicator based on FAO member country responses to the Code of Conduct for Responsible Fisheries (CCRF) survey questionnaire which is circulated by FAO every two years to members and IGOs and INGOs. This indicator is calculated on the basis of the efforts being made by countries to implement selected key provisions of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines), as reported in a given year of the survey.

Indicator variables

1. Existence of instruments that specifically target or address the small-scale fisheries sector
2. Ongoing specific initiatives to implement the SSF Guidelines
3. Existence of mechanisms enabling small-scale fishers and fish workers to contribute to decision-making processes

Indicator calculation

The weight given to each of the variables in calculating the indicator value for each country are as follows:

- Variable 1 – 40%
- Variable 2 – 30%
- Variable 3 – 30%

Scoring

The indicator variables are based on three questions which are part of the set of questions on small-scale fisheries in the biannual CCRF questionnaire survey (as reproduced in the Annex). The unit of measurement of the indicator is a score on a scale of 0 to 1, computed through scores and weights assigned to the three questions. The national indicator is calculated based on these questions specifically focusing on actual efforts of promoting and facilitating access rights to small scale fisheries. Responses termed “no” in all three questions will result in a “zero” score for the composite indicator. Maximum score will be achieved if all questions are answered “yes”. As this indicator would be reported in the biannual CCRF survey, difference in score as compared to the preceding year of the previous survey response will reflect the progress made during the survey periods.

---

7 Progress on the implementation of the FAO Code of Conduct for Responsible Fisheries is being reported on by FAO member countries using a self-assessment survey conducted every two years and presented to the biennial sessions of the Committee on Fisheries (COFI). All data is collected via the Code of Conduct of Responsible Fisheries [CCRF] questionnaire that is administered by FAO/FI.
2. How is the indicator linked to the specific TARGET as worded in the OWG Report?

Due to the diverse nature of small-scale fisheries in different countries, there is no globally agreed definition for small-scale fisheries, which became also evident during the development process of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) recently endorsed by the FAO Committee on Fisheries (COFI).

Accordingly, paragraph 2.4 of this new international instrument which complements the Code of Conduct for Responsible Fisheries (CCRF) states that “These Guidelines recognize the great diversity of small-scale fisheries and that there is no single, agreed definition of the subsector. Accordingly, the Guidelines do not prescribe a standard definition of small-scale fisheries nor do they prescribe how the Guidelines should be applied in a national context. These Guidelines are especially relevant to subsistence small-scale fisheries and vulnerable fisheries people. To ensure transparency and accountability in the application of the Guidelines, it is important to ascertain which activities and operators are considered small-scale, and to identify vulnerable and marginalized groups needing greater attention. This should be undertaken at a regional, sub-regional or national level and according to the particular context in which they are to be applied. States should ensure that such identification and application are guided by meaningful and substantive participatory, consultative, multilevel and objective-oriented processes so that the voices of both men and women are heard. All parties should support and participate, as appropriate and relevant, in such processes.”

The target is focusing on access to resources and markets for small-scale fisheries, in line with the Rio+20 outcome document para, 175. In order to guarantee secure access, an enabling environment is necessary which recognizes and protects small-scale fisheries rights. Such an enabling environment requires appropriate legal, regulatory and policy frameworks and related institutional mechanisms as well their effective application.

3. Does the indicator already exist and is it regularly reported?

There is currently no such indicator but the biennial FAO survey questionnaire on the CCRF implementation will include new questions in relation to small-scale fisheries and the implementation of the SSF Guidelines. The first results will become available for COFI in 2016, allowing for the definition of a baseline and starting period for this indicator. COFI 2016 can provide an opportunity to sharpen the questions if needed. In addition, there will be a specific COFI agenda item on small-scale fisheries. Data could therefore be produced at country level every two years for COFI through the electronic questionnaire.

4. Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.

Reliability

FAO Member Countries are invited every two years to respond to the FAO CCRF Survey and responses are reviewed and compiled and presented by FAO to COFI. This provides a high level of reliability and comprehensiveness of the global information and data set which will enjoy significant and growing political recognition among FAO’s Member Countries and the general public.

Coverage

The proposed indicator on would be global, covering all FAO members.

Comparability across countries

It would be possible to compare across countries and regions.

---

8 Progress on the implementation of the FAO Code of Conduct for Responsible Fisheries is being reported on by FAO member countries using a self-assessment survey conducted every two years and presented to the biennial sessions of the Committee on Fisheries (COFI). All data is collected via the Code of Conduct of Responsible Fisheries [CCRF] questionnaire that is administered by FAO/FI. See factsheet for indicator 14.c.1 below.
Sub-national estimates

Currently not available

5. Is there already a baseline value for 2015?

As indicated, the proposed indicator is new, and will be integrated in the next CCRF survey which should provide insight on responses by countries. The indicator examines the application by countries of a legal/regulatory/policy/institutional framework for the recognition and protection of access rights for small-scale fisheries. However, this can be expected to be a complex process which could require substantial amount of time to advance legal, administrative and capacity development efforts. A realistic numerical target for 2030 could be envisaged, but would need to be confirmed based on survey responses and results in the next survey effort. The new indicator would need a baseline which could be formulated based on results from the next survey period. 

Annex: Details of Small-Scale Fisheries – CCRF response indicator

<table>
<thead>
<tr>
<th>CCRF Questionnaire Number and Topic</th>
<th>Scoring Methodology</th>
<th>Full score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General – Small scale fisheries (SSF):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q45 Specific instruments on SSF</td>
<td>Existence of SSF-specific instruments: Proportion of number elements with ‘Yes’, and then multiplied with weighting factor of 0.4.</td>
<td>0.4</td>
</tr>
<tr>
<td>Q46. Initiatives to implement SSF Guidelines</td>
<td>Proportion of elements with ‘Yes’ in Q46.2, and then multiplied with weighting factor of 0.3 - 0.03;</td>
<td>0.3</td>
</tr>
<tr>
<td>Q47 Mechanisms enabling small-scale fishers and fish workers to contribute to decision-making</td>
<td>Existence of enabling participatory mechanisms: Yes - 0.3; No – 0.</td>
<td>0.3</td>
</tr>
</tbody>
</table>

CCRF survey questions on small-scale fisheries:

45. Are there any laws, regulations, policies, plans or strategies that specifically target or address the small-scale fisheries sector?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan/strategy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

46. The Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) were endorsed by COFI in June 2014 [add link to the SSF Guidelines - www.fao.org/3/a-i4356e.pdf]. Does your country have a specific initiative to implement the SSF Guidelines? [add note: the initiative can consist in a programme, policy, project etc.]
Target 14.c Enhance the conservation and sustainable use of oceans and their resources by implementing law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want.

Indicator 14.c.1: Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nation Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources

From ILO:

Definition and method of computation
This indicator conveys the number of countries that have ratified the ILO Maritime Labour Convention of 2006. ILO conventions are legally binding international treaties drawn up by the ILO's constituents (governments, employers and workers) and setting out basic principles and rights at work. The ILO Maritime Labour Convention (MLC) is a single, coherent instrument embodying as far as possible all up-to-date standards of existing international maritime labour conventions and recommendations, as well as the fundamental principles to be found in other international labour conventions.

Rationale and interpretation
This comprehensive convention sets out in one place seafarers' rights to decent conditions of work on almost every aspect of their working and living conditions including, among others, minimum age, employment agreements, hours of work or rest, payment of wages, paid annual leave, repatriation at the end of contract, on-board medical care, the use of licensed private recruitment and placement services, accommodation, food and catering, health and safety protection and accident prevention and seafarers’ complaint handling. It represents an essential step toward ensuring fair competition and a level-playing field for quality owners of ships flying the flags of ratifying countries. Given that these international legal measures are aimed at improving working and living conditions for seafarers, the most globalized of the world’s workers, the number of countries that have ratified the ILO Maritime Labour Convention gives an indication of the situation of maritime workers around the world.

Comments and limitations
The ILO Maritime Labour Convention is considered the "fourth pillar" of the international regulatory regime for quality shipping, complementing the key conventions of the International Maritime Organization (IMO) dealing with safety and security of ships and protection of the marine environment. Thus, the ratifications of all these conventions should be analyzed together. Moreover, the number of conventions ratified does not convey any information on their actual application or on the respect in practice of international labour standards in the national context.

Gender equality issues
The ILO recognizes gender equality not only as a basic human right, but also as intrinsic to the global aim of decent work for all. The ILO mandate on gender equality is stated in numerous resolutions of the International Labour Conference, as well as relevant International Labour Conventions (including the ILO Maritime Labour Convention).

Data for global and regional monitoring
The ILO has information on all conventions ratified and not ratified by each country, and on the global number of countries that ratified each convention, including the Maritime Labour Convention. Such information can be found in NORMLEX, the ILO Information System on International Labour Standards.

Supplementary information and references
**Responsible entities**
ILO.

**Current data availability**
The ILO has information on all ILO member states (185), of which 66 ratified the Maritime Labour Convention of 2006.