

Sustainable Development Goals (SDGs) reporting in leading global cooperatives and mutuals

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ABSTRACT

In 2015, the Member States of the United Nations agreed upon 17 Sustainable Development Goals (SDGs). The United Nations Global Compact (UNGC) and the Global Reporting Initiative (GRI) promoted SDGs reporting. Cooperatives can play an important role in meeting the 2030 Agenda. The aim of this paper is to develop an exploratory study to analyse the extent to which the top 300 cooperative and mutual organisations are committed to SDGs reporting. Results show that more than half of these organisations refers to the SDGs in their sustainability reports, prevailing SDG 13, SDG 8, and SDG 12.

1. Introduction

In 2015, the Member States of the United Nations set up the 2030 Agenda for Sustainable Development and agreed upon 17 Sustainable Development Goals (SDGs) and 169 targets to end poverty, fight inequality and injustice, and protect the planet.

Although recently governments, companies, and non-governmental organisations have been applying policies addressing the SDGs (Sierra-García et al., 2022), the Sustainable Development Goals Report 2022 (United Nations, 2022) shows the detrimental impacts of global crises (COVID-19 pandemic, climate change and war in Ukraine) on the SDGs achievement.

Since the Target 12.6 of the SDGs encourages firms to adopt sustainable practices and integrate sustainability information into their reporting, companies must undertake sustainable actions and report them to show their stakeholders how to deal with their concerns (Grueso-Gala and Zornoza, 2022).

Including information about the contribution to the SDGs can be a significant step towards improving sustainability reporting. Emphasising the organisation's willingness to address these issues represents a strategic compromise (Sierra-García et al., 2022). Meanwhile, sustainability reporting can ease organisations to comprehend, convey and enhance their SDGs contributions. In this matter, the United Nations Global Compact (UNGC) and the Global Reporting Initiative (GRI) joint initiative, consisting of reporting on the SDGs, deserves to be highlighted. They also launched several guidelines for integrating the SDGs into reporting (GRI and UNGC, 2018a, b). Similarly, Adams et al. (2020) published the Sustainable Development Goal Disclosure (SDGD) Recommendations.

The UN Inter-Agency Task Force on Social and Solidarity Economy pointed out the key role that the social economy could play in meeting the 2030 Agenda (Inter-Agency Task Force on Social and Solidarity Economy, 2015). The prime exponents of all entities within the social economy are cooperatives (Mozas-Moral et al., 2021). These organisations are present in all areas of the SDGs (Wanyama, 2014).

This work focuses on the leading global cooperatives and mutuals included in the World Cooperative Monitor 2021 and 2022 (produced by the International Cooperative Alliance and EURICSE). The main objective is to analyse the extent to which these organisations are committed to SDGs reporting. For this purpose, we carried out a content analysis of their non-financial information (sustainability) reports.

Our results show that more than half of the cooperative and mutual organisations that issue a sustainability-like report refer to the SDGs in there. The most mentioned SDGs are Climate Action (SDG13), Decent Work and Economic Growth (SDG 8) and Responsible Consumption and Production (SDG 12). We also found a great diversity in the number of SDGs included in the reports and in the type of report where SDGs are disclosed.

The paper is organised as follows. In the following section, we present a literature review. Next, we describe the methodology. Afterwards, we expose the results of our analysis. Finally, we present our conclusions.

2. Literature review

2.1. Reporting on the SDGs

In the words of the UN Global Compact, reporting on the SDGs “*will help business netter engage stakeholders, enhance sustainable decision-making processes and strengthen their accountability*”. So much so that there exists a growing interest to report on this matter from both researchers (Calabrese et al., 2021) and the vast majority of enterprises. Van der Waal and Thijssens (2020) focused on the 2,000 largest stock listed corporations worldwide and showed a wide but limited corporate involvement in SDGs. Curtó-Pagès et al. (2021) revealed that Spanish companies that publish non-financial reports are increasingly reporting on the SDGs.

Even though the interest is rising and becoming more relevant, there are still country-level differences in spite of advances in regulations towards sustainability reporting harmonization. Bosé and Khan (2022) found such discrepancies and evidenced that SDG reporting is higher for companies in shareholder-oriented countries than in stakeholder-oriented ones. Moreover, the commitment level is higher in developing countries than in developed ones. However, though it is true, Erin and Bamigboye (2021) highlighted that SDG disclosure by African listed firms is still at a very low level except for South African companies.

The probability to report much more about SDGs varies and depends on a huge pile of factors that may influence firms' commitment to this respect. One may find several mainstreams that might affect SDGs reporting. On the one hand, literature has analysed firms' financial characteristics such as intangible assets (Rosati and Faria, 2019a; Nechita et al. 2020), forward-looking information (Hummel and Szekely, 2020), business volume (Fonseca and Carvalho, 2019) or company size (Van der Waal and Thijssens, 2020), among others. In addition, the scrutiny may go further studying the expertise on non-financial information, looking to firms' outstanding commitment to sustainability frameworks and external assurance (Rosati and Faria, 2019a), the online availability of sustainability reports (Fonseca and Carvalho, 2019), or the fact to address SDGs in order to legitimize firms' contribution or to inspire them for future related activities (Silva, 2021). For instance, the higher the commitment level and the more availability of sustainability reports, the more likely is to report on SDGs.

Another research torrent lies on examining the influence of corporate governance features on SDGs reporting. For instance, the share of female directors and how young the board of directors is (Rosati and Faria, 2019a), CEO duality, independent board and meetings (Martínez-Ferrero and García-Meca, 2020), among others. The evidence states that the higher the quote of female directors and the younger the board of directors, the more likely to report on SDGs.

Market conditions are also expected to influence SDGs reporting by firms. For instance, Rosati and Faria (2019b) revealed that the adoption of SDG reporting is more common in countries more vulnerable to climate change, with national CSR, company spending on tertiary education, indulgence and individualism, lower market coordination and employment protection, power distance and long-term orientation. For its part, Izzo et al. (2020) proved that the most highly traded, liquid and capitalized Italian companies better integrate SDGs into their reports. In this line, the sector which firms belong to also impacts on their SDGs reporting. For example, Pizzi et al. (2020) manifested that the highest levels of SDGs reporting were achieved by firms operating in environmental-sensitive industries. Tsalis et al. (2020) also showed differences across sectors in terms of the breadth and quality of reported information considering Greek firms.

Despite all the aforementioned increasing interest in SDGs reporting and the enormous collection of factors that may influence SDGs disclosing, as our knowledge, the study of this practice in cooperatives is very scarce.

2.2. Cooperatives' engagement with the SDGs

Cooperatives allow people to take over their future economies. Participants are not their shareholders, so economic and social profits belong to them and generally remain in communities where they set up. Benefits are usually reinvested in the same cooperative or are returned to its participants. Cooperativism has a more stakeholder-oriented perspective, where the common interest is to build a firm with equal rights and create new opportunities under the umbrella of solidarity and equality. After the increase of violent conflicts worldwide, cooperatives have emerged as sources of "positive social capital". In addition, they contribute to creating a global enabling environment for sustainable development (Wanyama, 2014).

The dominating role of the social economy in SDG achievement has been vital and decisive. It is not only able to act through its private and public firms, but civil society that is involved in them and collaborate to achieve these goals (Mozas, 2019). Cooperatives are assumed to be the prime exponent among all entities within the social economy; they are recognized as essential partners to achieve SDGs as they promote democracy, enhance income fostering the social inclusion and care for the environment. To this respect, the International Co-operative Alliance (ICA) is playing a leading role in advocating for the role of cooperative to implement SDGs worldwide (Iyer, 2020). According to Moxom et al. (2019), cooperative organisations, as value and principle-based and people-centred businesses, have a key role to plan in facilitating present and future SDGs implementation at the global, national and local levels.

The Statement on the Cooperative Identity (ICA, 2018) states that "*a cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise*". The cooperative principles are guidelines by which cooperatives put their values into practice: (i) Voluntary and Open Membership; (ii) Democratic Member Control; (iii) Member Economic Participation; (iv) Autonomy and Independence; (v) Education, Training, and Information; (vi) Cooperation among Cooperatives; and (vii) Concern for Community.

Álvarez and Alarcón (2019) showed a first approximation of the correspondence between the 17 SDGs and the 7 cooperative principles. Specifically, they found a direct relationship between the cooperative principles 'Concern for Community', 'Member Economic Participation', 'Education, Training and Information', 'Cooperation among Cooperatives, and the SDG 11 (Sustainable Cities and Communities) and SDG 4 (Quality Education). Wanyama (2014) affirmed that cooperatives have a presence in all the areas of SDGs.

How cooperatives contribute to achieving SDGs is a question that has been scarcely studied. Mozas-Moral (2019) did research on Spanish olive oil cooperatives and concluded the existence of consciousness, but that there is still room to be done. In addition, the author states that not all firms go in the same direction and public policies are required to support and extend good practices. Iyer (2020) focused on the Asian Pacific region and showed that cooperatives, regardless the sector, are actively involved in instrumenting SDGs and gain recognition for that. Despite this, there are still obstacles associated to monitoring spots, indicators, data collection and reporting, awareness about SDGs reporting and covering the very diverse range of stakeholders. Díaz de León et al. (2021) fairly presented a concise alignment between the contribution of Mexican

cooperative entities and SDG 1 (no poverty), SDG 3 (good health and well-being), SDG 4 (quality education), SDG 5 (gender equality), SDG 8 (decent work and economic growth), and SDG 12 (responsible consumption and production).

As far as we know, only Polo-Garrido et al. (2022) have focused on the largest financial cooperatives, showing that most mentioned SDGs in their non-financial reports, prioritizing SDG 13 (climate action) and SDG 8 (decent work and economic growth). They also found a great variety regarding the number of SDGs reported.

Taking all together, and aiming attention at the Top 300 largest cooperatives and mutuals worldwide, we formulate the following research questions:

RQ1: Do most of Top 300 cooperatives and mutuals mention SDGs in their sustainability-like reports?

RQ2: Which are the most frequent SDGs reported by Top 300 cooperatives and mutuals?

RQ3: How many specific SDGs are mentioned on average?

3. Sample description and methods

The sample consists of the Top 300 largest cooperatives and mutuals around the globe, according to their turnover, spanning 2020 to 2021. We focus on these organisations since they are more globally digitalized than the rest, and a more online availability of sustainability reports is expected, even though we also expect to find some differences based on their risks. We explore their commitment for naming and using strategies based on the SDGs in their different issued reports bringing attention to the social, environmental and economic dimensions of cooperation. This is particularly tricky since such information may be included in plenty of divergent reports disclosed by cooperatives, such as: CSR Report, Annual Report, Annual Review, Responsible Investment Report, Sustainability Report, Integrated Report, Social Balance Sheet, Management Report, Non-Financial Performance Report, Social Responsibility Report, Universal Registration Document, Declaration of Extra-Financial Performance, Social and Cooperative Responsibility Report, Environmental, Social and Governance (ESG) Report, and Social Annual Report. We will refer to such reports as “sustainability-like reports”. It is important to say that we only took into consideration the downloadable reports containing SDGs issues. Almost the 100% of the sample of cooperatives and mutuals discloses SDGs topics on their websites, but not all of them do it by reporting such information through downloadable reports.

4. Results

Table 1 reports sample distribution regarding the type of issued reports by cooperatives to disclose SDGs. Almost the half of the sample published Annual Reports (41.48%), followed by Sustainability Reports (21.31%) and CSR Reports (5.97%). The 7.95% issued combined reports such as “Sustainability and Annual Report”, “Management and Sustainability Report”, “Management and Impact Report”, and “Management and Annual Report”. If we dig into the essence of reporting SDGs, the 50.28% of the reports included in their title keywords such as “sustainability”, “social”, “non-financial”, “extra-financial”, “responsibility”, “CSR”, and “ESG”. Fortunately, since it facilitates the overview of sustainable development behaviour of cooperatives (firms in general), entities are eventually but gently shifting from disclosing sustainability info (in particular, SDGs-

related issues) in economic or financial-like reports to a more social and environmental-related reports. Among cooperative and mutual organisations issuing sustainability-like reports, 60.5% in 2020 and 61.5% in 2021 refer to the SDGs in there, which represents a slightly increase of 1 point.

Table 1. Sample distribution by type of report issued by cooperatives.

	2020				2021				Full sample			
	Reports		Reports with SDGs		Reports		Reports with SDGs		Reports		Reports with SDGs	
	N	%	N	%	N	%	N	%	N	%	N	%
Annual Report	69	43.95	31	32.63	77	39.49	37	30.83	146	41.48	68	31.63
Sustainability Report	31	19.75	28	29.47	44	22.56	40	33.33	75	21.31	68	31.63
CSR Report	9	5.73	4	4.21	12	6.15	4	3.33	21	5.97	8	3.72
Sustainability and Annual Report	8	5.10	7	7.37	9	4.62	6	5.00	17	4.83	13	6.05
Environmental, Social and Governance Report	7	4.46	2	2.11	6	3.08	3	2.50	13	3.69	5	2.33
Non-Financial Report	5	3.18	4	4.21	5	2.56	4	3.33	10	2.84	8	3.72
Declaration of Extra-Financial Performance	5	3.18	3	3.16	6	3.08	4	3.33	11	3.13	7	3.26
Integrated Annual Report	3	1.91	2	2.11	10	5.13	6	5.00	13	3.69	8	3.72
Management Report	2	1.27	1	1.05	2	1.03	2	1.67	4	1.14	3	1.40
Activity and Social Responsibility Report	2	1.27	2	2.11	2	1.03	2	1.67	4	1.14	4	1.86
Social Responsibility Report	2	1.27	2	2.11	2	1.03	2	1.67	4	1.14	4	1.86
Non-Financial Performance Report	2	1.27	0	0.00	3	1.54	1	0.83	5	1.42	1	0.47
Social and Cooperative Responsibility Report	1	0.64	1	1.05	1	0.51	1	0.83	2	0.57	2	0.93
Sustainable Development Report	1	0.64	0	0.00	1	0.51	0	0.00	2	0.57	0	0.00
CSR Report and Annual Accounts	1	0.64	0	0.00	1	0.51	0	0.00	2	0.57	0	0.00
Corporate Responsibility Report	1	0.64	1	1.05	1	0.51	1	0.83	2	0.57	2	0.93
Management and Sustainability Report	1	0.64	0	0.00	1	0.51	0	0.00	2	0.57	0	0.00
Social Annual Report	1	0.64	1	1.05	-	-	-	-	1	0.28	1	0.47
Non-Financial Performance Statement	1	0.64	1	1.05	2	1.03	2	1.67	3	0.85	3	1.40
Management and Annual Report	1	0.64	1	1.05	1	0.51	1	0.83	2	0.57	2	0.93
Non-Financial Statement	1	0.64	1	1.05	1	0.51	1	0.83	2	0.57	2	0.93
Universal Registration Document	1	0.64	1	1.05	1	0.51	1	0.83	2	0.57	2	0.93
Progress Communication	1	0.64	1	1.05	2	1.03	1	0.83	3	0.85	2	0.93
Responsible Investment Report	1	0.64	1	1.05	1	0.51	1	0.83	2	0.57	2	0.93
Annual Review	-	-	-	-	1	0.51	0	0.00	1	0.28	0	0.00
Social Balance Sheet	-	-	-	-	1	0.51	0	0.00	1	0.28	0	0.00
Responsible Business Report	-	-	-	-	1	0.51	0	0.00	1	0.28	0	0.00
Management and Impact Report	-	-	-	-	1	0.51	0	0.00	1	0.28	0	0.00
TOTAL	157	100.00	95	100.00	195	100.00	120	100.00	352	100.00	215	100.00

Source: Authors' own.

Table 2 depicts the regional distribution of the aforementioned reports issued by cooperatives, incorporating references to SDGs as well. In Europe, cooperatives' sustainability-like reports increased in about 25% (from 107 to 134), whereas those with special remark to SDGs did in about 30% (from 68 to 89). In America, this type of reports increased in about 29% (from 28 to 36), however, the increasing was lower (12.5%) in the case of reports with SDGs. Finally, in case of Asian and Pacific cooperatives, the number of reports increased about 13% (from 22 to 25), but 15.8% in case of those

including SDGs references. Overall, European cooperatives are the most representative (68.47%, that is, 241 out of 352; 73.02% when stating SDGs reference in the report).

Table 3 shows a country-level distribution of reports issued by Top 300 cooperatives and mutuals. As of 24 countries, spanning 2020 to 2021, France is on the top, with more than 50 sustainability reports issued (almost 30 with SDGs references), while Argentina is at the bottom. The country-level classification completely varies depending on the ratio of reports with SDGs to sustainability reports issued and the annual change of reports with SDGs issued. Regarding the former, in countries such as Italy, Spain, Belgium, Singapore, Australia or Malaysia, all organisations disclose sustainability (or similar) reports that incorporate SDGs in there. French reports, conversely, is below the average with almost the 51%. On the other side, looking at the annual change between 2020 and 2021 of issued reports including SDGs, Switzerland, Italy, UK and Singapore are the countries that have increased the most (overpassing 100%) considering the number of reports with SDGs, amounting 300%, 125% and 100%, respectively. Oppositely, the level of sustainability reports with SDGs issues has decreased in countries such as Ireland, Canada, Finland, and Sweden.

Table 2. Regional distribution of reports.

REGION	2020				2021				Full Sample			
	Reports		Reports with SDGs		Reports		Reports with SDGs		Reports		Reports with SDGs	
	N	%	N	%	N	%	N	%	N	%	N	%
America	28	17.83	8	8.42	36	18.46	9	7.50	64	18.18	17	7.91
Asia and Pacific	22	14.01	19	20.00	25	12.82	22	18.33	47	13.35	41	19.07
Europe	107	68.15	68	71.58	134	68.72	89	74.17	241	68.47	157	73.02
TOTAL	157	100.00	95	100.00	195	100.00	120	100.00	352	100.00	215	100.00

Source: Authors' own.

Table 3. Country-level distribution of reports

COUNTRY	2020				2021				Full Sample			
	Reports		Reports with SDGs		Reports		Reports with SDGs		Reports		Reports with SDGs	
	N	%	N	%	N	%	N	%	N	%	N	%
France	21	13.38	10	10.53	30	15.38	16	13.33	51	14.49	26	12.09
Germany	21	13.38	11	11.58	27	13.85	15	12.50	48	13.64	26	12.09
USA	21	13.38	3	3.16	26	13.33	4	3.33	47	13.35	7	3.26
Japan	13	8.28	12	12.63	14	7.18	13	10.83	27	7.67	25	11.63
Netherlands	13	8.28	8	8.42	13	6.67	9	7.50	26	7.39	17	7.91
Finland	9	5.73	7	7.37	10	5.13	7	5.83	19	5.40	14	6.51
Denmark	8	5.10	6	6.32	9	4.62	6	5.00	17	4.83	12	5.58
Italy	4	2.55	4	4.21	9	4.62	9	7.50	13	3.69	13	6.05
Sweden	6	3.82	5	5.26	6	3.08	4	3.33	12	3.41	9	4.19
Norway	6	3.82	4	4.21	6	3.08	5	4.17	12	3.41	9	4.19
Spain	5	3.18	5	5.26	6	3.08	6	5.00	11	3.13	11	5.12
New Zeland	5	3.18	4	4.21	5	2.56	4	3.33	10	2.84	8	3.72
Switzerland	4	2.55	1	1.05	5	2.56	4	3.33	9	2.56	5	2.33
Canada	4	2.55	3	3.16	5	2.56	2	1.67	9	2.56	5	2.33
UK	3	1.91	1	1.05	4	2.05	2	1.67	7	1.99	3	1.40
Brazil	3	1.91	2	2.11	4	2.05	3	2.50	7	1.99	5	2.33
Austria	3	1.91	3	3.16	4	2.05	3	2.50	7	1.99	6	2.79
Belgium	2	1.27	2	2.11	3	1.54	3	2.50	5	1.42	5	2.33
Ireland	2	1.27	1	1.05	2	1.03	0	0.00	4	1.14	1	0.47
Singapore	1	0.64	1	1.05	2	1.03	2	1.67	3	0.85	3	1.40
India	1	0.64	0	0.00	2	1.03	1	0.83	3	0.85	1	0.47
Malaysia	1	0.64	1	1.05	1	0.51	1	0.83	2	0.57	2	0.93

Australia	1	0.64	1	1.05	1	0.51	1	0.83	2	0.57	2	0.93
Argentina	-	-	-	-	1	0.51	0	0.00	1	0.28	0	0.00
Total	157	100.00	95	100.00	195	100.00	120	100.00	352	100.00	215	100.00

Source: Authors' own.

Table 4 presents the sectorial distribution of such reports, being “insurance” the most representative industry (37.67%) regarding SDGs reporting, followed by “agriculture and food” (32.09%), being “education, health and social work”, paradoxically, the sector in the queue with 0%. On average, those industries in which the proportion of sustainability reports informing about SDGs is more accused are “Industry” and “Housing” with 100%, followed by “Financial service” (81.58%), “Insurance” (62.31%), “Agriculture and food industries” (60%), “Wholesale and retail trade” (48.15%), “Utilities” (16.67%) and “Education, health and social work” with 0%. In the same line, those that increased the most their effort in order to disclose more sustainability reports with SDGs in just one year are “Industry”, “Agriculture and food industries”, and “Wholesale and retail trade”, being 50%, 30% and 25%, respectively.¹

Table 4. Sectorial distribution of reports

SECTOR	2020				2021				Full Sample			
	Reports		Reports with SDGs		Reports		Reports with SDGs		Reports		Reports with SDGs	
	N	%	N	%	N	%	N	%	N	%	N	%
Insurance	59	37.58	37	38.95	71	36.41	44	36.67	130	36.93	81	37.67
Agriculture and food industries	50	31.85	29	30.53	65	33.33	40	33.33	115	32.67	69	32.09
Wholesale and retail trade	24	15.29	12	12.63	30	15.38	14	11.67	54	15.34	26	12.09
Financial service	18	11.46	14	14.74	20	10.26	17	14.17	38	10.80	31	14.42
Utilities	2	1.27	0	0.00	4	2.05	1	0.83	6	1.70	1	0.47
Industry	2	1.27	2	2.11	3	1.54	3	2.50	5	1.42	5	2.33
Education, health and social work	1	0.64	0	0.00	1	0.51	0	0.00	2	0.57	0	0.00
Housing	1	0.64	1	1.05	1	0.51	1	0.83	2	0.57	2	0.93
Total	157	100.00	95	100.00	195	100.00	120	100.00	352	100.00	215	100.00

Source: Authors' own.

With regards to cooperative type (Table 5), the majority of organisations in the Top 300 are producer cooperatives mainly representing agricultural and retailers' cooperatives (34%), and almost 29% in case of SDG references, followed by mutual cooperatives (30%) and consumer/user cooperatives (27%). Cooperatives such as “Non-Coop”, “Consumer/User” or “Worker” are those that meet the highest ratio of reports with SDGs in there (95%, 74% and 60%, respectively). In terms of annual change, “Producer”, “Non-Coop” and “Consumer/User” cooperatives have increased the most their level of reports with SDGs.

Table 5. Cooperative type-level distribution of reports

TYPE	2020				2021				Full Sample			
	Reports		Reports with SDGs		Reports		Reports with SDGs		Reports		Reports with SDGs	
	N	%	N	%	N	%	N	%	N	%	N	%
Producer	51	32.48	26	27.37	70	35.90	36	30.00	121	34.38	62	28.84
Mutual	47	29.94	26	27.37	58	29.74	31	25.83	105	29.83	57	26.51
Consumer/User	45	28.66	32	33.68	51	26.15	39	32.50	96	27.27	71	33.02
Non Coop	9	5.73	8	8.42	10	5.13	10	8.33	19	5.40	18	8.37
Worker	2	1.27	1	1.05	3	1.54	2	1.67	5	1.42	3	1.40

¹ Although the highest increase is experienced in the Utilities sector, such annual change corresponds to a single report with SDGs.

Multistakeholder	2	1.27	1	1.05	2	1.03	1	0.83	4	1.14	2	0.93
Producer and Consumer/User	1	0.64	1	1.05	1	0.51	1	0.83	2	0.57	2	0.93
TOTAL	157	100.00	95	100.00	195	100.00	120	100.00	352	100.00	215	100.00

Source: Authors' own.

Table 6 displays information on the SDGs distribution by region. Both in years 2020 and 2021, Asia and Pacific stands out considering the average SDGs per report. On the other hand, the average improves from one year to the next (8.05% to 8.76%). The geographic area following it is Europe. In this case, the average also improves from one year to the next (5.23% to 5.37%). Finally, America presents the lowest average, being less from one year to the next (2.61% to 2.35%). If no distinction among regions is made, the average slightly increases from 5.16 to 5.23. If focusing on Asia and Pacific, in the year 2020, the most cited SDGs are 8 and 12. In the year 2021, the most cited SDG is 8. Meanwhile, in Europe and America the most cited SDGs are 13, 12 and 8, in both years.

Table 6. SDGs distribution by region

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Average SDGs per report
2020																		
America	4	5	5	3	5	2	5	6	5	5	5	6	6	1	2	4	4	2.61
Asia and Pacific	13	10	12	11	11	5	9	14	8	8	11	14	12	9	12	6	12	8.05
Europe	24	29	46	29	34	23	37	51	26	26	29	51	55	17	34	25	24	5.23
Total	41	44	63	43	50	30	51	71	39	39	45	71	73	27	48	35	40	5.16
2021																		
America	3	7	6	3	5	5	6	9	4	4	4	9	9	1	4	4	4	2.35
Asia and Pacific	17	14	15	12	13	7	10	19	8	11	13	17	17	10	16	8	12	8.76
Europe	31	43	56	34	49	30	50	69	36	37	31	66	72	22	41	25	28	5.37
Total	51	64	77	49	67	42	66	97	48	52	48	92	98	33	61	37	44	5.23

Source: Authors' own.

Table 7 is also devoted to gather information of a geographical nature, since the average SDGs per report is here related to countries (23 in 2020 and 24 in 2021). With respect to the year 2020, only three countries exceed the average of 10 SDGs per report, Belgium (10.50), Brazil (10.33) and Spain (10.,20). In the year 2021, there are also 3 countries that exceed this average, although not all of them coincide. These countries are Japan (10.,64), Brazil and Spain (10.,50). On the opposite side, the average SDGs per report is less than 1 in India and USA (year 2020) and in Argentina, Ireland and USA (year 2021).

Table 7. SDGs distribution by country

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Average SDGs per report
2020																		
Australia	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	3.00
Austria	1	1	3	2	3	1	2	2	1	1	1	1	3	1	2	2	0	9.00
Belgium	2	0	2	1	2	0	1	1	2	2	2	2	2	0	0	1	1	10.50
Brazil	2	2	1	2	2	1	2	2	2	2	2	2	2	1	2	2	2	10.33
Canada	1	2	3	1	2	1	2	3	2	1	1	3	3	0	0	1	1	6.75
Denmark	1	4	5	3	4	4	3	5	2	1	2	5	5	2	5	3	5	7.38
Finland	1	2	4	2	2	2	3	5	3	4	2	5	5	2	5	2	1	5.,56
France	4	5	7	5	8	6	7	9	5	5	5	9	7	3	5	6	2	4.,67
Germany	4	3	5	4	4	3	5	7	5	4	3	6	7	2	4	5	3	3.,52
India	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.,00
Ireland	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2.,00

Italy	2	2	2	4	3	1	4	4	1	1	2	4	3	3	2	1	0	9.,75
Japan	9	4	7	10	8	2	6	9	8	6	9	7	8	5	7	6	9	9.,23
Malaysia	1	1	1	1	0	1	0	0	0	0	0	1	0	0	0	0	1	7.,00
Netherlands	4	3	4	1	0	1	2	5	0	0	2	4	7	0	2	0	2	2.85
Norway	0	2	4	1	1	0	1	4	2	1	2	5	4	1	2	0	4	5.67
New Zealand	3	4	4	0	3	2	1	4	0	2	2	4	4	4	4	0	1	8.40
Singapore	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	5.00
Spain	3	3	4	3	3	3	3	3	3	3	3	3	4	1	2	3	4	10.20
Sweden	0	1	2	0	1	0	3	3	1	1	3	3	3	0	3	1	1	4.33
Switzerland	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	4.75
UK	1	1	2	2	2	1	1	2	0	2	1	2	2	1	1	0	0	7.00
USA	1	1	1	0	1	0	1	1	1	2	2	1	1	0	0	1	1	0.,71
Total	41	44	63	43	50	30	51	71	39	39	45	71	73	27	48	35	40	5.,16
2021																		
Argentina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.,00
Australia	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	3.,00
Austria	1	1	3	2	3	1	2	2	1	1	1	2	3	1	2	2	0	7.,00
Belgium	2	1	2	0	1	0	2	0	1	0	2	1	2	0	0	0	0	4.,67
Brazil	2	2	2	2	3	2	3	3	2	3	3	3	3	1	3	3	2	10.50
Canada	1	2	3	1	2	1	2	3	2	1	1	3	3	0	0	1	1	5.40
Denmark	0	3	4	1	3	2	4	5	2	0	2	5	4	0	3	2	4	4.89
Finland	1	2	5	3	4	3	3	6	4	4	3	6	6	4	6	2	2	6.40
France	6	10	12	8	14	10	12	16	8	11	5	17	14	6	9	5	4	5.57
Germany	4	3	6	4	6	3	6	9	3	5	3	7	10	2	3	4	2	2.96
India	1	1	0	0	1	1	1	1	0	0	0	1	1	0	1	1	1	5.50
Ireland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Italy	4	6	4	6	5	3	4	8	4	3	4	6	7	2	2	4	2	8.22
Japan	11	7	10	10	9	4	7	12	8	9	11	9	11	7	10	6	8	10.64
Malaysia	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	6.00
Netherlands	5	4	5	1	1	2	2	6	1	2	1	4	7	1	3	0	3	3.69
Norway	0	3	4	1	3	1	2	5	4	2	2	6	5	1	3	0	4	7.67
New Zealand	3	4	3	0	3	1	0	4	0	2	2	4	4	3	4	0	1	7.60
Singapore	1	1	1	1	0	0	1	2	0	0	0	2	1	0	0	1	1	6.00
Spain	4	4	5	4	3	3	4	5	4	3	3	4	5	2	3	3	4	10.50
Sweden	0	1	1	0	1	0	3	2	2	1	2	3	3	0	3	1	0	3.,83
Switzerland	2	2	2	2	2	2	3	2	2	2	2	2	3	2	2	2	1	7.,00
UK	2	3	3	2	3	0	3	3	0	3	1	3	3	1	2	0	2	8.,50
USA	0	3	1	0	0	2	1	3	0	0	0	3	3	0	1	0	1	0.,67
Total	51	64	77	49	67	42	66	97	48	52	48	92	98	33	61	37	44	5.,23

Source: Authors' own.

Table 8 informs on the SDGs distribution by considering 8 economic sectors. Notice that although housing appears as the best positioned considering both years under analysis (being the average SDGs per report equals to 10), the fact that only 1 cooperative operates in this sector leads to conclude that the result is not significant. Once this clarification is made, gaze is directed toward the financial services sector, with average SDGs per report equals to 7.39 and 8.35 for years 2020 and 2021, respectively. Education, health and social work together with utilities are at the bottom. While the average for education, health and social work is equal to 0 in both years, the average for utilities changes from 0 to 1.50. If looking at financial services, in the year 2020, the most cited SDGs are 8 and 13. In the year 2021, the most cited SDG is 13.

Considering cooperative type (Table 9), those classified as "Non-coop" showed the highest number of SDGs per report, followed by "Consumer/User" in 2020 and 2021. On average, Top 300 cooperatives and mutuals inform on about 5 SDGs per report. SDGs 13, 8 and 12 remain as the most cited SDGs in the sample.

Table 8. SDGs distribution by sector

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Average SDGs per report
2020																		
Agriculture and food industries	6	21	19	6	9	14	15	23	8	6	5	27	22	8	19	6	8	4.44
Education, health and social work	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Financial service	10	6	7	10	9	4	10	11	6	8	7	9	11	4	7	8	6	7.39
Housing	0	0	0	1	1	0	1	1	1	0	1	1	1	0	1	0	1	10.00
Industry	1	0	0	1	0	0	0	0	1	0	1	1	0	0	0	0	1	3.00
Insurance	16	7	24	16	20	6	17	24	16	15	20	20	26	5	10	14	14	4.58
Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Wholesale and retail trade	8	10	13	9	11	6	8	12	7	10	11	13	13	10	11	7	10	7.04
Total	41	44	63	43	50	30	51	71	39	39	45	71	73	27	48	35	40	5.16
2021																		
Agriculture and food industries	8	31	26	12	22	24	23	38	15	12	7	40	34	11	26	10	13	5.42
Education, health and social work	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Financial service	12	9	9	11	11	5	11	14	9	9	8	13	15	4	9	9	9	8.35
Housing	0	0	0	1	1	0	1	1	1	0	1	1	1	0	1	0	1	10.00
Industry	1	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	4.67
Insurance	21	13	29	17	21	8	20	28	15	18	21	22	33	7	12	12	10	4.26
Utilities	0	0	0	0	1	0	1	1	1	0	0	1	0	0	0	1	0	1.50
Wholesale and retail trade	9	11	12	7	11	4	10	14	6	12	10	14	14	10	12	4	10	5.67
Total	51	64	77	49	67	42	66	97	48	52	48	92	98	33	61	37	44	5.23

Source: Authors' own.

Table 9. SDGs distribution by cooperative type

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Average SDGs per report
2020																		
Consumer/User	19	14	21	20	21	8	20	27	15	17	20	25	28	10	18	14	18	7.00
Multistakeholder	0	0	1	0	1	0	1	1	1	0	1	1	1	0	0	0	1	4.50
Mutual	12	5	18	12	15	5	13	17	13	14	15	14	18	5	8	13	9	4.38
Non-Coop	3	6	5	3	4	6	6	8	4	4	3	9	9	4	8	4	3	9.89
Producer	7	18	16	7	7	9	9	17	6	4	6	20	16	7	12	3	9	3.53
Producer	0	0	1	0	1	1	1	0	0	0	0	1	0	0	1	0	0	3.00
Producer and Consumer/User	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	0	12.00
Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Total	41	44	63	43	50	30	51	71	39	39	45	71	73	27	48	35	40	5.16
2021																		
Consumer/User	25	20	25	22	26	10	24	32	20	21	20	30	34	11	22	15	19	7.37
Multistakeholder	0	0	1	0	1	0	1	1	1	0	1	1	1	0	0	0	1	4.50
Mutual	13	8	20	12	14	6	14	19	11	14	16	15	22	5	7	10	7	3.61
Non-Coop	3	6	5	2	7	5	6	9	3	4	4	10	9	3	8	5	4	9.30
Producer	10	29	24	12	17	19	19	35	13	13	7	34	31	13	22	6	13	4.66
Producer	0	0	1	0	1	1	1	0	0	0	0	1	0	0	1	0	0	3.00
Producer and Consumer/User	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	0	12.00
Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Total	51	64	77	49	67	42	66	97	48	52	48	92	98	33	61	37	44	5.23

Source: Authors' own.

5. Conclusions and discussion

This paper contributes to the literature on sustainable development, SDG reporting and the role of cooperatives in achieving the SDGs. This exploratory analysis examines the extent to which the top 300 cooperative and mutual organisations worldwide are committed to SDGs reporting.

Results reveal that more than half of the organisations that issued a sustainability-like report included SDGs in there. In addition, there was a slightly increase from 2020 to 2021 in about 1%. European cooperatives are the most representative regarding SDGs reporting, experiencing a significant increase (30%), while many American cooperatives declined mentioning SDGs in their reports. Specifically, the most active countries are Italy, Spain, Belgium, Singapore, Australia, or Malaysia. These results could involve that SDGs reporting is associated with countries, as pointed out by previous works (e.g., Rosati and Faria, 2019b; Fonseca and Carvalho, 2019; Van der Waal and Thijssens, 2020). By sector, organisations operating in “Industry”, and “Financial services” include more actively SDGs in their reports. It shows a possible association between sector and SDGs reporting, in agreement with Pizzi et al. (2020), Tsalis et al. (2020), or Whittingham et al. (2022). By cooperative type, “Non-Coop”, “Consumer/User” cooperatives or “Worker” cooperatives meet the highest ratio of reports with SDGs.

Most cooperative and mutual organisations refer to SDG 13, SDG 8 and SDG 12. Findings also show a great diversity in the number of SDGs included in the reports, which agrees with Nichita et al. (2020) and Polo-Garrido et al. (2022). In this line, by region, Asia and Pacific cooperatives are in the first spot, followed by European and American ones. It could be explained because the organisations consider different SDGs as relevant for them. On the other hand, PwC (2019) affirmed that companies struggle with how many SDGs they should focus on, and they are not effective in showing how they match them, making it difficult to associate their activities with the 2030 Agenda. In this sense, literature highlights the necessity of frameworks, methods, and indicators to better understand the contribution of corporate sustainability activities to the SDGs. In this way, Tsalis et al. (2020) suggested a methodological framework to assess the quality of corporate sustainability reporting practices regarding SDGs. Similarly, Calabrese et al. (2021) proposed an assessment framework to explore how companies deal with 2030 Agenda, report their commitment in achieving SDGs, and monitor their progress.

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