Indicator Proposal Summary Template

Note: This document is provided as a template for the 1-2 page summary that should accompany your Indicator proposal for the 2020 Comprehensive review

Additional information/documentation that should accompany the summary include:
- Draft metadata *(Word file only please)*
- Available data and/or link to where data can be located-
- Any methodological documents and/or links to these documents

Full name of the Indicator: Agriculture Orientation Index (AOI) for credit

Custodian Agency (ies): Food and Agriculture Organization of the United Nations

Goal and target addressed: Goal 2; target 2.a

What type of proposal (replacement, refinement, adjustment and addition), for replacement, refinement and adjustment, please list the original indicator and its number: addition

1. Background and rationale for the indicator proposal

Credit to Agriculture corresponds to the amount loans and advances provided by the commercial banking sector to producers in agriculture. Access to formal credit is critical for farmers for purchasing inputs, such as seeds, fertilizer, plant protection materials, animal feed etc. The lack of access to reasonable credit is particularly problematic for farmers who face a time lag between expenditure on crops cultivation and/or raising of livestock, and realization of revenues from sale of their products.

Target 2.a of SDG 2 focuses on the necessity of increasing investment in agriculture in order to enhance agricultural productive capacity in developing countries, in particular least developed countries. However, despite the fact that the majority of private domestic investors in agriculture are the farmers themselves, there is no SDG Indicator for monitoring private investment in agriculture. As such, using statistics on banks' credit to agriculture published by central banks is the most available and accessible data for monitoring private investment to agriculture, and to proposing evidence-based policies for achieving the SDG Target 2.a. Therefore, the Agriculture Orientation Index (AOI) for credit is proposed as a proxy indicator for monitoring private investment in agriculture.

There are several potential indicators for monitoring credit to agriculture, which include: the level of credit to Agriculture (C2A); the Agriculture share of total credit to the economy, and the Agriculture Orientation Index (AOI) for credit.

An indicator that measures C2A levels fails to take into account the size of an economy. If two countries, A and B, have the same level of C2A, but country A's economy is 10 times that of country B, setting the same target levels for C2A fails to take economic size into account.

An indicator that measures the Agriculture share of Total credit to the economy is more informative than the C2A level. However, it fails to take into account the relative contributions of the agricultural sector to a country's GDP. Consider two countries with the same economic size, C and D, where agriculture contributes 2 per cent to C's GDP, and 10 per cent to country D's GDP. If the agriculture share of total credits were equal in both countries, C would experience greater relative investment in Agriculture than D. If the agriculture share of total credit differed, the result could be magnified or diluted.

The Agriculture Orientation Index (AOI) for credit is defined as the Agriculture share of Total credit to the economy, divided by the Agriculture Share of GDP. The AOI for credit takes into account a country's economic size, the agriculture contribution to GDP, and the total amount of credit to the economy. The AOI for credit normalizes the share of credit to agriculture (C2A share) by taking into account the economic contribution of the sector (ratio of the C2A share over the Agriculture share in GDP)

$$AOI = \frac{\text{Agriculture share of Total credit}}{\text{Agriculture Value Added Share of GDP}}$$

An AOI greater than 1 reflects a higher orientation towards the agriculture sector, which receives a higher share of credit relative to its contribution to economic value-added. An AOI less than 1 reflects a lower orientation to agriculture, while an AOI equal to 1 reflects neutrality in banks 'credits orientation to the agriculture sector.

2. Information on how and when the methodology has become an international standard and who is the governing body that approves it

The compilation of the Agriculture Orientation Index (AOI) for credit follows the same methodology as the SDG indicator 2.a.1 (which is a tier 1 indicator). However, the numerator of the SDG indicator 2.a.1 (Agriculture share of government expenditure) is replaced by the agriculture share of total credit. The concept of agriculture used in the AOI for credit follows the International Standard Industrial Classification of all economic activities (ISIC), Rev.4.

3. Data sources and data availability

The numerator of the AOI uses data on credit to agriculture published on FAOSTAT. FAO Credit to Agriculture dataset provides national data for 123 countries. Data for more than 100 countries are available on a regular basis. The dataset also provides statistics on the total credit to all industries, indicators on the share of credit to agriculture, and an agriculture orientation index for credit. The FAO C2A dataset covers the period 1991 to 2018 for most countries.

FAO collects C2A data directly from Central banks' websites. Central Banks compile and disseminate data on credits to agriculture as part of their monetary and financial statistics, either through annual or quarterly reports.

In an attempt to make the data internationally comparable, FAO standardizes the currency scale of the collected C2A data to millions, and the values are provided in both national currency and the converted values in national currency to US dollars. FAO compiles indicators on the share of credit to agriculture, and an Agriculture Orientation Index for credit (AOI).

The denominator of the AOI (The Agriculture value added Share of GDP) is based on official data reported by countries to the United Nations Statistics Division. Data for the denominator are available for most countries.

Table: Country Coverage in C2A Dataset, by region and year, 1991-2018 (Data availability for the numerator)

Year	Total Countries	Africa	Asia & Pacific	Europe	LAC	Other Developed*
1991	22	8	6	1	5	2
1992	24	10	5	1	6	2
1993	28	12	6	2	6	2
1994	33	12	9	2	7	3
1995	36	14	9	3	7	3
1996	40	14	12	3	8	3
1997	47	16	13	5	9	4
1998	50	16	13	7	10	4
1999	54	17	15	8	10	4
2000	67	18	18	9	18	4
2001	72	20	20	9	19	4
2002	80	22	22	10	22	4
2003	86	23	24	11	24	4
2004	90	24	27	11	24	4
2005	93	25	29	11	24	4
2006	97	27	30	11	25	4
2007	98	27	29	13	25	4
2008	109	30	32	16	27	4
2009	109	31	33	14	27	4
2010	107	24	35	16	28	4
2011	115	33	34	16	28	4
2012	116	33	33	18	28	4
2013	114	32	33	17	28	4
2014	113	31	32	17	29	4
2015	109	30	30	17	28	4
2016	102	29	27	15	27	4
2017	97	24	27	15	27	4
2018**	50	8	13	11	15	3

*Other Developed refers to Australia, Canada, New Zealand and the United States.
**2018 country coverage is likely to improve in the next publication (October)

4. Conclusion

Target 2.a of SDG 2 focuses on the necessity of increasing investment in agriculture in order to enhance agricultural productive capacity in developing countries, in particular least developed countries. The Agriculture Orientation Index (AOI) for credit is proposed as a proxy indicator for monitoring private investment in agriculture.

The AOI for credit has a great potential for monitoring domestic private investment into agriculture. The data for compiling the AOI for credit are collected directly from the central bank's websites and the United Nations Statistics Division. Therefore, the AOI for credit does not create any additional burden to member countries and it is also based on well-established methodologies. The AOI for credit increases comparability across countries by normalizing the share of credit to agriculture and taking into account the economic contribution of the sector.

Data are available for more than 100 countries on a regular basis. However, differences in timeliness of data publication by central banks makes data rarely available for year T-1 or T-2 where T is the current year. The time coverage for the AOI for credit is 1991 to 2017 due to the availability of VAA and GDP from UNSD.