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International Journal of
**CO-OPERATIVE ACCOUNTING
& MANAGEMENT (IJCAM)**

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Performance of Co-operatives

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Letter from the Editors

WE ARE PLEASED to publish our special issue focused on social and environmental performance of co-operatives. It is a timely topic in light of the ICA's adoption of the United Nations Sustainability Development Goals (SDGs). This volume features seven papers from authors in India, Europe, United States and Canada.

The Journal starts with a paper by Nik Rowston and Dr. Fiona Duguid (Saint Mary's University, Canada) which identifies the causes of the shortcomings in current co-operative sustainability reporting practice; assesses how best to address those causes; and proposes a more effective model of sustainability measurement and reporting. In the next paper, Claude-André Guillotte and Josée Charbonneau of the Université de Sherbrooke aim to highlight the existing links between the practices of forestry cooperatives in Quebec and Honduras and the SDGs. Their research shows that the cooperatives under study adopt practices related to all SDGs, except for SDG 14. The third paper, authored by Chiara Carini and Ilana Gotz of the European Research Institute on Cooperative and Social Enterprises (Euricse), analyzes the practices implemented by the Top 300 Cooperatives identified in the 2018 World Cooperative Monitor in order to contribute to the discussion on how large cooperatives can participate in the achievement of SDG 8. In the fourth paper, Fiona Duguid examines the current state of SDG and sustainability reporting: "Are Co-operatives Embracing the SDGs and Sustainability? A Content Analysis of Annual Reports, Reports, and Websites." The

fifth paper is authored by Simren Singh, Devika Singh, Mohit Dave and Balasubramanian Iyer, who are associated with the International Cooperative Alliance – Asia and Pacific. Their paper uses a conceptual framework to look at the engagement of cooperatives and their representative organisations in the voluntary national review consultative process, contributions of cooperatives to specific sustainable development goals, and alignment with national development strategies. In the next paper, Dr. Krishnachetty Ravichandran analyzes the role of Primary Agricultural Cooperative Credit Societies in the achievement of SDGs in Tamil Nadu. The final paper is the capstone paper from Saint Mary's University Masters of Management in Co-operatives and Credit Unions (MMCCU). The paper was written by Nicolas Bickford and examines whether environmental sustainability is sufficiently highlighted within the co-operative movement's Statement on the Co-operative Identity.

The next issue will be published in early December 2020. If you have a paper for the Winter 2021 edition, please submit by January 31, 2021.

Papers related to management topics should be submitted to Peter Davis and those focusing on accounting and reporting should be submitted to Daphne Rixon.

Daphne Rixon
Editor-in-Chief

Peter Davis
Senior Editor



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Co-operative Accounting and Reporting

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Co-operative Sustainability Performance Measurement: The Role of the Co-op Principles and UN Sustainability Development Goals in the Reporting Model

“Measure what is measurable and make measurable what is not so.” (Galileo Galilei)

Nik Rowston, Instructor, Financial Instruments, Saint Mary’s University; Managing Director, Fund Administration, Conifer Financial Services.

Fiona Duguid, Research Fellow, Adjunct Professor, Saint Mary’s University; Principal Researcher, Duguid Consulting

Abstract: This research begins with the question: can co-operative organizations make use of the Principles to develop a measurement and reporting model that addresses the identified shortcomings of current practice relating to sustainability reporting? To answer this question, the research objective is threefold: one, to help identify the causes of the shortcomings in current co-operative sustainability reporting practice; two, to assess how best to address those causes; and three, to propose a more effective model of sustainability measurement and reporting, which can be developed with a specific emphasis on making reference to the UN SDGs as a global benchmark for co-operatives.

The study identified shortcomings in the current reporting models employed and found support for the link between the Principles and sustainability efforts, including activities relating to the SDGs. We identified a framework of stratification of stakeholder interests, mission and organizational activity and impact; and determined a conceptual model of values alignment and impact measurement (based on using the Co-operative Principles to guide the reporting of organizational performance) for co-operative organizations. The model will guide the development of appropriate metrics related to social and environmental value, in addition to economic value, for an organization and thereby provide more meaningful information to stakeholders.

This study is important as it begins to address the lack of co-operative specific social, environmental and co-operative measures and reporting and provides assistance to co-operative organizations that are looking to report on how they are helping to meet the UN SDGs. The paper contributes to the literature by introducing a comprehensive model that can be further developed for implementation and evaluated for effectiveness in future research.

Nik Rowston holds a CA accounting designation from the UK and is a graduate of the University of Nottingham. He is a Hedge Fund Administrator and a part-time instructor in Financial Instruments at Saint Mary’s University (SMU). Nik is working with SMU’s Centre of Excellence for Accounting and Reporting in Co-operatives (CEARC) on performance frameworks for co-operatives.

Fiona Duguid has a PhD from University of Toronto in Adult Education and Community Development. She conducts research focusing on co-operatives, social economy, sustainability and community economic development. She is a Research Fellow with CEARC, SMU where she co-leads the Co-operative Performance Index project, which is a participatory action research project to advance social, environmental and co-op impact assessment. She is Principal Researcher at Duguid Consulting and an instructor in the SMU Co-operative Business Management program, as well as the MBA program (CED) at Cape Breton University.

Acknowledgements: The authors would like to thank the Centre of Excellence in Accounting and Reporting for Co-operatives (CEARC) for their assistance in completing this research and producing this paper. We would also like to thank the reviewers for their valuable time and thoughtful input and we thank Daphne Rixon, as editor of the *International Journal of Co-operative Accounting and Management (IJCAM)*, for publishing this paper.

Keywords: Co-operatives, sustainability, social, environmental, performance measurement, development goals

Introduction

Increasingly over the last couple of decades businesses have come under pressure from stakeholders to participate in and provide greater information on their activities in areas outside the scope of traditional financial reporting; areas such as environmental impact and sustainability (Haleem et al., 2014; Forte, 2013). According to Deloitte's 2018 Global Human Capital Trends Survey (p. 2), "...organizations today are increasingly judged on the basis of their relationships with their workers, their customers, and their communities, as well as their impact on society at large."

And co-operative organizations are not immune from such pressure. In fact it can be argued that co-operative organizations face a much higher level of pressure due to the more diverse interests and stronger voice of empowered stakeholders in co-operative organizations. The International Co-operative Alliance (ICA)'s guidance notes for implementation of the Co-operative Principles note that "co-operatives' success is based on their ability to support those communities [relevant to them] to develop in a sustainable way" and that co-operatives "have a responsibility to strive to be ethical and socially responsible in all their activities" (ICA, 2015, p. 85). Guzman et al. (2019) and Lauermaun et al. (2018) also highlight the pressure on co-operatives specifically in this area.

The lack of a standard definition of sustainability however has led to a range of different approaches and tools for the measurement of sustainability activities and results by organizations, as discussed in the work of Retolaza et al. (2014); Mulgan (2010); Hysa et al. (2018); and Hadad and Gauca (2014). Even then, there is a noted lack of such measures that are specific to co-operative organizations (Anzilago et al., 2018; Lauermaun et al., 2018).

The lack of a standard definition of sustainability coupled with the myriad of tools to measure sustainability has failed to yield useful results in terms of satisfying stakeholder interest in the reporting of organizations' and more specifically, co-operatives' sustainability activities (Anzilago et al., 2018; Lauermaun et al., 2018; Hadad & Gauca, 2014; Laskar & Maji, 2017; and Hysa et al., 2018).

The UN Sustainability Development Goals (SDGs) provide a framework of sustainability activity against which organizations and stakeholders can compare and measure progress (United Nations, 2015). However, the SDGs are specific targets and goals at a macro, governmental level¹ and do not therefore directly correlate to organizational level activity and impact, and do not provide a measure of value added to the organization. Nonetheless, stakeholder demand for information on organizations' activities in relation to the SDGs is increasing, as evidenced in PwC's SDG Reporting Challenge survey (PwC, 2018). A reporting/measurement model specific to co-operatives that includes or facilitates reference to these goals would therefore be beneficial.

Co-operative organizations are guided by the Co-operative Principles as published by the ICA and these Principles include specific reference to sustainability, which is highlighted under Principle 7 (ICA, 2015). As such, can co-operative organizations make use of the Principles to develop a measurement and reporting model that addresses the identified shortcomings of current practice relating to sustainability reporting?

This research has three objectives: one, to help identify the causes of the shortcomings in current co-operative sustainability reporting practice; two, to assess how best to address those causes; and three, to propose a more effective model of sustainability measurement and reporting that can be developed with a specific emphasis on making reference to the UN SDGs as a global benchmark for co-operatives.

Methodology

The methodology was composed of four steps: reviewing SDGs and co-operative principles; developing the conceptual framework; conducting the literature review; and analyzing the data. This is distilled into Figure 1 below.

Figure 1: Steps in the methodological process

Steps	Actions	Outcomes
Step 1	Review relevant documents re SDGs and Co-op principles	Scope of research
Step 2	Define markers into word-map (conceptual framework)	Figure 2
Step 3	Conduct literature review using keywords and defined parameters	40 documents
Step 4	Analysis of identified literature using Figure 2 word-map	Figure 3

In terms of meeting our first objective – to identify the causes of the shortcomings in current co-operative sustainability reporting practice – we began with Step 1 by reviewing in detail the statements of co-operative identity, the co-operative principles and the supporting documentation, such as the Guidance Notes to the Co-operative Principles. We identified therein keywords and phrases that defined the concepts behind each of the Principles.

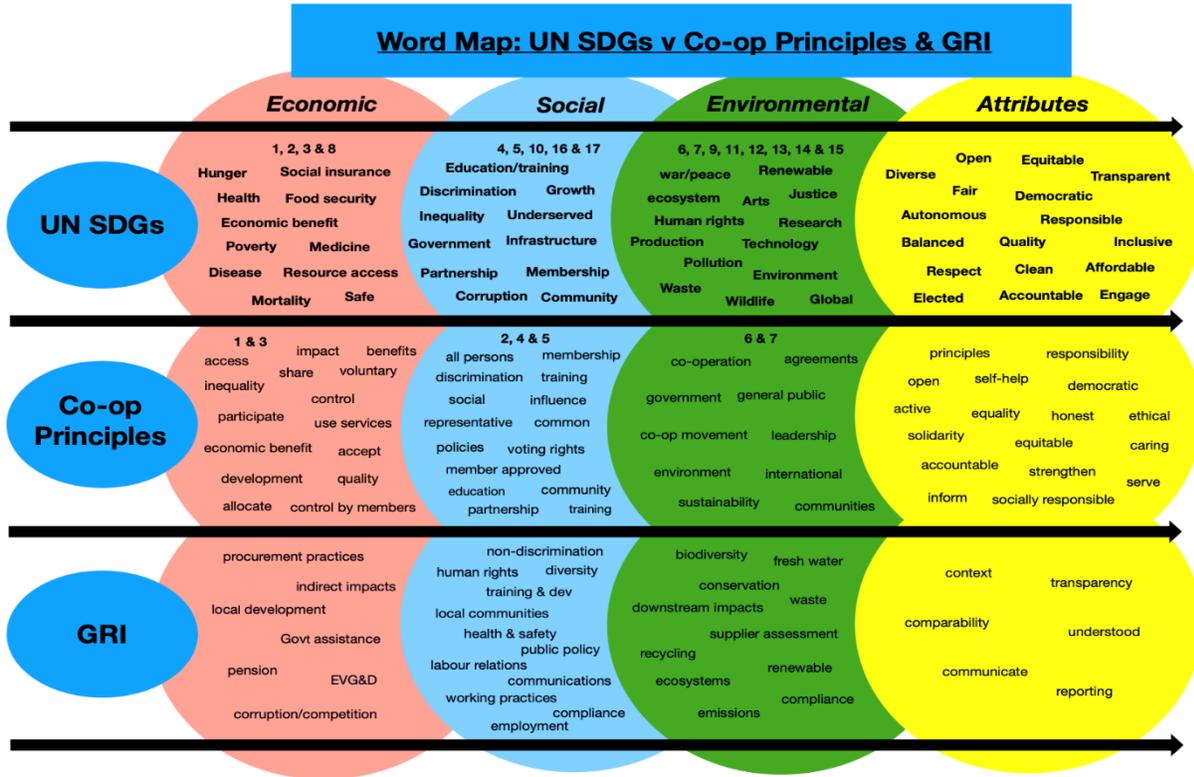
Following from the link between the Principles and the work done on environmental reporting and sustainable development by the UN in the 1990's², we reviewed in detail the UN Sustainability Development Goals and, given the purposefully short and simple nature of the goals themselves, related documentation such as progress reports and indicators. We identified therein keywords and phrases that defined the purpose and nature of each goal.

The SDGs and Co-op Principles are two different sets of documents with different approaches, foci and terminologies. Since both are also relatively brief, it is not practical to measure the occurrence of common words to see how these documents interact. Thus began Step 2, to develop a workable and robust conceptual framework. In order to assess the linkage between the SDGs and Co-op Principles we focused on the underlying purpose of each document, identifying that in each case the documents refer to distinct stakeholders (either parties receiving intended benefits, parties on which responsibilities are placed, or parties that are impacted by the goals/principles contained therein). These different stakeholders can be categorised on a spectrum ranging from individual interests, through group (organization, community, etc.) interests to societal/environmental interests. Since these categories of stakeholders are common to both documents, we used them to create linguistic domains within which we can specify markers (text within the documents, either specific words or phrases) that identify where and when each document is discussing such stakeholder interests. Markers existing in both documents for the same stakeholders give us the linkage between the content of each document in relation to the interests of those stakeholders.

The markers themselves can be split (generally) into two components - attributes and markers, where the attributes are generally descriptive words that correspond (usually) to values or subjective qualifiers; and the markers that are more context specific features of the goal/principle that align with the relevant stakeholder, e.g., poverty is a marker for individual stakeholders, as an individual is poor; whereas voting rights are a marker for group stakeholders, as the co-op ensures all members have voting rights. See Appendix A for a list of the markers and attributes for each set of documents.

By plotting the markers for each set of documents against the stakeholder categories, we developed a word-map (see Figure 2 below), to illustrate how the documents interact. The word-map provides the foundation for the conceptual framework.

Figure 2: Word-map of UN SDG, Co-operative Principles and Global Reporting Initiative



We utilised this word-map/conceptual framework for two purposes: one, to frame our research parameters for the subsequent literature review; and two, to see if the extant research on sustainability reporting in co-operative organizations supported the use of both the Principles and the UN SDGs.

With the initial SDG and Co-op Principles review completed and now with the word-map as a guide, we moved to Step 3 – reviewing the relevant literature. The review examined online resources and tools, industry reports, and journal articles for research relevant to the relationships between co-operatives, the Principles, sustainability and the SDGs. It was done between November 2017 and December 2019. We focused only on English language literature. We did not target any particular journals or publications except for specific items from the UN re the Sustainability Goals and from the ICA re Co-operative Principles. We searched for articles, papers, etc., that contained the following keywords relating to co-operatives and sustainability: combinations of corporate sustainability, social responsibility, co-operative measurement, corporate values, economic performance, personal values, social impact measurement, sustainability measures, social reporting, environmental reporting, profitability, co-operative principles, social value, stakeholders, co-operative advantage, and UN SDGs. Papers containing appropriate combinations of these terms, or synonyms of these terms in the title and with a focus on or substantial component related to co-operative organizations were chosen as relevant for detailed review. We then turned our attention to literature that related to the role of organizational values in co-operatives and in the implementation of sustainability.

We completed a detailed review of over 55 documents deemed most relevant from those targeted searches, with 40 of those producing referenceable points for inclusion in the paper.

We eliminated from scope items in the search results relating to impact measurement in ‘social enterprises’ and non-profit organizations that did not have substantial content on co-operatives. We did this to avoid any confusion that the findings would only be applicable to co-operatives that were also ‘social enterprises’ and to ensure

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sustainability reporting as an output/product in and of itself would be distinguished, i.e., non-profit organizations whose mission is to deliver impacts that would be considered sustainable versus sustainability reporting as an indicator of the processes applied in general operation of the organization regardless of its nominal 'product'. We also wanted to avoid the false contaminating inference that sustainability reporting comes with a trade-off against profit generation.

Following the literature review, Step 4 began. We utilised the findings and the work done in linking the Principles to the SDGs to meet objectives two and three: to assess the causes for the shortcoming in sustainability reporting and to formulate a new conceptual model of reporting for sustainability for co-operatives. We started our analysis of the identified literature (N=40) by examining items relating to the current use of CSR/sustainability metrics and measures by co-operatives. This we discuss below in the analysis and discussion sections and represent in Figure 3.

In terms of methodological limitations, we recognize that there is literature related to sustainability and performance reporting for 'social enterprises' and non-profit organizations that may contain relevant information to further the discussion in this paper. We also recognize that our choice of search terms and selection criteria on the results of the searches may not have yielded a comprehensive and exhaustive list of research items. However, we believe that the exclusion of this body of literature from this paper does not detract from its validity or value since the literature that is in scope is sufficient to support our conclusions and to justify the introduction of the our proposed model. Further research into the model should include an expansion of the search terms and criteria to include relevant materials from the 'social enterprise' and non-profit organizations' sustainability reporting literature.

A second methodological limitation comes from working with only English language literature. There could be many other resources, especially given the global nature of the sustainability effort and the use of co-operative organizational structures in the developing world, that we have not included or assessed. We encourage further research employing the conceptual framework (Figure 2) to research written in other languages, thus expanding the scope and findings.

Analysis

The first objective of this research is to help identify the causes of the shortcomings in current co-operative sustainability reporting practices. We begin with the GRI framework as it is a tool used by many Fortune 500 companies to report on CSR/sustainability efforts.³ Adams (2004) noted in his examination of GRI reporting in multi-national organizations that it did not provide a complete picture and was not accountable to key stakeholders with respect to ethical, social and environmental performance. We therefore looked for research on its use by co-operative organizations to see if similar issues occurred. A study by Toit and Buys (2013) examined the applicability of GRI to an agricultural co-operative in South Africa. They found it performed well under economic indicators, but it was more difficult to report on environmental performance. They found social performance was addressed through training and education, human rights were reported on through number of incidents, and society performance was highlighted through the co-operative's contribution to the community. Additionally, Anzilago et al. (2018) looked at the use of GRI in agricultural co-ops in Brazil and found little consistency in application and a general lack of interest in using such a tool by the co-op managers. They ascribe this lack of interest to the inadequacy of the GRI to capture items relevant to the co-op nature of the organizations and therefore its inability to provide useful information to the managers for decision-making purposes.

Mayo further argues that the basis of CSR as developed by and for commercial enterprises does not provide a suitable framework for co-operative enterprises (2011). While there are many CSR tools and techniques, Mayo contends they focus on investor owned organizations and do not address other models of ownership such as co-operatives. Instead, he calls for co-operative enterprises to develop appropriate accounting frameworks to understand member value and business performance. Furthermore, Mayo posits that sustainable development is a core principle of being a co-operative and is part of the co-operative identity; a position supported by the inclusion of Principle 7 within the Principles, as noted above. Consequently, since co-operative performance is distinct from business performance, the metrics used need to reflect input and outputs that support co-operative values and

principles. Lauermaun et al. also note the dual nature of co-ops and highlight failures of current measures based on their limited implementation in the Brazilian co-ops studied (2018).

Similar to Toit and Buys' (2013) finding, Hadad and Găucă (2014) found, in their research into the reporting of social impact, that most metrics are monetary/economic based and also are internal to the companies and therefore not capturing the full ethos of the social mission of the organizations examined. Gilligan and Golden (2009) in their research in the charitable sector propose the re-branding of organizations from 'Non-Profit' to 'Social Profit' and utilizing financial style metrics such as Social Productivity Cost and Return On Social Investment (ROSI) as performance measures, illustrating that the current focus on economic style indicators is pervasive across the spectrum of organizational forms. Tolivar (2013) also found that the current models of CSR do not provide useful information to the organization. Schneider (2015) and Retolaza et al. (2014) also identify a focus on economic measures as an issue with current CSR/sustainability reporting.

Perversely, despite the focus of current measures on economic/monetary metrics, many authors have been unable to produce conclusive evidence of the effect of CSR/sustainability activities on organizational financial performance. For example, Welter (2011) was unable to substantiate a link between sustainability measures and financial performance in his study of public US corporations and ascribed the lack of support, in part, to the multi-variate factors influencing financial performance and to the difficulties in isolating any direct effect of the sustainability measures. Laskar & Maji (2017) also found little support for the correlation between company performance and CSR reporting in their review of over 100 Asian companies. The work of Johnson (2009) supports that of Welter in that she could not substantiate a direct link between organizational values and profitability, but was able to determine a link through organizational values' impact on the intermediate factors of organizational identity and employee behaviour, which in turn both impact profitability. Maletic, et al (2015) also note that any correlation between sustainability practices and economic performance is as a result of improved performance in other areas such as innovation driven by the sustainability practices.

From the review of the literature noted above, it is evident that socially responsible and sustainability activities do not drive value to the organization in a manner that is conducive to measurement via economic/monetary metrics. Attempts to report on such activity using such measures will not produce valuable information for organizational stakeholders; neither useful information on the impact to company financial performance, nor useful information on social mission progress. This is of particular concern to co-operative organizations due to the expectation inherent in the Principles to understand the organizational impact of their activities on both the financial and non-financial spectrums. Without useful information on the impact of socially responsible/sustainability activities that can be utilised in the decision-making process, there exists an increased risk of mission drift and a vision of such activities as costs only (tending to decrease the incentive to undertake them). Cornforth noted that commercial pressures were a key factor in mission drift in social enterprises and that reporting of social mission performance was a useful strategy in combatting such drift, as it redressed the balance of focus between economic management and mission of the organization (2014). We note that there are opportunities for additional empirical research in this area that we have not explored.

Given that the aforementioned analysis suggested that socially responsible behaviour and sustainability are not significantly correlated to economic performance, we also analysed the literature on non-economic value of organizations, aka 'Social Value' and its measurement. Hysa, et al, (2018) discuss more directly the issue of monetizing and quantifying an objective measure of 'social value', noting a number of problems with such a process, not least the theoretical dichotomy of trying to get an objective measure of a subjective concept. Several other authors propose that measurements of organizational performance should, in addition to economic value, be based on similar concepts of non-economic value, such as social value (Hadad & Gauca, 2014), shared-value (Porter & Kramer, 2019), social markets (Mulgan, 2010), socio-economic return (Retolaza, et al. 2014) and social added-value (Mannarini et al., 2018). Common to each of these concepts is a focus on inclusion of multiple stakeholder interests and a consideration of the general environment in which the organization operates and its impact thereon. In general, therefore, we can consider the total 'performance' of a co-operative organization to be a composite of measures covering three broad categories of outcome: Economic, Social and Environmental, each providing important information relevant to stakeholders whose interests are focused in those areas (as shown in Figure 2).

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New measures of value in the areas of Social and Environmental activity need to be developed in order to deliver useful reporting on total co-operative performance. This is the message we have consistently seen in the literature review, as noted above.

What are the key drivers of non-economic value? We can see this emerging in Figure 2. Malan and Ungerer (2017) discuss the requirement of purpose in an organization to create value related to that purpose. They review the different theoretical models of value in organizations' purpose, contrasting the economic value ideology as espoused by authors Porter & Kramer (2011) in their Creating Shared Value (CSV) concept, versus the normative ideology of Donaldson & Walsh (2015) in their Optimised Collective Value (OCV) model. The latter focuses on moral value, which can be equated to our terms social & environmental value. Whilst Malan and Ungerer's discussion does not pit one theory against the other, our research supports the adoption of the latter theory as being more appropriate for co-operative organizations. Research by Slintak and Dvorsky (2019) supports this conclusion in that they advocate for a more complete purpose specified by firms as opposed to the purpose of 'making profit'. Their more complete purpose is generalised as 'service to society', in which economic performance is a requirement, but sits alongside creating what we have referred to herein as social value.

In order for social and environmental value to be separated from and measured differently than economic value, it is necessary for there to be separate social and environmental goals that are derived from the organizational purpose aspects relevant to social mission and from a knowledge of the relevant stakeholder interests. In their review of Italian social enterprises' reporting of social impact, Costa and Pesci (2016) highlight the potential of organizations to pick and choose the metrics (and therefore the goals) used in order to produce the most flattering reporting and suggest that involvement of stakeholders and the use of independent standards would help alleviate this issue. We were therefore interested to see if co-operative organizations could or are utilizing the UN SDGs as the basis for separate social and environmental goals and metrics.

From our review of the documentation on the UN SDGs, we categorised the underlying elements of each one into groupings of Economic, Social and Environmental based on the need (stakeholder interest) addressed (see Figure 2). There was a lack of research that related to direct reporting of co-operatives on the SDGs themselves. There was a greater propensity for literature to focus on co-operatives use of the GRI as the reporting model in relation to non-economic activity. As such, we added GRI items, grouped into our three categories onto our word-map, to show how they could be used to measure and report on SDG goal progress. The literature review, however, highlighted issues with co-operatives' use of the GRI (Adams, 2004 and Toit & Buys, 2013). In particular, it was noted that current GRI reporting did not encompass the duality of co-operatives' missions stemming from the Co-op Principles (Anzilago et al, 2018).

The Co-op Principles do not map one-to-one with the UN's SDGs, and are not in themselves measures of organizational value. However, by reviewing for the keywords and synonyms within each of the Principles, we are able to find commonality with the SDGs and GRI and they can therefore be added into the same standard categories used for the SDGs and GRI as reflected in Figure 2.

The word-map (Figure 2) hence provides a link to tie the goals discussed in the SDGs and the performance related to those goals, to the values applied by co-operative organizations in undertaking activity relating to the goals (since Principles are effectively organizational values that co-operative management should be utilizing in their decision-making process). We therefore examined the literature on the role of the Principles (or more generally organizational values) in sustainability/CSR activity and social and environmental mission.

Several authors have investigated the relationships between organizational values, CSR/sustainability and performance. Sullivan et al. (2001) note the benefits to organizations of being values-led, particularly in the context of delivering change. Tolivar (2013) reviewed the prevalent models of CSR and identified the common values that underpin these models. Florea et al. (2013) argue that clearly defined organizational values are required for effective implementation of CSR programs. Given that the research highlighted problems with the measurement of non-economic performance, it was expected that organizational values would be a key element for success; and that

'success' would include benefits to the organization such as increased employee retention and improved innovation. And this is indeed confirmed in the work of Johnson (2009) and Maletic, et al (2015).

Any organization, of course, is driven by its stakeholders, in particular the employees. We therefore examined literature on the relationships between employees and CSR/sustainability and that of employee-organization values alignment.

The work of Plante et al. (2013) and Priesmeyer (2011) explore the role of personal values and motivations in the context of behaviour within the organization. Both indicate that alignment of employees' individual values with those of the organization produces positive results for both the organization and the employees. Similarly, Hackett (2010) finds that employee motivations toward certain behaviours (such as sustainability efforts) are stronger where anchored in employees' personal values.

From this research review we can conclude that organizations are more likely to succeed in implementing programs that are non-economic in nature (such as CSR or sustainability efforts) if they have a clearly defined set of values that are aligned with employees' individual values in this area. Indeed, Florea et al. (2013) confirm that sustainability practices need to be implemented through a shared values system between the organization and the employees in order to be effective. In addition, Martin (2002) identifies that there is a clear competitive advantage for co-operative organizations where co-operative principles are effectively communicated to the stakeholders. Similarly, Borzaga and Depedri (2012) suggest that co-operative enterprises have been more successful than other forms of social enterprise in Italy, in part due to their well identified co-operative principles.

Also, Ramus and Vaccaro (2017) in their work on mission drift in social enterprises, conclude that stakeholder engagement is a vital component of ensuring mission drift does not occur, along with the need for strong organizational social values and social performance reporting.

To summarize the findings from our literature review, there are three key elements for consideration regarding co-operatives, sustainability reporting and the SDGs. These illustrate the causes for the shortcomings in current co-operative sustainability reporting practices.

First, current methods of reporting on sustainability (and similar items such as CSR in general) are not necessarily producing useful information for stakeholders in relation to the value of such activities. This is due largely to the nature of most models used, which tend to focus on quantitative assessments and internal organizational (i.e. single stakeholder) and economic outcomes, and therefore do not capture value related to non-economic impacts or impacts to multiple stakeholders (which can be described as the 'social mission' of the organization). This issue is particularly relevant for co-operatives due to their broader stakeholder involvement and the inherent social mission derived from the Principles.

Second, new models are required to capture the value related to activities undertaken to further the social mission. Value produced by the organization, measured as 'performance' can generally be split into three groupings based on the organizational need addressed: Economic, Social and Environmental value/performance. Such stakeholder interest-based grouping is also evident in the documentation relating to both the SDGs and the Principles. This allows us to identify the relevant goals and the specific values used for managing activities to fulfill organizational mission in the Social and Environmental areas. The identified values in turn provide guidance as to the correct metrics to use in order to provide useful information to the organization's stakeholders.

And third, social mission activities (such as CSR and sustainability programs) are found to be more effective where the organization has clearly defined purpose and values relevant to such activities. Alignment of the organizational values with the personal values of relevant stakeholders (e.g. employees and members) will increase the benefit to the organization in relation to all three performance groups (economic, social and environmental).

Discussion

In addition to identifying the causes of the shortcomings in current co-operative sustainability reporting practices, we also proposed two other objectives—to assess how best to address those causes, and to create a more effective

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model of sustainability measurement and reporting for co-operatives using the UN SDGs as a global benchmark. The first objective has provided the springboard to the second and third objectives. Our research indicated that, in general, although co-operatives are more susceptible to the limitations of the widely used current models of reporting in relation to producing a holistic picture of the performance of the organization (i.e. GRI), they are also uniquely well placed to overcome those limitations for the very same reason – the co-operative identity and Guiding Principles.

The literature has told us a great deal about how to best assess the shortcomings in current co-operative sustainability reporting practices. As discussed by Aram (1997), and by Hysa et al (2018), although the roots of capitalism are founded on principles relating to group strength and co-operation, the free-market model of current capitalism will over time work to erode that principle by prioritising economic value only. Hysa et al (2018) argue that the focus on resolving market inefficiencies is at the expense of social values. The current free-market model results from the (incorrect) ideological assumption that progress equates to economic growth and that maximising it will additionally lead to optimal social development. The primacy of economic development devalues social development and thereby produces a model of capitalism that tends to undermine its own foundational concepts due to its liberalist individualistic mechanisms (notably, through personal affluence, use of technology and globalisation) (Aram, 1997). This in turn drives inequality within the sphere of influence of the organization. Where the relative sphere is small, this issue has less impact; however, the nature of business over the past several decades has become increasingly global in scope, with large multi-national organizations coming to dominate many markets. As such, the inequality driven by this form of capitalism is becoming an increasingly significant problem, in both the countries exploited by such organizations and the countries in which they are based.⁴ For example, the benefit is becoming increasingly focused on economic benefit for a limited set of stakeholders, while the impact is being felt at social and environmental levels, too, and affecting an increasing variety of stakeholders (Forte, 2013).

The focus on economic value creation in the ideology, as well as driving issues as noted above, also results in a focus on economic value in the associated current reporting models, even where such reporting is on activities whose primary objective is not economic – such as sustainability. Evaluating such activity in this manner is unlikely to produce information that is useful in promoting its benefits to the organization (or society) on a holistic level. This is supported by the findings of this research.

In contrast to the current favoured liberal free-market capitalist ideology, as far back as the 18th century, scholars viewed trade as an activity that drove both economic and social value, and was an integral component of civil society (Hysa, et al, 2018). The concept of trade as beneficial on a social level as well as economic, is something that eventually resurfaced in the early development of the co-operative movement and is best illustrated with the following quote, which is alongside the ICA Statement of Co-op Identity at the Rochdale Pioneers museum:

The co-operative ideal is as old as human society. It is the idea of conflict and competition as a principle of economic progress that is new. The development of the idea of co-operation in the 19th century can best be understood as an attempt to make explicit a principle that is inherent in the constitution of society, but which has been forgotten in the turmoil and disintegration of rapid economic progress.⁵

This founding ideology of the co-operative movement is something that was enshrined in the Co-operative identity and later encapsulated also in the Principles to be utilised to effect the identity. Co-operative organizations therefore are inherently driven to producing value in both a societal sense and an economic sense.

In the same way that issues associated with liberal capitalism increase with organizational scale, so too does the difficulty in realizing benefits of socially-focused business. Fortunately, co-operation amongst co-operatives is one of the Principles and co-operatives therefore have reduced pressure to cannibalise the market, preferring instead to work with and alongside peer organizations. In addition, the values associated with diversity, cultural sensitivity and respect for local community also work to ensure that a co-op looks to act locally even when thinking globally. Again, co-operative organizations have an inherent set of values that can be used to help offset issues of scale, provided an effective measurement and reporting system is in place relating to those values and stakeholder interests.

Co-operatives have the organizational ideology within their formulation to avoid some of the issues noted above re capitalist activity; however, this creates an increased need to ensure effective measurement and reporting of organizational performance in this area in order to give them the tools to be able to use their advantage. Reporting needs to be focused on Social Value as opposed to Economic Value, for which a new set of measures and processes is required. This viewpoint is also supported by the research.

Our research indicates therefore that the Co-operative Principles do support and drive the organization's efforts in Sustainability (and other Social Value creation activities); however, we believe this advantage is currently under-utilised due to deficiencies in the reporting and measurement processes used.

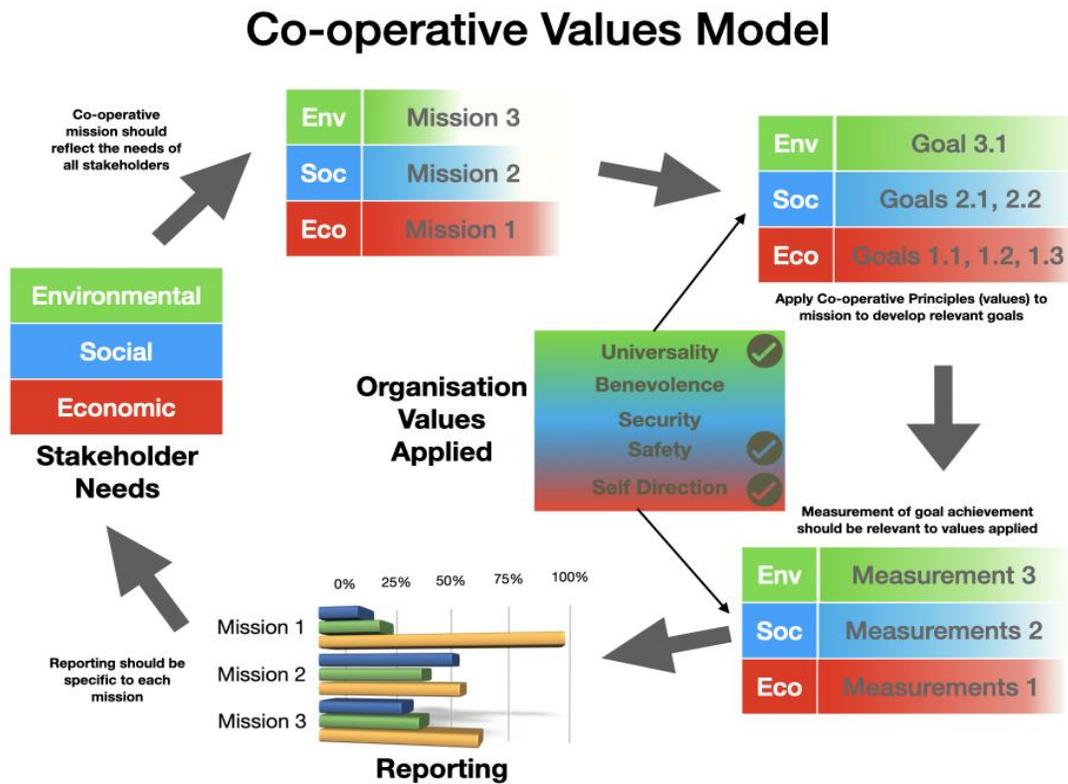
In addition to supporting organizational social mission activities, the existence of the Principles also supports the co-operative focus on its stakeholders and their requirements. From the ICA Guidance Notes: "...a co-operative is an association of persons united voluntarily to meet their common economic, social and cultural needs" (2015, p.1).

In terms of individual stakeholders, Lopez Davis and Ruiz de Maya (2017) discuss the concept of Personal Social Responsibility (PSR) and also refer to the economic, social and environmental aspects of individuals actions. They take the research done on socially responsible consumer behaviour and its links to corporate responsibility and extend it to the non-economic activity of the individual. They conclude that PSR can promote and amplify CSR for companies where strategies and goals are based on responsibility, transparency and mutual respect (in addition to economic growth). As we have illustrated, due to the co-operative identity and the Principles, co-operative organizations have an inherent and clearly elucidated expectation to set goals and perform in a responsible, transparent and respectful manner. They should therefore be well-positioned to benefit from the alignment of values between the stakeholders and the organization created by the promotion of the PSR concept.

The UN SDGs as written are macro, globalised and governmental targets and may not therefore be useful as goals relevant to any specific organization in terms of social and environmental value drivers. However, our analysis suggests that where organizations set social and environmental goals derived from the SDGs and in line with their overall strategy, they can use the values set out in the Principles to form the backbone linking individual stakeholder motivations with holistic organizational performance. This will result in contributions to societal objectives in the areas of social and environmental purpose as well as economic. Setting up such a model would assist in developing a business environment that works to address some of the most pressing societal issues we are facing today.

Our research identified a consensus that a new method of valuing social and environmental performance is required in order to fulfill this mission, but a lack of consensus on how activities in those areas should be measured is preventing significant progress. Our research and conclusions can be summarised into a model (see Figure 3) showing the relationship of the organization, its purpose, values and reporting processes to its stakeholders. This is the third objective of our research. It is our assertion that the model we propose herein for examining the values relevant to the goals, objectives and motivations associated with the social and environmental activities should be the starting point for future research and action; in particular examining how values can be used to determine appropriate metrics/measurements for each such activity.

Figure 3: Co-operative Values Model



The above figure illustrates the virtuous circle that results from aligning values at the stakeholder, organization and customer levels for co-operatives and assuming that a suitable measure can be determined for reporting. The circle can be said to be virtuous because the way the co-operative works toward the goals must be in line with the Co-operative Principles and reported effectively back to the relevant stakeholders.

Inherent in the organizational structure of a co-operative there is a non-economic mission in addition to the economic one, not least because the co-op members represent both economic (owners) and social (users) stakeholders. It is likely that co-op members represent a specific community that would also constitute them as environmental stakeholders (such as a local dairy co-op, although environmental in this respect is not limited to geographical environment). Different stakeholder needs are more likely to be represented by different individual stakeholders in non-co-op organizations. Provided that co-operatives have identified their non-economic missions and taken steps to convert these missions to specific goals (not just economic goals), management can utilise the Co-op Principles as the backbone of the measurement efforts for each goal to show how the range of impacts is driven across the different stakeholder needs.

Having inputs, goals and impacts identified across the spectrum of economic, social and environmental needs promotes a more holistic reporting and determination of organizational value. The model also can be used to more easily identify which UN SDGs are relevant for the specific co-operative and provide evidence of how the co-operative is working toward such SDGs.

Co-operative organizations have an advantage over other forms of organization due to the co-operative identity and Principles, which emphasize social and environmental considerations in addition to economic. Co-operatives should therefore be at the forefront of sustainability and social responsibility by ensuring that their reporting properly evidences the holistic value that they are producing. An effective way of measuring non-economic value is essential.

In this paper we argue that an assessment of the application of the specific Principles to each goal would be a potential method of determining such value.

Conclusions

We began this research with the question: can co-operative organizations make use of the Co-operative Principles to develop a measurement and reporting model that addresses the identified shortcomings of current practice relating to sustainability reporting? We had three objectives by way of answering this research question: one, to help identify the causes of the shortcomings in current co-operative sustainability reporting practice; two, to assess how best to address those causes; and three, to propose that a more effective model of sustainability measurement and reporting can be developed with a specific emphasis on the UN SDGs as a global benchmark for co-operatives.

Our review of the literature on topics related to co-operative organizations, sustainability and performance identified several weaknesses in the common approach to reporting and managing these items. Poorly defined concepts of Corporate Social Responsibility (of which sustainability is a subset) have tended to focus the attention of actors in this space to consider the organization as a closed system of management, forcing a myopic view of stakeholder interests and organizational performance, in which economic performance is paramount and other activities are required to evidence positive economic impact in order to be justified. We contend that organizations are open systems with multiple stakeholders bearing multiple impacts and outcomes from the activities of the organization and they therefore carry a responsibility for accounting for such impacts and outcomes to all stakeholders. In such a system, it is evident that economic performance is merely one factor of overall organizational performance and that it is derived from the needs of a single set of stakeholders – those with an economic interest in the organization. Attempting to justify one area of performance in terms of another is both unlikely to show the correlation required for such justification and unnecessary; each area of performance exists to provide information to a particular set of stakeholders. For example, it is not necessary to justify social performance in economic terms, because the social performance is required to satisfy the needs of stakeholders whose primary benefit is not economic; provided that social performance does not detract from the economic performance to such an extent as to create an existential threat to the organization. Similarly, economic performance cannot be used as a justification to avoid social performance; again, a certain threshold of existential social performance must be met regardless of economics.

Note, an organization may have stakeholders that have multiple interests in the organization and therefore form a part of different stakeholder sets discussed above. Indeed, members of co-operatives, for example, would form part of both the set of economic stakeholders in the organization and also the set of social stakeholders. As well as the multiple needs of the members of a co-operative, there will always be stakeholders beyond the formal members, since no organization is devoid of geography or locus of impact from its activities. All organizations therefore owe a duty and should be accountable to multiple formal and informal stakeholders and should be reporting performance relevant to all such stakeholder interests in relevant terms.

The concept of the organization as an open system accountable to multiple stakeholders helps rationalise the difficulty many researchers have had in developing an effective economic argument for CSR and/or sustainability. This was borne out by the literature we reviewed, in particular when examining the commonly noted criticisms of current reporting models, such as internal organizational focus, use of only economic type measures, etc. We note that there is no agreed definition of Social Responsibility for organizations and that there is opportunity for further work in this area. All research in this area would benefit from a more detailed specification of the concept, and its operation and boundaries.

Our work is focused on co-operative organizations and we reviewed documentation relating to the co-operative sector. This includes specific ethos and guidelines for co-operatives that form a set of guiding principles, which can be used to identify co-operatives' stakeholders and their needs. These principles support our assertion of the co-operative organization as an open system that impacts a broad range of stakeholders who are impacted in a broader set of ways than just economic outcomes and that the organization attains its legitimacy from its responsibility to the complete range of stakeholders.

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Our review encouraged us to delineate organizational performance into three distinct categories; economic, social and environmental. It should be noted that this delineation is for academic purposes and that there is crossover at the boundaries such that whether an item is considered to be social or environmental, for example, is somewhat dependent on the opinion of the user. Such delineation is useful in that it enables us to identify how the activities of the organization work to address the needs of each set of stakeholders. We did this by producing the word-map, which groups common terms from the Co-op Principles, the GRI reporting tool and the UN SDGs within each of the general categories: economic, social and environmental. The word-map evidences how the organization can use the Principles as the operationalising tool to marry sustainability goals (such as the SDG) to relevant outcomes and the reporting thereof (e.g., GRI). Although we encountered some criticism of GRI reporting and its applicability to co-operative organizations, in the absence of a suitable alternative for co-operatives specifically, it worked well to illustrate the general linkage as discussed previously. Developing a more co-operative specific set of reporting tools in line with the results of this paper and the model developed herein is an area of future research that we intend to undertake.

As an operational mechanism, the Principles reflect a set of organizational values that affect outcomes of activity and therefore impact stakeholders. Where the organizational values are aligned with the values of different stakeholders of the organization, goals can be set relevant to each set of stakeholders and outcomes managed to produce impacts relevant to achieving those goals. The literature review evidenced that sustainability and social responsibility efforts were more successful when organizational values were aligned with key stakeholder values.

We therefore developed the model presented whereby co-operative organizations can utilise the Principles and the stratification of interests, mission, goals and activities into Economic, Social and Environmental categories to develop an aligned process of delivering impact in all areas and to each set of stakeholders. The development of the stratified mission, goals and activities determines the relevant outcomes and required reporting. Although the word-map showed sufficient support for the model using standardised goals (the UN SDGs) and standardised holistic reporting tools (GRI), the challenge for future research in this area is to develop a more co-operative specific reporting tool based on the Principles as the operational mechanism. This should reduce the criticisms of applying GRI reporting and measures to co-operatives and the difficulties in translating the UN SDGs into organizational level relevant goals.

References

- Adams, C. A. (2004); "The ethical, social and environmental reporting-performance portrayal gap". *Accounting, Auditing & Accountability Journal*, 17(5), 731-757.
- Anzilago M., Panhoca L., Bezerra C. A., Beuren I. M. & Kassai J. R. (2018); "Values or hypocrisy: the global reporting initiative mapping in agricultural co-operatives in Paraná, Brazil"; *Environ Monit Assess* 190: 487. DOI: 10.1007/s10661-018-6870-5
- Aram J. D. (1997); "Challenges to the Social Foundations of Capitalism in an Age of Global Economics"; *Human Relations*, Vol 50, No.8.
- Borzaga, C. & Depedri, S. (2012); "The emergence, institutionalisation and challenges of social enterprises: the Italian experience"; *CIRIEC-España, Revista de Economía Pública, Social y Co-operativa*, 75, 35-53.
- Cornforth, C. (2014); "Understanding and Combating Mission Drift in Social Enterprises"; *Social Enterprise Journal*, Vol 10, No 1, pp 3-20; DOI: 10.1108/SEJ-09-2013-0036
- Costa, E. & Pesci, C. (2016); "Social impact measurement: why do stakeholders matter"; *Sustainability Accounting, Management and Policy Journal*, 7 (1), 99-121
- Donaldson, T. & Walsh, J. (2015); "Toward a theory of business"; *Research in Organizational Behavior*, 35:181-207. <https://doi.org/10.1016/j.riob.2015.10.002>
- Florea, Liviu; Cheung, Yu Ha; Herndon, Neil C (2013); "For All Good Reasons: Role of Values in Organizational Sustainability"; *Journal of Business Ethics: JBE; Dordrecht* Vol. 114, Iss. 3, (May 2013): 393-408. DOI:10.1007/s10551-012-1355-x

- Forte A. (2013); "Corporate Social Responsibility In The United States And Europe: How Important Is It? The Future Of Corporate Social Responsibility"; *International Business & Economics Research Journal*. Volume 12, Number 7
- Gilligan, C. & Golden, L. (2009); "Re-branding Social Good: Social Profit as a New Conceptual Framework"; *Academy of Marketing Studies Journal*, 13 (2), 97-117
- Guzman C., Santos F. J. & de la O. Barroso M. (2019); "Analysing the links between co-operative principles, entrepreneurial orientation and performance"; *Small Bus Econ*; DOI: 10.1007/s11187-019-00174-5
- Hackett, J.D. (2010); "Values Anchoring: Strengthening the link between values and behaviour"; *Claremont Graduate University*. UMI Number: 3421448
- Hadad, S. and (Drumea) Găucă, O. (2014); "Social impact measurement in social entrepreneurial organizations"; *Management & Marketing. Challenges for the Knowledge Society*, Vol. 9, No. 2, pp. 119-136.
- Haleem F., Boer H. & Farooq S. (2014); "Environmental and social pressure as drivers of corporate social responsibility in a globalizing world"; Conference paper, 2014
- Hysa X., Zerba E., Calabrese M. & Bassano C. (2018); "Social business as a sustainable business model: making capitalism anti-fragile"; *Sustainability Science*, 2018, 13:1345-1356; DOI: 10.1007/s11625-018-0566-1
- International Co-operative Alliance (2015); "Guidance Notes to the Co-operative Principles"
- Johnson, Kimberly M. (2009); "The Influence of Organizational Values on Profitability"; *Auburn University*; UMI 3394616
- KPMG (2017); "Survey of Corporate Responsibility Reporting"; <https://assets.kpmg/content/dam/kpmg/be/pdf/2017/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf>
- Laskar N., Maji S. G. (2017); "Corporate Social Responsibility Performance and Firm Performance: A Cross Country Analysis from Asia"; *IPE Journal of Management*, Vol 7, No 1 2017; ISSN 2249-9040
- Lauermann G.J., Moreira V. M., Souza A. & Piccoli P.G.R. (2018); "Do Co-operatives with Better Economic-Financial Indicators also have Better Socioeconomic Performance?"; *International Society for Third-Sector Research; Voluntas*; DOI: 10.1007/s11266-018-0036-5
- Lopez Davis S., Ruiz de Maya S. (2017); "Introducing Personal Social Responsibility as a key element to upgrade CSR"; *Spanish journal of Marketing ESIC*, vol 21, issue 2, Sep 2017; DOI:10.1016/j.sjme.2017.04.001
- Malan D & Ungerer M (2017); "Communicating Progress on Meeting the UN Global Compact Goals: An Analysis of the South African Experience"; *African Journal of Business Ethics, Stellenbosch Vol. 11, Iss. 2, (2017)*. DOI:10.15249/11-2-158
- Maletic, M., Maletic, D., Dahlggaard, J.J., Dahlggaard-Park, S.M., Gomiscek, B. (2015); "Do Corporate Sustainability Practices Enhance Organizational Economic Performance?"; *International Journal of Quality and Service Sciences*, Vol. 7 No. 2/3, 2015;
- Mannarini T., Talo C., D'Aprile G. & Ingusci E. (2018); "A Psychosocial Measure of Social Added Value in Non-profit and Voluntary Organizations: Findings from a Study in the South of Italy"; *International Society for Third-Sector Research; Voluntas* (2018); 29:1315-1329; DOI: 10.1007/s11266-018-00061-9
- Martin, C. (2002); "A further exploration of "is there a co-op advantage"?"; *Management Quarterly*; Summer 2002; 43, 2;
- Mayo, E. (2011); "Co-operative Performance"; *Sustainability Accounting, Management and Policy Journal*, 2 (1), 158-164.
- Mulgan, G. (2010); "Measuring Social Value"; *Sanford Social Innovation Review*, Summer, 38-43.
- Plante I., O'Keefe P.A., Theoret M. (2013); "The relation between achievement goal and expectancy-value theories in predicting achievement-related outcomes: A test of four theoretical conceptions"; *Motiv Emot* 37:65-78 DOI 10.1007/s11031-012-9282-9
- Porter M. E., & Kramer M.R. (2011); "Creating Shared Value"; *Harvard Business Review*, Jan-Feb 2011
- Priesmeyer R.H. (2011); "Emotional Components of Unethical Decisions: An Exploratory Study"; *Journal of College Teaching & Learning* – December 2011 Volume 8, Number 12
- PwC (2018); "SDG Reporting Challenge – 2018"; <https://www.pwc.com/gx/en/sustainability/SDG/sdg-reporting-2018.pdf>
- Ramus, T. & Vaccaro, A. (2017); "Stakeholders Matter: How Social Enterprises Address Mission Drift"; *Journal of Business Ethics*, 143:307-322; DOI 10.1007/s10551-014-2353-y

Co-operative Sustainability Performance Measurement: The Role of the Co-op Principles and UN Sustainability Development Goals in the Reporting Model

- Retolaza J.L., San-Jose L. and Ruiz-Roqueñi M. (2014); "Monetizing the Social Value: Theory and Evidence"; *CIRIEC-España, Revista de Economía Pública, Social y Co-operativa* Nº 83/2015, pp. 43-62; ISSN: 0213-8093
- Schneider, A. (2015); "Reflexivity in Sustainability Accounting and Management: Transcending the Economic Focus of Corporate Sustainability"; *Journal of Business Ethics: JBE; Dordrecht* Vol. 127, Iss. 3, (Mar 2015): 525-536. DOI:10.1007/s10551-014-2058-2
- Slintak, K. & Dvorsky J. (2019); "The Purpose of Firms and its Influence on Formulating Their Mission and Vision"; *Montenegrin Journal of Economics*, Vol 15, No 2, 015-029; DOI: 10.14254/1800-5845/2019.15-2.2
- Sullivan, W., Sullivan R., Buffton, B. (2001); "Aligning Individual and Organizational Values to Support Change"; *Journal of Change Management*, 2:3 247-254, DOI 10.1080/738552750;
- Toit, M. & P. Buys, P. (2013); "An Evaluation of the Co-operative Business Model Within The Context Of The Global Reporting Initiative"; *International Business & Economics Research Journal*, 12 (2), 179-191.
- Tolivar, A. D. (Aug 2013); "Measuring Corporate Social Responsibility Through Corporate Values: A Scale Validation Study"; *University of Texas at Arlington*; UMI Number: 3598537;
- United Nations, (2015); "Sustainability Development Goals"; Retrieved from <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>
- Welter, Kirk A. (2011); "A Study of Publicly-Held U.S. Corporations on the Effects of Sustainability Measures on Financial Performance, Utilizing a Modified Regression Discontinuity Model"; *Lawrence Technological University College of Management*; UMI Number: 3488003

Notes

- ¹ See 'Targets and Indicators' pages for each goal at the UN SDG website.
- ² Principle 7 was created and formally adopted in 1995 in the context of the UN's 1992 Earth Summit in Rio as a result of which the UN SDGs were eventually developed – see ICA Guidance Notes to the Co-operative Principles (2015, p 85) for more detailed discussion.
- ³ 93% of the world's largest 250 corporations use GRI (KPMG, 2017).
- ⁴ See also UN Trade report 2017 for more detailed discussion on this issue.
- ⁵ From "Consumers' Co-operation in Great Britain", A M Carr-Saunders, P Sargent Florence and Robert Peers, G Allen and Unwin, London (1938).

Appendix A: Linguistic Domains and Markers for SDGs and Co-op Principles

Sustainability Development Goals

Stakeholder interest/Impact areas (linguistic domain)

1. Individual Physiological & Safety Impacts
2. Individual Security through group belonging/community impacts
3. Community Social/Institutional Development & Growth impacts
4. Societal and Environmental Impacts

Markers

- a) Poor, poverty, bad-health, economic-resources, economic-benefit, minimum-wage, social-insurance, hunger, food-security, markets, malnutrition, safe, mortality, deaths, disease, health-insurance, violence, sexual-health, mental-health, medicine, vaccine, supply
- b) Ownership, membership, community, employment, education, discrimination, participation, labour, gender-equality, training, energy, corruption, work, financial services, underserved

- c) GDP, growth, safety-net, agriculture, government, co-operation, partnership, institutions, regulation, infrastructure
- d) Justice, climate, arts, environment, pollution, sanitation, charity, research, technology, war, peace, human-rights, global, ecosystem, wildlife, renewable, recycle, production, waste

Attributes

Open, fair, equitable, democratic, autonomous, responsible, balanced, quality, diverse, inclusive, respect, clean, affordable, transparent, accountable, engage, independence, elected

Combinations of attributes and markers create marker phrases that identify the linguistic domains.

Co-operative Principles

Responsible stakeholder/focus area (linguistic domain)

- a) Individual focus/impacts
- b) Organizational focus/impacts
- c) Extra-organizational focus/impacts

Markers

- a) Voluntary, use-services, willing, accept, contribute, control-capital, allocate, benefit-members, autonomous, control-by-members, participate, economic
- b) Membership, all-persons, without-discrimination, common-property, representative, voting-rights, policies, member-approved, education, training
- c) Co-operation, working-together, general-public, government, international, agreements, sustainability, environment, communities, co-operative-movement

Attributes

Open, responsibility, self-help, democracy, equality, equity, solidarity, ethical, honest, social-responsibility, caring, accountable, active, inform, serve, strengthen

Exploring the Links Between the Practices of Forestry Cooperatives and the SDGs

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Abstract: The 17 Sustainable Development Goals (SDGs), adopted by the General Assembly of the United Nations in 2015, represent the main global challenges to be met worldwide. Since they are directly influenced by actions taken at the micro level, the commitment of businesses, including cooperatives, to their implementation is very important. In theory, cooperatives that act in accordance with the cooperative principles agree to commit to the sustainable development of their community, as enshrined in the 7th cooperative principle. The latter principle specifies, however, that this commitment is made through policies approved by their members, which means that it depends on decisions made by the collective of members, based on their needs and aspirations. The commitment of cooperatives to sustainable development must, therefore, be demonstrated by concrete actions. This article aims to highlight the existing links between the practices of forestry cooperatives in Quebec and Honduras and the SDGs. We show that the cooperatives under study adopt practices related to all SDGs, except for SDG 14, although their commitment is not yet formalized within their core business. This suggests that they are likely to contribute even more positively to the implementation of the SDGs if they formally commit to them through a collective strategy across their respective networks. Although these results cannot be generalized, we suggest that the collective participation of members in ownership, power and results, characteristic of cooperatives, represent a considerable contribution to the fight against poverty, the reduction of inequalities and the promotion of just, peaceful and inclusive societies.

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Mots-clés : Objectifs de développement durable, coopératives forestières, coopératives de travailleurs forestiers, coopératives agroforestières, Québec, Honduras

Keywords: Sustainable Development Goals, forestry cooperatives, forestry workers' cooperatives, agroforestry cooperatives, Quebec, Honduras

Introduction

Ending poverty, protecting the planet and ensuring global peace and prosperity: these are the ambitions of the 2030 Agenda for Sustainable Development, adopted by the General Assembly of the United Nations in 2015 (Resolution 70/1). This global blueprint is based on a list of 17 Sustainable Development Goals (SDGs), which represent the main areas of economic, social and ecological intervention on which governments, organizations and civil society are invited to act worldwide. While these overarching goals provide a macro perspective of the challenges to be met in terms of sustainable development, they are directly influenced by action on the ground, at the micro level (Jasmine, 2017). The contribution of businesses to the implementation of the SDGs, "broadly defined by movement toward the global societal aims expressed in the SDGs" (Gregersen, Lakany and Blaser, 2017, p. 21), is therefore very important.

In this context, “the relationship of business and society” must be examined by asking how it can effectively contribute to solving global challenges (Dyllick and Muff, 2015). What distinguishes a sustainable organization from another is indeed its ability to reflect on how its activities can generate positive impacts on society and the environment and to translate the challenges of sustainable development into its core business, its activities and its practices (Amui, Jabbour, de Sousa Jabbour and Kannan, 2017; Dyllick and Muff, 2015; Stappmans and Bereuther, 2017). However, this approach requires a change of perspective “from seeking to minimize its negative impacts to understanding how it can create a significant positive impact in critical and relevant areas for society and the planet” (Dyllick and Muff, 2015, p. 11). This “outside-in” approach differs from the more generalized “inside-out” approach, in which organizations seek to reduce their negative impacts in order to benefit financially from integrating sustainable development issues into their strategy (Dyllick and Muff, 2015). The success of organizations now depends on their ability to find “innovative solutions that address global issues and, simultaneously, fulfill stakeholders' needs” (Amui *et al.*, 2017, p. 308).

The 2030 Agenda for Sustainable Development explicitly mentions cooperatives in the section on the means of implementation of the SDGs. However, because of their broad formulation, it may seem difficult for local cooperatives to concretely associate the SDGs with their daily activities (Alliance coopérative internationale (ICA), 2017). Furthermore, the targets and indicators describing the SDGs have been designed for national and regional levels, which does not facilitate their translation into objectives or indicators at the organizational level. Hence, some adaptation work has to be done by local organizations that wish to integrate the SDGs in their strategies and practices, in particular by identifying their current and potential impacts on implementation. This article therefore aims to highlight the existing links between the practices of forestry cooperatives in Quebec and Honduras and the areas of intervention expressed in the SDGs. It reports the results of research carried out in collaboration with the Fédération québécoise des coopératives forestières (FQCF) and the Société de coopération en développement international (SOCODEVI), which aimed to better understand the nature of the current contribution of Quebec and Honduran forestry cooperatives to SDGs, based on their perceptions and practices. Beginning with a brief summary of the knowledge surrounding the links between the forestry sector and the SDGs, then that concerning the commitment of cooperatives to sustainable development, the article continues by addressing the methodology adopted and the cooperatives under study. The practices identified as part of this research are then presented and analyzed in relation to the SDGs and their targets. The article shows that forestry cooperatives are already contributing to the implementation of many SDGs, although their commitment is not formalized within their core business. This finding suggests that certain characteristics intrinsic to the cooperative model may favour their contribution to the social, ecological and economic challenges reflected in the SDGs, which is the subject of the concluding discussion.

State of current knowledge

While forestry co-operatives are active in many countries (Guillotte and Charbonneau, 2016), we found no research so far about their contribution to SDGs, which can be partly explained by the recent adoption of the SDGs. Therefore, in this section, we discuss the relationship established between the forestry sector and the SDGs in recent literature before turning to the one on the commitment of cooperatives to sustainable development.

Forestry sector and SDGs

The role of forests in achieving the SDGs is explained by many researchers. Some argue that forests can contribute to all of the SDGs, by providing various ecosystem services (Gonzalez-Navarro, Tomei and Flores-Oyarzo, 2018; International Institute for Environment and Development, 2014). Forests fulfill a multitude of functions: they protect and improve ecosystems, create wildlife habitats, help regulate climate systems, protect soils and watersheds, provide spaces for recreation and contemplation in addition to providing a multitude of wood and non-wood products (Gonzalez-Navarro *et al.*, 2018).

SDG 15, which aims in particular to protect terrestrial ecosystems, explicitly mentions forests. From a theoretical point of view, it is generally accepted that rural communities dependent on forests directly benefit from the products and services provided by the forest, such as the provision of income and employment (SDGs 1 and 8), the purification of water (SDG 6), the regulation of services for agriculture (SDG 2) or even access to energy (SDG 7), medicinal

components (SDG 3), building materials (SDG 11) and green spaces (SDG 11) (Gonzalez-Navarro *et al.*, 2018; Baumgartner, 2019; De Jong, Pokorny, Katila, Galloway and Pacheco, 2018). Researchers also recognize that forests can contribute to climate action (SDG 13) (De Jong *et al.*, 2018; Baumgartner, 2019).

However, little research has focused on the contribution of forestry sector actors to the various SDGs. The main objective assigned to this sector in the context of the SDGs is that of ensuring the implementation of practices that are consistent with sustainable forest management, often associated with the following three objectives (Gregersen *et al.*, 2017) :

- curtailing illegal deforestation and unneeded forest conversion and degradation [...];
- building up the global forest estate through afforestation, reforestation, and agroforestry, including restoring degraded forests and abandoned agricultural and other lands; and
- governing, managing and utilizing both natural and planted forests and trees in more efficient, effective, equitable and sustainable ways. (p. 14)

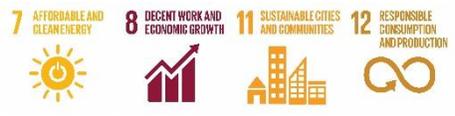
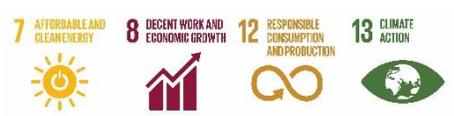
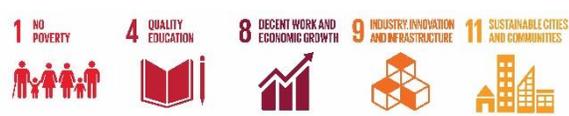
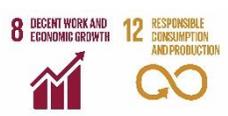
The emphasis on sustainable forest management does not, however, represent adequately the possible contribution of forest industry stakeholders to the SDGs. Hazarika and Jandl (2019) obtained the views of leaders of the Austrian forestry sector (research institutes, forestry institutes, non-profit organizations and ministerial units) regarding the possible synergies between SDG 15 (protection of terrestrial ecosystems) and the other SDGs in the context of activities related to the forest industry. Respondents identified significant synergies between SDG 15 and SDGs 3 (health and well-being), 6 (clean water and sanitation), 7 (clean and affordable energy), 9 (industry, innovation and infrastructure) and 13 (climate action). The other SDGs were considered to be linked from far or very little linked to the forestry sector.

In addition, forestry can have positive or negative effects on the achievement of the SDGs, depending on the practices adopted by the stakeholders (Baumgartner, 2019). Interested in knowing the contribution to the SDGs of a Chilean forestry company operating mostly in monocultural private plantations, Gonzalez-Navarro *et al.* (2018) find that only its social investment practices are positively associated with the SDGs. The effects of other business practices on the local community are considered to be limited or even negative. A limited supply of low-paid, non-permanent jobs, inadequate forestry and plantation management practices and the large area devoted to plantations leaving little room for the development of alternative economic activities explain these results.

Conversely, research identifies many potential contributions of community forestry to the SDGs. This type of forestry aims to improve the livelihoods of people living in or near forests in countries with low gross domestic product per capita, while maintaining forest cover and the provision of ecosystem services (De Jong *et al.*, 2018). Food and Agriculture Organization (FAO) and AgriCord (2016) point out that organizations which bring small agroforestry producers together are likely to have beneficial effects on improving livelihoods (SDGs 1, 2, 3, 7), strengthening environmental management (SDGs 13, 15), developing human capacity (SDGs 4, 8, 10) and establishing inclusive partnerships (SDG 17). According to De Jong *et al.* (2018), the potential contribution of community and peasant forestry initiatives to the SDGs is substantially increased when the conditions favorable to the implementation of these initiatives are met.

More recently, the Forest Solutions Group of the World Business Council for Sustainable Development (WBCSD) has identified eight impact opportunities for the forestry sector, a summary of which is presented in Table 1.

Table 1. Forestry sector impact opportunities according to the Forest Solutions Group

<p>Working forests</p> <p>Bring more of the world’s working forests under sustainable management.</p> 	<p>Circularity</p> <p>Bring resource efficient, bio-based and circular business models to scale.</p> 
<p>Bioeconomy</p> <p>Scale up the sector’s contribution to a circular bioeconomy.</p> 	<p>Communities</p> <p>Enhance the livelihoods and support resilience of forest dependent communities and local economies.</p> 
<p>Climate</p> <p>Advance and strengthen the role of forests, wood fiber products and the forest sector in global climate change mitigation and adaptation.</p> 	<p>People</p> <p>Enhance sector’s attractiveness, diversity, inclusiveness and safety.</p> 
<p>Water</p> <p>Expand context-based water stewardship approaches.</p> 	<p>Procurement</p> <p>Strengthen and enhance responsible procurement practices, transparency and traceability throughout the value chain.</p> 

Source: WBSCD, 2019, p. 26-36.

Cooperatives and sustainable development

In theory, cooperatives that act in accordance with the cooperative principles agree to commit to the sustainable development of their community, as enshrined in the 7th cooperative principle (ICA, 1995). Certain cooperative characteristics are then highlighted to explain their particular contribution to their environment.

Locally owned and controlled, with net profits distributed to members-owners, many consider co-operatives to be a perfect model for the socio-economic development of their local communities. Their structure and objectives compel them to behave differently than other community organizational structures. In addition, co-operatives play a vital and direct role in rural economic development. (Vukmirovic et al., 2015, p. 59)

The latter principle specifies, however, that this commitment is made “through policies approved by their members” (ICA, 1995). In other words, it depends on decisions made by the collective of members of a cooperative, based on their individual and collective needs and aspirations. Thus, it is important to “avoid a shortcut that is too quick, which tends to believe that cooperatives will necessarily make distinctive contributions to their environment” (Isola, Gonzalez, Oreggioni, Pastorini, Yorn, Fortin, Beauregard, Peixe McIntyre, Fraco deSa, Ariza and Dosza, 2005, p. 84; *our translation*). The commitment of a cooperative to sustainable development largely depends on the collective project carried out by its members through the cooperative, which “brings into play the why, the what and the how of the existence of a collective” (Desreumaux, 2013; cited in Capron and Quairel-Lanoizelée, 2015, p. 241; *our translation*). This collective project represents the main driver of its strategy and practices.

Touzard and Vandame (2009) observe that the variability in the commitment of cooperatives to sustainable development is explained by a number of factors. First of all, this commitment is built primarily through investments oriented towards the economic sphere allowing the cooperative to survive. While necessary, these investments are not sufficient for the development of actions in the social and ecological fields. Thus, the authors argue that a commitment to sustainable development presupposes a collective project capable of combining the economic motivations of the members with a perspective of social change. Finally, the authors observe that the composition of cooperative membership appears to be an important factor in their commitment to sustainable development. Cooperatives with more heterogeneous membership tend to engage more in innovative actions in the social and ecological fields than cooperatives with homogeneous membership.

In general, an organization's desire to maintain its reputation, or its legitimacy, represents an important driver for integrating sustainable development into its strategic directions and practices. Legitimacy, a key concept in the social acceptability of an organization's activities, is defined as “the shared impression that the actions of the organization are desirable, suitable or appropriate in relation to [...] social norms, values and beliefs” (Suchman, 1995; cited in Capron and Quairel-Lanoizelée, 2015, p. 39; *our translation*). The behaviour of an organization is therefore not inherently fair or acceptable. “It is judged as such according to values or social norms at a given time” (Capron and Quairel-Lanoizelée, 2015, p. 39; *our translation*). Cooperatives active in sectors dependent on natural resources, such as forestry, are directly exposed to ecological campaigns on issues such as biodiversity, the integrity of forest ecosystems or the reconciliation of uses (Gertler, 2001). Being recognized as legitimate actors becomes a determining condition for the continuity of their activities, especially in public or community forests where the access to resources is subject to the will of the State.

In short, the cooperative organization is a possible framework for implementing actions that are *a priori* favorable to sustainable development, but commitment to this path is not given by cooperative status alone (Touzard & Vandame, 2009; Brown & Novkovic, 2015; Akhabbar & Swaton, 2011). Cooperative principles are first constructed with regard to economic and social development issues and do not explicitly cover all of the fields currently considered by the SDGs. The undertaking of sustainable development measures depends on strategic choices independent of its status. It requires a certain financial stability making it possible to devote resources to the implementation of sustainable development actions (Labelle & St-Pierre, 2015) compatible with a collective project of social change driven by consequent values and aspirations (Touzard & Vandame, 2009). The commitment of cooperatives to sustainable development must therefore be demonstrated by concrete actions in social, economic and ecological areas (Touzard & Vandame, 2009; Brown & Novkovic, 2015).

Methodology

Analyzing the contribution of an organization to a given objective consists in establishing that an intentional action, taken with the aim of creating a change, had a noticeable effect (Mayne, 2012; Midgley, 2000). Since multiple factors are likely to have an influence on the results (Mayne, 2012), our research specifically focuses on the actions implemented by forestry cooperatives, which translate into practices. Within the framework of this research, the contribution of forestry cooperatives to the SDGs is envisaged from the angle of actions intentionally implemented by cooperatives to generate positive effects or reduce negative effects of their activities in the social, economic and ecological areas of intervention targeted by the SDGs.

These intentional actions were obtained through discussion workshops in which 15 representatives of six forestry workers' cooperatives, members of FQCF, and 28 representatives of three agroforestry cooperatives, members of the Federación Hondureña de Cooperativas Agroforestales (FEHCAFOR), participated on a voluntary basis. All the participants in these workshops were members, administrators or managers within their respective cooperatives. One workshop was conducted in Quebec and another in Honduras, using the same data collection tools. For logistical reasons, the cooperatives represented, both in Quebec and in Honduras, came from the same region. Participants were not required to be familiar with the SDGs to participate in the workshops.

Participants were invited to reflect on the meaning and application of sustainable development within their respective cooperatives. They were then invited to read a sheet describing the title of each of the SDGs and a summary of the main associated targets. Next, they were asked to identify the SDGs that they believed were the most important to achieve for categories of beneficiaries, namely their members, their cooperative itself and their local community. This subdivision is based, first, on the idea that cooperatives combine a social function - which is linked to the satisfaction of their members' needs and aspirations - and an economic function - which generally involves activities of transformation of goods or offers of services and conditions the integration of the cooperative in its economic environment (Isola *et al.*, 2005). The addition of the local community category is based on the assumption that the territorial anchoring of the cooperatives generally "leads them [...] to take into account the need to manage in the long term the local resources which condition [their] activities and those of [their] members, to get involved and invest in local development" (Draperi and Touzard, 2003; cited in Touzard and Vandame, 2009, p. 39; *our translation*). Furthermore, the contribution of organizations to sustainable development must take into account the context in which they operate. Certain practices or measures relevant in a given local or national context will not find an echo in another context.

Starting from the SDGs identified in each of these subdivisions, the participants were led to map the practices implemented by their respective cooperatives towards them. Internal documents relating to the cooperatives encountered were also analyzed, when available, in order to supplement or clarify some of the practices mentioned by the workshop participants. The practices identified by the forestry cooperatives were then linked to the targets set for each of the SDGs. This classification of practices makes it possible to identify the areas of intervention in which studied cooperatives are currently the most engaged or hold potential for contributing further.

Limits of research

As part of this exploratory research, we voluntarily chose to examine only practices that demonstrate a commitment to contribute positively or reduce the negative effects of the activities of forestry cooperatives on the SDGs. This decision is consistent with the research objective, which is to better understand the current contribution of cooperatives to the areas of intervention targeted by the SDGs. The degree of contribution of forestry cooperatives to the SDGs and the relevance of the actions implemented with regard to them are not among the objectives of our research. Internal procedures or additional research will be necessary to identify the current unsustainable practices adopted by forestry cooperatives, so as to know and to mitigate their negative effects, as well as to assess the effectiveness of the practices adopted towards SDGs.

Cooperatives under study

Quebec forestry cooperatives are mainly made up of worker cooperatives. Other types of forestry cooperatives also exist to a lesser extent; their members are then the companies or forest owners who use their services (Comité

sectoriel de main-d'œuvre en gestion forestier (CSMOAF), 2017). For their part, forestry cooperatives located in Honduras generally take the form of agroforestry cooperatives (Nygren, 2005). While the legislative context surrounding the activities of these cooperatives differs, their objective is similar: the taking over of forestry activities by local populations, so as to promote local development (Van den Breemer, Bergh and Vermeij, 1994; Blais, 1999).

Forestry workers' cooperatives - Quebec

Forestry workers' cooperatives are owned and controlled by their employee-members. Workers' cooperatives are those “made up exclusively of natural persons who, as workers, join together to operate an enterprise pursuant to the rules of cooperative actions, and whose object is to provide work to [their] members and auxiliary members” (*Cooperatives Act*, art. 222). The objective of forestry workers' cooperatives is thus to create and maintain local and quality jobs in the forestry sector (Guillotte and Charbonneau, 2016). They are distributed in all regions of Quebec with a high percentage of public forests, in which they carry out most of their activities (CSMOAF, 2017). Forestry workers' cooperatives participate in the forest value chain through the production of tree seedlings, forest management, harvesting of wood and non-wood forest products, transportation and, for some, wood processing (Mobtaker, Ouhimmou, Rönnqvist and Paquet, 2018; Ryan, 2011; CSMOAF, 2017).

The first forestry workers' cooperatives in Quebec appeared in the late 1930s, in a context of near-monopoly of large pulp and paper industries. From the outset, they focused their strategies “on workers taking charge of their working conditions, developing and controlling forest resources, thus contributing to the development of local communities” (Ryan, 2011: 3; *our translation*). Forestry became the main driver of development in certain regions. Even today, forestry workers' cooperatives represent one of the main, if not the only, employers in certain forest regions of Quebec.

Forestry workers' cooperatives greatly consolidated and developed during the 1980s. Aware of the precariousness generated by the use of tenders for supply and forest management contracts, and of its effects on the demobilization of labour and the quality of works, the Council of Ministers of Quebec adopted a decree authorizing preferential allocation to forestry workers' cooperatives. Up to 50% of intensive forest management work in public forests could then be awarded to these cooperatives through contracts (Ryan, 2011). The purpose of this exemption was to recognize the importance of cooperatives in the Quebec forestry sector and, more specifically, in the training of a workforce specializing in the performance of silvicultural work. This official recognition did not, however, withstand the changes in governments and forest regimes that took place thereafter, despite sustained efforts by cooperatives to obtain more responsibility in the management of local public forests (Ryan, 2011). Today, the majority of Quebec forestry workers' cooperatives carry out forest management activities in publicly-owned forests on behalf of private forestry manufacturers who hold supply guarantees.

The Sustainable Forest Development Act, and the new forest regime introduced in 2013, put most of the responsibilities related to the forest in the hands of the government (Moreau and Guénette, 2016). This new law is based on an ecosystem approach, which aims to ensure adequate protection of biodiversity and the viability of ecosystems by reducing the gaps between the managed forest and the natural forest (Gouvernement du Québec, 2016-2020; CSMOAF, 2017; Gareau, 2005). Important considerations regarding the reduction of negative environmental impacts associated with forest interventions are introduced in the law and related regulations. Thus, all organizations operating in the Quebec public forest, including forestry workers' cooperatives, must hold an environmental certification recognized by the Ministry of Forests, Wildlife and Parks, or work under the aegis of a company that owns one. They can opt for the international standard ISO 14001 or for the certification program for enterprises in forest management set up by the Bureau de normalisation du Québec (BNQ). These certifications require the implementation of internal procedures aimed at monitoring and continuously improving the environmental performance of the organization (BNQ, n.d.).

Obtaining forest certification complements environmental certifications. In Quebec, three forest certification systems are recognized: that of the Canadian Standards Association (CSA), that of the Forest Stewardship Council (FSC) and that of the Sustainable Forestry Initiative (SFI). These systems, specific to the forestry sector, deal with subjects similar to sustainable forest management (Gouvernement du Québec, 2004-2016). The forestry workers' cooperatives operating in public forests are all FSC or SFI certified. In addition, third-party certification of silvicultural

business management practices is also compulsory for carrying out non-commercial silvicultural work in Quebec's public forest (CSMOAF, 2017).

Agroforestry cooperatives - Honduras

Until the 1970s, there were very few cooperatives active in the forestry sector in Honduras (Jones, 2003). Rather, the sector was dominated by foreign forestry companies with concessions granted by the Honduran government. Corruption and mismanagement were common, and profits from logging were not reinvested in local communities. Large volumes of wood were harvested, without any obligation to reforest, which led to a sharp reduction in the stock of wood from forests (Nygren, 2005; Repetto, 1999). In the early 1970s, the Honduran government passed a law to regain control of the country's forests. The Honduran Corporation for Forestry Development (Corporación Hondureña de Desarrollo Forestal (COHDEFOR)) was founded and obtained responsibility for all activities related to forest management (Nygren, 2005).

With these new responsibilities came that of establishing a social forestry system. Such a system aims to involve rural communities in forest management, so as to prevent the continuous destruction of forest resources while promoting local development. Social forestry is based on the idea that rural communities living in or near forests are best placed to protect and care for these forests (Jones, 2003; Repetto, 1999). When communities can derive their livelihoods from the forest, it strengthens their appreciation of it. Therefore, they are more inclined to participate actively in the protection of forests against fires, overgrazing, illegal logging and forest encroachment by agricultural activities (Richards, 1993; Jones, 2003).

Most of the agroforestry cooperatives currently operating in Honduras were born out of this social forestry system. The adopted law stipulated that any group of members of a community organized through a legally recognized institution could participate in the social forestry system (Pelligrini, 2011; Jones, 2003). Since COHDEFOR promoted the formation of agroforestry cooperatives, the majority of communities that wished to participate in the social forestry system formalized themselves through such cooperatives (Jones, 2003). Their presence became significant in pine forest areas, and resin extraction represented, and still represents, the main income-generating activity for their members (Jones, 2003).

In fact, most of the members of agroforestry cooperatives are subsistence farmers who receive no monetary income from their agricultural activities and whose only source of liquidity comes from the exploitation of the resin (Jones, 2003). Within communities, each forest plot dedicated to the exploitation of resin is generally recognized as belonging to the member who collects the resin (*resinero*), even when this member does not hold legal title (Jones, 2003). While some cooperatives require members to actually own a forest plot for resin extraction, others, including those that have diversified their activities over the years, allow new members to join the cooperative even if they do not own such plots. The acquisition and sale of these lots, if any, are often transacted within the cooperative (Jones, 2003).

COHDEFOR's virtual monopoly in harvesting, processing and exporting timber was abolished in 1992, when the government promulgated the law on the development and modernization of the agricultural sector (Jones, 2003; Peretto, 1999). State-owned harvesting and processing companies were closed or privatized. Control of private and communal forests was returned to the landowners. The role of COHDEFOR, now AFE/COHDEFOR, was reduced to that of formulating forest policies and regulating forest management activities (Nygren, 2005; Jones, 2003).

A section of the 1992 law, however, contained clauses aimed at reaffirming and strengthening the social forestry system. One of them granted usufruct rights to groups with three or more years of successful experience in forestry activities, over a period generally defined at 40 years (Jones, 2003). Today, agroforestry cooperatives operate, for the most part, in national forests, owned by the central government and administered by AFE/COHDEFOR, or communal forests, which are administered by municipal governments (Jones, 2003). The 1992 law also gave licence holders primary responsibility for fire prevention (Repetto, 1999).

The agroforestry cooperatives that participated in the study all operate in national forests and their members come from several villages living in or around these forests. Annual management plans, operational and firefighting plans

are required and must be approved by AFE/COHDEFOR to extract resin or harvest wood on these lands. Cooperatives then pay taxes or stumpage fees for the products extracted (Jones, 2003). The last Honduran forestry law, approved in 2007, once again reaffirmed the importance of the social forestry system as a national poverty reduction strategy (Pellegrini, 2011; FAO, 2011). The management of Honduran forests by cooperatives thus combines objectives of reducing deforestation, fighting against poverty and promoting local development.

Results and analysis

During discussion workshops, participants in Quebec and Honduras were asked to name the SDGs that they believed were the most important to achieve for their members, their cooperative and their local community. The SDGs most often identified by participants for each of these subdivisions are presented in Table 2, in order of frequency. The results show the main concerns of the participating cooperatives.

Table 2. Key SDGs identified by workshop participants

Forestry workers' cooperatives (Quebec)	Agroforestry cooperatives (Honduras)
Members	
	
Cooperative	
	
Community	
	

SDGs identified for members of forestry workers' cooperatives in Quebec

The most important SDGs to achieve for workers' cooperative members, according to the workshop participants, are related to health and well-being, decent jobs, access to training, reduction of inequalities as well as peace, justice and the efficiency of institutions. The issues raised by these different SDGs are very similar to those addressed in the definition of decent work established by the International Labour Organization:

Decent work sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men. (1996-2020)

Drawing on the results of research focusing on workers' cooperatives, Pérotin (2017) specifies that such organizations generate more sustainable jobs than traditional businesses, their members often preferring to maintain jobs rather than wage stability. They thus preserve jobs better in difficult market conditions than traditional companies which, for their part, tend to reduce the number of jobs to cope with these conditions. In fact, the practices listed in connection with these SDGs relate in particular to those put in place to ensure decent work for members, both in terms of quality and duration. Jobs in the forestry sector being seasonal, participants in the workshops mentioned that their cooperatives try to extend the work season, or even seek job opportunities for their members with other companies. By doing so, cooperatives aim to offer a sufficient number of hours and weeks worked to ensure the qualification of their employees for unemployment insurance, which is particularly important for jobs with high seasonality (CSMOAF, 2017).

In order to recruit and retain qualified worker-members, forestry workers' cooperatives mention offering training that meets their needs and aspirations, internally or through partnerships with educational institutions. They facilitate access to the latter by granting scholarships to their members. In addition, they offer internships and student jobs to introduce young people to work in a forestry environment and encourage the recruitment of new members. The forest management sector is indeed characterized by a lower proportion of young workers compared to all industries in Quebec (CSMOAF, 2017). Unattractive working conditions and low valuation of associated trades are mentioned to explain this difficulty in recruiting in forest management (CSMOAF, 2017). Cooperatives offer competitive wages as a way to reduce the effect of aging and the difficulty to recruit and retain new workers in the forestry sector. Although these issues are more vibrant in forest management, they are also felt by companies focusing on non-wood forest products and the production of forest plants (CSMOAF, 2017).

Gender parity also remains an important issue in the forestry sector. With the exception of forest seedling production cooperatives, which hire a larger share of women, the majority of jobs related to forest intervention remain occupied by men (CSMOAF, 2017). As a result, the representation of women in decision-making bodies remains, for the time being, limited. However, the cooperatives met said that they are currently developing policies and programs to promote the hiring of women and their effective participation in the activities of the cooperatives. Forestry workers' cooperatives know that they have to innovate to retain their staff and attract new skilled workers.

Aside from skills development, many efforts are made by forestry workers' cooperatives to ensure the health and safety of their members. Training, protocols, emergency response plans are among the practices mentioned, since the risk of accidents is very high in the forestry sector (CSMOAF, 2017). Forestry workers' cooperatives also establish several internal policies aimed at framing working relationships: promotion of mental and physical health, fight against harassment or the use of psychoactive substances, etc. They also offer a variety of internal programs to increase members' access to health care and group insurance products, or to help them prepare for retirement. According to Pérotin (2017), the simple fact of having a certain control over their employment and working conditions, which is favoured by a transparent democratic governance system, can also positively affect workers' health, well-being and job satisfaction in workers' cooperatives.

One of the specific features of cooperatives lies in its democratic governance, which is reflected in particular by the “one member, one vote” rule. The application of this rule implies, however, that members have sufficient and complete information to make informed decisions. For the forestry workers' cooperatives met, democratic governance is mostly reflected by establishing transparent communication with the members, by consulting them for strategic decisions and by providing them with the training and supervision necessary for effective participation. The cooperatives adopt a governance structure consisting of the general assembly of members and a board of directors elected by the members. Specific committees or boards can be established to increase member participation in different areas. This governance structure is framed by codes of professional conduct and ethics. In addition, the cooperatives use an outside administrator who is active in the community to promote the harmonization of their activities with local interests.

Finally, the remuneration structure established by forestry workers' cooperatives aims for an equitable distribution of the fruits of collective work. In addition to pay equity policies and equal wages between jobs of the same kind, surpluses generated by cooperatives, if any, are redistributed to members in the form of patronage allocations, that is to say pro rata of the work done.

SDGs identified for forestry workers' cooperatives in Quebec

The very existence of forestry workers' cooperatives depends on their ability to recruit employee-members and provide them with quality and sustainable jobs in the forestry sector. In order to do so, the workshop participants consider the sustainable management of forests, innovation and infrastructure modernization as well as partnerships as important SDGs for the success of their cooperatives and their capacity to offer the best possible working conditions to their members.

The cooperatives thus take the necessary measures to comply with laws and regulations regarding sustainable development of the forest land in Quebec. The respondents specify that they ensure the continuous improvement of their practices, the maintenance of their forest certifications and the training of their members, both technically and in terms of sustainable forest management and applicable regulations. Forestry activities that comply with the legal framework and are certified are generally recognized to efficiently promote sustainable forest management (Pellegrini, 2011).

In addition to their certifications, forestry workers' cooperatives mention a number of internally adopted practices aimed at managing their negative environmental impacts. For example, they mention measures to reduce the consumption of water and energy in their various buildings (head office, forest camps). The modernization of forestry equipment, machinery and infrastructure is also part of this objective of optimizing efficiency and reducing harmful impacts on the environment. These measures are complemented by the management of hazardous residual materials and the limitation of the use of chemicals, among others.

As organizations operating in market contexts, forestry cooperatives must find ways to capture part of the value created or preserved by the sustainable management of forest resources to finance the investments necessary for its implementation (Gertler, 2001). Thus, the cooperatives encountered endeavour to develop a range of new products and services in order to diversify their activities, ensure their longevity and increase employment opportunities. Investments in research and development and the establishment of partnerships are implemented to optimize the use of forest resources and to valorize forest residues and wood waste, transforming them into valuable subproducts.

In recent years, some of them have developed activities related to the forest bioeconomy¹. They specify, among other things, their concern to develop forest biomass as a source of renewable energy. Forest biomass is, in theory, all the biological material from trees and plants. In practice, it comes essentially from four sources (Natural Resources Canada, 2014, p. 4):

- traditional forest management by-products - residues from commercial cutting, thinning, brush cutting, pruning, or from trees affected by natural disturbances;

- industrial processes by-products, such as bark, sawdust, wood shavings and chips or spent pulping liquor;
- construction, renovation or demolition residue;
- trees from short-rotation plantations.

Until now, forestry workers' cooperatives have been mainly interested in the valorization of cutting by-products and non-market stems, which are usually left on the ground (CSMOAF, 2017). The valorization of forest by-products from industrial wood processing, construction, renovation and demolition processes could represent an interesting commercial strategy from the point of view of responsible production and consumption but has not been mentioned by the cooperatives met.

Forestry workers' cooperatives thus establish numerous research and development, business and training partnerships with private, cooperative and public partners in order to achieve their objectives. These partnerships aim in particular to train and recruit qualified workers, to diversify their activities and to innovate in their offer of products and services.

SDGs identified for local communities of forestry workers' cooperatives in Quebec

Workshop participants view the establishment of sustainable communities, poverty alleviation and the sustainable management of terrestrial ecosystems as the most important SDGs to achieve at the local level. These SDGs highlight the links that participants establish between forestry activity, income generation and the socio-economic vitality of their region. These interrelations are all the more important in forest communities, where the forestry sector represents a significant number of available jobs. The most recent data show that in 2000, 264 Quebec municipalities were defined as being mono-industrial, that is to say that the majority of jobs were associated with industrial activities in the forestry sector. For 140 of them, more than 90% of jobs were related to this industry (Rouleau, 2014; cited in Moreau and Guénette, 2016). Dependence on forestry activity remains a reality for some regions even today. According to the Fédération québécoise des municipalités (2017), one in fifteen jobs is related to forests in rural areas.

In addition to their contribution to the local job market and consequently, to the local economic vitality often necessary to maintain local access to basic services, the forestry workers' cooperatives offer direct support to their communities. This support is manifested by their participation in numerous regional committees and councils, financial and material support to local organizations, the organization of and participation in local community events and local procurement policies. In some situations, cooperatives have also acquired local businesses that were in the process of being closed, in order to maintain economic activity in the region. Furthermore, Pérotin (2017) points out that unemployment has more far-reaching than strictly economic negative impacts, particularly on health. Job preservation can therefore reduce the negative social consequences of unemployment and the pressure on community resources such as social services, in addition to having a positive effect on local tax revenues.

SDGs identified for members of agroforestry cooperatives in Honduras

The SDGs identified by agroforestry cooperatives in Honduras regarding their members are concerned with the fight against poverty, economic growth and decent work, gender equality, partnerships and peace, justice and the effectiveness of institutions.

Voluntary and open membership, the first cooperative principle (ICA, 1995), promotes access to collective ownership of the cooperative and to the economic resources associated with it. "Having access to and control over resources gives people the power to escape poverty" (FAO and AgriCord, 2016, p. 6). Therefore, integrating new members into Honduran agroforestry cooperatives helps strengthen the economic and even social integration of more people, thereby reducing poverty and inequality. The cooperatives met say they are working towards the integration of new members from cities and other rural areas, essentially by the creation of new jobs. The accessibility and affordability of membership could also allow more people to take advantage of the benefits of membership. FAO and AgriCord (2016) specify that:

One of the main contributing factors to poverty is the lack of access to land, technology and finance. By coming together in formal organizations, smallholder farmers can gain joint access to resources, set up small enterprises and work their way out of poverty. [...] Trees are often seen to offer the prospect of long-term income and an economic safety net; they act as a store of potential (and increasing) wealth. (p. VIII)

However, practices specifically aimed at integrating the poorest people into Honduran cooperatives were not mentioned by the research participants. As pointed out by De Jong *et al.* (2018), the impact of agroforestry cooperatives in the fight against poverty may remain more limited in the absence of measures to this effect, since the majority of smallholders are generally not part of the poorest sections of the population. That being said, agroforestry cooperatives in Honduras say they are making many efforts to diversify sources of income and jobs for members of the local community. Resin extraction activities are increasingly combined with forest harvesting as well as organic farming, marketing of shade-grown coffee, fish farming, breeding of laying hens, tree nursery management and manufacturing of furniture, soaps and disinfectants. “Even small amounts of forest-derived earnings help to bridge income gaps and so play a critical role in livelihood security”, acting as “natural insurance” for peasants (Sweeney, 2003, p. 2). For members of agroforestry cooperatives, often subsistence farmers, this income reduces the risk associated with a single activity which is, moreover, dependent on climatic conditions (Sweeney, 2003; Johnson, 1998).

This additional income is supplemented by access to loans, equipment and technical training offered by cooperatives. The purchase of machinery and technological equipment as well as the various services offered by the cooperative, such as the marketing of harvested agroforestry products, aim to increase the productivity of members and their access to markets. The cooperatives also give credit for the basic food basket, in order to promote food security for the most vulnerable segments of the population, and offer emergency assistance in the event of illness or death. Internal regulations also ensure equal remuneration for equal work and measures are taken to ensure the safety of workers.

Efforts aimed more specifically at integrating women and young people into cooperative membership can also help to fight poverty and reduce inequality. The agroforestry cooperatives sponsor the maternal home in order to increase the financial autonomy of women in addition to forming, internally, gender and youth committees, which aim to promote the integration of women and young people in the cooperative, in the bodies management and on the boards of directors and supervisory boards. Effective governance structures and mechanisms are key for the long-term survival of cooperatives (Jones, 2003).

Agroforestry cooperatives in Honduras maintain many partnerships aimed at increasing the skills of their members in sustainable forest management, processing and marketing of forest products as well as in agroforestry. They mention the establishment of alliances with government institutions, universities and international cooperation organizations, such as SOCODEVI, a Quebec organization dedicated to international development by the structuration of the cooperative sector.

SDGs identified for agroforestry cooperatives in Honduras

The workshop participants identified the challenges of sustainable management of terrestrial ecosystems, responsible consumption and production, economic growth and decent jobs as well as access to education as the main SDGs to be achieved to ensure the longevity of their cooperative.

The benefits that members and the community derive from the cooperative and its activities are the main justification for the existence of agroforestry cooperatives. In order to sustain these benefits, Honduran agroforestry cooperatives must, however, be able to maintain the forest rights granted by the government. From the point of view of the State, what justifies the existence of agroforestry cooperatives is first of all their capacity to play an active role in the protection of forests and the collective management of forest resources (Jones, 2003).

Thus, a forest management plan and an operational plan are required by the national government, before any timber harvest. They must be approved by AFE/COHDEFOR and the amount of the royalties paid depends on the forecast

of volumes of harvested wood established in the operational plans (Jones, 2003). Agroforestry cooperatives are also responsible for paying and organizing “a fire crew each dry season to put out fires and manage controlled burns” (Jones, 2003, p. 44). All the cooperatives mention fulfilling these various obligations and add that they pay particular attention to monitoring and controlling pests; monitoring committees are set up for this purpose. Agroforestry cooperatives also report that special plans for resin extraction have been adopted or are under development, although such plans are not required by AFE/COHDEFOR (Jones, 2003). These plans aim to facilitate the reconciliation of resin extraction and timber harvesting activities of cooperatives by ensuring that the *resineros* are not disadvantaged by the harvesting of wood on their plot. A successful integration of these two business activities can in fact be beneficial on both counts. “This integration is nearly essential for the long-term sustainability of resin tapping because a tree can only be tapped for a finite number of years. Without logging to encourage new regeneration of trees, cooperatives will eventually run out of trees to tap” (Jones, 2003, p. 18).

Agroforestry cooperatives also seek to make their production more responsible. They are committed to reducing and treating waste, particularly in carpentry workshops, and to replacing chemicals with natural products during the resin extraction and wood transformation processes. In addition, they carry out activities related to raising awareness and training community members on various aspects related to environmental protection and the adoption of responsible agroforestry practices. Organic cultivation, reduction of burns on agricultural land, management of the shade of coffee, maintenance of biodiversity, reduction of the use of chemicals, protection of watercourses and adequate management of residual water generated during the coffee washing process are some of the themes covered in training activities carried out by the cooperatives. The latter also carry out reforestation and monitoring of water sources as well as restoration of arable soils. The purchase of forest land for reforestation has also been mentioned among the practices of some cooperatives. Lastly, some cooperatives have already obtained forest certification, while the others are in the process of obtaining it.

A majority of cooperatives have set up education committees. The training activities offered concern sustainable farming practices as well as the development of alternative sources of income to contribute to members’ food and economic security and enhance their resilience in the face of economic or environmental shocks. Agroforestry cooperatives in Honduras also train their members on local social issues, such as non-violence. Some offer primary, secondary and university scholarships. Finally, members who participate in the activities of their cooperative, whether in governance structures or special committees, have the opportunity to develop new skills in terms of leadership, management or accounting, for example.

SDGs identified for local communities of agroforestry cooperatives in Honduras

Participants in the discussion workshop identified drinking water and sanitation, gender equality, health and well-being and food security as the more important SDGs for their communities. They all mention practices related to the development of infrastructure and local organizations among the measures taken by their cooperative.

The practices listed by the participants are financial, and sometimes material, support for school and religious infrastructure, as well as to community drinking water management committees. Some cooperatives have also set up medical brigades and a life insurance offer for their members. Similarly, the construction of community buildings, drinking water tanks, housing for community members or health centres are among the projects carried out by Honduran agroforestry cooperatives. The latter finally mention their participation in the electrification of the community, in particular by means of solar panels, and in the opening, improvement and maintenance of roads. These different projects are consistent with the ambition of the Honduran social forestry system from the start. Since their appearance, successful agroforestry cooperatives have invested in their communities. “The communities benefit from the cooperatives in the form of increased economic stability, direct or indirect assistance from the cooperative for community projects, and forest and water conservation near the communities” (Jones, 2003, p. 70).

Linking practices to SDGs’ targets

The practices listed by workshop participants help identify the current commitment of forestry cooperatives in Quebec and Honduras to the SDGs. In order to understand the potential contributions of the forestry cooperatives met, we associated the practices listed by the research participants with the targets specifying each of the SDGs.

Table 3 presents the results obtained for Quebec forestry workers' cooperatives and for Honduran agroforestry cooperatives.

Table 3. UN targets linked to practices described by participants to workshops

		<i>Workers' cooperatives</i>	<i>Agroforestry cooperatives</i>
1.	No poverty	-	1.4, 1.5
2.	Zero Hunger	-	2.1, 2.3, 2.4
3.	Good health and well-being	3.4, 3.8	3.8
4.	Quality education	4.4	4.1, 4.4
5.	Gender equality	5.1*, 5.5*	5.1, 5.5
6.	Clean water and sanitation	6.3, 6.4, 6.6	6.1, 6.3, 6.6, 6.b
7.	Affordable and clean energy	7.2	7.1
8.	Decent work and economic growth	8.2, 8.4, 8.5, 8.6, 8.8	8.2, 8.5, 8.6, 8.8
9.	Industry, innovation and infrastructure	9.1, 9.2, 9.4, 9.5	9.1, 9.3
10.	Reduced inequality	10.2, 10.3, 10.4	10.2, 10.3, 10.4
11.	Sustainable cities and communities	11.3	11.1, 11.4, 11.a
12.	Responsible consumption and production	12.2, 12.5, 12.8	12.2, 12.5, 12.8
13.	Climate action	13.2	13.2, 13.3
14.	Life below water	-	-
15.	Life on land	15.1, 15.2, 15.5	15.1, 15.2, 15.5
16.	Peace, justice and strong institutions	16.6, 16.7	16.6, 16.7
17.	Partnerships for the goals	17.17	17.17

** Politics and programs under development*

This classification shows that forestry workers' cooperatives in Quebec and agroforestry cooperatives in Honduras adopt practices related to all of the SDGs, with the exception of SDG 14, which concerns the conservation and sustainable exploitation of oceans and seas. The absence of practices related to SDG 14 can be explained by the location of the forestry cooperatives studied. It is not excluded that forestry cooperatives active in coastal forest environments could contribute to this SDG.

The practices implemented in connection with the fight against poverty and food security are, however, specific to agroforestry cooperatives in Honduras. Although practices targeting the most vulnerable populations were not mentioned either by Honduran cooperatives or by Quebec cooperatives, the former act more directly on access to basic services, ownership and control of land and other forms of property (target 1.4) and on reducing people's exposure and vulnerability to economic, social or environmental shocks (target 1.5). Keeping members in a situation of non-poverty, which is not highlighted by current targets, can still represent an equally important contribution (Gregersen *et al.*, 2017). A certain stability of employment or income, access to the cooperative's property and its resources as well as integration into the forest value chain can help keep members in a situation of non-poverty. This form of contribution can also apply to Quebec forestry workers' cooperatives, especially in the communities where they are the main employer.

Processes associated with avoidance of unsustainable development are just as important as processes that appear to lead to more sustainable development. Processes that help non-poor forest dwellers avoid moving into, or back into poverty are just as important as those designed to get the poor out of poverty, although perhaps not as politically visible. In a [sustainable development] context, the results of both contribute to the same societal aim of reducing poverty on a sustainable basis. (Gregersen et al., 2017, p. 13)

Besides, the participation of forestry cooperatives in the socio-economic vitality of their community can have considerable effects on maintaining access to certain basic services. Cooperatives help to create an environment conducive to investment by individuals, businesses and governments and to facilitate networking between local development actors (Gertler, 2001; Isola *et al.*, 2005). Their presence can thus strengthen the resilience of the communities where they are active. This contribution is even more evident when cooperatives represent one of the only economic actors in a locality, as is the case in Honduras and in some municipalities in Quebec. This contribution is highlighted by the workshop participants. Participants from Honduras indicate that their cooperatives provide financial or material support for initiatives aimed at facilitating access by members of their community to health care, educational establishments, drinking water, energy, road infrastructure and even housing. The practices mentioned by Quebec participants in this area are more formalized internally, in terms of policies and programs, and are aimed more specifically at their members. This difference undoubtedly stems less from a tenuous commitment on the part of Quebec cooperatives to facilitate access to these basic services than from the coverage of these services by other players, such as the State. Group insurance or drug insurance programs, as well as training and scholarships, are offered to members of Quebec cooperatives to complement the services available.

There are also some differences in the integration of women into the activities of cooperatives and their decision-making bodies. While programs to this effect are currently developed in forestry workers' cooperatives, measures to strengthen the participation and empowerment of women are already being implemented in cooperatives in Honduras. That said, gender-focused policies of organizations supporting Honduran forestry cooperatives, such as SOCODEVI, are likely to be largely influencing the establishment of such measures (Fecteau and Escot, 2013). In addition, the scarcity of labor and the demanding nature of forestry work currently complicates the recruitment of members, both male and female, by Quebec forestry workers' cooperatives (CSMOAF, 2017).

The role given to forestry cooperatives in national forest management strategies can surely explain other noted differences between the practices of Honduran and Quebec cooperatives. Within the Honduran social forestry system, agroforestry cooperatives occupy a prominent place, explicitly recognized by the government, in the management of public and community forests. Although institutional improvements are still required (Jones, 2003), agroforestry cooperatives enjoy a contract for the usufruct of forest resources from public forests under their responsibility, subject to certain conditions. As a corollary, these responsibilities underlie a certain obligation to protect and manage the water sources, soils and forests present on the territory, all for the purpose of reducing poverty and developing forest communities. Agroforestry cooperatives thus focus their practices more on raising awareness and training members of their community, on reconciling uses within the forest territory - by developing complementary and sustainable agroforestry activities for example - and on the marketing of harvested forest products. In fact, forest tenure can have important effects on the success of any community forestry endeavour or

conservation effort. The formal or informal tenure rights enjoyed by cooperatives encourage groups to manage and protect the forest rather than destroy it (Jones, 2003).

Even though community-based forest enterprises do not always work well and there have been cases of mismanagement, there are many examples where CFEs have reduced deforestation and illegal logging, generated employment and income opportunities for impoverished communities, and brought about more sustainable forms of forest use. (Del Gatto, 2013, p. 1)

Quebec forestry workers' cooperatives have a more limited role in forest management. Decisions relating to the management of public forests are taken by the government and forestry workers' cooperatives intervene in the forest and access resources according to supply guarantees and sub-contracting agreements. They have an obligation to comply with applicable laws and regulations but have no long-term usufruct rights. Therefore, they must train their worker-members in best forestry practices, maintain their certifications and modernize their equipment, machinery and infrastructure to increase their productivity and remain competitive. Their innovation efforts are more oriented towards the development of economic activities peripheral to forest harvesting, such as optimizing the use of woody and non-woody forest resources, or the valorization of forest residues for bioenergy production. As they act at the beginning of the forest value chain, they are more likely to feel the effects of changes in the industry and the timber supply on jobs (Moreau and Guénette, 2016; CSMOAF, 2017). Forestry workers' cooperatives continue to give an important place to the creation of decent jobs for their members, to the socio-economic development of their community and to the adoption of sustainable forestry practices. Nevertheless, their insecure access to forest resources and to forestry contracts as well as their limited role in forest management make long-term planning difficult. This situation could, in the long run, limit their capacity to develop and adopt sustainable practices other than for strictly economic reasons. Yet, the commitment of cooperatives to sustainable development relies on their ability to combine their members' motivations of economic utility to a collective social change project (Touzard and Vandame, 2009). Furthermore,

For some co-operatives, often those focused on competing for market share or on survival in a market, a focus on the transformative potential of co-operatives as a distinctive form of business seems more like ideology than like good business. This kind of thinking can be damaging to the co-operative movement as it makes it more difficult to see the co-operative advantage, and thus increases vulnerability to isomorphic practices. Co-operatives that mimic investor-owned businesses may be in danger of losing their identity as co-operatives, perhaps coming to see themselves as hampered rather than strengthened by the "constraints" of democracy and other co-operative principles. (Brown et Novkovic, 2015, p. 13)

This observation is even more worrying if we consider that part of the potential contribution of forestry cooperatives to SDGs 10 and 16 seems to take root in their cooperative nature. Quebec and Honduran laws governing cooperatives and cooperative principles specify the terms of access to membership, redistribution of surpluses as well as the democratic governance structure of cooperatives. Collective property, free and open access to membership, democratic control and the remuneration structure of cooperatives constitute considerable assets in the reduction of inequalities. Measures to favor the integration of new members, whether it concerns membership expansion strategies, training aimed at increasing their skills, creation of new jobs or measures to facilitate their access to the market, also support the reduction of inequalities. The cooperatives' role in that matter seems even more important considering that the achievement of SDG 10 is currently compromised in Canada and in Honduras (Sachs, Schmidt-Traub, Kroll, Lafortune and Fuller, 2018).

The democratic and transparent management of cooperatives in Honduras was less highlighted by the research participants. While Quebec participants emphasized the transparency of communication and consultation with members for strategic decision-making, Honduran participants simply mentioned the main governance structures associated with cooperatives, such as the boards of directors and the general assembly of members. Research shows that some community forestry cooperatives tend to integrate sometimes unequal, even elitist social structures within them (Cronkleton, Pulhin and Saigal, 2012; Cronkleton, Barry, Pulhin and Saigal, 2010; Jones and Orr, 2006; Mahdavi, 2015; Mohammed and Inoue, 2014; Saigal, Dahal and Vira, 2009). This is likely to reduce transparency and

sometimes equity in cooperatives. The results of our research do not indicate that this is the case for agroforestry cooperatives in Honduras. Formalized integration and training measures for current and future members could promote the consolidation of a democratic and transparent governance structure and mechanisms, all the more important since participatory governance helps to improve the well-being of members (Hudon and Huybrechts, 2017) and is likely to bring greater respect for local culture and its values (Isola *et al.*, 2005).

The classification of practices according to targets shows, however, that the potential contribution of forestry cooperatives to the SDGs is similar on several levels. For example, many practices are in place, both in Quebec and in Honduras, to consolidate and diversify the activities of forestry cooperatives and encourage the creation and maintenance of decent jobs in the forestry sector. The training of current members as well as measures related to the health and safety of workers are implemented by cooperatives in Quebec and Honduras even if the latter are rather in their infancy in these areas. Pay equity policies and equal pay for jobs of the same kind, as well as redistribution of surpluses generated by cooperatives, where applicable, improve the quality of the jobs created in addition to helping to reduce inequalities.

As local actors in the forest sector and leading players in the forest value chain, forestry cooperatives are in a good position to implement, on the ground, climate actions (SDG 13) through sustainable management of forests. Research participants agree on their role in this area and mention their contribution to this SDG but find it more difficult to explain it in their practices. The production of forest plants, afforestation, reforestation, forest restoration, silvicultural work and the valorization of forest biomass are among the practices listed by the research participants to explain their contribution to climate action. However, the targets affected by these practices fall under SDG 15 and are not linked to SDG 13, although a clear link is established between forest health and carbon sequestration and storage (Intergovernmental Panel on Climate Change, 2014). "Forests are mitigating climate change, and are also adversely affected, leading to the need for adaptive management in order to cope with climate change" (Hazarika and Jandl, 2019 p. 6).

The SDG 13 targets are formulated to encourage the establishment of national policies, strategies and mechanisms. It therefore remains more difficult to associate them with practices at the organizational level. The use of bioenergy and low-carbon bioproducts as substitutes for more carbon-emitting alternatives nevertheless represents a strategy envisaged by the Canadian Council of Forest Ministers (2017) to mitigate climate change (SDG 13). The contribution of forest biomass valorization activities to the mitigation of climate change remains, however, a function of the energy sources - more or less carbon-emitting - that they replace. Additional steps should be taken to clarify and document the practices of forestry cooperatives and their effects in the fight against climate change.

Finally, the forestry cooperatives in Honduras and Quebec are establishing numerous partnerships in multiple fields in order to achieve their economic, but also social and ecological objectives. Although it was little or not mentioned by the participants, the ability of cooperatives to come together in a sectoral way, in particular through a federation, increases their potential for defending and representing the interests of their members and their community, sharing sustainable practices and pooling resilient infrastructure (Isola *et al.*, 2005). While it is true that organizations' commitment to sustainable development depends on choices made at the organizational level, the potential for forestry cooperatives to contribute to the SDGs could be increased tenfold by the unification of their efforts within their respective network and the establishment of a collective strategy.

Concluding remarks

The SDGs present the main challenges to be met by 2030. They call for the mobilization of all actors and their explicit commitment to them. In terms of sustainable development, the ability for an organization to translate the challenges of sustainable development into its strategic directions is what sets it apart from other organizations. The explicit integration of economic, social and ecological objectives into its core business and its purpose is required to formalize its commitment and guide its actions (Capron *et Quairel-Lanoizelée*, 2015).

As part of this research, we were interested in the commitment of forestry cooperatives to the SDGs, according to the perception of their members and the practices implemented. The results of the research thus make it possible to better understand the nature of the current commitment of forestry workers' cooperatives in Quebec and

agroforestry cooperatives in Honduras towards the SDGs, as well as to establish a number of avenues regarding their potential contribution. The results of these workshops indicate that they adopt practices related to all the SDGs, except for SDG 14, and are therefore likely to contribute positively to SDGs if they formally commit to them.

The main objective of the forestry sector, in the context of the SDGs, remains that of ensuring the implementation of practices that are consistent with sustainable forest management. As local actors in the forestry sector and leading players in the forest value chain, forestry cooperatives are well positioned to implement such practices. However, they must be able to identify the effects of their practices in order to optimize their positive spinoffs and reduce their negative ones. Taking into account the interrelationships between the SDGs associated with their practices could help better anticipate these effects. Well-managed forests can have a positive impact on many SDGs. Yet, there is a risk of goal conflicts between uses of forest-based goods and services. Acknowledging these conflicts, and other unintended consequences of their practices, is one important step for forestry cooperatives to gain, maintain or restore their legitimacy in the eyes of salient stakeholders such as governments and local communities. Integrating more formally the SDGs into their governance could also be the key to a greater recognition of their role in the sustainable management of public and community forests.

As mentioned by Baumgartner (2019), the main challenge in forest sustainable management “is to balance environmentally-related SDGs like SDG 15 with other human-centered SDGs” (p. 6). Forestry workers’ cooperatives and agroforestry cooperatives both mentioned their willingness to preserve forests and forest resources in the long term since their very survival and, most importantly that of their community, greatly depends on it. According to the practices mentioned by the respondents, forestry cooperatives are currently well engaged towards three important impact opportunities highlighted by the Forest Solutions Group, namely “working forests”, “communities” and “people” (see Table 1). This shows the importance that both agroforestry and forestry workers’ cooperatives place on maintaining healthy forest communities, envisioning forest sustainable management as a way to contribute to “other human-centered SDGs”. Forestry workers’ cooperatives also make efforts to develop the forest bioeconomy, another impact opportunity identified by the Forest Solutions Group.

The research shows that some contextual factors can influence the commitment of cooperatives to sustainable development. Agroforestry cooperatives were created to halt deforestation and to promote the development of forest communities. They are inserted into a social forestry system set up by the government for this purpose. Even if their only apparent accountability is to provide forest management and operational plans, a large part of the practices listed by the participants to this research concerns the improvement of their members’ living conditions and of the community infrastructure. In contrast, forestry workers’ cooperatives seem currently to be seen more as economic agents rather than local development actors by the government, thereby limiting their role and maintaining them in a position of dependence on the various actors in the Quebec forest value chain. The capacity of forestry workers’ cooperatives to engage towards the SDGs could be reinforced by a more formalized role in local forest management or by the creation of new local partnerships allowing them to reduce their dependence on work carried out in public forests, two paths they have been pursuing for a few years already.

Although the research results cannot be generalized to all cooperatives, or even to all forestry cooperatives, it is possible to draw certain hypotheses. For example, the collective participation of members in ownership, control and results (Desroche, 1976), characteristic of cooperatives, could represent a considerable advantage in contributing to the fight against poverty (SDG 1), the reduction of inequalities (SDG 10) and the promotion of just, peaceful and inclusive societies (SDG 16). By allowing members to participate collectively in property ownership, cooperatives promote their rights to economic resources and property (target 1.4) and foster their empowerment and social and economic integration (target 10.2). The participation of members in control, through a democratic governance structure and mechanisms, ensures greater accountability and transparency within the organization (target 16.6) and ensures that dynamism, openness, participation and representation characterize decision-making (target 16.7). Finally, collective participation in results contributes to ensuring equal opportunities and reducing inequalities in results (target 10.3), through policies, in particular budgetary and salary policies, promoting progress towards greater equality (target 10.4). It would be interesting to take this reflection further by analyzing the contribution of cooperatives from other sectors to the SDGs. Considering the potential contribution of cooperatives to the SDGs, the contextual factors enhancing or reducing the capacity of cooperatives to commit effectively to the

implementation of the SDGs should be the subject of future research, particularly with regard to cooperatives working in the natural resources sector.

In summary, since they describe the main social, ecological and economic challenges to be met, the SDGs represent an important strategic tool for cooperatives wishing to make a concrete commitment to sustainable development. Integrating the SDGs into their strategic directions, as well as assessing their progress and communicating them transparently to their various stakeholders, could help increase the legitimacy of cooperatives as sustainable development actors.

References

- Alliance coopérative internationale (2017, September). *Co/ops pour 2030, un mouvement concrétisant le développement durable pour tous*. Retrieved September 2, 2019 from <https://base.socioeco.org/docs/co-ops-for-2030-final-report-vol-1-2017fr-944013350.pdf>.
- Akhabbar, A., & Swaton, S. (2011). L'économie du développement durable et l'économie sociale et solidaire. *Colloque international francophone Le développement durable : débats et controverses*, 15 et 16 décembre, Université Blaise Pascal, Clermont-Ferrand. Retrieved September 2, 2019 from <http://www.oeconomia.net/private/colloquediufm/04.colloquedd-akhabbar-swaton.pdf>.
- Amui, L.B.L., Jabbour, C.J.C., de Sousa Jabbour, A.B.L., & Kannan, D. (2017). Sustainability as a dynamic organizational capability: a systematic review and a future agenda toward a sustainable transition, *Journal of Cleaner Production*, 142, 308-322.
- Baumgartner, R. J. (2019). Sustainable Development Goals and the Forest Sector – A Complex Relationship. *Forests*, 10 (2), 152-161.
- Blais, R. (1999). Développement durable et approche sociale en foresterie : retour sur le discours d'Esdras Minville. *Recherches sociographiques*, 40 (2), 225-241.
- Brown, L., & Novkovic, S. (2015). Introduction. In L. Brown, C. Carini, J. Gordon Nembhard, L. Hammond Ketilson, E. Hicks, J. McNamara, S. Novkovic, D. Rixon, & R. Simmons (Eds), *Co-operatives for Sustainable Communities. Tools to Measure Co-operative Impact and Performance*. (pp. 3-17). Retrieved March 9, 2020 from <http://www.cooperativedifference.coop/tools/>.
- Bureau de normalisation du Québec (n.d.). *Certification des entreprises d'aménagement forestier (CEAF)*, Retrieved June 27, 2019 from <https://www.bnq.qc.ca/fr/normalisation/foresterie/ceaf.html>.
- Capron, M., & Quairel-Lanoizelée, F. (2015). *L'entreprise dans la société. Une question politique*. Collection Grands Repères, Paris : Éditions La Découverte.
- Comité sectoriel de main-d'œuvre en aménagement forestier (2017, January). *Diagnostic sectoriel de main-d'œuvre de l'industrie québécoise de l'aménagement forestier 2015-2016*. Retrieved March 9, 2020 from http://www.csmoaf.com/dynamiques/documents/PDF/etudes_CSMOAF/Diagnostic%20sectoriel_Rapport_complet_FINAL.pdf.
- Canadian Council of Forest Ministers (2017), *A Forest Bioeconomy Framework for Canada*. Retrieved August 20, 2019 from <https://www.ccfm.org/pdf/10a%20Document%20-%20Forest%20Bioeconomy%20Framework%20for%20Canada%20-%20E.pdf>.
- Cooperatives Act*, RLRQ, 2019, c. C-67.2
- Cronkleton, P., Pulhin, J.M., & Saigal, S. (2012). Co-management in Community Forestry: How the Partial Devolution of Management Rights Creates Challenges for Forest Communities. *Conservation and Society*, 10 (2), 91-102.
- Cronkleton, P., Barry, D., Pulhin, J.M., & Saigal, S. (2010). Chapter 3. The Devolution of Management Rights and the Co-Management of Community Forests. In A.M. Larson, D. Barry, G.R. Dahal, & C.J. Pierce Colfer (Eds), *Forests for People: Community Rights and Forest Tenure Reform* (pp. 43-68). Center for International Forest Research, London: Earthscan publications.
- De Jong, W., Pokorny, B., Katila, P., Galloway, G., & Pacheco, P. (2018). Community Forestry and the Sustainable Development Goals: A Two Way Street. *Forests*, 9 (6), 331-347.

- Del Gatto, F. (2013). Community Forestry in Honduras: A Path towards Better Governance. *Forest Trends, Information Brief*, No 8. Retrieved August 20, 2019 from https://www.forest-trends.org/wp-content/uploads/imported/community-forestry-in-honduras_english-pdf.pdf
- Desroche, H. (1976). *Le projet coopératif : son utopie et sa pratique, ses appareils et ses réseaux, ses espérances et ses déconvenues*. Paris : Éditions économie et humanisme, les Éditions ouvrières.
- Dyllick, T., & Muff, K. (2015). Clarifying the Meaning of Sustainable Business: Introducing a Typology from Business-as-Usual to True Business Sustainability. *Organization & Environment*, 29 (2), 156-174.
- Fecteau, K., & Escot, X. (2013). La prise en charge de la promotion de l'égalité entre femmes et hommes par les coopératives du Sud, un nouveau mécanisme de gestion locale de l'égalité : le cas des coopératives forestières du Honduras appuyées par la Société de coopération pour le développement international (SOCODEVI) à travers le projet COOPFORH. *Économie et solidarités*, 43 (1-2), 70-85.
- Fédération québécoise des municipalités (2017, November). *Portrait des économies de la forêt*. Retrieved March 9, 2020 from https://www.fqm.ca/wp-content/uploads/2019/08/POL_forets_final-simple_WEB.pdf.
- Food and Agriculture Organization of the United Nations & AgriCord (2016). *Forest and Farm Producer Organizations – Operating Systems for the SDGs. Strength in Numbers*. Forest and Farm Facility. Retrieved August 27, 2018 from <http://www.fao.org/3/a-i5765e.pdf>.
- Gareau, P. (2005). Approches de gestion durable et démocratique des forêts dans le monde, *Vertigo*, 6 (2). Retrieved February 20, 2020 from <http://journals.openedition.org/vertigo/4244>.
- Gertler, M. (2001). *Rural Co-operatives and Sustainable Development*, Saskatoon, SK: Centre for the Study of Co-operatives, University of Saskatchewan.
- Gonzales-Navarro, V., Tomei, J., & Flores-Oyarzo, G. (2018). Analysing the Outcomes of the Forestry Sector on the Sustainable Development Goals for Rural Communities: A Case Study of Cabrero, Chile, *Journal of Sustainable Development*, 11 (5), 194-211.
- Gouvernement du Québec, 2016-2020, *L'aménagement écosystémique: au coeur de la gestion des forêts*. Ministère des Forêts, de la Faune et des Parcs. Retrieved February 20, 2020 from <https://mffp.gouv.qc.ca/les-forets/amenagement-durable-forets/lamenagement-ecosystemique-au-coeur-de-la-gestion-des-forets/>.
- Gouvernement du Québec, 2004-2016, *Les systèmes de certification forestière, Certification forestière*. Ministère des Forêts, de la Faune et des Parcs. Retrieved June 27, 2019 from <https://mffp.gouv.qc.ca/publications/enligne/forets/criteres-indicateurs/5/537/systemes.asp>.
- Gregersen, H., El Lakany, H., & Blaser, J. (2017). Forests for Sustainable Development: a process approach to forest sector contributions to the UN 2030 Agenda for Sustainable Development, *International Forestry Review*, 19 (S1), 10-23.
- Guillotte, C.-A., & Charbonneau, J. (2016). *Coopératives forestières et durabilité : un état des lieux*. Sommet international des coopératives 2016, Sherbrooke, QC: IRECUS.
- Hazarika, R., & Jandl, R. (2019). The Nexus Between the Austrian Forestry Sector and the Sustainable Development Goals: A Review of the Interlinkages. *Forests*, 10 (3), 205-220.
- Hudon, M., & Huybrechts, B. (2017). From Distant Neighbours to Bedmates: Exploring the Synergies Between the Social Economy and Sustainable Development. *Annals of Public and Cooperative Economics*, 88 (2), 141-154.
- International Co-operative Alliance (1995). *Statement on the co-operative identity*. Retrieved June 27, 2018 from https://www.entreprises.coop/images/documents/principes_aci_1995.pdf.
- International Institute for Environment and Development (2014). Sustainable Development Goals: A Forest Module for a Transformative Agenda. *Briefing*. Retrieved August 10, 2019 from <https://pubs.iied.org/pdfs/17248IIED.pdf>.
- International Labour Organization (1996-2020). *Decent Work*. Retrieved March 6, 2020 from <http://www.oit.org/global/topics/decent-work/lang--en/index.htm>.
- Intergovernmental Panel on Climate Change (2014). *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Core Writing Team, R.K. Pachauri & L.A. Meyer (eds.), Geneva, Switzerland: IPCC.
- Isola, G., Gonzalez, L., Oreggioni, W., Pastorini, M., Yorn, C., Fortin, M.-È., Beaugard, G., Peixe McIntyre, J., Franco de Sa, R., Ariza, L., & Dosza, D. (2005). Les fonctions, actions et contributions des coopératives en milieu rural sur le développement local durable. *UniRcoop*, 3 (1), 81-105.

- Jasmine, B. (2017). Mainstreaming Corporate Engagement for Progress towards the Future – Sustainable Development Goals 2030. *Current Science*, 113 (6), 1027-1028.
- Johnson, R. N. (1998). Multiple Products, Community Forestry and Contract Design: The Case of Timber Harvesting and Resin Tapping in Honduras. *Journal of Forest Economics*, 4 (2), 127-146.
- Jones, M.J. (2003). *Evaluation of Honduran Forestry Cooperatives: Five Case Studies*. Submitted in partial fulfillment of the requirements for the degree of Master of science in forestry, Michigan Technological University.
- Jones, M. J., & Orr, B. (2006). Resin Tapping and Forest Cooperatives in Honduras. *Journal of Sustainable Forestry*, 22 (3-4), 135-169.
- Labelle, F., & St-Pierre, J. (2015). La conjugaison des facteurs contextuels, organisationnels et individuels comme déterminant de la sensibilité des PME au sujet du développement durable. *Revue Internationale PME*, 28 (1), 157-189.
- Mahdavi, A. (2015). The Economic, Social, and Ecological Impacts of Wild Pistachio (*Pistacia atlantica Desf.*) Oleo-Gum Resin Extraction Cooperatives in Zagros Forests, Ilam Province, Iran. *Forests, Trees and Livelihoods*, 24 (4), 275-284.
- Mayne, J. (2012). Contribution Analysis: Coming of Age? *Evaluation*, 18 (3), 270-280.
- Midgley, G. (2000). Systemic Intervention. In G. Midgley (Ed.), *Systemic Intervention - Philosophy, Methodology and Practice* (pp. 113-133), New York: Kluwer Academic / Plenum.
- Mobtaker, A., Ouhimmou, M., Rönnqvist, M., & Paquet, M. (2018). Development of an Economically Sustainable and Balanced Tactical Forest Management Plan: A Case Study in Quebec. *Canadian Journal of Forest Research*, 48 (2), 197-207.
- Mohammed, A.J., & Inoue, M. (2014). Linking Outputs and Outcomes from Devolved Forest Governance using a Modified Actor-Power-Accountability Framework (MAPAF): Case Study from Chilimo Forest, Ethiopia. *Forest Policy and Economics*, 39, 21–31.
- Moreau, A., & Guénette, J. (2016). Les régimes forestiers du Québec : des leçons à tirer pour renouer avec la prospérité. *Les Cahiers de la recherche*, Institut économique de Montréal, available from https://www.iedm.org/files/cahier0416_fr.pdf.
- Natural Resources Canada, 2014, *Research at the Laurentian forestry centre of natural resources Canada: forest biomass*. Retrieved March 16, 2020 from <https://cfs.nrcan.gc.ca/pubwarehouse/pdfs/35471.pdf>.
- Nygren, A. (2005). Community-Based Forest Management Within the Context of Institutional Decentralization in Honduras. *World Development*, 33 (4), 639-655.
- Organisation des Nations Unies pour l'Alimentation et l'Agriculture (2011). Réforme de la tenure forestière. Enjeux, principes et processus. *Étude FAO: Forêts*, No 165. Retrieved July 3, 2019 from www.fao.org/3/i2185f/i2185f.pdf.
- Pellegrini, L. (2011). Forest Management and Poverty in Bolivia, Honduras and Nicaragua: Reform Failures?. *European Journal of Development Research*, 23 (2), 266-283.
- Pérotin, V. (2017). Worker Co-operatives: Good, Sustainable Jobs in the Community. In J. Michie, J.R. Blasi, & C. Borzaga (Eds), *The Oxford Handbook of Mutual, Co-operative, and Co-Owned Business* (131-144), New York, NY: Oxford University Press.
- Repetto, R. S. (1999). Amérique latine. In E. Kern, K.L. Rosenbaum, R.S. Repetto, & T. Young (Eds), *Tendances du droit forestier en Amérique et en Asie* (pp. 3-58), Organisation des Nations Unies pour l'alimentation et l'agriculture, *Étude législative* 66, Retrieved March 16, 2020 from <http://www.fao.org/3/X0722F/X0722F.pdf>.
- Résolution 70/1 de l'Assemblée générale (2015, October 21). *Transformer notre monde: le Programme de développement durable à l'horizon 2030*, A/RES/70/1. Retrieved June 27, 2018 from <https://undocs.org/fr/A/RES/70/1>.
- Richards, M. (1993). *Groupes de sciage de long dans le nord du Honduras : progrès et problèmes*, Document RDFN, Hiver (16). Retrieved July 17, 2019 from <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/1300.pdf>.
- Ryan, P. (2011). L'histoire d'un réseau à la défense des coopératives forestières. *Cahiers de l'ARUC-DTC*, Série « Recherche », no 7.
- Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., & Fuller, G. (2018, July). *SDG Index and Dashboards Report 2018*. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN), Retrieved

- September 2, 2019 from https://s3.amazonaws.com/sustainabledevelopment.report/2018/2018_sdg_index_and_dashboards_country_profiles.pdf.
- Saigal, S., Dahal, G.R., & Vira, B. (2009). *Cooperation in Forestry. Analysis of Forestry Cooperatives in Rajasthan, India*, Center for International Forestry Research (CIFOR) and Rights and Resources Initiative (RRI), University of Cambridge.
- Stappmans, F. V., & Bereuther, T. (2017). *Translating the Sustainable Development Goals into Societal Value Contributions of Businesses*. Working Paper, University of St Gallen, Retrieved August 16, 2019 from https://www.alexandria.unisg.ch/252726/1/Final%20Short%20Paper%20Stappmanns%20and%20Bereuther_2nd%20Review_Upload%20Alexandria.pdf.
- Sustainable Forest Development Act*, RLRQ, 2019, c. A-18.1.
- Sweeney, K. (2003). Tropical Forests as Safety Nets? The Relative Importance of Forest Product Sale as Smallholder Insurance, Eastern Honduras. *The International Conference on Rural Livelihoods, Forests and Biodiversity*, 19-23 May 2003, Bonn, Germany.
- Touzard, J.-M., & Vandame, R. (2009). La coopérative comme outil du développement durable : le cas des coopératives d'apiculteurs au Mexique et au Guatemala. *Revue internationale de l'économie sociale*, 3 (313), 36-57.
- Van den Breemer, J. P. M., Bergh, R. R., & Vermeij, M. J. (1994). Anthropologie et foresterie sociale: une exploration théorique. *Bulletin de l'APAD*. Retrieved July 17, 2019 from <http://journals.openedition.org/apad/2243>.
- Vukmirovic, D., Ciric, R., Smolcic, M., Jelic, S., & Budimir, J. (2015). Satellite Accounts: A New Approach for Economic Evaluation of the Co-operative Sector. In L. Brown, C. Carini, J. Gordon Nembhard, L. Hammond Ketilson, E. Hicks, J. McNamara, S. Novkovic, D. Rixon, & R. Simmons (Eds), *Co-operatives for Sustainable Communities. Tools to Measure Co-operative Impact and Performance*. (pp. 59-77). Retrieved March 9, 2020 from <http://www.cooperativedifference.coop/tools/>.
- World Business Council for Sustainable Development (2019). *Forest Sector SDG Roadmap*. Retrieved July 17, 2019 from https://docs.wbcsd.org/2019/07/WBCSD_Forest_Sector_SDG_Roadmap.pdf.

Notes

- ¹ “The forest bioeconomy refers to the economic activity generated by converting sustainably managed renewable forest-based resources, primarily woody biomass and nontimber forest products, into value-added products and services using novel and repurposed processes.” (Canadian Council of Forest Ministers, 2017, p. 6)

Large Cooperatives and SDG 8: Quantifying Contributions Toward the Goal

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Abstract: The 17 Sustainable Development Goals (SDGs), adopted with the 2030 UN Agenda for Sustainable Development, stressed the need for sustainable economic growth to be achieved by reducing poverty, fighting inequality, supporting social development, and addressing aspects that are fundamental for sustainable development, such as climate change and the construction of peaceful societies.

Among the SDGs, SDG 8 “Inclusive and sustainable economic growth, full and productive employment, and decent work for all” highlights the need to pursue economic growth while ensuring inclusion and fairness in the distribution of economic resources and guaranteeing decent working conditions. Companies, including cooperatives, can make a direct contribution to this challenge. As value-based and principle-driven organizations, cooperatives are, by nature, a sustainable and participatory form of business. They can actively contribute to the achievement of SDG 8 through company choices and actions that encourage decent working conditions not only within the companies themselves but also in the production chain. This is especially true for large cooperatives that operate in multiple contexts and regularly need to balance their economic, legal, ethical, environmental, and social interests.

Given this background, this study analyzes the practices implemented by the cooperatives in the 2018 World Cooperative Monitor Top 300 Cooperatives in order to contribute to the discussion on how large cooperatives can participate in the achievement of SDG 8. In particular, the study is based on the analysis of the sustainability reports of those cooperatives that joined the United Nations Global Compact project and/or the Global Reporting Initiative.

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Keywords: SDGs, decent work, cooperatives, sustainability reports, UN Global compact, Global reporting Initiative

Introduction

The recent economic crisis and recovery have highlighted that “economic growth [does] not result in improvements in social conditions or respect for human rights or a reduction in poverty” (European Union, 2006). The crisis and the recovery have therefore highlighted once more the need to rethink the current development model by moving towards a more balanced model that considers not only economic growth but also social and environmental factors.

Sustainable development has been a topic of lively international debate among academics and policy makers for the last two decades. With the adoption of the United Nations’ 2030 Agenda for Sustainable Development, it has

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received further global attention (United Nations, 2015). The agenda has in fact reaffirmed the need for growth “that meets the needs of the present without compromising future generations to meet their own needs” (World Commission on Environment and Development, 1990), a form of growth that “results from the enrichment and enhancement of a society’s knowledge base, including socially shared mindsets and technical knowledge and skills” (International Labour Organization [ILO], 2019).

As part of the 2030 Agenda, the Sustainable Development Goals (SDGs) established targets for reducing poverty, fighting inequality, supporting social development, and addressing concerns that are fundamentally important to sustainable development, such as climate change and the construction of peaceful societies, by the year 2030. The strength of the SDGs lies in the fact that they are clear, easily understandable objectives for which measurable targets have been defined, such that progress on the various issues can be measured and assessed over time.

Although the SDGs were conceived as a call to action for countries, they can also be considered targets on which companies can focus when they plan their activities. SDG 17, “strengthen the means of implementation and revitalize the global partnership for sustainable development,” in fact, explicitly acknowledges the role of enterprises, emphasizing that the targets set by the SDGs can be achieved only if there is cooperation between governments, enterprises, and civil society.

Contributions to the achievement of the SDGs are fundamental to the survival of enterprises themselves because, as research has made evident (Cambridge Institute for Sustainability Leadership, 2015), the current business model of many companies will not be sustainable in the long term; it is natural for companies to rethink their strategic model and operating framework. However, it is a question not only of reducing companies’ environmental impact but also of modifying their strategies and production models to create value through a reduction in “poverty, inequality and lack of financial access” by considering “new market opportunities for smart, progressive, profit-oriented companies” (Business and Sustainable Development Commission, 2017, p. 7).

It is therefore a matter of defining business strategies by applying a triple-bottom-line strategy that considers people, planet, and profit (Elkington, 1997). This means that a corporate strategy should address “the needs of a firm’s direct and indirect stakeholders [...] without compromising its ability to meet the needs of future stakeholders as well.” There is therefore talk of a broad spectrum of environmental, social, and economic needs in response to which companies can implement multiple actions to achieve the corresponding goals (Poisson-de Haro and Bitektine, 2015). The challenge is particularly relevant for large and multinational companies that, while operating in a multiplicity of contexts, must regularly balance several economic, legal, ethical, environmental, and social interests as part of their internationalization strategy. Indeed—because of their size and the extent of their range of action—large enterprises interact in multiple contexts and with several stakeholders, which can have a great impact not only within the organizations in question but also on their value chain and, in an even wider sense, on the country’s policies (Business and Sustainable Development Commission, 2017; Kolk, 2010; Kolk and van Tulder, 2010).

International corporations and major for-profit companies around the world are making investments to show their support for the SDGs. In some cases, these investments and resources are integrated into the company at a strategic business level. This is the case of Unilever, a multinational corporation promoting its commitment to the SDGs as a key business strategy; the company’s Sustainable Living Plan (Unilever, 2019) ties the company’s actions on sustainable growth directly to the SDGs. The Nestle corporation has a similar plan – its Creating Shared Value goals maps its sustainability strategy against the SDGs (Nestle, 2020). And while not referring directly to the SDGs, but to ethical and sustainable actions toward stakeholders and communities, the Business Roundtable, an association representing CEOs of leading American companies, released a Statement on the Purpose of a Corporation signed by 181 CEOs in 2019 (Business Roundtable, 2019). Often, however, initiatives of for-profit companies are still limited as they focus on simply reducing harm or limiting pollution (Agarwal et al., 2017; Mhlanga et al., 2018; van Zanten & van Tulder, 2018).

Cooperatives, on the other hand, can and do contribute in positive ways to achieving the SDGs. As highlighted by a recent United Nations report, cooperatives are—by their nature—participatory and sustainable organizations (International Labour Organization [ILO] and International Cooperative Alliance, 2014). As reiterated by the general

director of the ILO, “as global attention focuses on the challenge of sustainable development, co-operatives can and must play a key role as creative enterprises expanding into new and innovative areas” (UN News, 2013).

While cooperatives contribute across all the SDGs, SDG 8 is particularly relevant to the cooperative business model. SDG 8 focuses on the theme of sustainable growth and decent work, meaning “jobs of acceptable quality” (ILO, 1999), that is, work that guarantees conditions of safety in the workplace, that excludes all forms of discrimination and exclusion, and that promotes the diversification and progress of technology and innovation and at the same time produces inclusive effects and sustainability (Ferruzza et al., 2018; United Nations Inter-Agency Task Force on Social and Solidarity Economy, 2014).

Grouping sustainable growth with full and productive employment and decent work in SDG 8 foregrounds the need to seek a new model of economic development that guarantees a more equitable distribution of economic resources as well as decent working conditions. Achieving this goal has implications for the other SDGs as well. SDG 8 is indeed a prerequisite for the achievement of many other SDGs, such as the reduction of poverty (SDG 1) and of inequalities (SDG 10).

On the theme of decent work, there are many ways in which cooperatives can contribute to achieving the targets set by SDG 8. Surveys conducted in different areas of the world have highlighted that cooperatives have protected jobs more successfully than other private companies during economic crises (Pérotin, 2006; Birchall and Ketilson, 2009; Birchall 2013; United Nations News, 2013). The cooperative model has also empowered workers from companies in crisis or bankruptcy to reorganize and keep businesses alive (Ruggeri and Vieta, 2015). Examples are taken from the more than 300 *empresas recuperadas* (worker buyouts) - and their 13,000 workers who were surveyed in Argentina in 2014 (Ruggeri, 2014), or from the 257 worker buyouts (among 9,300 workers) that, beginning in the 1980s, were established in Italy (Vieta, 2015).

In addition, cooperatives can serve as an employment opportunity for disadvantaged or vulnerable people (Fonteneau & Pollet, 2019). According to a recent report by the European Commission (European Commission, 2020), Italian social cooperatives employed more than 32,000 disadvantaged people in 2017. This was an increase of almost 9,000 workers, compared to 2003, which confirms the trend of cooperatives working to protect employment in periods of economic contraction. Other studies have shown that cooperatives can offer job opportunities to people who, for various reasons such as gender, racial background and/or immigration status, find themselves in conditions of vulnerability by improving their working conditions (Matthew & Bransburg, 2017.) and increasing their trust (Majee & Hoyt, 2009).

Speaking of vulnerable people, one cannot fail to note that, following the practices of many developing countries, cooperatives have enabled the emergence of informal work¹, thus ensuring better working conditions and worker protections for at-risk populations. It should also be emphasized that ‘cooperatives may be an option that lifts groups, rather than individuals, out of poverty as a result of their ability to create and sustain bonding and bridging social capital for groups of cooperative members (Majee and Hoyt, 2011). One example of such an organization is the Self-Employed Women’s Association, an Indian trade union that represents 1.8 million informally employed women who have been organised into more than 100 cooperatives (ILO & WIEGO, 2017).

Having said that, this paper intends to contribute to the discussion of the relation between cooperatives and SDGs focusing on how large cooperatives can participate in the achievement of SDG 8 to highlight how cooperatives can serve as leaders in their sectors and as players that, by proposing diverse business models, can compete with for-profit companies even at the international level. The focus on large cooperatives emerges from the World Cooperative Monitor (WCM), an annual reporting initiative conducted by Euricse and the International Cooperative Alliance (ICA)². Within the scope of recent WCM reporting, Euricse and the ICA have analyzed the practices related to achieving the SDGs implemented by cooperatives ranked in the Top 300 largest cooperative and mutual organizations. The research discussed in this paper was conducted based on those organizations within the 2018 Top 300 Cooperatives by turnover ranking (Euricse-ICA, 2018).

The paper is organized as follows. After the discussion of the reporting standards that can provide support in measuring the progress of companies in terms of the SDGs (paragraph 1), paragraph 2 presents the methodology adopted in the analysis. Paragraph 3 presents the main results obtained. The conclusions follow.

1. Reporting and sustainable development

The commitment to the adoption of business models oriented toward sustainable development must translate into monitored and measured procedures, decisions, and behaviors in all aspects of the company and along the supply chain. Data serves as the essential basis for decision-making; without it, defining, evaluating, and monitoring new company processes and policies is practically impossible (UN Data Revolution, 2014).

Companies have well understood this need, as well as the necessity to communicate such data externally. In fact, reporting practices (in the form of stand-alone reports or sections within annual reports) dedicated to the disclosure and analysis of data other than purely economic data have spread since the late 1980s. Whereas initially companies have focused their attention on purely environmental aspects (Berthelot et al., 2003), over the years the focus of reports has widened to include social, ethical, and governance aspects (Kolk, 2005).

Several international initiatives have proposed metrics and standards for reporting sustainable practices and outcomes (Dumay et al., 2010). Among these, the most popular is the Global Reporting Initiative (GRI), launched in 1997 by the Coalition for Environmentally Responsible Economies and the Tellus Institute with the aim of developing and disseminating guidelines for economic, environmental, and social reporting. To assist companies in the preparation of their social reporting, the GRI, through the Global Sustainability Standards Board, has issued guidelines involving metrics and indicators relating to different aspects of the economic, social, and environmental operations of companies. At the end of 2016, the revision of the guidelines led to the publication of the first GRI Sustainability Reporting Standards.

According to a survey conducted by KPMG, 63% of the top 100 companies by revenue in each of the 49 countries covered by the KPMG study and 75% of the world's 250 largest companies by revenue based on the Fortune 500 ranking of 2016 apply the GRI framework (KPMG, 2017).

Another initiative, different in its approach and processes, was introduced by the United Nations in the year 2000 (UN Global Compact, 2008). The UN Global Compact is an international voluntary network-based initiative that brings together several actors, including UN agencies, corporations, and non-government organizations, with the aim of spreading among businesses 10 principles in the areas of human rights, labor, the environment, and anti-corruption (Williams, 2004; Kell, 2005). It also seeks to catalyze the attention of companies on broader UN goals, such as the SDGs. The project aims to encourage the processes of discussion, learning, and advancement of the 10 principles (Rasche, 2009; Ruggie, 2001), but the implementation in companies is not measured. Indeed, participating companies are required to annually upload a report, called Communication on Progress (CoP), to the project platform to make public the progress made on the 10 principles. However, no guidelines are provided for the preparation of the CoP reports, nor are there specified indicators to be used for measuring the progress achieved.

Indicators on how companies can measure their contribution to the achievement of the SDGs come from the SDG Compass, a project jointly developed by the United Nations Global Compact and the GRI, together with the World Business Council for Sustainable Development.

This project makes a repository of indicators selected from widely recognized sources/standards, including the GRI, available to companies wishing to monitor their progress on SDG issues (SDG Compass, 2015).

2. The research

The analysis aims to deepen the practices put in place by large cooperatives within their own organizations, within their production chains, and, more generally, within their territories and communities to pursue the targets of SDG 8. To this end, the study focuses on the enterprises listed in the 2018 World Cooperative Monitor Top 300 Cooperatives (based on turnover) that joined the United Nations Global Compact project and/or the GRI.

The analysis was carried out in two steps. First, attention was given to the cooperatives that joined the United Nations Global Compact project (36 out of the top 300 cooperatives in the ranking). The study focused on the analysis of the responses provided by the companies in the self-assessment questionnaire, which was completed by all companies participating in the project at the time of the annual submission of the CoP report. The questionnaire also includes questions that investigate which SDGs are included within the CoP report and the type of information provided in this regard.

Second, the analysis focused on an examination of the sustainability reports prepared by the cooperatives included in the top 300 cooperatives in the world to analyze the practices implemented by these cooperatives in achieving SDG 8. The analysis concentrated only on the annual or sustainability reports compiled according to the guidelines promoted by the GRI to collect comparable data. Out of all the cooperatives in the top 300 list that joined the GRI initiative and reported applying the GRI indicators, 32 organizations were included in the analysis. A selection of GRI indicators³ that, according to the guidelines of the SDG Compass project, are relevant in terms of equal work and sustainable development was studied (Table 1).

Table 1.
GRI Standards Related to SDG 8

Business theme	Relevant GRI Standard or Sector Disclosure	Disclosure/Indicator Nr.	Disclosure/Indicator Title
Abolition of child labor	GRI 408: Child Labor	408-1	Operations and suppliers at significant risk for incidents of child labor
Changing the productivity of organizations, sectors, or the whole economy/Indirect impact on job creation/Jobs supported in the supply chain	GRI 203: Indirect Economic Impacts	203-2	Significant indirect economic impacts
Diversity and equal opportunity	GRI 405: Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees
Earnings, wages and benefits	GRI 202: Market Presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage
	GRI 401: Employment	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees
Elimination of forced or compulsory labor	GRI 409: Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor
Employee training and education	GRI 404: Training and Education	404-1	Average hours of training per year per employee
		404-2	Programs for upgrading employee skills and transition assistance programs

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Business theme	Relevant GRI Standard or Sector Disclosure	Disclosure/Indicator Nr.	Disclosure/Indicator Title
		404-3	Percentage of employees receiving regular performance and career development reviews
Employment	GRI 102: General Disclosures	102-8	Information on employees and other workers
	GRI 202: Market Presence	202-2	Proportion of senior management hired from the local community
Employment & Youth employment	GRI 401: Employment	401-1	New employee hires and employee turnover
Equal remuneration for women and men	GRI 405: Diversity and Equal Opportunity	405-2	Ratio of basic salary and remuneration of women to men
Labor practices in the supply chain	GRI 414: Supplier Social Assessment	414-1	New suppliers that were screened using social criteria
		414-2	Negative social impacts in the supply chain and actions taken
Non-discrimination	GRI 406: Non-discrimination	406-1	Incidents of discrimination and corrective actions taken
Occupational health and safety	GRI 403: Occupational Health and Safety	403-1	Workers representation in formal joint management–worker health and safety committees
		403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities
		403-3	Workers with high incidence or high risk of diseases related to their occupation
		403-4	Health and safety topics covered in formal agreements with trade unions

Source: *SDG Compass, 2019*

Basing the analysis on information found in the annual and sustainability reports has both advantages and limitations. Given the difficulty of finding data directly from organizations, the annual and sustainability reports are the main and most complete sources of extra-economic data on companies. However, this strategy also has some limitations. First, the decision to limit the analysis to annual and sustainability reports compiled according to GRI standards considerably decreases the number of cases examined. Second, the reports underscore actions that have been implemented, although they do not necessarily include every action that an organization has taken. Third, it should be considered that there may be some bias due at the fact that the indicators are self-reported. Finally, the GRI standards provide guidelines on the trajectory to be maintained in reporting but do not explain in detail how

these metrics should be developed in the reports. Therefore, the degree of detail and the way the information is presented within the reports can vary considerably. This makes it difficult in some cases to compare information across cooperatives.

Despite these limitations, the analysis provides interesting insights into the contribution that large cooperatives can make toward achieving the objectives of SDG 8.

3. Main results

Looking at the cooperatives that joined the United Nations Global Compact project, the analysis highlighted that 31 of the 36 organizations declared they address at least one of the SDGs in their CoP reports. All of the SDGs are addressed in some way by at least one of the studied organizations according to the reports.

The statements provided by the top 300 organizations show that they pay attention to ensuring sustainable consumption and production patterns (SDG 12). They also state they are taking urgent action to combat climate change and its impacts (SDG 13), ensure healthy lives and promote well-being for people of all ages (SDG 3), and promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all (SDG 8).

The reporting mainly involves a description of the opportunities and responsibilities that one or more SDGs represent for the company (24 cooperatives out of 36), the company's priorities with respect to the themes promoted by the SDGs (22 cooperatives out of 36), and the presentation of indicators aimed at quantifying the progress made by the company on the reported SDGs (21 cooperatives out of 36). The cooperatives also report the existence of partnerships with other stakeholders for the implementation of actions related to the SDGs (16 cooperatives out of 36), illustrate how the SDGs are operationally integrated into the business model of the company (14 cooperatives out of 36), and describe the expected outputs and impact of the actions promoted by the company on these issues (11 cooperatives out of 36).

Regarding the analysis of the sustainability reports compiled according to GRI standards, it is interesting to investigate which issues related to SDG 8 have attracted the attention of cooperatives.

The first conclusion that can be drawn from the analysis concerns the issues on which the cooperatives decide to report. As is clear from the data shown in Table 2, not all the topics presented in Table 1 are covered equally by the cooperatives studied.

Table 2.
GRI indicators covered by the cooperatives analyzed

Disclosure/Indicator Title	Number of coops reporting the indicator	Examples of data reported
Operations and suppliers at significant risk for incidents of child labor	7	"As per our Sound Sourcing Code of Conduct we do not allow child labour within our supply chain and we report figures relating to incidents that occur and implementation of corrective actions. Our risk criteria and audit process for our supply chain has robust measures to contribute to the effective abolition of child labour." (The Co-operative Group, 2018; p.10).
Significant indirect economic impacts	12	"Copersucar is committed to the positive transformation of society. Its business model includes investment in social responsibility activities that benefit the communities surrounding its operations. The Conecta Program is the main social initiative developed with this purpose. [...] The program promotes ties between government, private initiative and the third sector to train and capacitate young people in entrepreneurship, appreciation of

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Disclosure/Indicator Title	Number of coops reporting the indicator	Examples of data reported
		education and culture, dialog about community matters, and in the promotion of sports and health. The Conecta Program also creates opportunities for Copersucar employees to serve as volunteers. [...] The partner mills also make social investments that benefit local communities, while also promoting social, economic and cultural development. In the 2016-2017 and 2017-2018 crop years, 74% of the mills (26 altogether) had these types of initiatives in place (Copersucar, 2018; p. 60)
Diversity of governance bodies and employees	26	"Women made up 68.4 per cent of the total workforce of REWE Group in 2017 and 68.7 per cent in 2016. They also comprised about 48.6 per cent of the company's managers (2016: 48.1 per cent; 2015: 48.0 per cent). The share of women among the company's top management was 11.6 per cent (2016: 10 per cent). Consequently, REWE Group has beaten its target of having 47.9 per cent of its management positions filled by women." (REWE, 2018)
Ratios of standard entry level wage by gender compared to local minimum wage	8	<i>"El salario inicial estándar se encuentra un 250% por sobre el Salario Mínimo Vital y Móvil. El pago de salarios superiores al salario mínimo contribuye a la capacidad de los trabajadores adultos de mantener a una familia"</i> (The standard initial salary is 250% above the Minimum Living and Mobile Salary. Paying wages above the minimum wage contributes to the ability of adult workers to support a family). (Sancor Seguros, 2017)
Benefits provided to full-time employees that are not provided to temporary or part-time employees	9	"A large number of voluntary occupational benefits are available in principle to all employees. [...] Equally, there is no distinction in terms of voluntary benefits at our foreign subsidiaries between full-time and part-time employees. However, some benefits such as preventive healthcare measures and occupational retirement provision are reserved for employees with permanent contracts." (Talanx, 2018; p. 52)
Operations and suppliers at significant risk for incidents of forced or compulsory labor	6	"Copersucar and its partner mills are committed to combating child, forced and slave-like labor. The company mitigates the risk of these illegalities occurring by adopting several practices, in particular: <ul style="list-style-type: none"> • Copersucar establishes contractual clauses expressly prohibiting the use of child, forced or slave-like labor; • The adoption of workplace health and safety systems and tools. In the 2016-2017 and 2017-2018 crop years there were no known cases of child, forced or slave-like labor across Copersucar's value chain." (Copersucar, 2018; p. 60)
Average hours of training per year per employee	21	"In 2017, approximately 25,652 (25,146) training days were held with 3,552 (3,440) Metsä Group employees in Finland and 4,040 (3,419) abroad." (METSÄ GROUP, 2017; p.52)
Programs for upgrading employee	25	"Die Migros bildete im Berichtsjahr 3'860 Lernende in über 50 verschiedenen

Disclosure/Indicator Title	Number of coops reporting the indicator	Examples of data reported
skills and transition assistance programs		Berufen aus und hat jungen Berufsleuten in den Bereichen Detailhandel, Industrie, Logistik und Dienstleistungen eine vielfältige Auswahl geboten. 79% der Grundbildungen wurden mit einem eidgenössischen Fähigkeitszeugnis abgeschlossen, 5% mit einer eidgenössischen Berufsmatur und 16% mit einem eidgenössischen Berufsattest" (<i>In the reporting year, Migros trained 3,860 trainees in more than 50 different professions and offered young professionals a broad choice in the areas of retail, industry, logistics and services. 79% of basic training programmes were completed with a Swiss federal certificate of proficiency, 5% with a federal vocational diploma and 16% with a federal vocational certificate</i>). (Migros, 2017 p. 80)
Percentage of employees receiving regular performance and career development reviews	17	"OP Financial Group implements its strategy and annual plan through annual employee performance reviews. They are an integral part of performance management and include the goal-setting review, performance review and competence and follow-up review. The first review of the year includes an assessment of the employee's performance during the past period and setting targets for the coming period. The second review focuses on competencies and includes the drawing up of a development plan on the key areas in need of improvement. Furthermore, the realisation of targets in the current period is discussed. The entire OP personnel in Finland and abroad have annual performance and career development reviews." (OP financial Group, 2018).
Information on employees and other workers	32	1,369 employees, 1,279 with permanent contract (Banco Coomeva, 2018)
Proportion of senior management hired from the local community	7	"100% de altos directivos procedentes de la comunidad local donde se desarrollan operaciones significativas" ("100% of senior managers comes from the local community where significant operations are carried out." (Grupo Ilunion, 2017).
New employee hires and employee turnover	25	"The turnover rate among REWE Group employees has been relatively stable between 14 per cent and 16 per cent for many years. In 2017, the fluctuation rate rose slightly to 16.2 per cent from 15.3 per cent (2016). During the same period, the hiring rate of new employees rose from 16.7 per cent (2016) to 17.1 per cent in 2017. The industry average in Germany was 27.9 per cent in both 2014 and 2015". (REWE, 2018)
Ratio of basic salary and remuneration of women to men	17	Gender pay overall, by category and by location (Fonterra, 2017a)
New suppliers that were screened using social criteria	23	"Die 18 Basisbestände für das Verwalten und Sortimentwechsel z.B. Arbeitsstandards in der Lieferkette, Vorgaben zur Lebensmittelsicherheit und zum Tierwohl sowie den Schutz der Interessen Fischbestände und der Tropenwälder." (<i>The 18 basic requirements for suppliers and product ranges include labour standards in the supply chain, and requirements relating to</i>

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Disclosure/Indicator Title	Number of coops reporting the indicator	Examples of data reported
		<i>food safety, animal welfare and the protection of global fisheries and rainforests</i>). (Migros, 2017)
Negative social impacts in the supply chain and actions taken	7	"In 2017, REWE Group restructured the concept of its supplier development activities in the area of social issues and set up a social improvement programme. It includes the following steps: 1) Onboarding 2) Auditing/certification 3) Remediation/improvements and 4) Training." (REWE, 2018)
Incidents of discrimination and corrective actions taken	17	"We investigated two reported incidents of discrimination over the past year. These incidents were reported through formal internal channels, or confidentially via The Way We Work Hotline [...]. Both issues were investigated. One matter is no longer subject to action; the other is still under investigation." (Fonterra, 2017a; p.88)
Workers representation in formal joint management–worker health and safety committees	8	"Achmea finds it is important to have good relations and cooperation with participation bodies. In this cooperation we aim to resolve organisational problems through a process of co-creation, each from their own individual responsibility. In 2017 the Achmea Works Councils held regular consultations with the management of the operating companies. [...]. In 2017 the Central Works Council handled a total of eighteen requests for advice and eight requests for consent. Achmea has held talks with the trade unions about the current collective labour agreement and the new agreement. With respect to innovation, employer organisations and trade unions have conducted pilot studies into an individual employability budget and a mobility budget. The outcomes were submitted to the collective labour agreement negotiations for 2018". (Achmea, 2018; p.35)
Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	30	"Achmea has identified two types of risk. On the one hand, risks involved in the performance of work by employees, and on the other the risk of lacking the right competences to perform the activities. [...], the risks identified are mainly operational and compliance-related. These concern matters such as internal fraud, disruption to processes, workplace security, damage to physical possessions and disruptions to the business. [...]. Since the introduction of the employability policy in 2011, the sickness absence rate has fallen sharply. Since 2016, the rate has been stable at around 3.45%." (Achmea, 2018, p. 32 and p.35)
Workers with high incidence or high risk of diseases related to their occupation	9	There is no indication that employees have a high illness rate or health risks as a result of their jobs. [...]. Mental strain can sometimes have a devastating effect on people’s employability, motivation and job performance. For this reason, REWE Group worked with the Institute for Health Promotion in 2011 to develop a project called “LoS! – Lebensphasenorientierte Selbsthilfekompetenz” (Life Phase-Oriented Self-Help Skills)." (REWE, 2018)

Disclosure/Indicator Title	Number of coops reporting the indicator	Examples of data reported
Health and safety topics covered in formal agreements with trade unions	6	"We comply with each country's local regulations and legislation on collective agreements and working conditions, including health and safety." (METSÄ GROUP, 2017; p. 66)

All of the cooperatives deal with the more general theme, namely that of work, offering data on and analysis of the characteristics of their workforce. Health and safety in the workplace, diversity and equal opportunity, training and work practices in enterprises in the production chain are also widespread. Less widespread, but interesting from the point of the information provided, is the theme of the indirect impact of the cooperative's activities.

The second consideration concerns the perimeter covered by the reports. The analysis has in fact highlighted that these issues offer information on three different fronts. In fact, with respect to these issues, the cooperatives report on the actions implemented within their organizations to guarantee decent working conditions for their workers, actions in place related to activities across their supply chain, and those aimed at supporting growth not only in the company, but also in the communities in which the business operates.

3.1 Guaranteeing decent work within the organization

As is evident from the data shown in Table 2, a good part of cooperatives' attention is dedicated to describing the characteristics of their organizations' workers in terms of diversity, training courses for the improvement of hard and soft skills, and safety in the workplace. In fact, all 32 cooperatives analyzed provide information on the characteristics of their workers; however, the degree of detail provided varies greatly from report to report.

The most relevant information that can generally be obtained from the reports concerns the composition of the workforce according to classification by type of contract, age and gender. The first relevant group of data comes precisely from the type of contract applied to the employees. The data collected shows that for 20 cooperatives, among the 22 cooperatives for which information on type of contract is available, permanent workers represent more than 80% of all workers, with minimal differences between women and men.

Gender equality is one of the issues to which the reports pay particular attention. Cooperatives have taken several actions to guarantee equal treatment of women and men within their organizations. For example, the policies used to determine wages, where existing, are defined on the basis of national or sectoral contracts and are defined exclusively on the basis of employee's qualifications and professional experience. However, the challenge of gender equality has objectives that have yet to be fully achieved, such as the presence of women in top positions, which remains limited in many of the organizations examined. This is a well-known deficit, but many cooperatives are striving to implement changes that enable women to break the glass ceiling. This is the case, for example, in OP Financial Group, where in 2017 women occupied just 21% of executive positions, but the cooperative group has set goals to reach a 60/40 ratio of men to women in such positions (OP Financial Group, 2018).

As far as training is concerned, many of the cooperatives analyzed promote continuous training courses for their employees, not only to increase workers' soft and hard skills but also to increase workers' sensitivity to issues of particular interest to the cooperative. For instance, REWE Group promoted an initiative in 2016 to raise awareness among its workers regarding the issue of sustainability in commerce (REWE, 2018).

Lastly, another topic related to work within the organization widely discussed in sustainability reports is safety in the workplace. Of the 32 cooperatives analyzed, 30 delve into this issue by providing details about the practices they have implemented to ensure the safety of workers in the workplace and the countermeasures they have put in place to address any accidents that may occur.

3.2 Promoting decent working conditions within the supply chain

Also emerging from the sustainability reports analyzed is the attention of cooperatives to working conditions not only of workers in their organization but also extending to workers belonging to organizations in the cooperative's supply chain. It is interesting to observe how cooperatives perceive the need to network on this front instead of acting alone (a need already underlined expressly by SDG 17). Many join online platforms, forums, and associations such as, for example, the Ethical Trading Initiative (ETI), the SEDEX platform, and the Business Social Compliance Initiative.

The data shows that of the 32 cooperatives analyzed, 23 present in their sustainability report the practices implemented to assess the behavior of new suppliers, not only economically but also on the employment, environmental, and social fronts. Agricultural cooperatives (especially those dedicated to food processing) and consumer cooperatives show a particular sensitivity to the topic. Because their production chains are distributed across several countries, the cooperatives promote actions to ensure decent working conditions even in those countries where labor legislation is relatively weak or completely nonexistent. In this context, to promote better working conditions within the enterprises of their production chain, cooperatives mainly follow two approaches: one is aimed at spreading the knowledge of good working practices, and the second focuses more on the signing of agreements between suppliers to respect human rights and certain working conditions.

Among the actions aimed at disseminating a decent work culture are the organization of workshops and training courses on decent employment and social standards in line with ILO directives. For example, in 2018 the Co-operative Group organized a series of 18 events attended by over 900 delegates (The Co-operative Group, 2018) in three countries (Great Britain, Spain, and Kenya) that play a central role in the product supply line in order to raise supplier companies' awareness of decent work issues and to provide support on local labor laws.

As for the signing of agreements, several cooperatives require their suppliers to sign ethical codes that cover different concerns of the SDGs, such as human rights, environmental impact, and working conditions. The cooperatives also subject their suppliers to periodic checks and controls in order to assess compliance with the agreements signed. This is the case, for example, with Fonterra, which in 2017 evaluated over 400 suppliers to verify compliance with the code they signed (Fonterra 2017a; Fonterra, 2017b). In the same year, Migros verified the working conditions of migrants through audits in most of their fruit and vegetable suppliers based in Italy, Spain, Greece, and Israel (Migros, 2017).

Moreover, S Group practices responsible procurement, requiring that their suppliers respect labor and human rights and that products can be traced back to the source of raw materials. The group is a member of the Business Social Compliance Initiative, and using indicators from this initiative, in 2017 99% of the direct risk country purchases of S Group's private labels and own imports were audited at the factories of 249 S Group suppliers (S Group 2017).

3.3 Actions to support the community

Finally, looking at the wider impact of organizations, 12 cooperatives also present initiatives they promote to stimulate the growth of the communities in which they operate or development projects promoted in developing countries. These are initiatives different in terms of purpose, duration and characteristics, however united by the desire to support entrepreneurial initiatives, promote training and work integration of young people, and spread the culture linked to sustainable development issues and SDGs.

Coopersucar, for example, promotes youth entrepreneurship in its local communities through its Conecta Program, a collaboration between government, private initiatives, and the third sector. Another interesting entrepreneurship support initiative comes from Migros, which launched Engagement Migros in 2012. Migros allocates 10% of dividends from its financial, retail, and travel services to this initiative, which supports projects in various fields related to the circular economy, digitalization, and innovation.

Cooperatives also implement and support activities in areas where they do not operate directly. The Bay Wa cooperative's foundation, for example, supports biogas in Tanzania through training and construction of biogas

plants. Through these initiatives, the cooperative is helping to improve environmental conditions as well as create jobs and improve living conditions for farmers.

Conclusion

Although the number of organizations analyzed is limited, the results provide concrete examples on reporting practices on SDGs and actions taken by large cooperatives to meet the objectives of SDG 8. This is an increasingly fundamental SDG, given the threats to decent working conditions posed by various global trends and crises. At the outset of 2020, we were keenly aware of the impact of migration, technology, the rise of the so-called “gig economy”, the legacy of economic, financial, and political crises that continue to increase the uncertainty and precariousness of work (Baglioni & Giugni, 2014). However, the global health pandemic emerging throughout 2020 compounds the already existing problems and raises further challenges for meeting the targets set out by the SDGs.

The future of work is expected to include a larger share of employment coming from the service sector, particularly personal care and social services, and could be less structured than in the past, given new types of employment and the rise of the gig economy (ILO 2017; Roelants et al., 2019).

Cooperatives can play a key role in mitigating the impact of these global trends and crises and in improving social and economic conditions. They provide quality and stable jobs, facilitate gender equality in the labor force, and help workers transition from informal to formal employment. However, it is not enough to say cooperatives are environmentally and socially responsible businesses without the data and analysis to demonstrate it. Cooperatives must communicate the actions that demonstrate their fundamental nature as ethical businesses both within and beyond the cooperative movement. The more they participate in reporting initiatives that enable the collection of reliable and internationally comparable data, the more research and analysis can be done to demonstrate the social and economic impact of cooperatives.

The initiatives analysed in this paper are two examples of how guidelines and indicators can help companies report and publicise their actions in the area of sustainable development. By providing reporting guidelines, these initiatives constitute a model for how companies can approach the subject of reporting. By defining specific indicators, they outline the route that companies should take in presenting their actions, the limitations that still arise, and a means to compare their work with that of other companies. However, the vagueness of some indicators, the lack of detailed directives on how the individual indicators should be presented, and the freedom companies have about which indicators to report (and which to leave out) are factors that raise some doubts about the actual effectiveness of the reporting schemes promoted by such initiatives.

Notwithstanding these doubts, which future research could investigate further, the reporting practices studied in this paper provide some key insights and concrete examples of the contributions businesses, both for profit and cooperative, make to meeting the objectives established by the SDGs.

References

- Achmea. (2018). Integrated annual report 2017. Retrieved July 01, 2019, from: <https://www.achmea.nl/en/investors/publications>
- Agarwal, N., Gneiting, U., & Mhlanga R. (2017). Raising the bar. Rethinking the role of business in the Sustainable Development Goals. Oxfam discussion papers. Retrieved online August 29, 2020, from: <https://media.business-humanrights.org/media/documents/files/documents/dp-raising-the-bar-business-sdgs-130217-en.pdf>
- Baglioni, S., & Giugni, M. (2014). *Civil Society Organizations, Unemployment, and Precarity in Europe: Between Service and Policy*. Basingstoke, Hants: Palgrave Macmillan.
- Banco Coomeva. (2018). Informe de Sostenibilidad 2017. Retrieved August 20, 2019, from: <https://database.globalreporting.org/reports/60291/>
- Berthelot, S., Cormier, D., & Magnan, M. (2003). Environmental disclosure research: Review and synthesis. *Journal of Accounting Literature*, 22, 1–44.

- Birchall, J. (2013). *Resilience in a downturn: the power of financial cooperatives*. Geneva: International Labour Office (ILO). Online: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---coop/documents/publication/wcms_207768.pdf
- Birchall, J., Ketilson, L. H. (2009). *Resilience of the Cooperative Business Model in Times of Crisis*. Geneva: ILO. Online: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_108416.pdf
- Business and Sustainable Development Commission. (2017). *Better business, better world*.
- Business Roundtable. (2019). Statement on the purpose of a corporation. Retrieved August 20, 2019, from: <https://opportunity.businessroundtable.org/ourcommitment/>
- Cambridge Institute for Sustainability Leadership [CISL]. (2015). *Rewiring the Economy*. Cambridge, CISL.
- Copersucar. (2018). Sustainability report 2016-2018. Retrieved July 20, 2019, from: <http://relatorios.copersucar.com.br/2018/en/inicio.html>
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11, 130–141.
- Dumay, J., Guthrie, J., Farneti, F. (2010). Gri Sustainability Reporting Guidelines For Public And Third Sector Organizations. *Public Management Review Volume 12*, 2010 - Issue 4.
- Elkington, J. (1997). *Cannibals with forks. The triple bottom line of 21st century business*. Oxford: Capstone.
- European Commission. (2020). *Social enterprises and their ecosystems in Europe. Updated country report: Italy*. Author: Carlo Borzaga. Luxembourg: Publications Office of the European. Retrieved online August 30, 2020, from: <https://ec.europa.eu/social/BlobServlet?docid=16380&langId=en>
- European Union. (2006). *Promoting decent work for all*. <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=LEGISSUM:em0023&from=EN>
- Euricse, & International Cooperative Alliance (ICA). (2018). The World Cooperative Monitor. Exploring the cooperative economy. <https://monitor.coop/en/media/library/research-and-reviews/world-cooperative-monitor-2018en>
- Ferruzza, A., Baldazzi, B., Costanzo, L., Patteri, P., Tagliacozzo, G., & Ungaro, P. (2018). Statistics for measuring Sustainable Development Goals: challenges, opportunities, progress and innovations. Paper prepared for the 16th Conference of IAOS.
- Fonteneau, B., & Pollet, I. (Eds). (2019). *The contribution of the social and solidarity economy and social finance to the future of work*. International Labour Office, Geneva. Retrieved online August 30, 2020, from: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_739377.pdf
- Fonterra. (2017a). Sustainability Report. Retrieved July 20, 2019, from: <https://database.globalreporting.org/reports/62287/>
- Fonterra. (2017b). *Fonterra supplier sustainability code of practice*. Retrieved July 20, 2019, from: https://www.fonterra.com/content/dam/fonterra-public-website/pdf/FONTERRA_SUPPLIER_SUSTAINABILITY_CODE_OF_PRACTICE_V1_1_2017.pdf
- Global Reporting Initiative [GRI]. (2006). *Sustainability Reporting Guidelines*, Amsterdam: Global Reporting Initiative.
- Grupo Ilunion. (2017). Índice de contenidos GRI. Retrieved July 20, 2020, from: <https://rsc.ilunion.com/es/indice-de-contenidos-gri>
- International Labour Organization. (1999). *Decent work for all in a global economy: An ILO perspective*. Submission by Mr. Juan Somavia - Director-General, International Labour Office to the Third WTO Ministerial Conference in Seattle (30th November to 3rd December).
- International Labour Organization. (2017). *Social and Solidarity Economy and the Future of Work. Euricse Working Paper for the ILO*. Geneva: ILO, ISBN: 978-92-2-130107-3.
- International Labour Organization. (2019). *Time to Act for SDG 8: Integrating Decent Work, Sustained Growth and Environmental Integrity*. Geneva: ILO, ISBN 978-92-2-133677-8.
- International Labour Organization, International Cooperative Alliance. (2014). *Cooperatives and the Sustainable Development Goals A Contribution to the Post-2015 Development Debate*. Geneva: ILO. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_240640.pdf
- International Labour Organization [ILO], & Women in Informal Employment Globalizing and Organizing [WIEGO]. (2017). *Cooperation among workers in the informal economy: A focus on home-based workers and waste*

- pickers*. Retrieved online August 30, 2020, from: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/--emp_ent/---coop/documents/publication/wcms_567507.pdf
- Kell, G. (2005). The Global Compact: Selected experiences and reflections. *Journal of Business Ethics*. 59(1/2), 69–79.
- Kolk, A. (2010). Trajectories of sustainability reporting by MNCs. *Journal of World Business*. 45(4), 367-374.
- Kolk, A., & van Tulder, R. (2010). International business, corporate social responsibility and sustainable development. *International Business Review*. 19(2), 119-125.
- Kolk, A. (2005). Social and environmental accounting. In C. Clubb (Ed.), *Blackwell encyclopedia of management accounting* (pp. 393–398). Malden, Oxford and Victoria: Blackwell Publishing.
- KPMG. (2017). *The road ahead The KPMG Survey of Corporate*. KPMG. Available: <https://assets.kpmg/content/dam/kpmg/xx/pdf/2017/10/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf>
- Matthew, R. A., & Bransburg, V. (2017). Democratizing Caring Labor: The Promise of Community-Based, Worker-Owned Childcare Cooperatives. *Affilia: Journal of Women and Social Work*. 32-1, 10-23. <https://doi.org/10.1177/0886109916678027>
- Majee, W., & Hoyt A. (2009). Building Community Trust Through Cooperatives: A Case Study of a Worker-Owned Homecare Cooperative. *Journal of Community Practice*. 17, 4. 444-463. <https://doi.org/10.1080/10705420903299995>
- Majee, W., & Hoyt, A. (2011). Cooperatives and Community Development: A Perspective on the Use of Cooperatives in Development. *Journal of Community Practice*. 19-1. 48-61.
- METSÄ GROUP (2017). *Sustainability report 2017*. Retrieved July 7, 2019, from: <https://www.metsagroup.com/en/Documents/Publications/Metsa-Group-sustainability-report-2017.pdf>
- Mhlanga, R., Gneiting, U., & Agarwal, N. (2018). Walking the talk. Assessing companies' progress from SDG. *Oxfam discussion papers*. Retrieved online August 29, 2020, from: <https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620550/dp-walking-the-talk-business-sdgs-240918-en.pdf?sequence=1&isAllowed=y>
- Migros. (2017). *Migros Annual Report 2017*. GRI Content Index. Retrieved July 7, 2019, from: <https://report.migros.ch/2017/en/gri-content-index-en/>
- Nestle. (2020). *Contributing to the global goals*. Website page. Consulted July 1, 2020, from: <https://www.nestle.com/csv/what-is-csv/contribution-global-goals>
- OP financial Group. (2018). *GRI 2017*. Retrieved July 05, 2019, from: <https://op-year2017.fi/en/gri>
- Pérotin, V. (2006). Entry, exit, and the business cycle: Are cooperatives different?. *J. Comp. Econ.* 34: 295–316. <https://doi.org/10.1016/j.jce.2006.03.002>
- Poisson-de Haro, S., & Bitektine, A. (2015). Global sustainability pressures and strategic choice: The role of firms' structures and non-market capabilities in selection and implementation of sustainability initiatives. *Journal of World Business*. 50(2), 326-341. <https://doi.org/10.1016/j.jwb.2014.10.009>
- Rasche, A. (2009). Toward a model to compare and analyze accountability standards – the case of the UN Global Compact. *Corporate Social Responsibility and Environmental Management*. First published: 21 July 2009 <https://doi.org/10.1002/csr.202>
- REWE. (2018). *GRI-Bericht der REWE Group*. Retrieved July 1, 2019, from: <https://rewe-group-nachhaltigkeitsbericht.de/2017/gri-bericht/index>
- Roelants, B., Eum, H., Esim, S., Novkovic, S., & Katajamäki W. (2019). *Cooperatives and the World of Work*. Milton Park, Abingdon: Routledge. ISBN 9780367250850.
- Ruggeri, A. (2014). *Informe del IV relevamiento de empresas recuperadas in la Argentina*. Retrieved August 21, 2020, from: https://www.recuperadasdoc.com.ar/Informe_IV_relevamiento_2014.pdf
- Ruggeri, A. & Vieta, M. (2015). Argentina's worker-recuperated enterprises, 2010-2013: A synthesis of recent empirical findings. *Journal of Entrepreneurial and Organizational Diversity*. 4(1), 75-103.
- Ruggie, JG. (2001). Global_governance.net: The Global Compact as learning network. *Global Governance*. 7(4), 371–378.
- Sancor Seguros. (2017). *Reporte de Sustentabilidad 2016/2017*. Retrieved July 05, 2020, from: <https://database.globalreporting.org/reports/57279/download-report-pdf/>
- S Group. (2017). *S Group's year and responsibility*. Retrieved July 05, 2019, from: <https://s-ryhma.fi/en/finance-and-administration/reports>

- SDG Compass. (2015). *The guide for business action on the SDGs*. https://sdgcompass.org/wp-content/uploads/2015/12/019104_SDG_Compass_Guide_2015.pdf
- SDG Compass (2019). Inventory of Business Indicators. Retrieved July 10, 2019, from: <https://sdgcompass.org/business-indicators/>.
- Talanx. (2018). *Sustainability Report 2018*. Retrieved July 10, 2020, from: <https://database.globalreporting.org/reports/64766/>
- The Co-operative Group. (2018). *Co-op Way Report 2017. GRI Index*. Retrieved July 05, 2019 from: <https://database.globalreporting.org/reports/57244/>
- Unilever. (2019). *Unilever sustainable living plan: progress in 2019*. Retrieved July 01, 2020, from: https://www.unilever.com/Images/uslp-performance-summary-2019_tcm244-549815_en.pdf
- United Nations. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. United Nations, New York, NY, USA.
- United Nations. (2019). *Progress towards Sustainable Development Goals*. E/2019/xxxx Goals https://sustainabledevelopment.un.org/content/documents/22700E_2019_XXXX_Report_of_the_SG_on_the_progress_towards_the_SDGs_Special_Edition.pdf
- United Nations Data Revolution. (2014). *A World That Counts: Mobilising the Data Revolution for Sustainable Development*. United Nations Independent Expert Advisory Group on a Data Revolution for Sustainable Development, www.undatarevolution.org/report/
- United Nations Global Compact (UNGC). (2008). *Corporate Citizenship in the World Economy*. New York: United Nations.
- United Nations Inter-Agency Task Force on Social and Solidarity Economy. (2014). *Social and Solidarity Economy and the Challenge of Sustainable Development*. Geneva, Switzerland. TFSSE.
- United Nations News. (2013). Cooperatives can build socio-economic resilience during crises – UN officials from: <https://news.un.org/en/story/2013/07/444052-cooperatives-can-build-socio-economic-resilience-during-crisis-un-officials>
- van Zanten, J.A., & van Tulder, R. (2018). Multinational enterprises and the Sustainable Development Goals: An institutional approach to corporate engagement. *J Int Bus Policy*. 1, 208–233. <https://doi.org/10.1057/s42214-018-0008-x>
- Vieta, M. (2015). “The Italian Road to Creating Worker Cooperatives from Worker Buyouts: Italy’s Worker-Recuperated Enterprises and the Legge Marcora Framework”. *Euricse Working Papers*. 78|15.
- Williams, OF. (2004). The UN Global Compact: The challenge and the promise. *Business Ethics Quarterly*. 14(4), 755–74.
- World Bank. (2019). GDP growth (annual %). [Data file]. Retrieved from <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>
- World Commission on Environment and Development. (1990). *Our Common Future*. Oxford University Press, U.S.A. ISBN-10: 9780192820808.

Notes

¹ https://www.ilo.org/global/topics/cooperatives/areas-of-work/WCMS_546476/lang--en/index.htm

² www.monitor.coop

³ See the GRI website (www.globalreporting.org) for the description of all the standards and indicators.

Are Co-operatives Embracing the SDGs and Sustainability? A Content Analysis of Annual Reports, Reports, and Websites

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Abstract: Clearly there is a great opportunity for co-operatives around the world to embrace the Sustainable Development Goals (SDGs) specifically and economic, social and environmental sustainability more generally given the nature of the principles and values. As values-based businesses, co-operatives could, can and do occupy the SDG framework space with ease and vigour; however, little empirical research has been done to begin to quantify how co-operatives are embracing the SDG framework, let alone how they are acting in support of the SDGs targets or measuring their impacts based on the indicators. This research attempts to understand the first of these gaps by answering the question: How are co-operatives talking about the SDGs? The methodology for this research is content analysis. This involves analyzing a combination of qualitative and quantitative information, and categorizing the information into pre-defined categories, thus allowing for patterns to emerge. This research uses co-operatives' annual reports (ARs) as the main source for data on SDG presence. There is a great opportunity for co-operatives to move beyond commentary and reflection on sustainability in general to a place of action and implementation based on the SDG targets and performance measurement based on the SDG targets. The goal of this research is to provide insight into how co-operatives are talking about or embracing the SDG framework or sustainability in general. From this insight, it is up to co-operatives individually and as a movement to decide which side of sustainability and the planet's people and environment future they want to be on.

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Keywords: Sustainable Development Goals, co-operatives annual reports, sustainability reporting, economic, social and environmental sustainability

Introduction

After decades of work with the United Nations, 193 countries, including Canada, adopted *The 2030 Agenda for Sustainable Development* in 2015 (United Nations, 2019a).¹ The Sustainable Development Goals (SDGs) provide "a shared blueprint for peace and prosperity for all people and the planet, now and the future" (United Nations, 2019b). In this time of dramatic climate change, political instability and severe inequality the SDG framework is crucial to the short-and long-term sustainability of the planet and the people on it.

The Canadian co-operative sector is made up of 8,000 co-operatives in every region of Canada and in diverse industries. The International Co-operative Alliance defines a co-operative as "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 Co-operative Alliance, 2019). In this definition, we can see matters related to sustainability, but as Carruso identifies, "we can see them more clearly in the co-operative values specification" (2007): "co-operatives are based on the values of self-help, self-responsibility, democracy, equality and solidarity". Co-operatives are the original values-based business. Co-operatives around the world use economic means to pursue social goals, thereby creating businesses with a social purpose (Novkovic, 2012).

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The opportunity for co-operatives to embrace and envelop the SDG framework, given the core of co-operative principles and values and the close proximity to community needs regarding people and the planet, has been identified (Esim, 2019; Schwettmann, n.d.; Wanyama, 2014). However, little empirical research has been done to begin to quantify how co-operatives are embracing the SDG framework, let alone how they are acting in support of the SDGs targets or measuring their impact based on the indicators. This research attempts to understand the first of these gaps by answering the question: How are co-operatives talking about the SDGs?

Interest in the answer to this research question began with wondering whether and how the co-operative sector was engaging with the SDG framework. Since at this point there is no co-operative SDG measurement or reporting framework (i.e., dataset) (Duguid, 2017; Rixon & Duguid, 2018), and connecting with every co-operative to see how they were taking up the SDG framework was methodically unachievable, a content analysis investigating how co-operatives are talking about SDGs emerged. Pursuing this line of research would uncover whether co-operatives are at the very least talking about SDGs in the public space, and if so, what their self-reported actions are in regard to the SDGs. Using a similar methodology as Duguid and Balkin (2016), a content analysis of published reports including annual reports, community reports, sustainability reports, etc., was conducted to identify if and how co-operatives were talking about the SDGs.

Given the increased interest in the SDGs, globally and in Canada, and their growing importance regarding building resilience, stability, peace, and public security, understanding how the co-operative sector is contributing to the sustainable development goals will be threefold. First, by providing a baseline understanding of how and what co-operatives are saying about the SDGs; second, via the baseline understanding open up opportunities for further engagement with the SDGs, and three, further strategic thinking and design by embedding the SDG framework into co-operatives' operations and management.

Literature Review

Sustainability reporting

Over the past two decades there has been a rise in interest by businesses in reporting on sustainability, environment, and social impact. For management and accounting, sustainability and corporate social responsibility has become a standard topic. Social and environmental reporting has taken on a higher profile in light of the UN launch of the SDGs. According to a Price Waterhouse Coopers (PWC) study of 729 publicly listed companies from six countries, 72% mentioned SDGs in their annual report, and only 23% included meaningful quantitative key performance indicators (KPIs) and targets (PWC, 2018).

Generally, sustainability reports are meant to provide a balanced picture of the sustainability performance of the business. It is not uncommon for companies to invest both time and money disclosing information on environmental and social initiatives, nurturing their competitive advantage in the hope that it will result in generating more capital and help to avoid financial downturns (Gamerschlag, Moller, & Verbeeten, 2011). Voluntary disclosures on social impact, or corporate social reporting (CSR), usually outline the corporation's impact on customers, communities, employees, and the natural environment (Stanton & Stanton, 2002). Because sustainability disclosures are voluntary, however, "greenwashing" is not uncommon. Reporting the negative aspects of corporate sustainability performance, however, may cause stakeholders to perceive the corporation to be out of line with societal norms, and diminish corporate legitimacy as a result (Hahn & Lulfs, 2014). On the other hand, companies that do not report negative results may face increased skepticism from stakeholders who may begin to view their reporting as unreliable, negatively affecting their accountability. As a result, companies which actively disclose negative sustainability performance may be viewed positively (Hahn & Lulfs, 2014).

There are varying degrees of reporting. On one side, there are full third party audited, indicator-based frameworks measuring and benchmarking businesses. One example of this is the Global Reporting Initiative (GRI), which provides standardized reporting guidelines as a way to support businesses who buy their services to measure and report on sustainability indicators. Third party oversight encourages businesses to disclose both negative and positive aspects of sustainability performance of the business. This information would then be published in various reports from the business. Reporting then moves through the full spectrum to, on the other side, self-reporting one-off comments

found within official publications from businesses. This research is interested in any type of published reporting on the SDGs.

SDG reporting

The development of the SDGs, a new global framework, will require countries, businesses, communities, and civil society to be thinking about, measuring and reporting on their impact regarding the 17 Sustainable Development Goals. The UN states, the SDGs are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including those related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice (United Nations, 2019a).

According to Stafford-Smith et al. (2017), the goals of the SDGs defined an agenda for the sustainable development of all nations which adhered to economic growth, social inclusion and environmental protection (Goyannes Gusmão Caiado, 2018). The SDGs are intended to address sustainable development processes in both developed and developing countries, and to facilitate action at all levels and with all actors, including government, civil society, the private sector and the science community to strengthen the capacity of the State to achieve the desired outcomes (Recuero Virto, 2018). The SDG framework was co-designed by the signatory countries and the resulting targets and indicators are being rolled out to support the actors, including businesses, involved in meeting the goals.

The Canadian co-operative sector and sustainability

Co-operatives provide goods and services in a wide range of industries including agriculture, housing, banking, insurance, retail, natural gas, energy generation, funeral services, consulting, farmers' markets, and midwifery (Innovation, Science, and Economic Development Canada, 2018). The total memberships (31.8 million) in Canada reflect this saturation (Duguid & Karaphillis, 2019). The co-operative sector turns over \$85.9 billion in volume of business and has \$503.2 billion in assets thus contributing 3.4% of Canada's GDP (*ibid*). It employs over 182,000 people, which is 3.6% of the total jobs in Canada (*ibid*). While there are economic indicators of impact, as seen from the above studies, there is no standardized framework for co-operatives to measure and report on sustainability, social, environmental or SDG impact (Duguid, 2017).

The co-operative sector, composed of social enterprises and businesses, is not divorced from engaging with sustainability reporting. Co-operatives have the same opportunity to measure and report on SDGs as other businesses. There has also been a direct connection made between co-operatives as values-based businesses and the SDGs (ILO, 2014; Schwettmann, n.d.). This suggests a greater need to better measure and report on co-operatives' impacts in terms of the SDGs.

Content Analysis of Reporting Documents

In particular the annual report is an important document published by businesses.² The annual report is a formal public document produced by businesses, and forms part of the mandatory reporting requirements for most developed economies. The document typically employs management, marketing and communication theory in order to construct a formalized vision and brand of the corporation (Stanton & Stanton, 2002), and is typically considered a pivotal document presented by companies, which can significantly impact and influence financial markets as well as public perceptions of a company (R. Anderson & Epstein, 1995). Some financial information is legally required for corporations to publish, however many corporations include additional information such as social or community impact. In addition, corporations often use their annual report as a way to establish or maintain a brand or image in the public sphere (Guthrie & Petty, 2000).

Beyond the legal requirement to provide financial information, the annual report has become a product of the corporate design environment, which is used to construct and promote the corporate brand and visibility (Stanton & Stanton, 2002). As an important and useful source of information, the report is one way that corporate managers convey what is important to the company (Guthrie & Petty, 2000). Including voluntary information in the document is often used by management as a way to send implicit and explicit messages to the public (Salanik & Meindl, 1984).

The report is one of the ways that companies communicate with various stakeholders and interest groups. While investors are considered the most important stakeholders for corporations from an economic perspective, there is

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a wide variety of additional stakeholders to whom corporate managers are responsible. These include regulators, community members affected by the company, lenders, competitors, employees, and trading partners (Yuthas, Rogers, & Dillard, 2002).

The annual report has been a source of interest for academic research for decades. For example, Judd & Tims (1991) found that the report is a useful mechanism for information dissemination, and is one of the ways that management communicates with customers, shareholders, employees, suppliers, media and government. In addition, Anderson & Imperia (C. Anderson & Imperia, 1992) found that the annual report is an important way for corporations to communicate the personality and philosophy of the firm, while Bekey (1990) found that it is often used as a sophisticated marketing tool to impart the organizational image for the public.

Methodology

Research Design

The methodology for this research is content analysis. It involves analyzing a combination of qualitative and quantitative information, and by categorizing the information into pre-defined categories, allows the researcher to derive patterns in the information. Content analysis is a way of gathering data, and is considered a 'systematic', 'objective' and 'reliable' analysis of written or other published communications (Guthrie & Petty, 2000). In the field of accounting research, annual reporting content analysis is considered empirically valid for social, ethical, and environmental reporting (Guthrie & Petty, 2000).

This research uses co-operatives' annual reports (ARs) as the main source for data on SDG presence. As previously discussed, the AR is still one of the main forms of communication for a business as it is designed to roll up the year's activities hitting the high points and the points the enterprise would like the audience to take away about the enterprise. This is no different for co-operatives. In the past decade, with the rise of other impact and assessment measures, enterprises have also begun to report on these. Sometimes social, community, corporate social responsibility or sustainability reporting is found within the AR, sometimes found within a standalone document. These other reports have also been looked for and analyzed if they were posted.

Data Collection

The two datasets of ARs and other reports were created from existing co-operative lists. The first list is of Canadian co-operatives. These co-operatives were identified from the Top Fifty Canadian Co-operatives; a list of the top fifty non-financial co-operatives in Canada based on volume of business³ that is published by Innovation, Science and Economic Development (ISED) Canada. In addition to the top fifty non-financial co-operatives, the top financial co-operatives including credit unions, caisses populaires and insurance co-operatives added seven more. And finally, to provide a fulsome look at the co-operative sector in Canada, 11 federations including national, provincial, and sector-level co-operatives were looked at because of their leadership and strategic roles. In total 68 Canadian co-operatives were examined (Appendix B).

The second list looks at the global co-operative sector. This list was developed using the World Co-operative Monitor, which is created in partnership by the International Co-operative Alliance (ICA) and EURICSE, University of Trento, Italy. The list is generated based on turnover in US dollars and includes co-operatives and mutuals from around the world (Appendix B). The top 50 international co-operatives were examined.

Once the two lists of co-operatives – Canadian and International – were formed, then a search of ARs and other reports was conducted in February 2019. The timing of this study is important because reports that were posted or taken down before or after February 2019 would not form part of the datasets and therefore would not be included in the study's analysis. Given this timing, the 2018 ARs may not have been posted. The most recent posted AR report or other reports are what form the dataset that was analyzed.

A number of checks and balances were put in place to ensure a thorough search for recent ARs and other reports for each co-operative. First, a search on the co-operative's website was performed to narrow the search; second, a search via Google was conducted to cast the net widely. Third, if no reports had been found, a review of the co-

operative’s website was conducted using key terms such as financial and non-financial reporting, SDG or other sustainable development or community contributions reporting.

The fruits of the data collection resulted in two datasets of ARs and other reports to scrutinize for any reference to SDGs as per the conceptual framework (addressed below). The Canadian co-operative dataset is featured in Figure 1.

Figure 1. ARs and Other Reports from Canadian Co-operatives

Canadian	ARs	Other reports
<i>Non-financial Co-operatives</i>		
2015	1	1
2016	1	0
2017	12	3
2018	5	0
In Database	19	4
None Found	31	46
Total	50	50
<i>Financial Co-operatives</i>		
2017	7	2
In Database	7	2
None	0	5
Total	7	7
<i>Federations</i>		
2017	9	1
2018	1	0
In Database	10	1
None Found	1	10
Total	11	11
Database Total	36	6
Total	68	68

As presented in Figure 1, the Canadian dataset is made up of 36 ARs and 6 other reports. This means of the total 68 co-operatives only 36 (53%) had published an AR on their website, and 9% had published a report that handled other co-operative reporting information like community impact, social responsibility or sustainability. Other reports were titled: Corporate Social Responsibility, Sustainability Report, Sustainable Development Report, Community and Economic Impact Report, Corporate Performance Report, and Social and Corporate Responsibility Report. All of the co-operatives that posted on their website an “other” report had also posted an AR. “None found” means that there was no AR or other report posted to the website.

When the international co-operatives were examined for ARs and other reports the following dataset was created (Figure 2).

Figure 2. ARs and Other Reports from International Co-operatives

International	ARs	Other reports
2016	1	1
2017	33	21
2018	9	2
In Database	43	24
None Found	7	26
Total	50	50

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As presented in Figure 2, the international co-operative ARs and other reports dataset is larger than Canada's sitting at 43 ARs and 24 other reports. This means 86% of the international co-operatives are posting their ARs and 48% are posting other reports. The other reports included titles like Corporate Social Responsibility, Sustainability, Integrated, Corporate, Giving, Sustainable Development, Sustainable Progress, Social and Corporate Responsibility, Social Responsibility and Co-operative Way. 18 (36%) of the co-operatives posted both an AR and an "other" report. There were seven co-operatives that did not post an AR (none found) and 26 that did not post another kind of report.

Data analysis

Key terms identified within the SDG framework were employed to not only source the datasets, but also when analyzing them. The conceptual framework focuses specifically on the SDGs, but also expanded to include related concepts of sustainability, community, and corporate social responsibility (Figure 3).

Figure 3. SDG Framework Key Terms

Sustainability	Other Languages (French, German, Italian, Spanish) ⁴
SDGs	
Sustainable Development Goals	Objetivos de desarrollo sostenible, Obiettivi per lo sviluppo sostenibile, objectifs de développement durable, sostenibilidad nachhaltigkeitskodex, Duurzame Ontwikkelingsdoelen
United Nations	Nations Unies, Vereinte Nationen, Nazioni unite
Sustainable Development	développement durable, achhaltige entwicklung, sviluppo sostenibile, duurzaamheid, duurzame ontwikkeling
Sustainability	Sostenibilità
Social Responsibility	
Environment	
Community Impact	
Corporate Social Responsibility	
Community	communauté; collectivité
Responsibility	responsabilité
Global	
International	
Reporting	
Social	

Figure 3 presents the key terms used as part of the SDG conceptual framework. During the analysis the ARs, other reports and then websites were scrutinized to see how, what, where and when co-operatives were using these key terms. What is discussed in the analysis section are the themes, patterns and findings that emerge from implementing these key terms within the ARs and other reports in order to understand how co-operatives are talking about SDGs. No outreach to the individual co-operatives or co-operative associations was conducted for this research.

Limitations

There are limitations to the methodology of this research. One is that the use of ARs and other reports represents only one outward facing communications tool that co-operatives use. Other more nimble communications tools (i.e., social media, blogs, Facebook, Twitter etc.) could have an SDG presence for the individual co-operatives, but were not part of the scope of this research. However, searches of the websites were conducted, so if reference to SDGs was made on the co-operative's website, it would have been investigated. Two, inward facing communications (i.e.,

intranet, private documents etc.) could also reflect an SDG presence, but were not included or examined due to lack of public access. Additionally, since the research is interested in how co-operatives are talking about SDGs to the public, internal communications is really beyond the scope of research. And three, importantly, the timing of this study has a significant influence on the findings. The study was conducted in the month of February 2019. This means anything that was posted or taken down before or since was not captured or included in the analysis of this study; additionally, most of the ARs are from 2017 because the 2018 ARs were not completed or posted. In the world of an advancing SDG framework, the co-operative sector in Canada or globally, could have made great strides in terms of the SDGs since publishing their 2017 AR or other reports.

Analysis

Canadian co-operative sector

According to the dataset, the Canadian co-operative sector's engagement with the SDGs is slow to transpire; however, given the low number of co-operatives (53%) that have made their AR available online this is not surprising. An analysis of the differences between the non-financial co-operatives, the financial co-operatives and co-operative associations is presented in this section.

Non-financial co-operatives

In particular, non-financial co-operatives (62%) are not publishing their ARs online; however, whether they have an AR or not, is not known. In terms of the ARs that were found, none of the non-financial co-operatives referred to SDGs in their AR, or "other" reports or website for that matter. What was found within the ARs that fell under the SDG conceptual framework for this research were a range of comments and reporting (both quantitative and qualitative) on the following topics: values, community contributions, donations, environmental stewardship, social concerns, economic benefit to community, and education and training of employees.

Yet, all non-financial co-operatives had websites, and most provide information about their non-financial contributions to their communities – most often sponsorships and donations – on their websites. Some of the Top 50 non-financial co-operatives use the language of sustainability in relation to the co-operative itself, to the community it is located in, or in terms of environmental sustainability; however, many others do not. Yet, with very few exceptions the co-operative and/or community-minded nature of the co-operative comes through strongly in non-financial co-operatives' websites in general.

There were very few (4) "other" reports found. These are titled Sustainability Report, Sustainable Development Report, Corporate Social Responsibility Report, and General Manager Report and have not been produced consistently through the years. These reports cover topics such as community investment, employee engagement, co-operative leadership, fiscal responsibility, environmental sustainability, roadmaps for CSR, the use of international reporting tools such as GRI, community building, and community donations.

Only two co-operatives – a dairy co-operative (Agropur) and a retail co-operative (MEC) – referred to the use of international reporting frameworks like the Global Reporting Initiative (GRI). Perhaps this could be taken as a kind of readiness indicator (i.e., that the co-operative is thinking about its reporting in the global context).

Twenty-one of the top 50 (42%) non-financial co-operatives self-identified as members of the Co-operative Retailing System (CRS) formed by Federated Co-operative Limited (FCL) and local retail co-operatives. Their websites were based on two different templates, both of which allow for local content on community contributions and point to either the Sustainability page on FCL's website or the CRS-wide "We Care" website. This suggests an opportunity for FCL as a second tier co-operative⁵ to be a leader in terms of sustainability and the SDGs to its membership, as well as the opportunity for the trickledown effect to really take hold and solidify. They are in the position to promote broader use of the SDGs.

Eight of the top 50 non-financial co-operatives are members of La Coop fédérée network. This network of 57 co-operatives in Quebec are working to support producers and consumers of agricultural goods and services. Again, there is a tremendous opportunity for this third tier co-operative to be a leader regarding the SDGs and to provide

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guidance, content, and measurement and reporting opportunities to its members. La Coop fédérée is also in the position to promote the discussion, promotion and implementation of the SDG framework.

Financial co-operatives

Turning to the financial co-operatives, only two of the top seven financial co-operatives (including insurance co-operatives) analyzed are tracking their contributions to SDGs. In the Vancity AR, the SDG symbols and targets are cross referenced throughout the document and the contributions made to the SDGs are recorded. In the Desjardins Group AR there is a short description of the SDG commitment. Desjardins has also published a Social and Corporate Responsibility report, which highlights the SDGs and connects the SDGs to pillars of their work.

The Co-operators Insurance and Affinity Credit Union are using other international frameworks to shape their sustainability reporting. The Co-operators also references active participation in the UN Environment Programme Finance Initiative's Principles for Sustainable Insurance. Servus Credit Union has published a corporate social responsibility report with reference to social impact indicators and targets. Assiniboine Credit Union references a deep commitment to end homelessness and create affordable housing, community donations and community enterprise development. Meridian, while the least integrated AR, mentions commitments to communities, employee giving, youth initiatives and financial literacy.

While each financial co-operative is deciding to engage in the conceptual framework terms differently, the financial co-operatives are far ahead of the non-financial co-operatives in terms of having an AR published online, engaging in the conceptual framework concepts, embracing the SDG framework, and producing reports that fit the content needed to impart ("other" reports).

Co-operative associations

Among the co-operative associations scanned, only three out of 11 have signalled an interest in SDGs in their annual reporting. On Coop, the provincial association in Ontario, had a resolution passed at their AGM to support the SDGs, hosted a conference related to the SDGs, and has an award for most sustainable co-operative. Co-operative Housing Federation of Canada's (CHFC) AR contains a message from the Executive Director that refers to the SDGs. And Co-operatives and Mutuals Canada (CMC), the apex organization for co-operatives in Canada, talks about a session during their annual general meeting (AGM) on SDGs.

The Canadian Credit Union Association is framing sustainability in its own report called Community and Economic Impact Report and in a course it offers; however, there is no mention of the SDGs. Not dissimilar to the financial and non-financial co-operatives, the associations are also using language in their ARs that falls within the conceptual framework, but not directly related to the SDGs. For example, Nova Scotia Co-operative Association (NSCA) has a strong sense of community-building, the Saskatchewan Co-operative Association (SCA) uses sustainable development as a tagline for its conference, Alberta Community and Co-operative Association (ACCA) talks about education, Canadian Worker Co-operative Federation (CWCF) references sustainability of itself and worker co-ops; whereas, Conseil québécois de la coopération et de la mutualité (CQCM) states it will work to develop socioeconomic impacts in more detail over the coming years in Quebec. Needless to say, the wider conceptual framework of sustainability is present in the associations' ARs, other reports and websites, but there is very little concrete content, action, reporting, or commentary promoted.

A scan that included ARs, "other" reports and the website of each of the 68 Canadian co-operatives on the list found that only five (7%) of the sample Canadian co-operatives are using the language of the SDGs. These are mostly the financial co-operatives and some associations. In terms of content, the two financial co-operatives (Vancity Credit Union and Desjardins Group) are moving forward with deep, meaningful actions towards the SDG framework. The associations for the most part have mentioned SDGs in passing. Most of the key actors in the co-operative sector in Canada have not (yet) embraced the SDGs or the SDG language; however, when probing deeper and using the wider conceptual framework terminology, Canadian co-operatives do talk about sustainability, community, donations, and education. Sometimes just as a comment, sometimes with indicators and reporting in place.

International

The International co-operatives⁶ tell a very different story when it comes to publishing ARs on their websites and also about embracing the SDG framework. First of all, 86% of the co-operatives had an AR on their website and 48% had an “other” report that has content related to the conceptual framework. Second, 12 of the 50 co-operatives (24%) searched referred to SDGs in their ARs. Within the ARs, co-operatives referred to the SDGs in a number of ways: by integrating the SDGs into their key performance indicators for their co-operative, discussing alignment with the UN Global Compact 10 principles, creating a route to a 2020 strategy, pledging commitment to SDGs, outlining how they will contribute to SDGs, and aligning CSR practices with the SDGs framework. These examples of connecting with the SDGs are highly actionable, deep practices that go beyond the level of basic acknowledgement or reflection.

Almost half of the International co-operatives (24 out of 50) have “other” reports published. The co-operatives that have published another kind of report have always also published an AR. Not dissimilar to the Canadian co-operatives, the “other” reports are titled integrated report, CSR report, sustainability report, giving report, or sustainable development report. These “other” reports cover off similar topics to the Canadian “other” reports such as community donations, social impact, environmental sustainability, key performance indicators, and social reporting, but also embrace SDG alignment, measurement and strategizing.

From the “other” reports and the ARs many international co-operatives have begun to align their activities with the SDGs and some appear to be using the SDGs to inform their sustainability planning. The USA is an outlier – not one of the 13 co-operatives on the list acknowledged the existence of SDGs. Most US co-operatives also do not touch upon the terms within the conceptual framework thus lack sustainability strategies and goals or do not report on them. There is some evidence of corporate responsibility reporting, which often is an account of employee and corporate giving and/or volunteerism. There are comments about supporting environmental sustainability. The 2 UK and 4 Dutch co-operatives on the list are all participating in SDGs; whereas, results for France, Germany, Italy and Japan are mixed. Needless to say, country context seems to matter.

From the scan of international co-operatives, 24 of the 50 (48%) co-operatives have embraced the language of the SDG framework within their AR, “other” report or website. There is a great difference between countries in terms of using the SDG language with the USA never using the language of the SDGs and minimally using the wider sustainability conceptual framework language and with Europe and Japan tending towards more usage, action, and implementation language.

Comparison of Canadian and International co-operatives

To begin, the international co-operatives (86%) were already ahead of Canadian co-operatives (53%) in terms of the total number of co-operatives that have posted ARs on their websites. Additionally, International co-operatives (48%) are more often than Canadian co-operatives (9%) using the “other” report as a tool to convey additional information about their co-operative. This may be explained by the magnitude of international co-operatives, but is not as easily rationalized by this explanation, as ARs are a normal and common method by which businesses and co-operatives report back to investors, members or the public.

The international co-operatives at 48% are clearly embracing the language of the SDGs and framework more than the Canadian co-operatives (7%). There is also a qualitative difference between the international co-operatives and the Canadian co-operatives regarding the depth of embracing of the SDG framework, with the international co-operatives offering language that suggests action, implementation and reporting as opposed to comments and reflection. The international co-operatives are also using a wider breadth and greater depth of the sustainability and the conceptual framework language, action, and implementation than the Canadian co-operatives.

Based on the international top 50 co-operatives and Canadian co-operatives scans and ignoring differences like size and industry, European and Japanese co-operatives seem to be far ahead of North American co-operatives. As mentioned, this raises the question of how much country context matters.

Some of the international co-operatives mentioned that they were signatories of the UN Global Compact and participating in their national Global Compact networks. According to the UN Global Compact’s webpage, it is the

world's largest sustainability initiative. It has "a call to companies to align strategies and operations with universal principles on human rights, labour, environment and anti-corruption, and take actions that advance societal goals" (UN Global Compact, 2019). On its participants' page, as of publication of this research, Canada has 88 participants. None of the signatories of the UN Global Compact are Canadian co-operatives. With less than half of Canada's population, the Netherlands has 151 and with about 9x our population the US has only 728. It seems as though country context matters.

Conclusion

Clearly there is a great opportunity for co-operatives around the world to embrace the SDGs specifically and economic, social and environmental sustainability more generally given the nature of the principles and values. As values-based businesses, co-operatives could occupy the SDG framework space with ease and vigour. There does seem to be a divide in take-up of the SDG framework based on continent with Europe and Japan being ahead and deeply embracing the SDGs and North America being behind. In regard to Canada, there are a few gold standard examples in the financial co-operatives sector that can be models for the direction for Canadian co-operatives in terms of embracing the SDGs.

This research has also shown the need for Canadian co-operatives to publish their ARs or "other" reports on their websites. The AR is a point of consolidation of items that are important for the co-operative and that the co-operative wants the public, its members, other co-operatives, and other businesses to know about them. This could take the form of a full AR or another report structure or infographics. This research has also shown the tremendous opportunity for federations and associations to encourage the trickledown effect to their members. Being champions of the SDGs or the wider sustainability framework, encouraging deep, action-based implementation and reporting could shift the co-operative sector to leaders in the field of SDGs. There is an opportunity for co-operatives to join other businesses around the world in the UN Global Compact Network's call for action and to occupy this space as leaders of sustainability. There is a great opportunity for co-operatives to move beyond commentary and reflection on sustainability in general to a place of action and implementation based on the SDG targets and performance measurement based on the SDG targets.

The goal of this research is to provide insight into how co-operatives are talking about or embracing the SDG framework or sustainability in general. From this insight, it is up to co-operatives individually and as a movement to decide which side of sustainability and the planet's people and environment future they want to be on.

References

- Anderson, C., & Imperia, G. (1992). The corporate annual report: A photo analysis of male and female portrayals. *The Journal of Business Communication*, 29(2), 113–128.
- Anderson, R., & Epstein, M. (1995). The usefulness of annual reports: Australian shareholders want more information in annual reports and clearer explanations of what the numbers mean. *Australian Accountant*, 65, 25.
- Bekey, M. (1990). Annual reports evolve into marketing tools. *Financial Manager*, 3(1), 50–60.
- Carruso, I. (2007). Corporate Social Responsibility, values and co-operation. *International Advances in Economic Research*, 13(4), 454–460.
- Duguid, F. (2017). Non-financial Tools and Indicators for Measuring the Impact of Co-operatives. *Journal of Co-operative Accounting and Reporting*, 5(1), 40–54.
- Duguid, F., & Balkan, D. (2016). 'Talking the talk': Canadian co-operatives and sustainability reporting. *Journal of Co-operative Accounting and Reporting*, 4(1), 1–34.
- Duguid, F., & Karaphillis, G. (2019). *Economic Impact of the Co-operative Sector in Canada (2015)*. Ottawa, Canada: Co-operatives and Mutuals Canada.
- Esim, S. (2019). The cooperative key to sustainable development. Retrieved September 4, 2019, from https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_303222/lang-en/index.htm
- Gamerschlag, R., Moller, K., & Verbeeten, F. (2011). Determinants of voluntary CSR disclosure: Opportunism, ritualism, policies and processes. *Review of Managerial Science*, 5(2), 233–262.

- Goyannes Gusmão Caiado. (2018). A literature-based review on potentials and constraints in the implementation of the sustainable development goals. *Journal of Cleaner Production*, 198(October), 1276–1288. <https://doi.org/10.1016/j.jclepro.2018.07.102>
- Guthrie, J., & Petty, R. (2000). Intellectual capital: Australian annual reporting practices. *Journal of Intellectual Capital*, 1(3), 241–251.
- Hahn, R., & Lulfs, R. (2014). Legitimizing negative aspects of GRI-oriented sustainability reporting. *Journal of Business Ethics*, 123, 401–420.
- ILO. (2014). *Cooperative movement engagement in sustainable development and the post-2015 process: Survey findings* (p. 4) [Survey Results]. Retrieved from International Labour Organization website: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_248497.pdf
- Innovation, Science, and Economic Development Canada. (2018). *Co-operatives in Canada (2015)*. Ottawa.
- Judd, V. C., & Tims, B. J. (1991). How annual reports communicate a customer orientation. *Marketing Management*, 20(4), 353-360.
- Novkovic, S. (2012). The Balancing Act: Reconciling the economic and social goals of co-operatives. In M.-J. Brassard & E. Molina (Eds.), *The Amazing Power of Co-operatives*. Quebec, Canada: Sommet international des cooperatives.
- PWC. (2018). Retrieved from <https://www.pwc.com/gx/en/sustainability/SDG/sdg-reporting-2018.pdf>
- Recuero Virto, L. (2018). A preliminary assessment of the indicators for Sustainable Development Goal (SDG) 14 "Conserve and sustainably use the oceans, seas and marine resources for sustainable development". *Marine Policy*, 98(December), 47–57. <https://doi.org/10.1016/j.marpol.2018.08.036>
- Rixon, D., & Duguid, F. (2018). A Framework for Developing Co-operative Benchmarks. *Journal of Co-operative Studies*, 51(1), 5–16.
- Salanik, G. R., & Meindl, J. R. (1984). Corporate attributions as strategic illusions of management control. *Administrative Science Quarterly*, 238–254.
- Schwettmann, J. (n.d.). *The Role of Co-operatives in Achieving the Sustainable Development Goals: The Economic Dimension*. Geneva, Switzerland: ILO.
- Stafford-Smith, M., Griggs, D., Gaffney, O., Ullah, F., Reyers, B., Kanie, N., ... O'Connell, D. (2017). Integration: The key to implementing the Sustainable Development Goals. *Sustainability Science*, 12(6), 911–919. <https://doi.org/10.1007/s11625-016-0383-3>
- Stanton, P., & Stanton, J. (2002). Corporate annual reports: Research perspectives used. *Accounting, Auditing and Accountability Journal*, 15(4), 478–500.
- The Co-operative Alliance. (2019). What is a co-operative.
- UN Global Compact. (2019). Who we are [<https://www.unglobalcompact.org/what-is-gc>].
- United Nations. (2019a). About the Sustainable Development Goals. *United Nations Sustainable Development Goals Knowledge Platform*. Retrieved from <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>
- United Nations. (2019b). Sustainable Development Goals Knowledge Platform. *Sustainable Development Goals*. Retrieved from <https://sustainabledevelopment.un.org/?menu=1300>
- Wanyama, F. O. (2014). *Cooperatives and Sustainable Development Goals: A Contribution to the Post-2015 Development Debate*. Geneva, Switzerland: ILO.
- Woodward, S. (2018). *Environmental Reporting by Corporate Canada: A 5-year Content Analysis of Annual Reports from Canada's Largest Corporations*. Cape Breton University, Sydney, NS.
- Yuthas, K., Rogers, R., & Dillard, J. F. (2002). Communicative action and corporate annual reports. *Journal of Business Ethics*, 41(1/2), 141–157.

Notes

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² Special thank you to Stephanie Woodward (2018), who investigated the use of annual reports in her unpublished applied research paper “Environmental Reporting by Corporate Canada: A 5-year Content Analysis of Annual Reports from Canada’s Largest Corporations”.

³ Total volume of business means the total number of goods or services traded during a given period of time. This can be used interchangeably with revenue.

⁴ For other languages, Google translate was employed.

⁵ Second tier co-operatives support their member co-operatives, which are the first tier co-operatives providing goods and services to their members.

⁶ Only one Canadian co-operative is included in the top 50 international co-operatives, Desjardins Credit Union.

Appendix A: Canadian Co-operatives List

2018	Co-operative Name	Industry	Province
TOP 50 NON-FINANCIAL CO-OPS IN CANADA 2015* Source: https://www.ic.gc.ca/eic/site/106.nsf/eng/00152.html#fna			
1	Federated Co-operatives Limited	Wholesaler, consumer goods, petroleum refinery, building materials	SK
2	La Coop fédérée	Pork and poultry processing, petroleum, feed mill, farm supplies	QC
3	Agropur Coopérative	Dairy products	QC
4	United Farmers of Alberta Co-operative Limited	Petroleum, farm supplies, building materials	AB
5	Calgary Co-operative Association Ltd.	Supermarket, petroleum, pharmacy, travel agency	AB
6	Exceldor coopérative	Slaughtering, processing and marketing of poultry products	QC
7	Gay Lea Foods Co-op Ltd.	Dairy products	ON
8	Red River Cooperative Ltd.	Petroleum retail	MB
9	Hensall District Co-op Inc.	Grain marketing, feed mill, petroleum, farm supplies	ON
10	Saskatoon Co-op Association Limited	Petroleum, supermarket, building materials, consumer goods, farm supplies	SK
11	Progressive Pork Producers Co-operative Inc.	Pork processing	ON

2018	Co-operative Name	Industry	Province
12	Mountain Equipment Co-op	Outdoor recreational equipment	BC
13	Nutrinor, coopérative agro-alimentaire du Saguenay Lac St-Jean	Dairy products, petroleum, feed mill, hardware	QC
14	Vivaco, Groupe Coopératif	Feed mill, petroleum, mixed animals marketing, farm machinery, building materials	QC
15	Central Alberta Co-op Ltd.	Gas bars, food, pharmacy, building materials, farm supplies, petroleum	AB
16	Pioneer Co-op Assn. Ltd.	Fertilizer and chemicals, petroleum, supermarket, building materials	SK
17	Groupe Dynaco, coopérative agroalimentaire	Dairy products, building materials, farm machinery, hardware	QC
18	Fédération des coopératives du Nouveau-Québec	Wholesaler, petroleum, consumer goods, marketing Inuit handicrafts (Northern Québec)	QC
19	Comax, coopérative agricole	Pork, feed mill, farm machinery, farm supplies, petroleum	QC
20	Prince Albert Co-op Assn. Ltd.	Petroleum, supermarket, consumer goods, farm supplies	SK
21	Sherwood Co-operative Assn. Ltd.	Petroleum, supermarket, farm supplies	SK
22	Arctic Co-operatives Limited (ACL)	Wholesaler, consumer goods, aboriginal handicrafts (Northwest Territories, Nunavut)	MB
23	Otter Farm & Home Co-op	Petroleum, feed mill, supermarket	BC
24	Vanderhoof and Districts Cooperative Association	Wholesaler, petroleum, food, consumer goods, farm supplies	BC
25	Peninsula Consumer Services Co-operative	Petroleum, supermarket, tobacco retail	BC
26	Unicoop, coopérative agricole	Feed mill, pork marketing, hardware, farm machinery	QC
27	Profid'or, coopérative agricole	Feed mill, pork marketing, petroleum, farm supplies, hardware	QC
28	Western Drug Distribution Center Limited	Medical and hospital equipment	AB

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2018	Co-operative Name	Industry	Province
29	Amalgamated Dairies Ltd.	Dairy products, consumer goods, farm machinery	PE
30	Lloydminster & Dist. Co-op Ltd.	Petroleum, supermarket, farm supplies, building materials, pharmacy	SK
31	Heritage Co-op 1997 Ltd.	Wholesaler, petroleum, food, consumer goods, farm supplies	MB
32	Interprovincial Cooperative Limited	Wholesale distributor of food and farm supplies, produces agricultural chemicals	SK
33	Mid Island Consumer Services Co-op	Gas bars and other petroleum retail	BC
34	Leduc Co-op Ltd.	Gas bars, food, pharmacy, building materials, farm supplies, petroleum	AB
35	Pembina Consumers (Co-op) 2000 Ltd.	Farm supplies, petroleum, building materials, consumer goods, supermarket	MB
36	Ste. Anne Co-operative Oil Limited	Gas bars, other petroleum products	MB
37	Integrated Grain Processors Co-operative Inc.	Producer of fuel ethanol	ON
38	Citadelle, coopérative de producteurs de sirop d'érable	Retail of maple, honey and cranberry products	QC
39	St. Paul & Dist. Co-op Assn. Ltd.	Wholesale and retail, general merchandise store	AB
40	Discovery Cooperative Ltd.	Gas bars, food, pharmacy, building materials, farm supplies, petroleum, clothing	SK
41	The Wetaskiwin Co-op Assn. Ltd.	Wholesaler, petroleum, food, consumer goods, farm supplies	AB
42	Yorkton Co-op Assn. Ltd.	Petroleum, supermarket, farm supplies	SK
43	Wild Rose Co-operative Association Ltd.	Wholesale and retail, general merchandise store	AB
44	New Horizon Co-operative	Wholesale and retail, general merchandise store	AB
45	Winkler Consumers Co-operative Ltd.	Supermarket, petroleum, hardware, building materials	MB
46	BC Tree Fruit Co-operative	Fruit tree products	BC

2018	Co-operative Name	Industry	Province
47	La Coop Purdel	Grain products, farm supplies	QC
48	Prairie Co-operative Limited	Gas bars, food, building materials, farm supplies, petroleum	SK
49	Moose Jaw Co-op Assn. Ltd.	Gas bars, food, pharmacy, farm supplies, petroleum	SK
50	Swan Valley Consumers Co-operative Limited	Gas bars, food, pharmacy, farm supplies, petroleum	MB
CREDIT UNIONS			
CU.01	Vancity CU	Banking and financial services	BC
CU.02	Desjardins Group	Banking and financial services	Canada
CU.03	The Co-operators	Insurance and financial services	Canada
CU.04	Servus CU	Banking and financial services	AB
CU.05	Affinity CU	Banking and financial services	SK
CU.06	Assiniboine CU	Banking and financial services	MB
CU.07	Meridian CU	Banking and financial services	ON
CO-OP ASSOCIATIONS			
CA.01	Co-operatives and Mutuals Canada		Canada
CA.02	Canadian Worker Co-op Federation		Canada
CA.03	CQCM (Quebec)		QC
CA.04	BCCA		BC
CA.05	ACCA		AB
CA.06	Manitoba Co-operative Association		MB
CA.07	Sask Co-op Ass		SK
CA.08	Ontario Co-op Ass		ON
CA.09	Nova Scotia Co-operative Association		NS
CA.10	Canadian Credit Union Association		Canada
CA.11	Co-op Housing Federation		Canada

Appendix B: International Co-operatives' List

2018	Co-operative Name	Industry	Country
1	Groupe Crédit Agricole	Banking and financial services	France
2	Groupe BPCE	Banking and financial services	France
3	BVR	Banking and financial services	Germany
4	Zenkyoren	Insurance	Japan
5	REWE Group	Wholesale and retail trade	Germany
6	Nippon Life	Insurance	Japan
7	ACDLEC - E. Leclerc	Wholesale and retail trade	France
8	Groupe Crédit Mutuel	Banking and financial services	France
9	Zen-Noh	Agriculture and food industries	Japan
10	State Farm	Insurance	USA
11	Nonghyup	Agriculture and food industries	Republic of Korea
12	Liberty Mutual	Insurance	USA
13	Talanx Group	Insurance	Germany
14	Edeka Zentrale	Wholesale and retail trade	Germany
15	Sumitomo Life	Insurance	Japan
16	CHS Inc.	Agriculture and food industries	USA
17	Coop Swiss	Wholesale and retail trade	Switzerland
18	Migros	Wholesale and retail trade	Switzerland
19	Meiji Yasuda Life	Insurance	Japan
20	Rabobank	Banking and financial services	Netherlands
21	Nationwide	Insurance	USA
22	Achmea	Insurance	Netherlands
23	Système U	Wholesale and retail trade	France
24	MassMutual Financial	Insurance	USA
25	COVEA	Insurance	France
26	Northwestern Mutual	Insurance	USA

2018	Co-operative Name	Industry	Country
27	Bay Wa	Agriculture and food industries	Germany
28	New York Life	Insurance	USA
29	Unipol	Insurance	Italy
30	Coop	Wholesale and retail trade	Italy
31	Hokuren	Agriculture and food industries	Japan
32	Desjardins Group	Banking and financial services	Canada
33	Conad	Wholesale and retail trade	Italy
34	John Lewis Partnership PLC	Wholesale and retail trade	UK
35	Dairy Farmers of America	Agriculture and food industries	USA
36	Fonterra	Agriculture and food industries	New Zealand
37	Corporación Mondragón	Industry and utilities	Spain
38	Land O'Lakes, Inc.	Agriculture and food industries	USA
39	Wakefern Food Corp./Shoprite	Wholesale and retail trade	USA
40	Co-operative Group Limited	Wholesale and retail trade	UK
41	The Norinchukin bank	Banking and financial services	Japan
42	FrieslandCampina	Agriculture and food industries	Netherlands
43	Coöperatie VGZ	Insurance	Netherlands
44	SOK	Wholesale and retail trade	Finland
45	American Family	Insurance	USA
46	CCA Global Partners	Wholesale and retail trade	USA
47	AG2R La Mondiale	Insurance	France
48	Groupama	Insurance	France
49	Federal Farm Credit Banks Funding Corporation	Banking and financial services	USA
50	Arla Food ambia	Agriculture and food industries	Denmark

Cooperatives: Present but Not Visible Evidence from Voluntary National Reviews

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Abstract: Cooperatives^[1] as people-centred organisations with sustainable development at their core have been recognised as important players in the implementation of the 2030 agenda. This paper reviews the voluntary national reviews submitted by countries from the Asia-Pacific region at the United Nations high-level political forum and analyses how cooperatives have been reflected in them. The paper uses a conceptual framework to look at the engagement of cooperatives and their representative organisations in the voluntary national review consultative process, contributions of cooperatives to specific sustainable development goals, and alignment with national development strategies. The paper also reflects the views of representative organisations from countries mentioned in the voluntary national reviews, on their role in the process and in highlighting the role of cooperatives with agencies responsible for preparing these reviews. The paper makes the case that, post covid-19, the world is looking at alternatives to the current market driven, consumption-led, inequality widening, and environmentally depleting models. Cooperatives with their values of democracy and solidarity, as well as principles of cooperation among cooperatives and concern for community need to make their presence visible by promoting the cooperative identity, showcasing work of cooperatives on the sustainable development goals, involving themselves actively in national consultations, developing strong partnerships to advocate for cooperatives, and ensuring cooperatives are included by agencies responsible for measuring and reporting.

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Goals (SDGs). Each year, we contact members in countries which are planning to submit Voluntary National Reviews (VNRs) and encourage them to actively engage with key stakeholders and ensure the inclusion of cooperatives in the VNR. Irrespective of whether there is a mention or not, members continue to be focused on implementing the SDGs. We would like to thank them for their continuing efforts.

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Keywords: Cooperatives; Sustainable Development Goals; Voluntary National Reviews; High-Level Political Forum; Partnerships; Identity

Introduction

What makes the cooperative model well suited to sustainable development? The first clear relation is found in the definition provided by ICA, which defines cooperatives as, “people-centred enterprises owned, controlled and run by and for their members to realise their common economic, social, and cultural needs and aspirations” (ICA, n.d.). Cooperatives meet a diversified set of needs, which go beyond profit generation or shareholder return. Cooperatives arise from genuine needs within the community, as compared with the manufactured consumer needs by conventional investor-owned companies. They ensure there are economic and social incentives for a community to come together in a democratic and accountable manner and that investments stay within.

Two of the ICA Principles further solidify the case for cooperatives as sustainable enterprises: Principle 6, cooperation among cooperatives; and Principle 7, concern for community. Principle 6 is associated with the value of solidarity, ensuring cooperatives work together to attain expertise and scale, enabling their sustainability and ensuring their impact. Principle 7 combines the values of self-help and self-responsibility and ensures cooperatives are rooted in the communities in which they conduct their business. Their continuity and success are based on their ability to support communities to develop in a sustainable way. Their response to the COVID-19 pandemic and efforts to mitigate the impacts of climate change reinforces the need to place ‘concern for community’ at the core of development.

The ICA Blueprint for a Cooperative Decade makes the case for cooperatives as builders of economic, social and environmental sustainability. As member-owned economic enterprises, cooperatives are less likely to compromise on quality in pursuit of short-term profit, focusing more on longevity. As social actors, they are inclusive and build the stock of social capital on which successful societies and economies thrive. As participatory organisations, concerns about future environmental outcomes are voiced democratically by members, without needing to be calculated in terms of return on investment (ICA, 2013).

In times of economic crises, “cooperatives are not driven to pack up and move to an alternative location” (Archerd, 1996, as cited in Moxom et al., 2019). Cooperatives have proven their resilience during the financial crisis of 2008 and are doing the same during the current pandemic. “They have proven to act according to members’ needs in the long term, rather than push like investor-owned companies to respond to the logic of expansionism, economic externalities and shareholder value” (Flecha and Ngai, 2014, as cited in Moxom et al., 2019).

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In September 2015, Transforming our World: the 2030 Agenda for Sustainable Development was adopted by the United Nations (UN) to build on the work begun in 2000 by the Millennium Development Goals (MDGs). The 2030 Agenda is a commitment from all countries to address key global concerns (poverty, inequality, unemployment, gender equality, climate change, peace, etc.) and cuts across all sectors of economic activity (agriculture, industry, housing, health, education, production, consumption).

Cooperatives are recognised as important partners to achieve the 17 SDGs, given their involvement in diverse economic sectors. A number of SDGs and their indicators are well aligned with the Cooperative Identity. For example, SDG 1: Reducing Poverty, is in line with the endeavour to meet members' social and economic needs; SDG 8: Decent Work and Economic Growth, is supported by a democratic and member-based approach, coupled with concern for community; SDG 12: Responsible Production and Consumption, is promoted by the principle of concern for community and the value of equity; and SDG 17: Partnerships, is upheld by the principle of cooperation among cooperatives.

The 2030 Agenda, adds an element of reporting, the voluntary national review (VNR), as an important innovation, which was lacking in the MDGs. The MDGs were seen as devoid of consultations with all stakeholders; their monitoring perceived as a top-down exercise; missing targets for decent work, governance, peace and security; and not delivering on commitments to global partnerships (UN, 2012). The 2030 Agenda takes into account the weaknesses in the MDGs and "introduces a new approach that is country led and that takes into account national realities, recognising that country ownership is central to the implementation of the Agenda" (UN 2015, para 74, as cited in Fukuda-Parr et al., 2018). Moreover, the approach is to be voluntary, transparent and participatory, while based on robust evidence. The process is intended to facilitate learning from national experiences and promote accountability to citizens. The VNR is presented at the annual UN High-Level Political Forum (HLPF) on sustainable development in the Ministerial segment and provides an opportunity for countries to share their experiences in the implementation of the 2030 Agenda.

UN member states have shown great interest in the VNR process. In 2016, the first year of implementation, 22 countries presented VNRs; 43 countries in 2017; 47 in 2018 and 2019. "The process has also generated interest on the part of diverse stakeholders" (Fukuda-Parr et al., 2018) with some contributing to the preparation of VNRs and others commenting on the report.

About this paper

The objective of the paper is to explore the visibility of cooperatives in VNRs. This is important for cooperatives as it presents a political opportunity for cooperatives to get involved in and be recognised in the highest form of reporting on SDGs. While cooperatives enjoy a long and rich presence in the development landscape of countries, our analysis shows that their visibility, especially in VNRs and national development plans remains minimal. This stems from limited acknowledgement of cooperatives and their role in implementing SDGs which can be attributed to the limited awareness about their contribution to SDGs and national development in general.

Promotion of the cooperative identity is one of the strategic priorities of ICA and the international cooperative movement. We view the process of VNR formulation, as a channel to promote the cooperative identity and the work of cooperatives to local and national governments, and other relevant stakeholders. This paper falls within the scope of knowledge building activities undertaken within the Framework Partnership Agreement between the ICA and European Commission for the period 2016-2020, on 'Cooperatives in Development: People-Centred Business in Action'. Known also as the #coops4dev project, this partnership seeks to strengthen the cooperative movement and its capacity to promote international development.

In this paper, we present the cooperative model as an alternative approach to meeting a range of socio-economic needs. Cooperatives not only contribute effectively towards the implementation of the 2030 Agenda, but also have a vital role to play in the overall national development of countries. Even before the 2030 Agenda became a milestone in institutionalised development, cooperatives have been instruments of change and community development, and continue to be so. They are also recognised as a strategic pillar for development in many countries.

For the period 2016 to 2019, 36 countries from the Asia-Pacific region presented their VNRs. Of these, there were 25 countries where ICA has a member and 11 non-ICA member countries. Cooperatives are mentioned in the VNRs of 14 countries; in 11 ICA member countries: Indonesia, Japan, Kiribati, Malaysia, Nepal, New Zealand, Palestine, Philippines, Thailand, Timor Leste, Vanuatu; and in three non-ICA member countries: Afghanistan, Lao PDR and Saudi Arabia. Cooperatives are mentioned in eight countries where an apex body representing cooperatives is present; these are - Indonesia, Japan, Malaysia, Nepal, New Zealand, Philippines, Thailand, and Timor Leste. The active role of government departments overseeing cooperatives also influences the mention about cooperatives. Cooperatives are largely mentioned in relation to SDG 1, SDG 2: Zero Hunger, SDG 8, and SDG 13: Climate Action. This is a reflection of the number of cooperatives working in agriculture and in rural areas. The frequent reference to cooperatives in SDG 8 shows that governments expect them to play their role in promoting inclusive and sustainable economic growth, full and productive employment and decent work. Of the 14 countries which mention cooperatives in their VNR, 13 have national development plans (except New Zealand). Cooperatives are mentioned in 12 of the 13 countries with national development plans (not mentioned in Saudi Arabia).

SDGs are important milestones for the survival and welfare of humanity. They are enacted for nation states and not explicitly for businesses. For cooperatives to be adequately recognised in national development frameworks and reporting, it is imperative that apex and representative cooperative organisations, departments responsible for cooperatives, play a proactive role in increasing visibility of cooperatives' contributions and their alignment with national development frameworks and SDGs. Further, our analysis of the VNRs indicates a correlation between cooperatives being mentioned in national development plans and their reflection in the VNRs.

Driven by the above proposition and gaps, this paper comprises the following sections: (1) Role of cooperatives in implementation of SDGs; (2) What is VNR and why is it important?; (3) Why is reporting on SDG performance of cooperatives in VNRs important?; (4) Findings: Analysis of VNRs and member responses; (5) How can cooperatives better engage in the VNR reporting process?; and (6) Conclusion.

Role of cooperatives in SDG implementation

As people-centred enterprises, cooperatives play a crucial role in sustainable development. Their importance to contribute effectively in sustainable development is widely recognised by many international and intergovernmental institutions such as the UN, International Labour Organisation (ILO), and EU. There is a widely-held consensus among many actors, including the UN, ILO, and ICA, that the cooperative model is most suited to address all dimensions of poverty and exclusion. "The way cooperatives help reduce poverty is important. They identify economic opportunities for their members, empower the disadvantaged to defend their interests, provide security to the poor by allowing them to convert individual risks into collective risks, and mediate member access to assets that they utilise to earn a living" (ICA and ILO, n.d.).

At the global level, the UN General Assembly declared 2012 as the International Year of Cooperatives. This declaration recognised the "contribution of cooperatives to socio-economic development and their impact on poverty reduction, employment generation and social integration" (UN, n.d.). "The 2030 Agenda recognises the contributions of cooperatives and calls on them to work together with the international community in achieving the SDGs, by acknowledging the role of the diverse private sector, ranging from micro-enterprises to cooperatives to multinationals, civil society organisations and philanthropic organisations in the implementation of the new Agenda" (UN Department of Economic and Social Affairs (UNDESA), n.d.). Similarly, "the ILO views cooperatives as important in improving the living and working conditions of women and men globally, as well as making essential infrastructure and services available, even in areas neglected by the state and investor-driven enterprises" (ILO, n.d.).

In the 2017 Consensus on Development, the EU recognised that "cooperatives have become instrumental partners in reaching the most vulnerable and marginalised people", alongside other actors, and the EU pledges to promote and defend the "space where these development actors can operate safely...for achieving sustainable development" (Council of the EU, 2017 as cited in Cooperatives Europe, 2017). The #coops4dev Project being implemented by ICA is designed to enhance the profile of cooperatives in development. One such medium to pursue this is the Coops for 2030 Campaign, launched to encourage ICA members to learn about the SDGs, pledge their contributions to the successful implementation of the SDGs and report their progress. For example, the Japanese Consumers' Co-

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operative Union (JCCU) in 2018 had pledged to reduce their CO₂ emissions by 40% compared to 2013 levels, by 2030. As of March 2020, it is roughly estimated that JCCU and its member cooperatives have reduced CO₂ emissions by about 20% as compared to 2013.^[2] Indian Farmers Fertiliser Cooperative Ltd. (IFFCO) has pledged towards a number of goals, including SDG 13 by undertaking afforestation projects on waste lands in over 30,000 hectares. IFFCO has also pledged towards SDG 1 by ensuring adequate returns to members on their investments by marketing of products through the cooperative network, diversification in profitable areas, and entrusting handling and transportation of fertilisers to member societies. iCOOP from South Korea has pledged towards SDG 2 by committing to having at least 3% of its annual turnover through fair trade business. In another instance, National Cooperative Bank Ltd. from Nepal has pledged to raise awareness of SDGs by incorporating them into their training activities and supporting SDG activities of cooperatives in their network.

Besides this, within the international cooperative movement, there are many diverse examples to show the contributions of cooperatives to SDG implementation. For example, National Trades Union Congress (NTUC) in Singapore through its various cooperative businesses, including supermarkets, food courts and hawker centres, pre-school education, adult learning, insurance, senior care, dental and family medicine clinic, is addressing societal concerns related to cost of living and healthcare, ageing, and social mobility. In doing so, these cooperative businesses are improving lives holistically by contributing to SDG 1; SDG 10: Reduced Inequalities; SDG 3: Good Health and Well-being; and SDG 4: Quality Education (Singapore National Co-operative Federation (SNCF), 2018). In Nepal, Nepal Agricultural Cooperative Central Federation Ltd. (NACCFL) is actively implementing SDG 10 and SDG 5: Gender Equality and Women's Empowerment at the grassroots by ensuring social and economic inclusion of small and marginalised farmers. Specifically, NACCFL strives to ensure that both male and female small-scale farmers have access to credit and finance; people from indigenous backgrounds and marginalised castes are integrated into the cooperative movement for their social and economic transformation; the capacity of women entrepreneurs to start and manage their own agricultural enterprises is built; and that women are given equal opportunities for learning and representation at leadership and managerial positions (NACCFL, 2019).

In the current scenario when the world is facing the COVID-19 pandemic, cooperatives continue to provide all the necessary support to their members, people at large, and the government. Their response to COVID-19 reflects their concern for community which is intrinsic to their model and also shows how their work directly relates to various SDGs. A few notable examples are listed below:

- (1) The network of milk cooperatives in India ensured a seamless supply of milk to households during the national lockdown of over 70 days due to COVID-19. These cooperatives procured milk directly from producers at source, thereby securing livelihoods of many at the grassroots (SDG 8), as well as, ensuring an uninterrupted supply of milk for daily consumption and well-being (SDG 2 and SDG 3) (Business Standard, 2020).
- (2) Similarly, the National Agricultural Cooperative Marketing Federation of India (NAFED) supported the Government of India by exporting 4,000 metric tonnes of food grains to Lebanon during COVID-19 as part of ensuring uninterrupted supply of food and essential items from India to West Asia (SDG 2) (Singh, 2020). It also distributed 6 lakh metric tonnes of pulses [a lakh is 100,000] to 20 crore households in India [a crore is 10 million] during the national lockdown due to COVID-19 under the provisions of a central government scheme and National Food Security Act of India (ICA-AP, 2020).
- (3) Cooperative banks have taken multiple measures to reduce the financial implications of the pandemic on their communities (SDG 10). The Norinchukin Bank, JA Bank, JF Marine Bank and Rokin Banks of Japan are providing low-interest loans and consultations on repayments to support their members and the local economy. They have also established an emergency fund to combat COVID-19. Cooperative banks in India granted a moratorium of 3 months on payments of instalments on loans between 1st March-31st May 2020. The Cooperative Commission of Malaysia considered applications for deferment of loan repayments by cooperatives impacted by COVID-19 (ICA-AP, 2020).

- (4) Cooperatives such as DEKOPIN in Indonesia, Rah-e-Roshd in Iran, iCOOP, HeW cooperative in Japan, Central Cooperative Society in Myanmar, and Nepal Agricultural Cooperative Federation in Nepal are among many cooperatives which are directly supporting their communities and governments through the provision of essential and healthcare goods and services such as Personal Protective Equipment, ventilators, awareness drives on sanitisation for good health and wellbeing of people during COVID-19 (SDG 3) (ICA-AP, 2020).
- (5) Cooperatives have also gone beyond local and national boundaries to assist cooperatives in other countries. For instance, the All China Federation of Supply and Marketing Cooperatives (ACFSMC) provided necessary equipment to assist staff of the Sri Lanka Consumer Cooperative Societies Federation Ltd. (SDG 3) (ICA-AP, 2020).

What is VNR and why is it important?

The VNR is a voluntary assessment of the progress of SDG implementation in a country and is part of the follow-up and review mechanism adopted in the 2030 Agenda. As noted in paragraph 84 of the 2030 Agenda, “regular reviews by HLPF on sustainable development are to be voluntary, state-led, and undertaken by both developed and developing countries” (Division for Sustainable Development Goals, n.d.). The aim of the VNR is to strengthen “accountability to citizens as well as facilitate the sharing of experience, including successes, challenges and lessons learned” through implementation of the SDGs (Fukuda-Parr et al, 2018).

A distinct feature of the 2030 Agenda is that, even though it assigns a universal characteristic to SDGs, it also recognises that countries differ in challenges and resources. Thus, even though there is no country in the world where SDGs are not applicable, there is flexibility in prioritising certain SDGs as per the relevant national circumstance. Countries are free to develop nation specific agendas for sustainable development. This also creates room for flexibility and autonomy in how countries report the progress on different SDGs. In this context, while guidelines for preparing the VNRs have been issued, they are intended to be flexible and allow for adaptation to national circumstances (UNDESA, 2019). As a result, VNRs prepared by different countries vary according to a country’s “thematic focus, the use of indicators, the details of policy descriptions and the inclusion of civil society or private sector perspectives, among others” (Fukuda-Parr et al, 2018).

The VNR framework is built around a “process that tracks the progress on SDGs; is open and participatory for stakeholders; focuses on people with particular attention to human rights and the people furthest behind; takes a long-term perspective; and is rigorous and evidence based” (UN 2015, para 74 as cited in Fukuda-Parr et al, 2018). “The main responsibility for follow-up and review of SDGs lies with national governments. However, to reinforce vertical coherence and complement the VNR process, local and regional governments are increasingly engaging in voluntary local review, which has proved useful for cities to understand where they are located in the big picture and demonstrate local governments’ capacity and commitments” (Economic and Social Commission for Asia and the Pacific, 2019).

The HLPF encourages member states to conduct regular and inclusive reviews of progress at the national and sub-national levels (Division for Sustainable Development Goals, n.d.). Countries are expected to participate in voluntary review at least twice in the 15-year cycle (Food and Agricultural Organisation of the UN (FAO), n.d.).

In recent years, “more and more countries have started volunteering to report their progress towards achievement of the 2030 Agenda and SDGs through VNR at HLPF, taking place in New York in July” (Economic and Social Commission for Asia and the Pacific, 2019). The growing number of VNR submissions at HLPF every year shows its importance. Some of the reasons why VNR is important and gaining popularity are as follows:

- (1) “Through the VNR exercise, countries can revise national development goals and targets; assess and strengthen the adequacy of national policies and institutions; and mobilise multi-stakeholder support for the achievement of SDGs, enhancing awareness around the SDGs and the 2030 Agenda” (Economic and Social Commission for Asia and the Pacific, 2019).
- (2) “The scope of the review is expected to be broad, reflecting on national priorities and circumstances, reporting on actions taken to advance implementation and progress

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made...Increasingly, countries are adopting the principle of Leaving No One Behind as a lens through which to analyse achievements towards sustainable development.” Youth groups, academia, volunteers, the private sector, civil society organisations and local governments are all cited as contributors to effective implementation” (Economic and Social Commission for Asia and the Pacific, 2019).

- (3) “VNR reports are expected to show what steps a country has taken to implement the 2030 Agenda and provide an assessment of the results on the ground including successes, challenges, gaps in implementation, possible solutions and emerging issues” (Tap Network, 2019).
- (4) “The preparation process for drafting the report mobilizes all parts of government and extends to the whole of society to implement the 2030 Agenda in an inclusive manner.” Moreover, VNR preparations provide the opportunity to anchor sustainable development at the highest possible political level under the guidance of key ministries or even heads of government, ensuring ownership for the implementation of the 2030 Agenda (Economic and Social Commission for Asia and the Pacific, 2019).
- (5) “In a number of countries, VNR is an opportunity to rethink their international development cooperation. It gives them an opportunity to look closely at what developing countries are identifying as priorities in their VNR, and areas where they need support” (UNDESA, 2019). “As a tool for accountability, the VNR process can strengthen national ownership of the SDGs, promote transparency, inclusiveness and participation in reporting on the SDGs, and support more effective implementation of the 2030 Agenda. Given the 2030 Agenda’s voluntary nature, a VNR may be seen as a norm-building process, in which individual countries’ best practices may persuade others to follow suit and set standards for the international community” (UN Development Group Guidelines, 2017 as cited in Tap Network, 2019).

Why is reporting on SDG performance of cooperatives in VNR important?

As a people-centred enterprise model that is more than a century old and in existence for almost as much time in countries such as Indonesia, Thailand, India, Japan, and South Korea, cooperatives are intrinsically intertwined with the development of people and hence, nation states as a whole. Irrespective of whether the cooperative movement in the region was born as a result of administrative policies of colonial governments, economic turmoil created by World Wars, influence from the West, or transitions in national markets and economies, the cooperative model has emerged as a need-based model whose success and sustainability have withstood the test of time. For example, first established in the early 20th century, cooperatives in South Korea continue to play a vital role to drive community-based initiatives to strengthen the rural and urban economy. Post 2000, the government of South Korea has even recognised the role of cooperatives, along with social enterprises, as a means to ensure jobs and reduce dependency on the welfare economy (ICA-AP, 2019). Similarly, in Japan, the roots of the cooperative movement date back to the early 1800s but cooperatives continue to be the mainstay of the Japanese rural economy through their dominant presence in agriculture, fisheries and the forestry sector (ICA-AP, 2019). Most recently, the efforts of the Japan Workers’ Co-operative Union (JWCU) have led to the draft ‘Worker Cooperatives Act’ being submitted to the Diet^[3] with support from all political parties and factions. It is 42 years since a new Cooperative Act in Japan has been considered. The last was in 1978 when the Forestry Cooperative Act was enacted. The Worker Cooperatives Act, when passed, will contribute to “the realization of sustainable and vibrant communities through the activities of worker cooperatives” (JWCU, 2020).

Apparent from their contribution to the socio-economic and environmental development of their countries, cooperative business enterprises continue to be driven by a social mission yet ensure that they contribute to national development effectively. In some countries, cooperatives contribute more than 10% of the GDP^[4] such as in New Zealand (19%, 2018) and Thailand (13%, 2017) (ICA-AP, 2019). Regardless of their economic classification,^[5] countries continue to benefit from the presence of cooperatives that have the capacity and experience in reaching out to the masses, marginalised, and most vulnerable, beside others. Some countries have also officially recognised cooperatives as the third pillar in national development policies along with the public and private sector; and some have even enshrined their importance in the national Constitution, such as in Nepal and Iran.

The inclusion of cooperatives in VNRs is a recognition of the value added brought about by cooperatives historically and to date. The reporting on SDG performance of cooperatives in VNRs is important for two main reasons.

- (1) First, as a globally recognised political document, the significance of including cooperatives in VNRs goes beyond mere reporting. It translates into recognition of cooperatives as one of the actors that have a role in the implementation of development agendas. By mentioning cooperatives explicitly as they are, and not within the ambit of other organisational identities (such as community-based organisations, civil-society organisations, producer organisations, social enterprises or the social solidarity economy), the cooperative identity remains preserved and acknowledged. The way the contributions or potential of cooperatives is mentioned, brings encouragement and opens up opportunities to do more. Specifically, it becomes an important tool to promote the adoption of a formal SDG framework and monitoring mechanisms within the large network of cooperatives, so that moving forward, data collection and reporting on cooperatives' SDG performance and impact becomes systematic and robust.
- (2) Second, the inclusion of cooperatives in VNRs requires more than monitoring and measurement of cooperatives' impact on sustainable development. The process of formulating VNRs is long and involves consultation with many organisations. The reporting on SDG performance of cooperatives in VNR requires involvement of cooperative apex bodies in this consultation process, above anything else. For this to happen, as much as the responsibility is on the national statistical agencies and government bodies to engage with the cooperative sector, at par with others, it is also a responsibility of cooperative organisations, especially apex bodies to be aware of VNRs, show interest in advocacy with the government, and actively engage with them to ensure that cooperatives are not left out. It thus requires active networking, dialogue and advocacy with those who are responsible to implement a VNR and being involved in the process in some way or another.

Findings: analysis of VNRs

The Handbook for the preparation of VNRs, developed by UNDESA, outlines the building blocks and the basic, practical information on the steps that countries may take when preparing VNRs (UNDESA, 2020).

The VNRs are most apt “when they involve an inclusive, participatory, transparent and thorough review process at the national and sub-national levels; when they are evidence based, produce tangible lessons and solutions; and when they are followed by concrete action and collaboration” (UNDESA, 2020).

In order to make this possible, the Handbook recommends the following (UNDESA, 2020):

- (1) **Coordination structure:** “An entity within the government responsible for the overall coordination of the VNR...and collaboration with other relevant government ministries, agencies and relevant stakeholders is needed in order to provide information and data...All sectors and levels of government, civil society, private sector, trade unions, members of parliament and national human rights institutions, should be considered”.
- (2) **Multi-stakeholder participation:** “One of the founding principles of the 2030 Agenda is the requirement for all implementation and follow-up processes to be participatory and inclusive, including all levels and sectors of government, civil society and the private sector, members of parliament, national human rights institutions, among others”.
- (3) **Institutional Mechanism:** “To engage stakeholders, which can be used for future involvement in the implementation of the 2030 Agenda...The institutional mechanism should remain relevant across political cycles” and ensure that the institution’s work extends to “current and future decision makers and political parties”.
- (4) **Ownership of the SDGs:** “Awareness raising and dissemination of information about the SDGs throughout all branches and levels of government and among stakeholders is a crucial and ongoing dimension of creating an enabling environment, and participatory and inclusive processes...” and “ownership”.

- (5) **Incorporation of the SDGs into national frameworks:** “The effective implementation of the SDGs depends on their incorporation into all relevant national frameworks. The VNR needs to analyse how well the frameworks are aligned with the SDGs and determine whether there are critical gaps”.
- (6) **Means of implementation:** “Discuss how means of implementation are mobilised, what difficulties are being encountered, and what additional resources are needed to implement the 2030 Agenda, looking at the full range of financing sources (public/private, domestic/international) and non-financing means of implementation, such as capacity development and data needs, technology, and partnerships...The review could indicate how financial systems, statistical data and resource allocations are being aligned to support the realization of the 2030 Agenda and its pledge to leave no one behind”.

Methodology adopted in this paper

A two-step process was adopted to collect data: (1) Review of VNRs of 36 countries from 2016 to 2019. These included 25 ICA member countries and 11 non-ICA members countries from the Asia-Pacific region and (2) E-interviews with five ICA members from Asia and Pacific countries that mentioned cooperatives in their VNRs.

(1) Review of VNRs from Asia and Pacific

VNRs from 2016 to 2019 were reviewed to see how cooperatives are mentioned, keeping some points from the above process in view. The focus was on the Asia-Pacific region and 36 countries were covered, of which 25 were ICA member countries and 11 non-ICA member countries. The countries reviewed, where ICA members are present were: Australia, Bangladesh, Bhutan, Fiji, India, Indonesia (2017 and 2019), Japan, Jordan, Kazakhstan, Kiribati, Malaysia, Maldives, Nepal, New Zealand, Pakistan, Palestine, Philippines (2016 and 2019), Singapore, South Korea, Sri Lanka, Thailand, Timor Leste, UAE (2017 and 2018), Vanuatu and Vietnam. The non-ICA member countries reviewed were Afghanistan, Bahrain, Cambodia, Iraq, Lao PDR, Palau, Qatar (2017 and 2018), Tonga, Tajikistan, Turkmenistan and Saudi Arabia (used to be an ICA member till 2018).

The data from the review of 36 VNRs was analysed to see whether cooperatives were mentioned both in general terms and with reference to specific SDGs, and the way they compared against the building blocks in the Handbook for the preparation of VNRs, developed by UNDESA. These included engagement with a coordination structure; participation in consultations; ownership of the SDGs; and, incorporation of the SDGs and cooperatives into national frameworks, in the institutional mechanism and means of implementation. (The detailed analyses of the VNRs have not been included in the paper. They can be made available upon request.)

(2) E-interviews with ICA members from Asia and Pacific

Following the review of the VNRs, five ICA members were contacted from countries where cooperatives found mention in the VNRs to find out their involvement in the VNR process. The members contacted were the Business Council of Cooperatives and Mutuals (BCCM), Australia; Economic and Social Development Center (ESDC), Palestine; National Association of Training Centers for Cooperatives (NATCCO), Philippines; National Cooperative Federation (NCF), Nepal; and Office of Registrar of Cooperatives and Business Development Services (ORCBDS), Vanuatu.

The e-interviews with members were analysed to look into their engagement in the consultation process; ways in which they presented the role of cooperatives; benefits seen in their engagement; and efforts being made to make central the role of cooperatives in the VNRs and the national development processes. (The detailed member responses have not been included in the paper. They can be made available upon request.)

Findings from the review of VNRs

The review of VNRs shows that most countries have presented a qualitative account of their experience and progression in the realization of SDGs. While reporting on an SDG, countries have showcased a variety of work being pursued at local and national level through examples and case studies of exemplary initiatives by the government and non-governmental organisations. In some cases, countries have presented a way forward on many SDGs that are important to their local social, economic, cultural and political context.

(1) Engagement with coordination structure and participation in consultations

The members mentioned in the VNR were from Australia (BCCM), Kiribati (Ministry of Commerce, Industry and Cooperatives, MCIC), Nepal (NCF), the Philippines (NATCCO) and Singapore (SNCF). These were largely the apex organisations representing cooperatives in the country. BCCM (Australia) and SNCF (Singapore) contacted the Focal Points early in the VNR process and made submissions on the role played by cooperatives in implementation of the SDGs. NCF (Nepal) and NATCCO (Philippines) were involved in the consultative process as part of engagement with Civil Society Organisations (CSOs).

(2) Mention about cooperatives

Table 1 and 2 below show that cooperatives are mentioned in the VNRs of 14 countries; in 11 ICA member countries: Indonesia, Japan, Kiribati, Malaysia, Nepal, New Zealand, Palestine, Philippines, Thailand, Timor Leste, Vanuatu; and in three non-ICA member countries: Afghanistan, Lao PDR and Saudi Arabia. While ICA members from Australia (BCCM) and Singapore (SNCF) are mentioned in their respective VNRs, there is no specific mention of cooperatives. Cooperatives are mentioned in eight countries where an apex body representing cooperatives is present; these are - Indonesia, Japan, Malaysia, Nepal, New Zealand, Philippines, Thailand, and Timor Leste. The active role of government departments overseeing cooperatives also influences the mention of cooperatives.

Table 1
Mention of cooperatives in the VNRs of countries where ICA has members

	Country	Year VNR presented	Cooperatives mentioned in VNR	ICA member mentioned in VNR	National development plans mentioned in VNR	Cooperatives mentioned in national development plans
ICA member countries						
1	Australia	2018	N	Y	N	N
2	Bangladesh	2017	N	N	Y	Y
3	Bhutan	2018	N	N	Y	N
4	Fiji	2019	N	N	Y	Y
5	India	2017	N	N	Y	N
6	Indonesia	2017	Y	N	Y	Y
7	Japan	2017	Y	N	Y	Y
8	Jordan	2017	N	N	Y	Y
9	Kazakhstan	2019	N	N	N	N
10	Kiribati	2018	Y	Y	Y	Y
11	Malaysia	2017	Y	N	Y	Y
12	Maldives	2017	N	N	N	N
13	Nepal	2017	Y	Y	Y	Y
14	New Zealand	2019	Y	N	N	N
15	Pakistan	2019	N	N	N	N
16	Palestine	2018	Y	N	Y	Y
17	Philippines	2016	Y	Y	Y	Y

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	Country	Year VNR presented	Cooperatives mentioned in VNR	ICA member mentioned in VNR	National development plans mentioned in VNR	Cooperatives mentioned in national development plans
18	Singapore	2018	N	Y	N	N
19	South Korea	2016	N	N	Y	N
20	Sri Lanka	2018	N	N	Y	Y
21	Thailand	2017	Y	N	Y	Y
22	Timor Leste	2019	Y	N	Y	Y
23	UAE	2017	N	N	Y	N
24	Vanuatu	2019	Y	N	Y	Y
25	Vietnam	2018	N	N	Y	Y

Table 2
Mention of cooperatives in the VNRs of countries where ICA has no members

	Country	Year VNR presented	Cooperatives mentioned in VNR	Cooperatives involved in VNR process	National development plans mentioned in VNR	Cooperatives mentioned in national development plans
Non-ICA member countries						
1	Afghanistan	2017	Y	N	Y	Y
2	Bahrain	2018	N	N	Y	N
3	Cambodia	2019	N	N	Y	N
4	Iraq	2019	N	N	Y	Y
5	Lao PDR	2018	Y	N	Y	Y
6	Palau	2019	N	N	N	N
7	Qatar	2017	N	N	Y	N
8	Saudi Arabia	2018	Y	N	Y	N
9	Tajikistan	2017	N	N	Y	Y
10	Tonga	2019	N	N	Y	N
11	Turkmenistan	2019	N	N	Y	N

(1) Cooperatives and specific SDGs

Cooperatives are largely mentioned in relation to SDG 1, SDG 2, SDG 8, and SDG 13. This is not surprising, given the number of cooperatives working in agriculture and in rural areas. The frequent reference to cooperatives in SDG 8 shows that governments expect them to play their role in promoting inclusive and sustainable economic growth, full and productive employment and decent work.

The 2017 VNR report of Nepal identifies the cooperative sector as one of the three pillars of economic development in the country, making the sector a key stakeholder in creating an enabling environment, with strong contributions towards SDGs 1, 2, 3, 4, 5 (Gender Equality), 7 (Affordable and Clean Energy), 8, 10 and 17 (VNR, Nepal, 2017). The “development and promotion of cooperatives” have been noted as one of the measures to “promote decent employment and economic growth” (SDG 8) in the 2018 VNR report of Palestine (VNR, Palestine, 2018). The 2017 VNR report of Indonesia mentions, for example, the “promotion of cooperative establishment within the framework to protect small-scale farmers” (SDG 14: Life Below Water) (VNR, Indonesia, 2017). New Zealand’s VNR report for 2019 brings forward Fonterra’s (New Zealand’s largest dairy

cooperative) contributions in accelerating sustainable dairying, restoring freshwater habitats, reducing nutrient pollution, and building ecosystem resilience (VNR, New Zealand, 2019).

(2) *Ownership of the SDGs*

The overarching aim of governments as listed in the VNRs to reduce poverty, empower weaker members of society, provide opportunity, and treat with fairness and equality resonates well with cooperatives. Some of the priority areas mentioned in the VNRs are agriculture (climate smart, improve value added and sustainable development), communities (become stakeholders in the development of their community and integrate local projects with mainstream development agendas, health and energy), entrepreneurship (create ecosystem to improve productive capacity), gender (equality and representation), youth (technical and vocational education). The priority areas of governments match with the interests of cooperatives and there is need for both to work on awareness raising, sharing of experiences and dissemination of information to ensure an enabling environment, and participatory and inclusive processes and ownership.

(3) *Incorporation of the SDGs into national frameworks*

In most countries, there is a national policy whose timeline matches that of the SDGs. As stated in the Handbook, the effective implementation of the SDGs depends on their incorporation into all relevant national frameworks.

Of the 14 countries which mention cooperatives in their VNR, 13 have national development plans (except New Zealand). Cooperatives are mentioned in **12** of the 13 countries with national development plans (not mentioned in Saudi Arabia). In addition, in **seven** countries, cooperatives are mentioned in the national plans (Bangladesh, Fiji, Iraq, Jordan, Sri Lanka, Tajikistan and Vietnam) but not in the VNRs. Cooperatives figure in close to 50% of the countries and are reflected in VNRs and national plans. There is correlation between cooperatives being mentioned in the national plan and their being reflected in the VNRs. This shows the need for apexes and departments responsible for cooperatives to show how the work of cooperatives is aligned with the national framework and the need to reflect their work in the VNRs.

The Government of Nepal has identified the strong potential and power of cooperatives to contribute towards “poverty reduction, service delivery, gender equality and good governance.” The cooperative sectors’ contributions to the country’s GDP are equal to that of Nepal’s tourism sector, which is 4% of the GDP (UN Development Programme (UNDP), n.d.). The Philippines has also recognised the role of NATCCO and other cooperative members in building SDG awareness and ownership, and their involvement in social security and financial access programmes for the informal sector. Vanuatu has recognised the role of cooperatives in promoting broad-based growth by strengthening primary production, and linkages between tourism, infrastructure, agriculture and industry in rural areas. The Government of Kiribati emphasized the need for development of a National Cooperative Policy to strengthen cooperatives and credit unions as part of its key objective to strengthen national governance systems to promote principles of good governance including accountability, transparency and inclusiveness.

(4) *Institutional mechanism and means of implementation*

Cooperatives are not part of any institutional mechanisms that are meant to get the views of government and nongovernmental stakeholders. While cooperatives are actively engaged in implementation, their financial and non-financial contributions do not get reflected. Cooperatives also are not part of the institutional mechanisms to collect and report data against targets and indicators. Partnerships are seen as an effective vehicle to implement the SDGs and there is need for more active engagement of cooperatives.

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Perspective from ICA members

Q: Were you approached by the agency responsible for preparing your country's VNR?

NCF in Nepal was invited to be part of the consultative process while BCCM in Australia and NATCCO in the Philippines approached the Focal agencies. BCCM made a written submission to the Focal Point; in the case of the Philippines and Nepal, the members were able to put across the work of cooperatives in the consultative discussions. The ORCBDS was not directly involved but contributed indirectly through their business plan, annual performance reporting and M&E.^[6]

Q: How was the role played by cooperatives highlighted to the agency preparing the VNR?

BCCM prepared a submission to a Parliamentary Inquiry on the SDGs which included case studies of how Australian cooperatives and mutuals contribute to different SDGs. BCCM also submitted a number of case studies directly to the Department of Health as part of their Departmental consultation on the SDGs. The NCF and National Planning Commission in Nepal highlighted cooperatives as effective partners to localize implementation, and fill the gaps in access, especially financial. NATCCO highlighted the contribution of their network in financial inclusion by providing access to finance especially to the marginalized, the role in financial education especially with their partnership with the Department of Education in the implementation of Aflatoun, and the role in digital literacy and shift to digital money with their Kaya Payment Platform. In Palestine, the role of cooperatives in decent work was highlighted. 'The Vanuatu National Sustainable Plan or the People's Plan 2030' recognises cooperatives under the economic pillar and sets a target to increase agricultural production. In addition, the government budget priorities and trade policy framework have specific targets for cooperatives.

Q: Do you see any benefit in cooperatives being mentioned in the VNR and how do you use this?

According to ESDC, "mention highlights the sector as important contributor in sustainable development and increases the opportunities to bring out issues and to create an enabling environment for the cooperative sector, since the VNR is a reference for all Palestinian sectors and organisations". The benefits of being mentioned in the VNRs were: recognised work of cooperatives, identified as key player, invited to discussions, and increased contributions. NCF in coordination with the Ministry of Cooperatives and Poverty Alleviation and UNDP prepared comprehensive guidelines to include cooperatives and presented their progress paper at the 'United Nations Workshop on Cooperatives and Sustainable Development Goals: Ensuring that No One is Left Behind', held in Brazil in 2017. The ORCBDS sees mention in the VNR as a help to gain more attention from the government to cooperatives. In the 2021 budget, the government has allocated additional resources to support cooperatives and the apex body representing cooperatives. Mention in the VNR also helped them sign MoUs^[7] with several stakeholders (Department of Customs; Department of Agriculture, Livestock, Fishery, Forestry, and Biosecurity; Department of Energy; Department of Industry; Reserve Bank of Vanuatu; National Bank of Vanuatu; Vanuatu National Provident Fund) to establish partnerships. The strong awareness also helped in updating the Cooperative Act of Vanuatu.

Q: Are you working to include cooperatives in the national data collection process?

In Australia, the first recommendations of the 2015 Senate inquiry into cooperatives and mutuals was that the Government of Australia should collect data on cooperatives. This remains part of BCCM's policy platform and it continues to fund and carry out national data collection on cooperatives to produce the annual National Mutual Economy report. As part of this research, they are seeking to expand collection of data on the overall economic and social impacts of cooperatives (for example, more data on their donations and sponsorship of community causes). In Nepal, the Central Bureau of Statistics is responsible for overall data collection, refinement and dissemination which is also applied in SDGs. In case of data relating to cooperatives, the Department of Cooperatives (DoC) is responsible and NCF is a coordinating partner of DoC to collect data. The Government of Nepal's Cooperative and Poverty related Management Information System is the platform to collect disaggregated data about the cooperative sector, and is being implemented at the local, provincial and federal level. In Vanuatu, the Department of Strategic Policy, Planning and Aid Coordination (DSPPAC) is responsible for M&E. The ORCBDS uses the targets set by DSPPAC in their business plan to guide performance and meet the targets.

Q: Are you continuing to engage with the Focal Point? How do you see your role in future VNRs?

Members stressed the need to be proactive in being in contact with the Focal Points and continue engagement with the VNR process. Most countries plan to submit VNRs and being engaged ensures that cooperatives will be called on and their contributions recognised. In the Philippines, NATCCO plans to develop formats where progress on targets can be uploaded and regularly forwarded to the body preparing VNRs. The ORCBDS plans to continue engaging with Focal Point and play a more regulatory role in the future rather than facilitation.

Q: Do you have suggestions for members in other countries who want to engage in the VNR process?

How can cooperatives better engage in the VNR reporting process?

The 2030 Agenda makes a strong case for shifting global priorities towards an alternative, inclusive and sustainable model, such as the cooperative business model. The COVID-19 crisis has revealed deep-rooted systemic biases in the current socio-political-economic model, creating an opportunity for a model that is inclusive and environmentally sustainable. As a social-solidarity economic model, cooperatives in the region and around the world are already implementing many of the SDGs. However, despite the size, potential and significant contributions of the sector locally and globally, their visibility in national and international development agendas, monitoring and reporting, remains minimal. Cooperatives are often left out of key national and international documents that are centred on the sustainable development discourse (Schwettmann, n.d.).

The VNR is not a one-time activity. It has been adopted by countries to be carried out every two to three years, up until 2030, with some countries reporting every alternate year as well. The VNR is also not a stand-alone document but a reflection of national priorities and alignment with national development agendas. Despite the limited inclusion of cooperatives from the region in the VNR process, it remains a good platform to invest time and resources in to increase the involvement and visibility of cooperatives.

This paper, after the review of VNRs across 36 countries and inputs from ICA members, advocates reinforcing identity, measuring contributions, getting involved in national development plans, engaging stakeholders and participating in the VNR process to increase the visibility of cooperatives.

Reinforcing identity

Cooperatives, while working on all the SDGs, neither reflect nor incorporate the SDG language. For example, agriculture cooperatives contribute to zero hunger, but they rarely mention SDG 2 and any of its associated indicators. Many members of cooperatives are unaware of the goals and their own contributions to any of the targets. Cooperatives need to incorporate the goals in their messaging, record their contributions, communicate and engage with stakeholders.

Cooperatives have played an important role in addressing the needs of their members and communities. During the COVID-19 crisis, their roles have ranged from distribution of essential commodities, providing information to access stimulus packages and contributing to relief funds and, in the process, they have contributed to SDG1, SDG 2, SDG 3, SDG 6: Clean Water and Sanitation, SDG 10, and SDG 17. Cooperatives in the Philippines contributed medical, protective and hygiene equipment to local hospitals and communities; distributed food and other basic necessities; and made direct and indirect financial contributions in excess of PHP 6 million. SNCF in Singapore collaborated with Singapore Statutory Boards Employees' Cooperative and GP+ Cooperative to purchase and distribute over 10,000 surgical masks to migrant workers and fund sponsorship towards initiatives to support migrant workers stranded in Singapore. NTUC FairPrice Cooperative was involved in the supply of food and daily necessities and the NTUC LearningHub conducted online training and education to help individuals transition to new roles. Indian Farmers Fertiliser Cooperative (IFFCO) in India, contributed US\$ 3.6 million to the PM CARES Fund (ICA-AP, 2020). The Government of India has publicly applauded the invaluable role and contributions of the cooperative movement towards creating an inclusive society which leaves 'no one behind' (Outlook, 2020). Cooperatives in Australia, Japan, Indonesia, Iran and Malaysia have made enormous contributions to ensure social, economic and environmental stability, directly and indirectly contributing to almost all goals. While these contributions continue during 'normal' times, the COVID-19 crisis has highlighted the key role played by cooperatives as a social solidarity business model.

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ICA has focused on an SDG every year, since 2016, to celebrate the International Day of Cooperatives (IDC). The theme for 2016 was ‘Cooperatives: The Power to Act for a Sustainable Future’ to emphasise cooperatives’ contribution to the SDGs. The theme for the 2017 IDC was: ‘Cooperatives Ensure No One is Left Behind’ to show that globalisation should be done through a set of values such as those of the cooperative movement. The theme for 2018 was ‘Sustainable Consumption and Production’ (SDG 12) to show that efficient management of natural resources, reduction of waste and sustainable patterns of consumption can help achieve food security and make the shift towards a resource efficient economy. The theme for 2019 was: ‘Decent Work and Economic Growth’ (SDG 8) to show that cooperatives are people-centred enterprises characterised by democratic control that prioritise human development and social justice within the workplace. The 2020 celebration of IDC will focus on ‘Cooperatives for Climate Action’ (SDG 13). Given the ravages of COVID-19, the focus on this theme is to commit to climate actions and achieve a fair, green and just transition for all communities, leaving no one behind.

Measuring contribution

Apex cooperative organisations from five ICA member countries highlighted the absence of direct communication and engagement with their national organisations and departments that are involved in consultation, data collection, and reporting for the VNRs. Cooperatives in many countries are not monitored by the national statistical agencies and line departments responsible for cooperatives. They are neither clued in to the SDGs nor do they respond in a timely fashion.

The lack of data and visibility is a common weak link across many sectors and countries. However, this gap also creates an opportunity for the cooperative sector to raise its voice for inclusion in national data collection and statistics. With a global presence of over one billion members (ICA, n.d.), the scope and potential of the cooperative sector to implement and achieve the SDGs is very high. Inclusion of cooperatives in national data collection and development planning will enable more inclusive and positive outcomes for implementation of SDGs.

The Government of Nepal has identified the strong potential and power of cooperatives to contribute towards “poverty reduction, service delivery, gender equality and good governance” (UNDP, n.d.). As noted by Mr. Keshab Badal, ex-Chairperson of NCF, “I don’t believe there is a single one out of the 17 SDGs that doesn’t apply to cooperatives, in some form or the other.” NCF used the recognition to work with the government and UN agencies to ensure they are recognised in the national plan and included in monitoring. Table 3 below from the Status and Roadmap 2016-2030 prepared by the National Planning Commission, Government of Nepal provides an example of the target where cooperatives are mentioned. The table shows that while the percentage of households (within 30-minute walk) with access to cooperatives was 54% in 2015, the number rose to 60.9% in 2019; and the estimate increase by 2022, 2025 and 2030 is 66.1%, 71.3% and 80%, respectively.

Table 3
Nepal Sustainable Development Goals-Status and Roadmap 2016-2030

Targets and Indicators		2015	2019	2022	2025	2030
Target 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services						
8.3.1	Proportion of informal employment in non-agriculture employment, by sex	70 ^b	54	42	30	10
1	Contribution of Micro-, Small-, and Medium-scale enterprises in GDP (%)					
2	Access to Financial Services					
3	Access to Cooperatives (% of households within 30 min walk)	54 ^a	60.9	66.1	71.3	80

In a similar vein, apex across the region need to interact with the national statistical agencies to ensure that the work of cooperatives is tracked and reported, their contribution to the SDGs highlighted and their visibility enhanced.

National development

The VNR is a state-led process to report on a country's achievement of the SDGs from their national perspectives and priorities. "They are indicative of SDG inclusion into national development plans and strategies, and each country's achievements against their nationally determined contributions towards the SDGs" (UNDESA, 2016). This synthesis of the SDGs with national development plans is reflected in our analysis of the VNRs of 36 countries: 29 of the 36 VNRs reviewed emphasise the inclusion of the 2030 Agenda with their various national plans and agendas. The Government of Bangladesh has synthesised the 2030 Agenda with its Perspective Plan (2020-2021), 7th Five Year Plan (2016-2020), 8th Five Year Plan (2021-2025), and 9th Five Year Plan (2026-2030) (Bangladesh VNR, 2017). Kiribati has a special SDG Task Force as part of its Development Coordination Committee and has integrated the mid-term review of its Development Plan (2016-2019), with its VNR (IISD, 2018). Almost 60% of indicators in Lao's 8th National Social-Economic Development Plan are linked to the SDG indicators (IISD, 2018). Qatar has also aligned its National Development Strategy (2018-2022) with the 2030 Agenda. Saudi Arabia has prioritised alignment of its state programmes and strategies with the SDGs and indicators. Sri Lanka has mainstreamed SDGs in institutional plans as a strategy towards achieving the SDGs, with its National Budget (2018) focusing on a 'Blue Green Economy' (IISD, 2018).

Mainstreaming of the cooperative sector in national development plans and strategies is an important step towards its inclusion in the VNRs. Country VNRs which highlight the role of cooperatives in implementing the SDGs, have also included cooperatives as a key sector within their national development agendas. For instance, Nepal's VNR strongly highlights the role of the cooperative sector in implementing various SDGs, especially linked to SDGs 1, 2, 5, 8 and 10. This reflects recognition of the cooperative sector as the 'Third Pillar' in the Constitution of Nepal. The VNR of Japan (2017) identifies cooperatives as an important stakeholder, with the sector included in the consultative process; however, it doesn't include cooperatives in its national development plans. Indonesia identifies the significant role of cooperatives in providing protection to small-scale fishermen in the context of MSMEs^[8] (Indonesia VNR, 2017); the role of cooperative banks in financial inclusion; and that of local cooperatives in climate change mitigation and environmental management (Indonesia VNR, 2019). This recognition is reflected in the country's National Medium-Term Development Plan (2004-2009; and 2015-2019), where cooperatives are included in the national agenda for further empowerment, economic development, and enhancement of the welfare of people.

Engaging stakeholders

The review of SDGs calls for active consultations among stakeholders; cooperatives need to be around the table where decisions are taken on actions, progress and impacts. The success of cooperatives relies on healthy member-based cooperatives, as well as good governance, but expansion and further advancement is grounded in communities and supported by strong and strategic partnerships with respective governments and international and national organisations. Partnerships are key to ensure there is an enabling environment for cooperatives, recognition accorded to work done by cooperatives and supporting agencies speaking for cooperatives. Apex and national cooperative bodies need to form linkages with government departments to enhance data collection of the sector's actions and contributions. As mentioned earlier, cooperatives need to leverage the support extended by the EU, FAO, ILO and UNDESA. In addition, in Asia and the Pacific region, regional bodies such as the Association of South East Asian Nations (ASEAN), Central Asian Cooperation Organisation, Gulf Cooperative Council (GCC), Pacific Islands Forum and the South Asian Association for Regional Cooperation (SAARC) can play a key role in enhancing the voice of cooperatives. There needs to be active engagement of cooperatives with stakeholders in order to give voice and visibility to cooperatives in the implementation of SDGs.

Participating in the VNR process

Apex cooperatives, as representatives of primary and secondary cooperatives within a region or country, are well placed to identify member needs, consolidate member actions across sectors, and form a strong cohesive lobby to advocate with their respective national governments. In order to bring cooperatives into the VNR process, the following are some of the steps that could be taken:

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- (1) Understand the VNR in terms of process, timelines, and requirements.
- (2) Engage with the Focal Point for VNR early in the preparation process.
- (3) Make a submission on the role of cooperatives and SDGs to the Focal Point. The submission by BCCM to the Senate Standing Committee on Foreign Affairs Defence and Trade on 'Cooperatives and the UN Sustainable Development Goals' (BCCM, 2018), and SNCF's submission on how Singapore's cooperatives help contribute to SDGs to the respective Focal Point (SNCF, 2018), helped put across the contribution of cooperatives.
- (4) Coordinate with the Line Ministry/department responsible for cooperatives in the country to ensure the work on SDGs is communicated.
- (5) Participate actively in the VNR consultation process and engage in civil society platforms.
- (6) Engage with UN bodies and international agencies to advocate for cooperatives and for inclusion in key documents. ICA can play a role in communicating with focal points and international agencies, bringing in experiences from across the region, facilitating dialogue with key players and building capacity of members.
- (7) Follow-up to know about the consultation process and communicate work being carried out by cooperatives.

Conclusion

Cooperatives in the Asia-Pacific region are actively working towards the objectives and targets indicated in the SDGs. With SDGs as its foundation, this paper focuses on the role of cooperatives in national development and their inclusion in VNRs. The paper analyses VNRs from 36 countries to understand the presence of cooperatives in the international political instruments. The advantage of the cooperative model is its strong and broad outreach at the ground level to millions of vulnerable people, its emphasis on economic participation, and its eye towards sustainability. From covering a wide range of examples related to SDGs of the response of cooperatives to COVID-19, the paper showcases their ongoing contribution towards the welfare of people. Despite a rich history and significant economic role, the potential of cooperatives is yet to be fully harnessed and recognised.

This paper shows the different ways in which the cooperative movement does and can continue to, work towards implementing the SDGs and communicating the relevance of the cooperative model for sustainability. We systematically make the case that while cooperatives have a long and vast presence, they are not visible enough. Enabling the visibility of cooperatives in national and international domains has an underlying importance, i.e., to maintain, protect and enrich the cooperative identity. Post COVID-19, the world will be looking at alternatives to the current market driven, consumption led, inequality widening, and environmentally depleting models. Cooperatives with their values of democracy and solidarity, as well as principles of cooperation among cooperatives and concern for community need to make their presence visible.

The review of VNRs shows that most countries have presented a qualitative account of their experience and progression in the realisation of SDGs. While reporting on an SDG, countries have showcased a variety of work being pursued at local and national levels through examples and case studies of exemplary initiatives by the government and CSOs. In some cases, countries have presented a way forward on many SDGs that are important to their local social, economic, cultural and political context. Cooperatives are mentioned largely in relation to SDGs 1, 2, 8 and 13. This is not surprising, given the number of cooperatives working in agriculture and in rural areas. The frequent reference to cooperatives on SDG 8 shows that governments expect them to play their role in promoting inclusive and sustainable economic growth, full and productive employment and decent work.

There is a correlation between cooperatives being mentioned in national development plans and their being reflected in the VNRs. This indicates the need for apexes and departments responsible for cooperatives to show how the work of cooperatives is aligned to the national development strategies and the need to reflect their work in the VNRs. The active role of government departments overseeing cooperatives also influences the mention of cooperatives. The priority areas of governments match with the interests of cooperatives and both need to work on raising awareness, sharing experiences and disseminating information. This requires an enabling environment, a process that is participatory and sense of ownership.

The inclusion of cooperatives in the national development plans and SDG reporting processes, will increase the visibility of cooperatives as a socially, environmentally and economically sustainable model. This mainstreaming can also pave the way for an enabling legal and policy environment for cooperative businesses at the local and national levels, while also enhancing the scope for collaboration with government, CSOs, and private sector organisations. Through cooperation among cooperatives, a core cooperative principle, we argue that strong partnerships between and within cooperative organisations can be instrumental in enhancing the role of cooperatives as a pivotal actor in SDG implementation. External stakeholders such as civil society, Fairtrade organisations, local authorities, and international organisations will prove to be valuable partners for many activities, to channel the views and needs of individuals towards policymakers and advocate for an enabling environment for people-centred businesses. Finally, cooperatives need to be actively engaged in the VNRs by understanding the process, engaging with stakeholders and enhancing the visibility of their work.

Local cooperatives need to educate their members on the role they play and ways in which they contribute to the SDGs. They need to reach to the higher levels of cooperative governance and cooperative federations for support and knowledge sharing. National and large cooperative enterprises can reassess strategies to ensure the SDGs are streamlined within their operating procedures. Both types of organisations can commit to pledges that will ensure their contributions in achieving the sustainable development targets. At the apex level, significant work remains to be done in communicating the links between the SDGs and cooperative values and principles.

The visibility of cooperatives, especially in VNRs can be enhanced by promoting the work of cooperatives on SDGs, involving cooperatives actively in national consultations, developing strong partnerships to advocate for cooperatives, and ensuring that cooperatives are included by agencies responsible for measuring and reporting. These steps will enhance cooperative visibility, involvement and contributions towards achieving the SDGs.

References

- Bangladesh (2017). *Voluntary National Review (VNR): Eradicating Poverty and Promoting Prosperity in a Changing World*. Government of the People's Republic of Bangladesh. Retrieved from <https://sustainabledevelopment.un.org/content/documents/15826Bangladesh.pdf>
- BCCM (April, 2020). *BCCM members take action on COVID-19*. Retrieved from <https://bccm.coop/bccm-members-take-action-on-covid-19/>
- BCCM (2018). *Cooperatives and the UN Sustainable Development Goals*. Retrieved from <https://bccm.coop/what-we-do/advocacy-and-policy/submissions/>
- Business Standard (May, 2020). *How India is ensuring uninterrupted supply of milk during Covid-19 lockdown*. Retrieved from https://www.business-standard.com/article/companies/how-india-is-ensuring-uninterrupted-supply-of-milk-during-covid-19-lockdown-120050900400_1.html
- Cooperatives Europe (May, 2017). *Cooperatives - Key partners in the new European Consensus on Development*. Retrieved from <https://coopseurope.coop/resources/news/cooperatives-key-partners-new-european-consensus-development>
- Division for Sustainable Development Goals (n.d.). *Transforming our world: the 2030 Agenda for Sustainable Development*. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- Division for Sustainable Development Goals (n.d.). *Voluntary National Review Database*. Retrieved from <https://sustainabledevelopment.un.org/vnrs/>
- Economic and Social Commission for Asia and the Pacific (July, 2019). *What Do Voluntary National Reviews Tell Us About Progress on the 2030 Agenda?* Retrieved from <https://www.unescap.org/blog/what-do-voluntary-national-reviews-tell-us-about-progress-2030-agenda>
- FAO (n.d.). *Sustainable Development Goals, Tracking Progress*. Retrieved from <http://www.fao.org/sustainable-development-goals/tracking-progress/en/>
- Foreign Affairs News (April, 2020). *Cooperatives' COVID-19 Control Center at Manmohan Hospital*. Retrieved from <https://foreignaffairsnews.com/cooperatives-covid-19-control-center-at-manmohan-hospital/>
- Fukuda-Parr, S. (July 2018). *Voluntary National Review Reports— what do they report?* Retrieved from <https://sustainabledevelopment.un.org/content/documents/20549CDPbp201846.pdf>

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Evidence from Voluntary National Reviews

- Government of Nepal, National Planning Commission (2017). *National Review of Sustainable Development Goals*. Retrieved from <https://www.np.undp.org/content/nepal/en/home/library/sustainable-development-goals-national-report---nepal/National-Review-SDGs.html#:~:text=This%20review%2C%20prepared%20by%20the,and%20implementation%20in%20the%20country>
- Government of Nepal, National Planning Commission (2017). *Sustainable Development Goals - Status and Roadmap 2016-2030*. Retrieved from <https://policy.asiapacificenergy.org/sites/default/files/Sustainable%20Development%20Goals%20Status%20and%20Roadmap%202016-2030%20%28EN%29.pdf>
- IISD (2018). *47 Countries to Date Planning to Present VNRs at HLPF 2020*. Lynn Wagner, Senior Director, Tracking Progress Program, IISD. Retrieved from <https://sdg.iisd.org/news/47-countries-to-date-planning-to-present-vnrs-at-hlpf-2020/>
- IISD (2018). *Main Messages from 35 VNR Countries Outline SDG Actions and Plans*. Nathalie Risse, Thematic Expert for 2030 Agenda for Sustainable Development (Canada). Retrieved from <https://sdg.iisd.org/news/main-messages-from-35-vnr-countries-outline-sdg-actions-and-plans/>
- ICA (January, 2013). *Blueprint for a Co-operative Decade*. Retrieved from https://www.ica.coop/sites/default/files/media_items/ICA%20Blueprint%20-%20Final%20version%20issued%207%20Feb%202013.pdf
- ICA (n.d.). *Facts and Figures*. Retrieved from <https://www.ica.coop/en/cooperatives/facts-and-figures>
- ICA (n.d.). *What is a cooperative?* Retrieved from <https://www.ica.coop/en/cooperatives/what-is-a-cooperative>
- ICA and ILO (n.d.). *Cooperatives and Sustainable Development Goals. A Contribution to the Post 2015 Development Debate*. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_240640.pdf
- ICA-AP (2019). *Cooperatives in Korea*. Retrieved from <http://icaap.coop/sites/icaap.coop/files/2019%20Korea%20country%20snapshot.pdf>
- ICA-AP (2019). *Cooperatives in Japan*. Retrieved from <https://icaap.coop/ICANew/President/assets/Cooperatives%20in%20Japan-Country%20Brochure.pdf>
- ICA-AP (2019). *Cooperatives in Thailand*. Retrieved from <http://icaap.coop/ICANew/President/assets/Cooperatives%20in%20Thailand.pdf>
- ICA-AP (2020). *ICA-AP Member Response to COVID-19*. Retrieved from <http://icaap.coop/COVID-19/COVID-19/Member-response.php>
- ILO (n.d.). *What are Cooperatives?* Retrieved from <https://libguides.ilo.org/cooperatives-en>
- Japan (2017). *Japan's Voluntary National Review: Report on the Implementation of the Sustainable Development Goals*. Government of Japan.
- JWCU (2020). *The Draft of "Worker Cooperatives Act" was Submitted to the House of Representatives in Japan*. Retrieved from <https://jwcu.coop/houseika/?p=1284>
- Leone, F. (July, 2019). *Seven Countries Present Second Voluntary National Review of SDG Implementation*. Retrieved from <https://sdg.iisd.org/news/seven-countries-present-voluntary-national-reviews-of-sdg-implementation/>
- Ministry of Foreign Affairs and Trade (2019). *Towards a Better Future Together. New Zealand's Progress Towards the SDGs-2019*. Retrieved from <https://www.mfat.govt.nz/assets/Uploads/New-Zealand-Voluntary-National-Review-2019-Final.pdf>
- Moxom et al (2019). *Co-operatives and the Sustainable Development Goals: The Role of Co-operative Organisations in Facilitating SDG Implementation at Global, National, and Local Levels*. Review of International Co-operation, Volume 105/2019. Retrieved from <https://www.ica.coop/sites/default/files/publication-files/review-international-co-operation-2019-digital-336124954.pdf>
- NACCFL (2019). *Tackling Inequalities through the Cooperative Movement, Nepal*. Presented at ICA's international conference on Cooperatives for Development, Rwanda.
- National Development Planning Agency (2017). *Voluntary National Review (VNR). "Eradicating Poverty and Promoting Prosperity in a Changing World"*. Retrieved from <https://sustainabledevelopment.un.org/content/documents/15705Indonesia.pdf>

- Nepal24Hours (June, 2020). *Nepal Government Creates Fund to Fight COVID-19*. Retrieved from <https://www.nepal24hours.com/nepal-government-creates-fund-to-fight-covid-19/>
- Outlook (April, 2020). *Govt praises IFFCO for its efforts in fighting COVID-19*. Retrieved from <https://www.outlookindia.com/newscroll/govt-praises-iffco-for-its-efforts-in-fighting-covid19/1813675>
- Republic of Indonesia (2005). *The National Medium-Term Development Plan 2004-2009*. Presidential Regulation number 7 of 2005. Retrieved from <https://www.bappenas.go.id/index.php?cID=11314>
- Republic of Indonesia (2014). *Medium-Term Development Plan: RPJMN 2015-2019*. Director of Forestry and Water Resources Conservation Bappenas. Retrieved from <https://policy.asiapacificenergy.org/sites/default/files/National%20Medium-Term%20Development%20Plan%20%28RPJMN%29%202015%20-%202019%20presentation%20%28EN%29.pdf>
- Schwettmann, J. (n.d.). *The Role of Cooperatives in Achieving the Sustainable Development Goals - The Economic Dimension*. Retrieved from <https://ccr.ica.coop/sites/ccr.ica.coop/files/attachments/1.1%20Jurgen%20Schwettmann.pdf>
- SNCF (2018). *Singapore Co-ops Help Contribute SDGs*. Retrieved from <https://snfc.coop/publications/87-2018-co-operator/june-2018/590-singapore-co-ops-help-contribute-sdgs>
- Singh, M. (May, 2020). *Post-Covid Shift in World Trade Could Boost India's Supply to West Asian Nations Relying on Chinese Imports*. News 18. Retrieved from <https://www.news18.com/news/opinion/post-covid-shift-in-world-trade-could-boost-indias-supply-to-west-asian-nations-relying-on-chinese-imports-2633569.html>
- Tap Network (2019). *Contributing to Voluntary National Reviews (VNR)*. Retrieved from <https://secureservercdn.net/166.62.112.219/9bz.99d.myftpupload.com/wp-content/uploads/2019/05/Contributing-to-Voluntary-National-Reviews.pdf>
- Tap Network (2019). *Contributing to Voluntary National Reviews (VNRs)*. Retrieved from <https://sdgaccountability.org/working-with-formal-processes/contributing-to-voluntary-national-reviews-vnr/#easy-footnote-bottom-6-553>
- The Prime Minister's Office (2018). *Palestinian National Voluntary Review of the Implementation of the 2030 Agenda*. Retrieved from <https://sustainabledevelopment.un.org/content/documents/20024VNR2018PalestineNEWYORK.pdf>
- UNDESA (2016). *Synthesis of Voluntary National Reviews*. Division for Sustainable Development. Department of Economic and Social Affairs, United Nations. Retrieved from https://sustainabledevelopment.un.org/content/documents/127761701030E_2016_VNR_Synthesis_Report_ver3.pdf
- UNDESA (2019). *Handbook for the Preparation of Voluntary National Review. The 2019 Edition*. Retrieved from https://sustainabledevelopment.un.org/content/documents/20872VNR_hanbook_2019_Edition_v2.pdf
- UNDESA (2019). *High-level Dialogue: Voluntary National Reviews (VNRs) as Drivers of SDG Implementation? National Experiences from UNECE countries*. Regional Forum on Sustainable Development for the UNECE Region. Retrieved from <https://www.un.org/development/desa/statements/mr-liu/2019/03/hl-dialogue-vnrs-unece-countries.html>
- UNDESA (2019). *Remarks at High-level Dialogue: Voluntary National Reviews (VNRs) as Drivers of SDG Implementation? National Experiences from UNECE countries. Regional Forum on Sustainable Development for the UNECE Region*. Retrieved from <https://www.un.org/development/desa/statements/mr-liu/2019/03/hl-dialogue-vnrs-unece-countries.html>
- UNDESA (n.d.). *EGM on the Cooperative Sector and the 2030 Agenda for Sustainable Development*. Retrieved from <https://www.un.org/development/desa/cooperatives/what-we-do/meetings-and-workshops/egm-coops-2030agenda.html>
- UNDP. (n.d.). *Nepal & Agenda 2030: On the road to the SDGs*. Renaud Meyer (Ed.) Development Advocate: Nepal. October 2018 – March 2019.
- UN (2012). *Review of the contributions of the MDG Agenda to foster development: lessons for the post-2015 UN Development Agenda 16 March 2012*. Retrieved from https://www.un.org/en/development/desa/policy/untaskteam_undf/group_a_mdg_assessment.pdf
- UN (n.d.). *2012-International Year of Cooperatives*. Retrieved from <https://www.un.org/en/events/coopsyear/>

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Evidence from Voluntary National Reviews

UNDESA (2020). *Handbook for the Preparation of Voluntary National Review. The 2020 Edition*. Retrieved from https://sustainabledevelopment.un.org/content/documents/25245Handbook_2020_EN.pdf
Vietnam (2017). *Voluntary National Review (VNR): Eradicating Poverty and Promoting Prosperity in a Changing World*". Retrieved from <https://sustainabledevelopment.un.org/content/documents/15705Indonesia.pdf>

Notes

[¹] A common term ‘cooperatives’ has been used in this paper to represent both cooperatives and mutuals.

[²] The final results of their CO₂ emission evaluation will be available at the end of financial year 2021.

[³] In Japan, Diet refers to the National Legislature.

[⁴] Gross domestic product.

[⁵] Low income, middle income and high-income countries.

[⁶] Monitoring and evaluation.

[⁷] Memorandum of Understanding.

[⁸] Micro, small and medium enterprises.

PACS and SDGs: A Study in Tamil Nadu, India

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Abstract: Cooperatives have emerged as a vital segment of the Indian economy. Here the Primary Agricultural Cooperative Credit Societies (PACS) are the village level institutions on which the whole cooperative structure is built. PACS have the potentialities to contribute to the Sustainable Development Goals (SDGs) at the micro-level. This study was undertaken to analyze these societies' role in the achievement of SDGs in Tamil Nadu. The study found that these societies embody multiple economic and social objectives. They stabilize village economies by reducing inequality and equitable sharing of benefits of sustainable development. They promote economic democracy and the empowerment of marginalized groups through democratic management, crucial to sustainable development. These societies implement many schemes and programmes of the Government for agriculture and rural development, directly contributing to SDGs. However, some challenges constrain their contributions to SDGs. Though uniform strategy for linking PACS functions with SDGs might lead to success, differences between individual societies necessitated the development of an appropriate plan suited to the unique situation.

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Keywords: Primary Agricultural Cooperative Credit Societies, Sustainable Development Goals, agrarian distress, PACS-SHG linkage, Interest subvention, PDS

1. Introduction

The cooperative movement in India is one of the largest in the world. Cooperatives have now emerged as a vital segment of Indian economy by covering about 98 percent of rural India, having more than 8.50 lakh societies [a lakh is 100,000] with a membership of about 290 million (NCUI, 2018). Since establishing the first Primary Agricultural Cooperative Credit Societies¹ (PACS) in India, both the Government of India and State Governments use the cooperative institutional network to implement various schemes and programmes for agriculture and rural development. Hence, cooperative institutions' contributions to agriculture and rural development have been felt across the country. This trend is evident from cooperatives' contributions to the green revolution, white revolution, and Public Distribution System (PDS)². In this context, cooperatives in general and PACS, in particular, have significantly contributed to the Sustainable Development Goals (SDG) at the micro-level. This research paper attempts to analyze the role of sample PACS in Tamil Nadu in achieving SDGs at the village level.

2. India and Sustainable Development Goals

The SDGs, otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity. SDGs are an intergovernmental set of 17 Goals with 169 targets. They follow and expand on the Millennium Development Goals (MDGs), which were agreed upon by 189 countries in 2001 to eradicate poverty, hunger, and inequality. These 17 Goals build on the Millennium Development Goals while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace, and justice, among other priorities. These goals are interconnected. They provide clear guidelines and targets for all countries to adopt according to their preferences and the environmental challenges. SDGs need a well-governed

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State, a stable and responsible private sector, an influential and inclusive civil society, a supportive global partnership, and a vibrant social economy, including cooperatives. Each of these should contribute its comparative advantage to work towards the SDGs collectively.

India, home to one-sixth of all humanity, holds the key to the 2030 Agenda's success. India's commitment to the SDGs is reflected in its convergence with the national development agenda. India's strategies for a 'New India' by 2022, and Vision for 2030, Aspirational Districts Programme, just to name a few, directly address SDGs' challenges. An SDG mapping document speaks about the role of different Ministries of the Government of India in SDGs. Based on the evidence from the SDG India Index & Dashboard 2019-20, which measures progress at the sub-national level, the country has developed a robust SDG localization model centered on adoption, implementation, and monitoring at the State and district levels. To coordinate all the SDG efforts at the national and sub-national levels, NITI Aayog acts as the nodal institution. At the same time, owing to the country's federal structure, the States/Union Territories play a significant role in ensuring the success of the SDG agenda (NITI Aayog, 2019-20, p. 13). As far as Tamil Nadu is concerned, the Government has constituted a High Power Committee chaired by the Chief Secretary to Government to oversee SDGs' implementation. Eight thematic Working Groups have been formed to review and monitor the achievement of goals and targets. The implementation of programmes is coordinated by the State Development Policy Council (Government of Tamil Nadu, 2020).

3. Cooperatives and Sustainable Development Goals

Theoretically speaking, cooperatives as a potent movement should be central to the international development agenda in achieving SDGs. Yet, despite its size and outreach, the cooperative sector has not been very influential in the debate towards achieving SDGs from micro to macro level. Cooperatives are already present in all the areas that the SDGs envisage the direction the world will take in its journey to make sustainable development a reality. Although cooperatives, with their focus on members and local needs, are central to the realization of sustainable development worldwide, they have not always been proactive in national and international debates. This trend explains the relatively limited visibility and attention that cooperatives enjoy in the post-2015 development agenda debate (ILO, 2014, p. 59). It may be probably due to:

- lack of understanding of cooperatives' actual and potential contribution to sustainable development due to the dearth of studies on this subject.
- cooperatives' preoccupation with issues strictly related to their members
- failure to develop strategies to link themselves with the national and international agenda.
- general perceptions that cooperatives could serve as an institutional vehicle for implementing Government schemes and programmes but may not serve as development institutions.

However, cooperatives as grass-root democracies and institutional platforms of user groups can contribute to SDGs. The SDGs' root is that development has three equally important components - economic, social, and environmental. Cooperative institutions explicitly have economic and social bottom-lines, as they are both associations and enterprises. The 7th Cooperative Principle, Concern for Community, states that "*Cooperatives work for the sustainable development of their communities*". Secondly, the SDGs cover all economic activities (agriculture, industry, housing, health, education, production, consumption, etc.), and address all vital global concerns (poverty, equality, employment, gender, climate change, peace, etc.). Cooperative institutions could contribute to all SDGs, both because they are actively involved in these economic sectors and because their impact contributes substantially to the global concerns mentioned by the SDGs. Cooperatives are particularly well placed to facilitate an articulation across these three levels (international, national, and local levels) of action, owing to the cooperative model's specific features, including the values of democracy and solidarity, and the principles of cooperation among cooperatives and concern for the community. It also proposes that strong partnerships between and within cooperative organizations can help improve the cooperative movement's emerging role as a pivotal actor in SDG implementation (Jeffrey Moxom, et.al. 2019, p. 127). The potential role of cooperatives in India could very well be used to achieve SDGs.

4. Statement of the Problem

Tamil Nadu is one of the cooperatively developed States in India. Cooperatives in Tamil Nadu play a vital role in uplifting the poor and oppressed (Government of Tamil Nadu, 2019-20, p. 2). More than 10,000 cooperatives are functioning at the primary level to meet the financial and non-financial requirements of farmers, milk producers, fishers, hill tribes, and others. Among these primary level cooperatives, PACS are the foundation stone on which the entire cooperative structure is built in Tamil Nadu. There are 4,450 PACS functioning in the State. They are village-level institutions, having direct contact with the members, and cover all the villages in this State. Such an extensive institutional network, infrastructure, and rural outreach enable these institutions to reach the financial and non-financial needs of the farm and non-farm sectors. The business performance of these societies is given in Table-1. It shows that there has been continuous growth in all the selected indicators. More importantly, more than thirty percent of the members were borrowing members, which means that the members continuously associate themselves with their PACS' affairs. Accordingly, it was found that the total loans disbursed by all PACS in Tamil Nadu increased from Rs.10,618.55 crores in 2010-11 to Rs.21,432.67 crores in 2019-20 [a crore is 10 million]. The achievements of these organizations have contributed to several SDGs. If these institutions' potentialities are harvested systematically, their contributions to SDGs will be very significant and measurable at the village level. By doing so, the Government machinery could declare the particular geographical area has achieved SDGs. If this is the macro-level trend, how do PACS in Tamil Nadu meet the micro-level's SDG requirements? How do the stakeholders perceive the relationship between the functions of their PACS and SDGs? What are the challenges they are facing in achieving SDGs at the micro-level? Finding answers for these and other relevant issues is necessary for the context of enhancing the role of PACS in the achievement of SDGs in Tamil Nadu. Hence, this study was undertaken.

5. Objectives of the Study

This study's primary objective is to analyze sample PACS' role in achieving SDGs at the micro level. More specifically, this study was undertaken to:

- 1) analyze the business performance of sample PACS,
- 2) explore the role of sample PACS in SDGs,
- 3) examine the perceptions of members on the role of PACS in SDGs, and
- 4) identify the challenges faced by sample PACS in the achievement of SDGs.

Table -1
Business Performance of PACS in Tamil Nadu

(Rupees in Crores)

(Members and borrowing membership in Lakhs)

Year	Number of PACS	No. of Members	No. of Borrowing members	Deposits	Loan Disbursed
(1)	(2)	(3)	(4)	(5)	(6)
2010-11	4,488	95.11	54.72 (57.5)	3,833.35	10,618.55
2011-12	4,530	114.26	38.93 (34.7)	4,308.19	17,881.99
2012-13	4,530	104.20	49.81 (47.8)	5,633.79	20,582.03
2013-14	4,530	151.76	59.61 (39.3)	5,995.49	20,989.51
2014-15	4,530	116.95	63.93 (54.7)	5,987.72	20,326.63
2015-16	4,480	109.84	69.46 (63.2)	6,874.66	19,409.52
2016-17	4,450	132.01	55.68 (42.2)	7,352.64	15,403.51
2017-18	4,450	122.88	56.36 (45.9)	6,606.17	17,784.88
2018-19	4,450	136.18	60.57 (44.5)	6,371.79	19,723.89
2019-20	4,450	153.89	72.75 (47.3)	6,738.94	21,432.67
Compound Annual Growth Rate (CAGR)		4.93%	2.89%	5.80%	7.28%

Source: Compiled from *Policy Note on Cooperation*, Government of Tamil Nadu and publications of National Federation of State Cooperative Banks Ltd (NAFSCOB) for various years.

Note: Figures in brackets in column (4) are percentage of borrowing members

6. Methodology and sampling

This study is both descriptive and analytical. Survey method was followed for this study. By following a multi-stage random sampling technique, sample units for this study were selected. At the first stage, PACS were grouped as per seven agro-climatic zones in Tamil Nadu (*North Eastern Zone, North Western Zone, Western Zone, Cauvery Delta Zone, Southern Zone High Rainfall Zone, and Hilly Zone*). In the second stage, seven viable PACS were selected, representing each agro-climatic zone based on specific performance indicators (Table-2).

Table-2
Performance Indicators

Indicator number	Performance indicators
1	PACS which have diversified their business
2	PACS which have higher level of members' patronage in capital formation
3	PACS which are placed in the financially viable category
4	PACS which respond properly to the needs of agricultural system
5	PACS which have professionally trained and competent staff
6	PACS which enjoy continuous profit from their business
7	PACS which have implemented Government / NABARD / NDCDC schemes and programmes for the development of agriculture and allied sector

In the third stage, Yamane formula was used to determine the sample size. The determined sample size has been distributed based on probability proportionate to size sampling (PPS) of the population of each society. The number of member respondents from each PACS is determined by their number relative to the entire population. Being the primary users of PACS' services, the individual members alone were selected as sample respondents for this study. At the same time adequate care has been taken to see that the sample PACS and the members selected will represent the population (Table - 3). The Committees and Commissions reports, research studies, documents, and other secondary sources of data and information were collected and used. Data relating to the membership, deposits, working capital, loans outstanding, profit, and business diversification were collected from the sample PACS' Annual and Audit Reports. The period of study was between 2010-11 and 2019-20.

7. Scope and Limitations of the Study

This study was primarily focused on PACS' role in Tamil Nadu to achieve SDGs at the micro-level. The study's limitations are that the status of cooperative democracy in cooperatives in general and PACS, in particular, has been restored during this study period after a gap of three decades due to various reasons. The present generation also considered that the PACS are institutional networks for implementing various schemes and programmes by the Government. Hence, the responses received from the sample respondents were based on the economic advantages realized by them from their PACS' services. Further, this study is based on the perceptions of the sample respondents. Perception here refers to how sample respondents understood or interpreted the functions of sample PACS. Perception is the subjective process of perceiving, acquiring, and interpreting sensory information. Hence, this study is not far away from the limitations of perception bias. However, these limitations have not affected the purpose of the study.

8. Analysis and Discussion

There are 4,450 PACS functioning in Tamil Nadu as of 2019-20. They encourage thrift and savings among members and customers. They provide short term crop loans and medium-term investment loans for agricultural and allied activities like micro-irrigation, land development, purchase of milch animals, etc. These societies also provide loans for non-agricultural purposes like house construction, income-generating activities of Self Help Groups (SHGs), Joint Liability Groups (JLGs), and other non-farm sector activities. PACS play a significant role in implementing Government Programmes. PACS undertake the sale of agricultural inputs like fertilizers, seeds, and small agricultural equipment. Some of the PACS also run agro service centres, common service centres, agri clinics and Fair Price Shops (FPS) under

PDS. With this background, the performance of sample PACS is analyzed hereunder with select performance indicators.

8.1 Position of membership in sample PACS

As per the provisions of the by-laws of the sample PACS, the persons who are eligible to become members are: (1) any farmer (including sharecroppers, oral lessees, and tenant farmers), (2) SHGs and JLGs that are functioning in the area of operation of PACS, (3) the other groups which are working in the area of operation of the society and recognized by the Government, (4) State Government, and (5) the Financing bank. It was found that the average number of members per sample PACS has grown from 3,539 members to 4,933 members during the study period (Table-4). The position of membership was high in Mullukuruchi PACS and low in Bembatty Belethala PACS. The prime reason for the variation in the membership was the size of the sample PACS' area of operation and coverage of farmers.

Table -3
Basic Profile of sample PACS

Agro climatic Zone	Agro climatic Regions	Districts	Name of sample PACS	Date of Registration	Date of Starting	Audit classification	Number of sample respondents selected for the study
Southern Plateau & Hills (Zone X)	Region-1	Salem	S.1382, Mullukuruchi PACS	20.06.1960	20.07.1960	A	83
	Region-2	Dindigul	D.D514, Vedasanthur PACS	21.09.1967	14.12.1967	A	34
East Coast Plain & Hills (Zone XI)	Region-3	Cuddalore	E.2596 B.Mutlur PACS	28.11.1968	12.02.1969	A	42
	Region-4	Thiruvarur	ZA.112, Koradacheery PACS	26.09.1967	19.11.1967	A	130
	Region-5	Sivagangai	N.N.605 Idaikattur PACS	12.02.1968	28.03.1968	A	60
West Coast & Hills (Zone XII)	Region-6	Kanyakumari	Y 48, Myladi PACS	30.11.1958	06.12.1958	A	20
	Region-7	Nilgiris	J.293, Bembatty Belethala PACS	14.03.1989	15.04.1989	A	24
Total sample respondents							393

Source: Compiled from the Annual and Audit Report of the sample PACS for various years

Table -4
Position of Members in sample PACS

(Figures in numbers)

Year	Sample PACS							Average number of members per PACS
	Mullukurichi	Vedasanthur	B.Mutlur	Koradacheery	Idaikattur	Myladi	Bembatty Belethala	
2010-11	4,221	3,964	2,808	5,484	3,439	3,518	1,336	3,539
2011-12	4,205	4,333	2,907	5,484	3,450	3,521	1,348	3,607
2012-13	4,705	2,427	5,462	5,484	3,463	3,521	1,361	3,775
2013-14	4,750	4,499	5,647	7,641	3,524	4,376	1,373	4,544
2014-15	4,796	4,661	5,649	7,684	3,580	4,486	1,391	4,607
2015-16	4,813	4,804	5,721	7,718	3,620	4,447	1,403	4,647
2016-17	4,869	4,975	5,865	7,740	3,633	4,464	1,429	4,711
2017-18	4,968	5,086	5,946	7,889	3,633	4,897	1,452	4,839
2018-19	5,010	5,285	6,284	7,789	3,633	4,987	1,476	4,923
2019-20	5,018	5,295	6,308	7,789	3,639	4,998	1,481	4,933
CAGR	0.1774	0.0553	0.0003	0.0299	0.5682	0.0299	0.3569	

Source: As in Table -3

8.2 Position of Working Capital

Working capital indicates the amount of funds available for undertaking business. An increase in the working capital over the years reflects the PACS' financial strength, which could indicate better performance. Owned funds and borrowed funds together constituted the working capital of the PACS. If the contribution of owned funds and deposits is high in working capital, that will reduce the cost of funds for PACS. In the case of the sample PACS, it was found that the position of working capital of sample PACS has grown over the years. The position of working capital in Mullukurichi PACS has increased from Rs.2221.51 lakhs to Rs.4033 lakhs during the study period. The position of the average working capital per PACS has increased from Rs.865 lakhs to Rs.1531 lakhs during the study period (Table -5). At the same time, it was found that in Mullukuruchi PACS, Vedasanthur PACS, Idaikattur PACS, and Myladi PACS, the position of deposits constituted more than 50 percent of their working capital. In most cases the cost of working capital for these PACS would be comparatively lower than for their counterparts. This trend also directly contributed to the financial viability of these sample PACS. Further, the growth in the position of share capital and deposits reflects the credibility of these PACS functions to members.

8.3 Position of Loan outstanding

In the case of the sample PACS, they provide short-term and medium-term loans to members for production and consumption purposes. Sample PACS adopted individual and group lending approaches for loans to members. Generally, group lending approaches are adopted in the case of short-term loans through SHGs and JLGs. Originally

PACS' lending portfolios were dominated by crop loans. However, due to the problem of loan waiving policies of the Government, over the years, the share of crop loans in the total loans came down substantially. These trends were also found during the study period. Generally, an increase in loan outstanding would attract more interest income for sample PACS. Also, the increased trend in loan operations would cover more beneficiaries. The average loan outstanding at the sample PACS level increased from Rs.803.65 lakhs in 2010-11 to Rs.1095.51 lakhs in 2019-20 (Table -6). The position of the loan outstanding was comparatively higher in Mullukurichi PACS than other sample PACS. However, the maximum CAGR (Compound Annual Growth Rate) was observed in Idaikattur PACS, followed by Mullukurichi PACS.

8.4 Financial Results of PACS

Cooperative organizations consider the income earned over the expenditure as 'surplus'. However, for accounting purposes, PACS use the term 'profit' in the place of 'surplus'. Though the main aim of PACS is not to maximize profits, they should earn profit to render efficient service to members. Also, a PACS without profit cannot have a strong financial base and withstand severe competition. Profit is one of the indicators of financial viability. It depends on various factors, which are a higher proportion of owned funds in the working capital, high ratio of deposits in borrowed funds, effective recycling of funds, and lower level of establishment cost. It was found that though there has been overall growth in the position of profit earned by sample PACS, there were fluctuations during the study period (Table -7). This was due to the variations in the position of the loan outstanding of the sample PACS because a major portion of the profit for PACS has been earned from their credit business, especially the jewel loan business only (Ravichandran, K:2013, p.449). All the sample PACS issued general jewel loans to members and customers and agri jewel loans to members. Further, all the sample PACS are viable PACS and placed in category 'A' in Audit (refer to Table-3).

Table -5
Position of total Working Capital in sample PACS

(Rs. in lakhs)

Year	Sample PACS							Average amount of working capital per PACS
	Mullukurichi	Vedasanthur	B.Mutlur	Koradacheery	Idaikattur	Myladi	Bembatty Belethala	
2010-11	2,221.51 (72.2)	366.69 (86.1)	473.94 (8.1)	615.32 (32.1)	963.42 (52.9)	748.67 (56.6)	665.42 (24.8)	865.00
2011-12	2,252.88 (77.4)	390.93 (81.1)	528.25 (13.2)	652.32 (35.3)	1,051.55 (57.3)	804.86 (55.1)	854.55 (19.9)	933.62
2012-13	2,620.00 (76.6)	454.49 (76.1)	747.03 (11.3)	679.66 (36.5)	1,051.15 (58.1)	854.43 (61.1)	951.15 (19.9)	1,051.13
2013-14	3,163.09 (63.5)	475.42 (86.1)	879.42 (17.3)	780.11 (42.5)	1,057.65 (58.7)	928.66 (62.2)	997.64 (22.2)	1,183.14
2014-15	2,138.09 (98.8)	541.48 (88.6)	904.06 (12.6)	814.58 (34.5)	1,056.46 (59.1)	984.02 (63.5)	1,006.47 (22.8)	1,063.59
2015-16	3,433.52 (64.9)	600.37 (87.8)	781.42 (15.6)	893.04 (33.5)	1,057.03 (59.8)	1,000.01 (64.9)	1,037.06 (23.1)	1,257.49
2016-17	3,930.13 (59.8)	755.42 (86.2)	730.03 (20.9)	880.87 (29.6)	1,166.80 (62.9)	1,079.13 (65.5)	1,166.81 (20.5)	1,387.03
2017-18	3,704.6 (63.1)	874.85 (73.2)	992.08 (16.6)	951.44 (25.2)	1,201.58 (64.8)	1,143.33 (64.8)	1,191.56 (13.6)	1,437.06
2018-19	3,937.23 (60.1)	880.99 (78.7)	928.52 (18.1)	1,069.36 (26.5)	1,197.87 (65.3)	1,157.14 (63.9)	1,247.83 (21.1)	1,488.42
2019-20	4,033.00 (58.6)	916.49 (78.9)	952.18 (18.6)	1,130.06 (26.7)	1,248.73 (69.3)	1,167.72 (65.3)	1,268.83 (21.4)	1,531.00
CAGR	0.0614	0.0959	0.0723	0.0627	0.0263	0.0455	0.0667	

Source: As in Table -3.

Note: Figures in brackets are percentage of deposits in the total working capital

Table -6
Position of Total Loan Outstanding in sample PACS

(Rs. in lakhs)

Year	Sample PACS							Average Loan Outstanding per PACS
	Mullukurichi	Vedasanthur	B.Mutlur	Koradacheery	Idaikattur	Myladi	Bembatty Belethala	
2010-11	1,486.88	388.26	511.66	879.76	1,252.09	684.95	421.96	803.65
2011-12	1,826.79	439.15	590.00	979.19	1,252.89	836.76	520.00	920.68
2012-13	2,203.54	525.93	808.47	1,220.71	1,256.93	917.66	608.47	1,077.39
2013-14	2,647.36	538.77	931.19	1,166.80	1,268.03	996.89	631.19	1,168.60
2014-15	2,853.86	538.77	875.51	1,331.90	1,278.03	1043.55	775.51	1,242.45
2015-16	2,254.76	506.46	859.40	1,321.17	1,289.79	1302.94	859.40	1,199.13
2016-17	2,146.61	391.14	653.59	1,341.42	1,036.90	1033.94	653.59	1,036.74
2017-18	2,216.81	454.10	988.76	1,294.88	1,111.31	932.95	688.76	1,098.22
2018-19	2,367.91	584.71	980.72	1,284.71	1,178.77	945.94	680.72	1,146.21
2019-20	1,958.78	598.71	992.02	1,341.17	1,239.94	945.95	592.02	1,095.51
CAGR	0.7827	0.6805	0.5551	0.6874	1.0087	0.7505	0.7401	

Source: As in Table -3

Table -7
Position of Profit in sample PACS

(Rs. in lakhs)

Year	Sample PACS							Average Profit per PACS
	Mullukurichi	Vedasanthur	B.Mutlur	Koradacheery	Idaikattur	Myladi	Bembatty Belethala	
2010-11	63.24	79.02	68.99	193.36	21.98	39.02	10.85	68.07
2011-12	114.33	69.39	71.68	215.80	22.45	59.32	12.95	80.85
2012-13	94.65	74.38	89.38	222.64	23.28	84.33	13.48	86.02
2013-14	82.62	78.98	99.39	253.12	24.67	68.96	14.68	88.92
2014-15	96.21	88.6	91.24	257.99	38.19	88.90	16.79	96.85
2015-16	100.67	89.12	118.38	269.59	49.03	79.12	17.07	103.28
2016-17	101.24	102.15	88.00	229.07	70.03	91.17	14.93	99.51

Year	Sample PACS							Average Profit per PACS
	Mullukurichi	Vedasanthur	B.Mutlur	Koradacheery	Idaikattur	Myladi	Bembatty Belethala	
2017-18	138.51	85.30	99.53	236.21	76.58	75.30	14.57	103.71
2018-19	128.01	83.37	93.94	233.18	80.15	83.38	15.25	102.47
2019-20	139.45	84.83	85.08	270.46	83.19	88.89	16.73	109.80
CAGR	0.4951	0.9389	0.8300	0.7421	0.3063	0.4810	0.6805	

Source: As in Table -3

8.5 Business Diversification

Through diversified business, it was found that sample PACS met the needs of members and customers related to agriculture and rural development. Apart from the distribution of inputs (seed, fertilizer, pesticides, etc.) to the farmers, both as a component of crop loan and direct sales, sample PACS run agricultural extension centres and FPS. They also organized SHGs and JLGs by dovetailing support from Government schemes and programmes. The areas of business diversification adopted by sample PACS are given in Table -8.

Table -8
Areas of Business Diversification identified by sample PACS

Name of sample PACS	SHG	JLG	FPS/ PDS	Agri Clinics	Agro Service Centre	Common Service Centre
Mullukurichi PACS	126 Groups	7 Groups	13 (FT=4 + PT=9)	x	√	√
Vedasanthur PACS	18 Groups	4 Groups	9 (FT=4 + PT=5)	√	√	√
B.Mutlur PACS	6 Groups	12 Groups	9 (FT=9)	x	√	√
Koradacheery PACS	117 Groups	9 Groups	13 7 (FT=7 + PT=4)	√	√	√
Idaikattur PACS	137 Groups	x	√	√	√	√
Myladi PACS	82 Groups	x	√	√	√	√
Bembatty Belethala PACS	2 Groups	6 Groups	x	x	x	√

Source: As in Table-3

Note: FT- indicates Full time Fair Price Shops. PT - indicates Part -time Fair Price Shops.

√ - indicates this business is undertaken by sample PACS.

X - indicates this business is not undertaken by sample PACS.

From the above analysis of the general performance of sample PACS it was found that all the sample PACS have become financially viable societies due to: (1) the coverage of all farm families as members, promotion of SHGs and JLGs, and (2) need-based business diversification. With this background, sample PACS' role in achieving SDGs at the micro-level is analyzed hereunder.

8.6 Role of sample PACS in SDGs

Historically, PACS are considered the appropriate agencies in Tamil Nadu to implement various schemes and programmes of the Government for agriculture and rural development. Hence, PACS' role in SDGs can be measured in terms of their role in implementing various government schemes and programmes. PACS in Tamil Nadu are directly implementing the programmes of the Government of India like Financial Inclusion, Deendayal Antyodaya Yojana-National Rural Livelihood Mission, Interest Subvention Scheme, Pradhan Mantri Fasal Bima Yojana, Public Distribution System, and others. Accordingly, a mapping exercise was done to identify sample PACS' role in implementing Central Sector Schemes to achieve SDGs. This has been done based on the mapping done by NITI Aayog, Government of India on central sector schemes and Ministries of Government of India with SDGs (Annexure-1). It was found that the credit and other business functions of the sample PACS directly contribute to the SDGs, especially for the Goals No. 1, 2, 8, 10 & 15. Among these functions, in the context of Financial Inclusion, providing institutional access to credit and other financial products to farmers and others in rural areas assumed greater importance.

8.6.1 Pradhan Manthri Jan – Dhan Yojana - Financial Inclusion

The concept of Financial Inclusion can be traced back to the year 1904 when the Cooperative Credit Societies Act was enacted in India. Financial Inclusion's essence is to ensure that a range of appropriate financial services is available to every individual and helps them understand and access those services. The Pradhan Manthri Jan – Dhan Yojana (PMJDY) initiated by the Indian Government in 2014 aimed to include all people under the formal financial institutions so as to rescue people from the clutches of non-formal financial institutions. According to NABARD (2018-19, p. 18) access to a well-functioning financial system can empower individuals economically and socially by allowing them to protect themselves from economic uncertainties. Efficient, cost-effective, safe, and inclusive finance approaches for savings, credit, insurance, and remittance services for the poor and vulnerable sections can increase their incomes, build productive assets, manage risks, and break the vicious cycle of poverty. Financial Inclusion is not explicitly mentioned as an independent goal under the SDGs. Its importance as an enabler is reflected in the SDGs such as 'No Poverty', 'Zero Hunger', 'Good Health and Well-Being', 'Gender Equality', 'Decent Work and Economic Growth', 'Industry, Innovation and Infrastructure', 'Reduced Inequality', and 'Partnership for the Goals'. However, the SDGs' sub-goals amply stress the need for equal access to basic financial services for both men and women. Though PACS are not directly involved under this scheme of PMJDY, it was found that most of the PACS in Tamil Nadu have increased access to credit and other financial services to their members, to promote Financial Inclusion (Government of Tamil Nadu: 2019-20, pp. 18 & 21). All the sample PACS have ensured that the scheme's benefits have reached all the farmers in their area of operation.

JLG comprised of small and marginal farmers, tenant cultivators, sharecroppers are formed to provide credit to their members who hitherto could not access credit from institutional sources. This scheme has facilitated the joint purchase of seeds and fertilizers, the adoption of technology and mechanization through joint agricultural operations. It was found that except Idaikathur PACS and Myladi PACS, all the other sample PACS have promoted JLGs in their operational area and contributed significantly to Financial Inclusion (refer to Table-8).

8.6.2 Deendayal Antyodaya Yojana-National Rural Livelihood Mission

The Ministry of Rural Development, Government of India, launched the National Rural Livelihood Mission (NRLM) by restructuring Swarnajayanti Gram Swarojgar Yojana (SGSY) with effect from 1st April 2013 (RBI,2013), to create efficient and effective institutional platforms for the rural poor through SHGs. The Government of Tamil Nadu considers lending to SHGs by credit institutions is essential to achieve the objectives of Financial Inclusion. PACS in Tamil Nadu have been facilitated to form and give credit linkage to SHGs. The Registrar of Cooperative Societies, Government of Tamil Nadu, issued separate guidelines for facilitating the PACS and SHG linkage³. In the case of PACS – SHG linkage, two models exist across the State of Tamil Nadu. They are: (1) SHG Members' Livelihood Model, and (2) PACS Business Centered Model (Ravichandran K., 2012, p. 42). In the second model again, two approaches are coming to the surface. They are: (1) Target Approach, and (2) Umbrella Approach. It was found that more than 70 percent of PACS in Tamil Nadu have given credit linkage to SHGs and contributed to Financial Inclusion and SDGs. All the sample PACS have promoted SHGs in their area of operation (refer to Table -8). In this study, it was found that

members of SHGs were induced to come to sample PACS not merely for loans but also for easy access to an institution and availability of its services in their neighborhood (Ravichandran, K., 2016, p. 55).

8.6.3 Interest Subvention Scheme

Crop loan is the most critical component of agricultural finance extended by PACS in Tamil Nadu. Considering the importance of crop loan, the Government of India implemented the policy of 2 percent interest subvention from the year 2007-08. The PACS were allowed to issue crop loans from their owned funds with interest rate 7 percent up to Rs.3 lakh per borrower. In Tamil Nadu, PACS have been allowed to issue interest-free crop loans to farmers who repaid the loan within the due date since 2009. Accordingly, all PACS in Tamil Nadu are permitted to provide crop loans with full interest subvention (Government of Tamil Nadu, 2009). The Government of Tamil Nadu met the interest subsidy and interest subvention for crop loan, which was directly paid to the PACS. While fulfilling this objective, the scheme fostered Ground Level Credit Flow's growth from the PACS at a steady level. The stakeholders of the Short-term Cooperative Credit Structure (STCCS) overwhelmingly believed that the scheme has had a positive impact on ground level credit flow. There was also a positive impact of the scheme on the recovery of loans, as seen in the steady decline in overdue loans at ground level. On this score, too, there was a strong endorsement of the scheme by the stakeholders of the STCCS (NAFSCOB, 2016, p. 7). All the sample PACS disburse the crop loan to the members and enable them to benefit under this scheme. It was also found that the interest subvention scheme also helped the sample PACS to recover the loan dues in time.

8.6.4 Pradhan Mantri Fasal Bima Yojana (PMFBY)

New Crop Insurance Scheme, namely "Pradhan Mantri Fasal Bima Yojana" (PMFBY), was introduced in 2016, to reduce agricultural distress and promote farmers' welfare. In the event of crop failure, the borrower farmer has ensured indemnity for the damage caused for the insured crops. All the sample PACS issue crop loans to farmers with an insurance component under this scheme. The outcome of the loan operations under these schemes is that the sample PACS could achieve their annual target in lending crop loans to farmers. At the same time, the availability of interest-free loans and crop insurance insulates the farmer against the onslaught of risks and uncertainties during agrarian distress. The percentage of area brought under crop insurance cover to the net cropped area is also one of the indicators under the SDG-1 'Zero Hunger' in Tamil Nadu (Government of Tamil Nadu, 2020).

8.6.5 Public Distribution System

Tamil Nadu is the forerunner in implementing the Universal Public Distribution System in India. PDS plays a significant role in ensuring Food Security among the poor, oppressed, and vulnerable. In Tamil Nadu, food security is ensured by distributing essential commodities and special PDS commodities to all family cardholders through 32,924 fair price shops. Moreover, in Tamil Nadu, rice has been distributed free of cost with effect from 17.05.2011, and wheat has been distributed free of cost with effect from 02.02.2017 uninterruptedly to all the people to enable the poor people in Tamil Nadu to live without hunger. PDS in Tamil Nadu has been functioning as a "Universal Public Distribution System" and ensures Food Security throughout the year. Thus, the Sustainable Development Goal "End Hunger" has already been achieved (Government of Tamil Nadu, 2019-20, p. 93). All the sample PACS are serving as Link Societies⁴ under PDS in Tamil Nadu to distribute essential commodities through FPS and ensure food security in their area of operation. It was found that among the sample PACS, Koradacherry PACS and Mulukuruchi PACS have more FPS than their counterparts. This was due to the coverage of more family cardholders in their areas of operation.

8.7 Perceptions of sample respondents on the role of sample PACS in SDGs

For understanding the perceptions of sample respondents on the role of the sample PACS in achieving SDGs, the socio-economic and organizational profiles of sample respondents are analyzed.

8.7.1 Socio-economic profile of the sample Respondents

At the micro-level, one of the accepted criteria of development is sex. There is a clear distinction that has been made in development literature between sex and gender. Gender relates to the roles assigned to males and females in society. Thus, sex is a socio-economic variable involving roles, responsibilities, constraints, opportunities, and needs of males and females in an economy (Shanna K.C., 1988, p. 126). In this study, the majority of the sample

respondents were male (67.4 percent). However, the female population was also found to a significant level as individual members and as members of SHGs (Table-9).

Age is another important independent variable that influences the perceptions of an individual. Further, when an individual's age is related to a cooperative organization, the person's competency arises. When a person joins as a PACS member, he/she establishes a contractual relationship with the PACS. It was found that the majority of the sample respondents were in the age category of 36 to 55. Also, there is a need to accommodate the younger generation within the cooperative fold. It is recommended that appropriate strategies may be devised to accommodate the younger generation within the organizational ambit of sample PACS. The respondents' education level influences awareness about the financial institutions, whereas the uneducated have less awareness and banking knowledge (Jugale, V.B., 1992, p. 86). It was found that the majority of sample respondents belong to the category of higher secondary education and above.

Family type-wise classification is generally done, among others, based on the organization of the family (nuclear and joint) (Maninder Karur et al., 1997, p. 31). In this study, it was found that more than 64.4 percent of the sample respondents belonged to the nuclear family. This trend indicated that the joint family, which had been one of the rural social institutions, has been fading away in recent years, even in the rural area.

While analyzing the sample respondents' occupation, it was found that as high as 87.3 percent of the respondents' primary occupation was agriculture. Further income generated from secondary occupations also supplemented the growing financial need of the family. Generally, animal husbandry was found to be a secondary occupation in rural areas. But the mechanization of agriculture and continuance of drought severely hit this occupation too. As the available water sources could be sufficient for cultivating fodder for dairy animals, the dairy industry would become a natural subsidiary occupation (Maninder Kaur et. al., 1997, p. 32). In this study, it was also found that livestock and dairy were the secondary occupations for most of the sample respondents.

Income decides the financial background of a family. It is the yardstick to understand the standard of living. The poverty line and standard of living of a person are measured by using income as one of the indicators. It is difficult to get accurate information about the family income in Indian villages because they generally do not reveal the real worth of the goods that they produce for self-consumption and investment patterns. For them, income means the products sold in the market or the money received as salary or wages.

Table - 9
Socio-economic variables of sample respondents

(Figures in numbers)

Indicator number	Variables	Response	Total	% to total
1	Gender	Male	265	67.4
		Female	128	32.6
		Total	393	100.0
2	Age	Up to 35 years	41	10.4
		36 -55 years	187	47.6
		Above 56 Years	165	42.0
		Total	393	100.0
3	Educational Status	Literate with No formal education	14	3.6
		Up to Primary	34	8.6
		Secondary (6th to 10th)	111	28.2
		Higher Secondary (12th)	118	30.0
		Diploma / Graduate / Post-Graduate etc.,	116	29.6
		Total	393	100.0
4	Type of family	Joint	140	35.6
		Nuclear	253	64.4
		Total	393	100.0

Indicator number	Variables	Response	Total	% to total
5	Type of Primary Occupation	Agriculture	343	87.3
		Livestock	33	8.4
		Other Agricultural Activity	4	1.0
		Non-Agricultural Enterprises	5	1.3
		Other wage / salaried employment	8	2.0
		Total	393	100.0
6	Type of Secondary Occupation	Agriculture	11	2.8
		Livestock/dairy	189	48.1
		Other Agricultural Activity	92	23.4
		Non-Agricultural Enterprises	15	3.8
		Other wage / salaried employment	68	17.3
		No secondary occupation	18	4.6
		Total	393	100.0
7	Annual Family Income	Up to 25,000	214	54.5
		25,001 to 50,000	8	2.0
		50,001 to 75,000	38	9.7
		Above 75,000	133	33.8
		Total	393	100.0

Source: Compiled from sample respondents' interview schedule

Still, family income does mean the economic return from the main occupation and the family's income from all the sources. Here, annual family income refers to all the sources through which the respondents have had some returns of their livelihood activities in a year. As far as annual family income is concerned, the results show that a majority (54.5 percent) of the respondent's annual income was below Rs.25,000. This was because most of the sample respondents under study belonged to low-income categories as they were small and marginal farmers.

8.7.2 Organizational Profile of sample respondents

While identifying the organizational variables to analyze the respondents' perception of SDGs, the four Principles of Cooperation that directly speak about the participation of the cooperatives' affairs are taken into consideration. They are: (1) Voluntary and Open Membership, (2) Democratic Member Control, (3) Member Economic Participation, and (4) Education, Training, and Information. Accordingly, variables were constructed based on the pilot study, results and responses were sought from the sample participants (Table-10).

The rights of members and conditions for the membership are protected by the Tamil Nadu Cooperative Societies Act 1983 and Tamil Nadu Cooperative Societies Rules 1988. Hence, upon meeting basic requirements to become a member, all eligible individuals and groups are admitted as PACS members. Hence, it was found that all the farmers in the area of operation were admitted members of the respective sample PACS. While analyzing the sample respondents' responses, it was found that the number of members who had been in association with sample societies for about 10 to 15 years was more (44.3 percent) than for the other categories. It was also found that a significant percentage of sample respondents' family members (32.6 percent) had a membership with the sample PACS. The duration of membership is an essential variable in determining the relationship between members and their PACS. It is assumed that if membership duration is longer, there would be a sound relationship between the members and PACS. Longer duration of membership/customer will also represent the customers' loyalty (Taimani K.K., 1993, p. 240).

Members' participation in the management of the society is generally expected from their active participation in the General Body meeting, which is the supreme authority of cooperative management. It was found that all the sample respondents had participated in past General Body Meetings. It was also found that about 79.1 percent of the sample respondents participated in the General Body meeting regularly. This trend was attributed to the fact that: (1) the General Body meeting serves as a forum for the members to express their opinions / demands / suggestions

on the society's functioning. Hence, the majority of the members used this opportunity; (2) Strong leadership at the society level, which motivated the members to participate in the General Body meeting. At the same time, it is to be noted that the status of democracy in these societies was restored only after the recommendations of the Task Force on the Revival of STCCS. Hence, only about 2.4 percent of the sample respondents had had the opportunity to gain experience with the Board of Management of the society.

It is expected that all the members should contribute to a society's capital by subscribing to the share capital and depositing the surplus money available to them as savings. In most cases, members visit the PACS to use loan facilities only and, as such, their contribution to the capital of the society is restricted to 10 percent of the total loan borrowed. However, during the field study, it was found that the majority of the sample respondents (70.6 percent) contributed to the capital of the society by: (1) subscribing to share capital, and (2) depositing their surplus money. This trend reduces the cost of these societies' working capital, which significantly contributed to their financial viability.

Table - 10
Organizational variables of sample respondents

(Figures in Numbers)

Indicator number	Variables	Response	Total	% to total
1	Duration of membership with PACS	Less than 5 years	62	15.8
		5 to 10 years	96	24.4
		10 to 15 years	174	44.3
		Above 15 years	61	15.5
		Total	393	100.0
2	More than one membership in a family	Yes	128	32.6
		No	265	67.4
		Total	393	100.0
3	Participation in the General Body meeting	Occasionally	82	20.9
		Participated regularly	311	79.1
		Total	393	100.0
4	Experienced as a Member of Board of Director	Yes	59	2.3
		No	384	97.7
		Total	393	100.0
5	Contribution to the capital of the society	Subscribed minimum share capital to become a member	18	4.5
		Subscribed share capital up to the limit prescribed for getting loan	98	24.9
		Contributed to share capital as well as kept deposit accounts	278	70.6
		Total	393	100.0
6	Utilization of services of the society	Rarely	43	10.9
		During crop seasons	78	19.8
		Frequently	272	69.3
		Total	393	100.0
7	Participation in the educational programmes	Low	11	2.8
		Medium	56	14.3
		High	326	82.9
		Total	393	100.0
8	Sharing information about the affairs of the society among fellow members or general public	Low	34	8.7
		Medium	12	3.1
		High	347	88.2
		Total	393	100.0

Source: As in Table -9

Cooperative education is sine qua non for cooperative development. Hence, right from the Rochdale Pioneers, importance has been given to cooperative education. It was found that the sample societies provided several opportunities to members to learn about their society and the roles and responsibilities of membership, as most of the members participated in cooperative member education and other awareness generation programmes organized by the sample PACS (82.9 per cent). Also, most of the members (88.2 percent) opined that they shared information among fellow members and the general public about their societies' affairs. Further, most of the sample respondents (69.3 percent) frequently used the sample societies' services. This trend exhibits a higher level of participation of the members in the business of the sample societies. This trend might be one reason why the level of Non-Performing Assets was kept minimal in all the sample societies and that they have been continuously financially viable societies.

8.7.3 Results of Multiple Linear Regression

To find out how the socio-economic and organizational variables affect sample respondents' perception about the various schemes and programmes that are implemented through sample PACS, Multiple Linear Regression was used. For this purpose, the hypothesis was: There was no relationship between socio-economic and organizational variables of sample respondents and their level of perception about Central Sector Schemes and Programmes that are implemented through PACS for achieving SDGs. From the result of Multiple Linear Regression analysis (Table-11), it was found that both the socio-economic variables and the organizational variables do not influence the level of perception about the Central Sector Schemes and Programmes that are implemented through PACS. Hence, the stated null hypothesis is accepted.

On the other side, the result indicates that the independent variables 'education', 'utilization of services of the society' and 'participation in the educational programmes' influence (5 percent level) the level of perception about the schemes and programmes of the Government that are implemented through PACS and their contribution to SDGs. Hence, the stated null hypothesis is rejected. It means that when the level of education and the sample respondents' participation in the educational programmes organized by the sample PACS increases, the sample respondents' participation in the affairs of the society also increased.

This cumulatively increases the sample respondents' perceptions about schemes and programmes of the Government and their contribution to SDGs in their villages. From the above analysis, the following inferences are made:

- Sample PACS have implemented various government schemes and programmes and directly contributed to SDGs Number 1, 2, 8, 10 & 15 and indirectly contributed to almost all goals.
- When the educational level and the participation of the sample respondents on PACS' business increase, their perceptions about PACS' role in achieving SDGs also increases. This result attracts further studies.
- Based on the number of active members, volume of business, business diversification, and area of operation, sample PACS' potentialities could further be scaled up for achieving SDGs at village level.

Table -11
Relationship between social, economic and organizational variables of sample respondents and their perceptions about Central Sector Schemes and Programmes - Multiple Linear Regression

Independent variables	Central Sector Schemes and Programmes (Dependent variables)				
	Interest Subvention Scheme	PMFBY	PDS	SHG JLG/ Linkage	Others
Socio-economic variables					
Sex	0.843	0.781	2.204	0.942	1.674
Age	-0.250	1.287	1.008	1.067	0.945
Education	3.039**	3.052**	2.885**	3.079**	2.754**
Type of Family	1.349	0.078	0.099	1.905	0.038
Primary Occupation	2.001	1.901	2.004	1.042	1.809
Secondary Occupation	0.989	1.137	-0.025	1.903	1.812
Annual Income	0.733	1.802	1.034	0.971	0.925
Organizational variables					
Duration of membership with PACCS	-0.274	1.309	-0.023	1.914	1.833
More than one membership in a family	0.031	0.056	0.092	1.840	0.179
Participation in the General Body meeting	2.005	1.047	1.920	1.004	1.082
Experienced as a Member of Board of Director	0.057	1.047	0.078	1.220	1.056
Contribution to the capital of the society	1.247	0.283	1.980	2.044	1.920
Utilization of services of the society	2.987**	2.806**	3.081**	3.021**	2.691**
Participation in the educational programmes	2.946**	2.765**	3.002**	2.805**	2.861**
Sharing information about the affairs of the society among fellow members or general public	-0.254	0.292	1.966	1.804	1.542
N	393	393	393	393	393
Constant	33.525	39.643	41.705	52.561	45.121
R square value	0.525	0.514	0.583	0.503	0.493

Source: As in Table-9

** Significant at 5 percent level.

9. Challenges Before PACS in achieving SDGs

A question was raised with the sample respondents on what were the challenges faced by sample PACS in achieving SDGs. Based on the responses elicited from the sample respondents, this study found that the ability of sample PACS' organizational capacities (core capacities, change capacities, and organizational culture) to contribute to the SDGs' achievement effectively is limited by the following five challenges, which are interrelated and interdependent. If all these challenges are addressed through location-specific strategies, PACS' contributions to SDGs could very well be strengthened.

9.1 The challenge of the external environment

The existing external environment is not conducive to the proper functioning of genuine, democratically controlled and economically viable PACS. For example, the board of management of all PACS in Tamil Nadu were superseded on 9.6.1976. However, only since the recommendations of the Task Force on the Revival of STCCS and the Constitutional Amendment Act 2011, the status of democracy has been restored, and elected representatives manage the PACS. However, the interference of vested interest groups raises doubts about the maturity of

cooperative democracy at PACS in handling several developmental issues before them. In this context, the sample PACS should focus their energy on those goals and targets that are best suited, by dovetailing support from the members. In doing so, they should bring their most significant competitive advantage to reality, i.e., their duality as associations and enterprises.

9.2 The challenge of size

It is expected that PACS should reach the break-even point in their business by allowing every individual member to participate meaningfully. The optimal size of a PACS is therefore dictated by economic factors as well as societal factors. However, the size is determined by the area of operation of the society right from their incorporation. The post Revival Task Force era has facilitated PACS to diversify their business to enhance the volume of transactions based on their members' and customers' needs and aspirations. However, the sample PACS have not fully tapped the opportunities before them. This is the right time for sample PACS to further diversify their business and contribute to SDGs. In this direction, the National Bank for Agriculture and Rural Development's recent decision to develop at least half of India's PACS into Multi-Service Societies over the next five years as part of a new generation business strategy is a new development (Chintala G.R., 2020, p. 8). The sample PACS may explore avenues to utilize these opportunities.

9.3 The challenge of Professional Management

The general body, the Board of Directors, and the employees' team are the three wings of PACS management. It is essential for effective management of the PACS that the roles played by each of the three wings are kept distinct without intruding on the powers and functions of other wings. The professionalization of management implies divorcing the ownership from the operational management of the PACS' affairs. While the ownership rests with the shareholders, the executive management of the PACS' day-to-day affairs must rest with the professional managers. Decisions are to be taken based on PACS goals and objectives by applying expertise and scientific knowledge. However, this has been a long dream for the majority of PACS in the State. For the sample PACS, there is an urgent need to strengthen the existing system because all these sample PACS devote their energy to meeting the requirements of short-run objectives or business targets by forgetting their commitment to long-term goals. If this challenge is addressed, it will directly contribute to SDGs.

9.4 The challenge of innovation

PACS still have a significant role in traditional sectors of the State economy: agriculture, dairy, retail distribution, and rural finance. The modern economy, which is mostly technology-based, requires new approaches from PACS. New approaches to the existing problems will alone ensure the continued participation of primary stakeholders.

9.5 The challenge of entrepreneurial competencies

It has been found that those PACS which exhibited entrepreneurial competencies were able to sustain their business through location specific strategies in Tamil Nadu (Ravichandran K., 2016, p. 55). PACS exhibited their entrepreneurial competencies through: (1) facilitating members individually to start entrepreneurial activities, (2) facilitating members to continue or/and expand the existing entrepreneurial activities successfully, (3) facilitating a group of members to join together and start entrepreneurial activities, and (4) PACS themselves start entrepreneurial businesses with the support of all or a majority of the stakeholders. When the PACS helps develop entrepreneurial talents among its stakeholders, the relationship between these two parties has been successful and sustainable. In the case of sample PACS too, there are opportunities to exhibit their entrepreneurial competencies by expanding their business beyond the artificial restrictions.

10. Conclusion

India has given its strong commitment to the achievement of Global SDGs. NITI Aayog sets the high-level framework and monitors progress at national levels. It is expected that all the institutions in Public, Private and Cooperative sectors should contribute their support to achieve the set goals. The field-level experiences in Tamil Nadu revealed that PACS are embodied with multiple economic and social objectives. In the case of sample PACS, they stabilize village economies by reducing inequality and equitable sharing of benefits of sustainable development through their democratic management and diversified functions. They promote economic democracy and the empowerment of

marginalized groups, which is essential for sustainable development. The involvement of members is visible due to a higher level of awareness about their cooperative societies. With the active participation of the members, the sample PACS could maintain financial viability and contribute to the achievement of SDGs at the village level. It was found that the functions of the sample PACS directly contributed to SDG Numbers 1, 2, 8, 10 & 15 and indirectly contributed to almost all goals. Deep and intensive studies are needed to exactly quantify the level of contribution of these societies toward SDGs as per the indicators developed by Tamil Nadu State Development Policy Council. To conclude, in the pursuit of the motto, 'No one to be left behind', it is essential to remember that those who would be left behind would be the marginalized, oppressed, women, etc. Ultimately, the PACS, the organization of the people for the people and by the people, embodies adequate capacity to serve as an institutional vehicle for achieving SDGs at the village level. Apart from the present level of contributions, the sample PACS' organizational capacities could further be scaled up to achieve SDGs at village level. Though a uniform strategy for strengthening sample PACS contributions to SDGs might lead to success, differences between individual PACS necessitated the development of an appropriate plan suited to the unique situation.

References

- Chintala G.R (2020) Revival of Cooperative Structure with Technology and New Business Strategies - Vaikunthbhai Mehta Memorial Lecture, p.8. Retrieved 12th September 2020 from [https:// www.nabard.org](https://www.nabard.org).
- Government of Tamil Nadu (2009), *G.O. Ms. No.94/Cooperation*, Food and Consumer Protection Department/ dt.31.7.2009.
- Government of Tamil Nadu (2019-20), *Policy Note*, Cooperation, Food and Consumer Protection Department, pp.2,18,21&93. Retrieved November 9, 2019 from https://cms.tn.gov.in/sites/default/files/documents/coop_e_pn_2019_20.pdf.
- Government of Tamil Nadu (2020), State Development Policy Council, SDG State Modified Indicators Retrieved September 13, 2020 from <https://tnsdg.tn.gov.in/sdg/goal/2/state-indicators>.
- ILO (2014), Cooperatives and the Sustainable Development Goals A contribution to the post-2015 development debate, p.59. Retrieved September 13, 2020 from https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---coop/documents/publication/wcms_306072.pdf
- Jeffrey Moxom, et.al., (2019) Development Goals: The Role of Cooperative Organizations in Facilitating SDG Implementation at Global, National, and Local Levels, *Review of International Cooperation*, Volume 105/2019, p.127. Retrieved July 5, 2020 from <https://www.ica.coop/sites/default/files/publication-files/review-international-co-operation-2019-digital-336124954.pdf>
- Jugale V.B. (1992), *Cooperative Credit in Indian Agriculture — Its Socio - Economic and Technological Impact*, p.86, New Delhi Mittal Publications.
- Maninder Kaur, et.al., (1997), Rural Poverty in Punjab - A Case Study, *Indian Economic Panorama*, April - June, p.31&32.
- NABARD (2018-19), *Annual Report*, p 18. Retrieved April 18, 2020 from www.nabard.org.
- NAFSCOB (2016), Conclusions and Recommendations of the Report on An Impact Assessment of Interest Subvention Scheme of GOI in Short Term Cooperative Credit Structure, *NAFSCOB Journal of Rural Cooperative Credit and Banking*, April - June, p. 7&10. Retrieved February 19, 2017 from <http://nafscob.org>.
- NCUI (2018), *Indian Cooperative Movement: A Statistical Profile*. Retrieved June 7, 2020 from <https://ncui.coop>.
- NITI Aayog (2019-20), *SDG India Index & Dashboard*, p.13, Retrieved July 6, 2020 from https://niti.gov.in/sites/default/files/SDG-India-Index-2.0_27-Dec.pdf.
- Ravichandran, K (2013), Revival Package for PACS in Tamil Nadu: Emerging Challenges, *Journal of Rural Development*, Vol. 32, No. 4, Oct - Dec.: 2013, p.449.
- Ravichandran, K (2016), Entrepreneurial Competencies of Primary Agricultural Cooperative Credit Societies: A Study in Tamil Nadu, India, Ed: Zenaida M.Sumalde, et.al., *Cooperative Enterprises: Services, Practices, and Performance*, p-55, Institute of Cooperatives and Bio-Enterprise Development, University of the Philippines Los Banos.
- Ravichandran, K. (2012), Linking SHGs with PACS – Development and Suggestions, *Kootturavu (Tamil Monthly)*, Vol.5 No.85, August, p-42.

RBI (2013), *Circular No. RBI/2012-13/559*, dated June 27, 2013

Shanna K.C (1998), *Advanced Rural Banking*, Mumbai, p. 126, Indian Institute of Bankers.

Taimani K.K. (1993), *Cooperative Development: The Next Phase*, New Delhi, June p.240, ICA Domus Trust Publication.

Notes

¹ PACS are the village level savings and credit cooperatives in India and the primary unit in the Short term Cooperative Credit Structure (STCCS). These societies were called as Primary Agricultural Cooperative Banks (PACB) with effect from Government Notification – G.O. Ms. No.507, COOPERATION (CCI) DEPARTMENT Dated: 1.9.1987 and Letter No.32651 / CG.2/87-1, dated: 13.5.1989. Later as per the part of Revival Process as recommended by Task Force for the Revival of STCCS 2004, the nomenclature of PACBs are again changed to Primary Agricultural Cooperative Credit Societies as per the Tamil Nadu Ordinance No.8 of 2008 – An Ordinance further to amend the Tamil Nadu Cooperative Societies Act, 1983, published in Tamil Nadu Government Gazette, Extraordinary dt.21st October 2008 and RCS, Chennai letter No.RC.130240/08/D.M.F.C / dt.10.11.2008 and RCS, (Circular No.2/2008) RC. 130489 / 08 / SF.4, dt.23.1.2009. The STCCS functions as a three tier structure in 16 States; while in 13 smaller States and Union Territories, PACS are directly affiliated to the SCBs as a two-tier structure. In 3 States, a mixed structure operates, i.e., two-tier in some districts, and three-tier in the other districts. STCCS in Tamil Nadu is three-tier structure consisted of 4450 PACS at village level, 23 Central Cooperative Banks functioning at District level and Tamil Nadu State Apex Cooperative Bank at State level.

² PDS is India's food subsidy programme and the largest in the world. PDS was introduced during the late sixties and it was modified as Revamped PDS during June, 1992. In June 1997, the Government of India launched the Targeted PDS. PDS is operated under the joint responsibility of the Central and the State Governments. Tamil Nadu Government introduced Universal PDS to ensure food security to all citizens, particularly poor people, by making available essential commodities of good quality at affordable prices every month through FPS.

³ PACS-SHG linkage – important circulars:

- ✓ Cooperation Food and Consumer protection Department, G.O.No.280 dt 20.12.1999
- ✓ Cooperation Food and Consumer protection Department, G.O.No.119, dt 9.6.2000
- ✓ RCS Circular No: 128999/99 CPP1, dt 21.3.2000

⁴ The concept of Lead Society and Link Society are part of PDS in Tamil Nadu. Sample PACS serve as Link Societies. Lead Societies procure essential commodities from Tamil Nadu Civil Supplies Corporation and other sources and supply to Link Societies. In turn the Link Societies supply the essential commodities to Family Card Holders through FPS as per the norms fixed by the Government of Tamil Nadu.

Annexure-1

SDGs and Mapping of Central Sector Schemes, Ministries of Government of India and Role of sample PACS

SDG No.	SDG Description	Linkage with other SDGs	SDG Targets	Government of India sponsored Central Sector Schemes	Concerned Ministries/ Departments	Role of sample PACCS
1	End poverty in all its forms everywhere	SDGs 2,3,4,5,6,7,8, 10, 11,13	By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	Market Intervention Scheme and Price Support Scheme (MIS-PSS)	Agriculture & Cooperation,	Providing Produce Pledge Loan
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	SDGs 1,3,4,5,6, 8,12	By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.	Food subsidy (procurement, transport, distribution, etc.)	Consumer Affairs Food & Public Distribution	Running Fair Price Shops
			By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment	1) Green Revolution umbrella scheme 2) Pradhan Mantri Fasal Bima Yojana (PMFBY) 3) Interest subsidy for short term credit of farmers 4) Agricultural Education	Agriculture & Cooperation	Providing Crop Loan Crop Insurance Interest Subvention Scheme for Crop Loan
			By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality			
			Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries			

SDG No.	SDG Description	Linkage with other SDGs	SDG Targets	Government of India sponsored Central Sector Schemes	Concerned Ministries/ Departments	Role of sample PACCS
			Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility	Green Revolution Market Intervention Scheme and Price Support Scheme (MIS-PSS)	Agriculture & Cooperation,	
				Price Stabilization Fund	Consumer Affairs Food & Public Distribution	
8	Promote sustained, inclusive and sustainable Economic growth, full and productive employment and decent work for all	SDGs 1, 4, 5, 9, 10, 12	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value-added and labour-intensive sectors	Green Revolution White Revolution	Agriculture & Cooperation,	Providing crop loan and Non-farm Sector Loan
			Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	Deendayal Antyodaya Yojana-National Rural Livelihood Mission	RD	PACCS-SHG linkage
10	Reduce inequality within and among countries		By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average	Deendayal Antyodaya Yojana National Ruraql Livelihood Mission	RD	PACCS-SHG linkage
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	SDGs 2, 6, 9, 12, 14, 16	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and dry lands, in line with obligations under international agreements	National Mission on Sustainable Agriculture and other relevant components of the umbrella scheme on Green Revolution	Agriculture & Cooperation	Providing Crop Loan
			Promote fair and equitable sharing of the benefits arising from the utilization of	Green Revolution	Agriculture & Cooperation	Providing crop loan

SDG No.	SDG Description	Linkage with other SDGs	SDG Targets	Government of India sponsored Central Sector Schemes	Concerned Ministries/ Departments	Role of sample PACCS
			genetic resources and promote appropriate access to such resources, as internationally agreed	White Revolution		and Non-farm Sector Loan

Source: Modified based on the information available in the *SDGs and Mapping of Central Sector Schemes, Ministries of Government of India, NITI Aayog*, Retrieved July 6, 2020 from https://niti.gov.in/sites/default/files/2019-01/SDGMapping-Document-NITI_0.pdf

Note: Green Revolution, the umbrella scheme, includes: Rashtriya Krishi Vikas Yojana (RKVY); and Krishi Unnati Schemes (Mission for Integrated Development of Horticulture (MIDH), Integrated Scheme on Agriculture Census & Statistics, Integrated Scheme on Agriculture Cooperation, Integrated Scheme on Agricultural Marketing, National Food Security Mission, National Mission on Oilseeds & Oil Palm (NMOOP), National Mission for Sustainable Agriculture (NMSA), and National Mission on Agriculture Extension & Technology (NMAET))

The Centrality of Environmental Sustainability for the Co-operative Movement and the World

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Abstract: This research seeks to understand whether environmental sustainability is sufficiently highlighted within the co-operative movement's Statement on the Co-operative Identity. As the threat of climate change and myriad other environmental catastrophes loom, our current economic and political systems are woefully inadequate for the task of creating an environmentally sustainable world. The co-operative movement, serving as a humane alternative to capitalist enterprise, may be a vital component in addressing the central causes of the crises. As it currently stands, the Statement on the Co-operative Identity--which offers both an explanation of co-operation and guidelines for co-operative action--references environmental sustainability as a part of the seventh principle, Concern for Community. Yet it is only within the Guidance Notes to the Co-operative Principles that environmental sustainability is explained as being one-third of the meaning of sustainable development. As the current co-operative record on the environment does not fully live up to the promise of co-operation, the primary research herein, comprised of a series of interviews with co-operative leaders, sheds light on the importance of further emphasizing concern for the environment within the Statement on the Co-operative Identity, both as something close to the essential nature of co-operation and as a crucial guideline for co-operative action in the coming decades.

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Keywords: environmental sustainability, co-operatives and the environment, co-operative principles, concern for community, sustainable economy

Introduction

With humanity reeling from the COVID-19 pandemic, many eyes have turned away from the environmental crises the world's scientists have been giving warnings about for decades (Ripple et al., 2017; Manabe & Wetherald, 1967). The global economy may have shrunk, and emissions may have tapered off briefly due to national lockdowns and the subsequent economic downturns, yet precious attention has been taken from environmental issues in order to deal with the seemingly more immediate threat.

Environmental catastrophe is looming. Climate change, extinction of species, depletion of non-renewable resources, ocean acidification, and plastic pollution are some of the world's numerous environmental problems. Many of them have our economic systems in the vanguard, driving societies closer to worldwide ecological collapse.

The co-operative movement is an outgrowth of that eponymous trait humanity needs to survive--the ability to co-operate, to work together (Webb, 2016, pp. 89-94). It also serves as redress for many of the ills of capitalist market economies (Fairbairn, 1994, p. 2) and therefore stands in opposition to many of its environmentally destructive tendencies. The co-operative values, as laid out by the International Co-operative Alliance (ICA) (ICA, n.d.), are the foundation upon which the co-operative identity is built and the co-operative principles are crafted. The principles, then, are intended to act as guidelines for action (MacPherson, 2012, p. 2). Protection of the environment is incorporated within the ICA's seventh principle, Concern for Community, as one of the three pillars (social, economic, and environmental) of sustainable development. Yet the co-operative record on the environment may not reflect the true potential of the co-operative promise. The goal of this research is to answer the question: is a revision of

the ICA's Statement on the Co-operative Identity warranted to give protection of our shared environment its due place?

Research Design & Methodology

This research is undertaken from the perspective that historical understanding and a holistic knowledge of the current context are necessary for meaningful progress. It firstly takes a descriptive look at the myriad environmental crises humanity faces, followed by an explanatory look at various contributing aspects of our economic and social systems. It then reviews the component parts of a sustainable economy and explores sustainability as defined in the Brundtland Report (World Commission on Environment and Development, 1987, p. 41). From this, a case is built for the ways in which co-operatives meet the criteria for being sustainable economic entities capable of addressing the roots of the ecological problems the world faces.

With the foregoing context, the research shifts to a descriptive look at the current co-operative record on environmental sustainability, contrasting it with the record of investor-owned firms (IOFs). A history of the co-operative principles and values then builds an understanding of the philosophy behind the principles and what an eighth principle on environmental sustainability could look like. Other avenues for emphasizing environmental sustainability are also explored.

The literature review and analysis are augmented by primary research consisting of a series of interviews with co-operative leaders, where leader is defined as a president, vice president, CEO, or board member within a co-operative or higher tier organization. A variety of leaders were interviewed, including two graduates from the Master of Management: Co-operatives and Credit Unions program at Saint Mary's University:

- Sean Doyle - General Manager (GM) of Seward Cooperative in Minneapolis, Minnesota
- Erbin Crowell - Executive Director of the Neighboring Food Co-op Association

Other interviewees include:

- Ahsan Ali Thakur - Chairperson of the ICA's Asia-Pacific (ICA-AP) Committee on Youth Cooperation (ICYC) and board member of the ICA-AP
- Dame Pauline Green - ICA President (November 2009 - June 2015), Chief Executive of Co-operatives UK (January 2000 - October 2009), President of ICA Europe (2002 - November 2009)
- David Morgan - Former board member of the United States' Federation of Worker Co-operatives and current contractor for the Environmental Protection Agency (EPA)
- Bob Burlton - Former CEO of The Midcounties (consumer) Co-operative and former chair of The Co-operative Group, Cooperatives-UK and The Ethical Property Company
- Stephen Irvin - President and CEO of Amicus Solar Cooperative.

The purpose of the interviews was to understand how leaders conceive of the Concern for Community principle and whether environmental sustainability comes to mind when they contemplate it. Leaders were also questioned about what else they think the co-operative movement might do to address environmental problems, with particular emphasis on climate change. The interview with Dame Pauline Green was especially helpful in filling in information regarding the 2011 attempt by the ICA-Americas contingent to highlight environmental sustainability within the principles.

Grasping the Problems: The Direness of Our Environmental Crises

The Intergovernmental Panel on Climate Change (IPCC) has given 2030 as the year by which the global community must reduce carbon dioxide emissions by 45% to avoid the devastating consequences of global warming of over one and a half degrees Celsius above pre-industrial times (IPCC, 2018). If warming reaches two degrees Celsius, the limit agreed upon at the 2016 Paris Agreement (United Nations Framework Convention on Climate Change, n.d.), the differences in consequences may be very stark. If emissions continue to grow, cascading tipping points may accelerate the world towards a 'hothouse Earth' scenario leading to further warming (Steffen et al., 2018a) with dire

ramifications: lands that turn hotter than can sustain human life, displacing perhaps one third of the current human population (Xu et al., 2020); the collapse of many of the world's fisheries; flooding causing regional or global economic collapses; the loss of freshwater sources for many regions; and other apocalyptic outcomes (Steffen et al., 2018b, p. 11).

At the same time, the world is in the midst of the Holocene extinction, the sixth mass extinction event in the history of life on Earth. At the current rate, around 25% of studied species may face extinction, some within decades. And it may take hundreds of thousands to millions of years for life to rediversify (Ceballos, 2015, p. 4). As dire as this may be, the crisis may also be heading for a cliff (Trisos et al., 2020), as extinction of one species will often push other species that interact with it closer to the brink (Ceballos, Ehrlich, & Raven, 2020).

There is ample evidence that we are also depleting many of the world's non-renewable resources, including those essential to life such as phosphorus and water (Van Vuuren et al., 2010; Pacific Institute, 2013a; Pacific Institute, 2013b). Air, water, and land pollution are additional threats to the well-being of virtually all humans, plants, and animals. Overall, pollution was estimated to have killed around nine million people in 2015 (The Lancet, 2017), accounting for 16% of deaths globally (Landrigan et al., 2017) and new pollutants continue to enter our environment (Sneed, 2020).

Clearly, the world is not doing enough: our global carbon budget is being eaten away year by year, necessitating ever-steeper cuts in emissions to limit warming to one and a half degrees. Reefs continue to bleach, species continue to go extinct, and the effects of these problems are increasingly being felt, more in the world's poorest regions than in those largely responsible for the problems (Islam & Winkel, 2017). These are unprecedented global crises, and all eyes should be turned towards solving them.

Fundamental Flaws That Contribute to the Problems

Unregulated marketplaces are often touted as panaceas for most, if not all, of society's ills—a belief known as market fundamentalism (Block & Somers, 2016, p. 187). This paradigm has dominated many of the world's economies for the past several decades (Ostry et al, 2016). At its roots is the belief that no greater good can come to society than that which arises through the selfish interests of individuals partaking in market transactions (Longview Institute, n.d.). It also asserts that what is held in common is inevitably inferior to private ownership (Chomsky, 2012), thus laying the groundwork for privatization of common resources and movement away from democratic institutions. The machinery of neoliberalism, as the embodiment of deregulation and market fundamentalism, has coincided with an existential threat to the human species (Spratt & Dunlop, 2019). Though some may dispute a causal link, irrefutably our wider economic systems have not helped to address the threat. It can therefore be inferred that there are flaws/problems in the ways that modern capitalist marketplaces function.

One of the most well-known fundamental problems inherent in all marketplaces, whether capitalist or otherwise, is externalities. Insofar as market transactions take place between a buyer and a seller, they do not incorporate more than the knowledge and interests of those involved in the transactions (Rees, 2014, p. 91). Costs (such as pollution, resource depletion, and biodiversity loss) that accrue to the wider society are not taken into consideration in any meaningful way, and thus become some of the driving factors behind, “the greatest market failure the world has ever seen” (Stern, 2007, p. viii).

The notion of ‘perfect information’ is one of the core tenets of a well-functioning marketplace in neoclassical economic theory (Bjornstad & Brown, 2004, p. iii). Information asymmetries, however, are inevitable components of most parts of life and certainly most, if not all, market transactions (Stiglitz, 2009, pp. 347-348) and constitutes another inherent failing of markets. Yet beyond the inherent differences in what participants know, many companies invest considerable effort in *actively* creating ill-informed consumers who will buy products based on misleading marketing, thus exacerbating the problem.

These two examples, externalities and information asymmetries, are certainly not the only market flaws, but the problems they cause amply demonstrate that markets are not perfect forces of nature. They are human constructs, subject to human fallibility.

Beyond inherent flaws in the ways that markets function, there are problems rooted in economic theory--including the viewing of labour as a 'factor of production' (Stefano & Vera Zamagni, n.d.). Reducing the human being to a cog in the productive machine misses the ineffable value of human life and the power of labour as, "the main factor for transforming nature, society and human beings themselves" (Mondragon, n.d.).

A related problem is the dependence of the numbers inherent in GDP (in those systems that account for 'value') on a healthy environment (Tantram, 2015, p. 2). Modern economics has not factored ecosystem services into its equations, instead choosing to focus on unending growth as the sole metric of success and prosperity. Though it may not have been evident for much of history that humans could overstretch the natural bounds of Earth's systems, it is becoming increasingly obvious that the limitless growth capitalism requires is an untenable notion in a finite world (Fullerton, 2014, p. 141).

Solutions to these problems--and others, such as inequality and structural racism--are often seen as the responsibility of the public sector, of government regulation, laws, higher taxes, permitting, and subsidies (Bjornstad & Brown, 2004, p. iii). Such solutions, however, rely on a public sector that--while seemingly democratic--may be controlled by those economic elites whose financial power can massively influence political decision-making (Webb, 2016, p. 120). Yet even if that were not the case, it is less than ideal to have outside forces restrict the inherent destructive tendencies within a system (Zamagni, 2014, p. 194). Still, irrespective of the laws and regulations of a society, many corporations will continue to attempt to create profits at the expense of the general welfare on the misguided notion that, as the economist, Milton Friedman put it, "The Social Responsibility of Business is to Increase its Profits" (Friedman, 1970).

A Sustainable Economy: Addressing Problems' Roots

Given the issues inherent in our wider systems, it is useful to look at what would comprise an economy that did not degrade our natural environment--a sustainable economy. The definition of sustainable development put forth by the Brundtland Report, which was presented at the 1992 Earth Summit, says:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- *the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and*
- *the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. (World Commission on Environment and Development, 1987, p. 41)*

These two 'key concepts', meeting needs (especially of the poor) and the limits of the environment's capacity to meet needs, weave together the social and the environmental components of sustainability, which are then also framed within the continuum of successive human generations. Considering both the poverty and generational aspects, a central implication of this definition would be a shift to an economy focused on specifically meeting our core human needs and not wants and desires. One purely focused on growth, on superfluous 'needs' and manufactured wants, will likely only be capable of tending to the needs of the present and not the future, given the finite nature of many resources. Even then, the needs of the poor, which the Brundtland Report notes should be given 'overriding priority', will still often be neglected (as privatization will axiomatically push most all things out of the reach of the poorest). Making this shift would require defining development in terms of quality of life, thus decoupling economic growth from development (Rees, 2014, p. 95), as qualitative aspects of life are not dependent on scarce resources.

Excluding, for now, the lived experiences of many, there is research showing that what is most important in life is not the acquisition of things, but the qualitative sense of connection with others (Brown, 2012, p. 8). Such understanding may be coming at a pivotal time, influencing scientific domains that have previously been dismissive

of the unquantifiable (Smith & Max-Neef, n.d., p. 16). In this sense, societies could continue ‘developing’--growing their senses of well-being through better relationships--without having to put as much strain on natural systems.

While the importance of the qualitative should be self-evident, there still must be a place for grasping hard numbers--such as understanding carbon budgets and the impacts of businesses on our shared environment. One way to conceptualize a sustainable economy that incorporates both the qualitative and quantitative components of sustainability is given by Smith and Max-Neef (n.d.), who suggest a fundamental value principle for a sustainable economy: “No economic interest, under any circumstance, can be above the reverence for life” (p. 137). The notion of reverence for life succinctly encapsulates the serving of human needs, protection of the environment, the prioritization of quality of life (qualitative development), and a genuine concern for future generations.

A sustainable economy would, of course, comprise many other elements, as human society and the natural systems that sustain it are far more complex than a few simple notions can capture. Yet, the above ideas must be central components. And with these aspects in mind, this paper will look at how co-operatives may be ideally suited economic entities to tackle the serious ecological challenges our global society now faces.

Co-operation: An Abbreviated History of the Principles

Co-operation, as an economic form, is given full definition by the ICA’s Statement on the Co-operative Identity (ICA, n.d.b.). The current version of the ICA co-operative values and principles is the most recent revision of the original principles first settled on by ICA in 1937 (ICA, n.d.a.). Though there are other sets of principles, such as the ten Mondragon principles (Mondragon Corporation, n.d.), or the four USDA co-operative principles (United States Department of Agriculture Rural Development, 2011), the ICA, “is the global steward of the Statement on the Co-operative Identity – the values and principles of the cooperative movement” (ICA, n.d.).

The original ICA principles were largely a codification of the guidelines used by the Rochdale Society of Equitable Pioneers in the middle of the nineteenth century (Fairbairn, 1994, p. 26). The international co-operative community settled on seven core features of the Rochdale system that could be considered principles. Four of the seven were deemed essential aspects of co-operation, while the other three were deemed components of co-operation, yet not necessary for admission into the ICA (Fairbairn, 1994, p. 26).

A first revision of the 1937 principles took place in 1966 (ICA, n.d.a.), when five of the seven principles were kept (with minor tweaks), while two, ‘Cash Trading’ and ‘Political and Religious Neutrality’, were removed. A new principle, ‘Co-operation Among Co-operatives’, was added, thus putting forth six principles on the same footing--in contrast with the two different classes of the 1937 principles (Fairbairn, 1994, pp. 33-34).

The second and most recent revision of the principles took place at the 1995 congress, where the Statement on the Co-operative Identity was adopted. It fully defined a co-operative, its underpinning values, and provided an update the principles (ICA, 2015, p. 1). Those updates included: combining the former third and fourth principles (which spoke of share capital, surplus and savings) into the current third principle, Member Economic Participation (ICA, 2015, p. 29); resuscitating the principle dealing with neutrality in the new fourth principle, Autonomy and Independence; and adding a new seventh principle, Concern for Community, with the following definition: “Cooperatives work for the sustainable development of their communities through policies approved by their members” (ICA, n.d.).

The Development of the Seventh Principle

The idea of co-operative concern for community was previously seen as a component of the Co-operation Among Co-operatives principle (ICA, 2015, p. 85). In much the same way that democracy was taken as a given by the Rochdale Pioneers and not articulated formally in the original 1844 rules (Fairbairn, 1994, p. 7), the care that co-operatives held for their communities had, until the 1995 revision, not been deemed necessary to elevate to the level of full principle. This is despite it being, “an articulation of a dimension of the co-operative movement that has been widely honoured throughout the movement’s history” (MacPherson, 2013, p. 5).

The inclusion of the phrase “sustainable development of their communities” within the newest principle was informed by the environmental component of the Brundtland Report. It also had the social and economic aspects of the report in mind, with emphasis on the importance of meeting the needs of the poor. Thus, the seventh principle was meant to encapsulate these rather divergent but overlapping notions in the belief that “they are mutually interdependent and regenerative, [and] hence must be pursued concomitantly” (ICA, 2015, p. 87).

Ideally Suited Sustainable Economic Entities

The seventh principle is undoubtedly a prominent espousal of sustainability by the co-operative movement. But there are other aspects of co-operation, in terms of both identity and structure, that also lend themselves well to sustainable development. Identity-wise, “the co-operative principles closely [map] the social DNA of sustainability” (Dale et al., 2013, p. 7). Considering the failings of our modern economic systems, the principles help counteract some of the aspects that give rise to our ecological problems:

- the Concern for Community principle seeks to include externalities, as it articulates the notion that co-operatives should consider other stakeholders in their decision-making aside from their members, thus including those that had hitherto been external to decision-making and cost considerations;
- the Education, Training, and Information principle mitigates asymmetries of information, as members and workers are educated instead of propagandized;
- Democratic Member Control, Member Economic Participation, and Voluntary and Open Membership dignifies human life, as all three principles elevate the human element above the capital component; and
- the Member Economic Participation principle puts an inherent check on the limitless growth sought by capitalism; as the Guidance Notes stress, “in a co-operative, capital is the servant, not the master of the enterprise” (ICA, 2015, p. 30).

These are all ways in which, intentionally, the international co-operative movement has attempted to craft a framework that can stand as a bulwark against the destructive tendencies of capitalist enterprises.

Structurally, co-operatives may also be ideally suited to facilitate sustainability. Nobel laureate Elinor Ostrom supplied seminal work with her investigations into the capacities of people to successfully co-manage a commons (Allen, 2014, p. 245). Functioning ecosystems, a healthy environment, clear air, clean water, are common-pool resources (CPRs)—defined as “goods or resources where it [is] technically, economically or physically impossible to prevent people using them, but that [are] diminished by each use” (Allen, 2014, p. 242). Ostrom’s work, *Governing the Commons*, gives examples of communities successfully stewarding their CPRs and points to the possibility that co-operative institutions—as prime examples of collective self-governance—can be particularly viable ways to develop sustainable resource management. Her work demonstrates that co-operative solutions are indeed tenable: people involved in the use of resources can collaborate to supply the necessary checks on social and environmental externalities, not through privatization or external regulation, but through working together to devise solutions that maintain the resources for shared use. The CPR market is reliant on collaboration instead of competition, making it fundamentally different from typical private enterprise (Böök, 1992, p. 80). With the proper co-operative tools, people have the capacity to tend to their surrounding environment in a way that does not degrade it for future use. From this perspective, the true tragedy of the commons is not that people will inevitably destroy a shared resource, but that they do not have the right collective self-governance tools at hand.

Leaning into their democratic structure, co-operatives may also be ideal for propagating the use of sustainable energy. According to Viardot (2013), the co-operative form confers benefits in helping overcome barriers to the adoption of renewable energy through community based social marketing, “which emphasizes the relevance of grassroots engagement and provides practical guidelines for community initiatives interested in fostering sustainable behaviours” (p. 760). This has shown itself to be a particularly effective method for co-operatives to break down resistance to renewable energy (p. 761).

Co-operatives and the Environment Now

Sven Ake Book, in his run-up report to the 1992 Tokyo ICA Congress, *Co-operative Values in a Changing World*, expressed the view that co-operatives cannot be expected to be the primary means for solving large global issues (Book, 1992, p. 202). This may have been (and may still be) true at least in part due to the relatively small share of the world's economies that are comprised of co-operatives--17.5% of GDP in New Zealand and less than that in other countries (ICA, 2017) (though it should be acknowledged that they account for almost a third of GDP in specific regions, such as the Emilia-Romagna region in Italy (Duda, 2016)). Yet given the promise of co-operation, of the potential for collective self-governance to address many of the root problems within our economic systems, it would make sense for co-operatives to be in the vanguard of change; with their inherent potential as sustainable enterprises, the co-operative record on environmental sustainability should stand apart from that of IOFs.

Metrics used for measuring the sustainability of businesses vary (D'Aquila, 2018). Many firms use Corporate Social Responsibility (CSR) and the framework set up through the Global Reporting Initiative (GRI) to voluntarily report on their social, environmental, and economic impacts (GRI, 2013). Though CSR/sustainability reporting includes more than the environmental impacts of a business--incorporating the "Triple Bottom Line" of people, planet, and profit (Slaper & Hall, 2011)--it is one of the main avenues for assessing the environmental footprints of a business. Sustainability reporting has increased steadily over the past several decades, increasing from 35% of the 250 largest companies in the world in 1999 to 93% in 2017 (KPMG, 2017, p. 9). Yet, over half of those companies do not recognize climate change as a financial risk (KPMG, 2017, p. 4). Similarly, 72% of a sampling of 4,900 large companies from 49 different countries do not acknowledge the financial risks of climate change (KPMG, 2017, p. 4). Clearly, despite high rates of CSR reporting, attention to climate change is lacking in the world of IOFs.

Many co-operatives are quick to tout their record on sustainability. A study of Canadian co-operatives undertaken by Duguid and Balkan (2016) found that, of the 118 websites studied, 77 percent talked about sustainability (p. 2). The social and economic aspects were discussed more often than the environmental aspects (p. 21), however--potentially indicating that co-operative leaders are overlooking the environment. This possibility is also evident in an analysis of co-operative specific reporting tools by Duguid (2017), which found that, of 42 indicators studied, only one was specific to the environment: "reduction in greenhouse gas emissions and waste" (p. 48). Co-operative prioritization of the economic and social aspects of sustainability accords with the experiences of Sean Doyle (GM of Seward Cooperative in Minneapolis, Minnesota), who noted, when interviewed for this research, that the lobbying organization for his state's co-operatives considered it their biggest success to seek exemptions for the use of coal power for electric co-operatives. Further driving home this point, in Canada, Co-operatives and Mutuals Canada gave the award for 'Large Co-operative of the Year' to Federated Co-operatives Limited (FCL) in 2019 (FCL, 2019), despite its operation of The Co-op Refinery Complex, which can process crude oil at up to 130,000 barrels a day (FCL, n.d.). While these examples do not represent the whole co-operative movement, they do demonstrate that even regional co-operative leaders may tend to consider social and economic concerns above environmental ones.

Research indicates that a significant portion of the 300 largest co-operatives have "used less sustainability reporting than the big stock companies" (Segui-Mas, Bolas-Araya, & Polo-Garrido, 2015, p. 377). The ICA similarly notes that, in a comparison of the top 50 largest co-operatives to the top 50 Fortune 500 IOFs, the co-operatives lagged in reporting (Sustainability Solutions Group, 2016, p. 4). This does not mean that these co-operatives are less environmentally or socially responsible than most large IOFs, but it does indicate that they have put fewer resources into sustainability reporting. This suggests that many co-operatives have not emphasized environmental sustainability in a manner commensurate with the size of the problems faced. And the assertions of any business (whether co-operative or IOF) cannot be considered reliable without reporting metrics.

There is some evidence that those co-operatives doing sustainability reporting are driven by a genuine concern for the co-operative values and principles. A study of the assurances of sustainability reporting for the Spanish co-operative, Consum, found, "the cooperative's main motivation [for assuring its sustainability reports] lies in its ideology" (Seguí-Mas, Bolas-Araya, & Peiró, 2016). There are indeed other co-operatives that have led the way in sustainability reporting: the Co-operative Bank in the UK notes that it was, "the first bank in the world to produce an independently verified sustainability report in 1998" (The Co-operative Bank, n.d.). Vancouver City Savings Credit Union (Vancity), in British Columbia, utilizes several different reporting frameworks (Rixon & Beaubien, 2015), as

well as being a member of the Global Alliance for Banking on Values (Vancity, n.d.)--thus demonstrating a thorough commitment to measuring and tracking its social and environmental footprints. These examples indicate that there are individual co-operatives taking sustainability far more seriously than the average business--co-operative or otherwise. Yet there are, similarly, individual IOFs that are sustainability leaders. The clothing company Patagonia, which won the 2019 Champion of the Earth award from the UN in the category of entrepreneurship, is one prominent example (United Nations Environment Programme [UNEP], 2019).

Despite increased sustainability reporting overall, the value provided is an open question. The GRI acknowledges that:

we are still consuming increasing amounts of raw materials every year, increasing pollution and ecosystem contamination, and human rights and peace are far from being guaranteed for a large part of the world's population. (Global Reporting Initiative, 2015, p. 5)

Sustainability reporting may have become largely a means for corporations to reduce the costs of acquiring capital, as reporting can indicate lower risk (Aras & Crowther, 2009, pp. 284-285). The concept of sustainability may also be conflated with business sustainability (Aras & Crowther, 2009, p. 284) and, as Milne and Gray (2012) note, "reinforce notions that businesses first not ecological systems must remain going-concerns" (p. 24). During an interview for this research, Stephen Irvin (President and CEO of Amicus Solar Cooperative) noted that in his long tenure doing environmental work, "the word sustainability has lost a lot of its power". The overall concept of sustainability may thus have become distorted within the wider corporate culture. And it may be that while businesses may utilize the GRI framework or other means of reporting on their social and environmental impacts, true sustainability is out of reach for many businesses and possibly entire industries (Milne & Gray, 2012, p. 25). From the co-operative perspective, Erbin Crowell (Executive Director of the Neighboring Food Co-op Association) perhaps articulated the problem best when interviewed for this research: "our biggest challenge right now is the slow erosion of the co-operative identity through the use of the language and structures of mainstream economics."

CSR and other sustainability reporting initiatives are not the only means for assessing the environmental sustainability of co-operatives. For example, the Environmental Investigation Agency (EIA), in collaboration with Greenpeace, released their second report on plastics pollution by the United Kingdom's largest supermarkets in November 2019. Despite touting the environmental sustainability measures taken by Co-op Food (the Co-operative Group's supermarket business) on their website (Co-operative Group Limited, n.d.), the co-operative was ranked fifth out of ten overall on plastic pollution (Environmental Investigation Agency & Greenpeace, 2019, p. 9), lagging behind four IOFs.

The co-operative movement's mixed record on the environment has not changed in the past several decades; MacPherson (2012) noted, during the 1990s, that there were, "numerous examples of cooperatives addressing environmental issues very effectively", as well as older co-operatives that were, "developed during the time when environmental issues were not considered important", and thus still using practices that degraded the environment (p. 27). Yet, regardless of comparisons with other businesses, perhaps co-operative sustainability should be measured against their inherent potential and larger societal promise as humane economic enterprises.

Co-operative Values in a Changing World

Co-operative Values in a Changing World, Sven Ake Böök's report, serves as a foundation for understanding the thinking and rationale behind alterations of the definition and explanation of co-operatives. Böök reflects on the balance to be struck between principles close enough to the core values of co-operation that they take on a more eternal character (value-orientation) versus principles that act as guidelines for contemporary society (rule-orientation) (Böök, 1992, p. 48, p. 54, pp. 234-238). He notes that the principles should satisfy both criteria. He believes that the 1966 revision moved the principles more toward pure expression of the co-operative values (p. 235) and recommends that they continue in this direction (p. 236). He also recognizes that the principles are indeed, "the basic guidelines as to how these [co-operative] values may be put into practice" (p. 16). His reasoning rests on four points:

- the need to include more diverse regions and sectors;
- the rapidity of the changing co-operative landscape;
- not being able to infer enough “essential interpretations” from the principles; and
- the importance of keeping an open door to new forms of co-operation (p. 236).

With these considerations in mind, he proposes two sets of principles to find a balance between the value-orientation and rule-orientation: basic co-operative principles and basic co-operative practices (p. 238), with the basic co-operative practices to be set forth in a supplement that itself should be given the status of principle (p. 236). Though the ICA did not take his suggestion for a principle encapsulating co-operative practices, Böök’s conceptions offer useful insight into the philosophy for further revisions.

From this framework, we can begin to contemplate what Böök may have overlooked--that the two types of principles may not be mutually exclusive: the essential nature of what it means to work in co-operation with others can often be revealed in an ongoing manner through modern circumstances. Humanity and nature are intertwined in ways that demand the active protection of nature, and only in the past half century has this reality been illuminated by our stark violations of this reality. Therefore, it is sometimes *through* contemporary circumstances that co-operators may gain an understanding of what should be the value-oriented guidelines for co-operative action.

Another core aspect of the discussion somewhat neglected within Böök’s report is the degree to which practitioners will seek the deeper articulation of co-operation--the fullest meaning of each principle. He recognizes that the principles act, “as the bridge between co-operative ideals and co-operative reality” (Böök, 1992, p. 221), but he does not consider how many people will fully cross that bridge. For example, the current sixth principle of Co-operation Among Co-operatives is a central component of co-operation that co-operators may or may not infer from the basic notion of co-operating. As a principle, however, it serves as a prominent reminder that higher-tier co-operation is an essential part of co-operative practice.

Returning to Böök’s value-oriented perspective, he notes that--serving as the point of commonality among all other co-operative values (Böök, 1992, p. 27)--global solidarity is crucial for finding redress to the environmental damages wrought on one country by the actions of another (p. 11). The value of global solidarity, then, may find its greatest expression within concern for the environment, as few other human actions have such far-reaching and lasting worldwide impact. The expression of solidarity can counter the detrimental effects of national boundaries when environmental repercussions cross borders. The co-operative way--the co-operative concern for community--can be an integral part of global solidarity if environmental sustainability is recognized as a pivotal, foundational component of co-operation.

All this considered, concern for the environment should be more than the somewhat neglected component of the seventh principle that it currently is. It should be recognized as an articulation of something that has been, as Ian MacPherson noted, an important component of co-operation since at least the Rochdale Pioneers. Given its influence on the creation of the Concern for Community principle and the current environmental threats, it is worth considering raising concern for the environment to the status of full principle—in a way coherent both with previous thinking behind the adoption of the principles and as an imperative for the contemporary movement and wider society. Though this change, in and of itself, would not cause the movement to take more action on the current crises, it would be a good starting point with “potential both as an educational tool and in attracting public support” (Webb, 206, p. 82). It would be a guideline for action and a clarion call for co-operators and non-co-operators alike.

Previous Attempt at Emphasizing Environmental Sustainability

The idea to highlight and emphasize environmental sustainability within the principles is not new. In 2011, the ICA Americas contingent brought a failed motion to amend the seventh principle to read:

Concern for community and environmental sustainability: Co-operatives work for the sustainable development of their communities including the protection of the environment through policies approved by their members, promoting the responsible management of natural resources to ensure ecological balance (Murray, 2011).

The nature of this amendment hints at a failing of the current wording: a relative lack of recognition that all societies and all economies depend upon the natural world to survive and thrive. It has an implicit emphasis on social development--developing a healthy community--above developing financial capital, while also recognizing the importance of economic sustainability. There is little recognition of how both social and economic aspects depend upon functioning ecosystems, a healthy environment, and natural resources. This contrasts with co-operative advocate Sidney Pobihushchy's belief: "The co-operative values and principles convey a very important central message: Respect for the dignity of life, all life, not only human life but the life of nature as well" (Webb, 2016, p. 94). If Pobihushchy is correct, then the current articulation of the values and principles is woefully inadequate. Dame Pauline Green (former ICA President, Chief Executive of Co-operatives UK and President of ICA Europe) noted during her interview for this research that the Rochdale Pioneers saw the importance of, "being in tune with the natural world". Yet this has not found its way prominently into the current principles. It is also neglected within the definition of a co-operative, which says that co-operatives are intended to help people, "meet their common economic, social, and cultural needs and aspirations" (ICA, n.d.). Any mention of meeting their common environmental needs is conspicuously absent. The proposal by the Americas contingent, therefore, sought to rectify this problem.

The motion was brought forward by the ICA Americas president, Ramon Imperial, who said:

We believe we need to adapt our principles for the challenges that face us. We are not trying to change the essence, but expand it. We would like to give it further scope so co-operatives can deal with the issues. (Murray, 2011)

This explanation accords with Bööck's primary concerns about finding balance between principles close to the heart/essence of the values and being able to address contemporary issues. But perhaps Imperial missed, much as Bööck, that stressing the importance of environmental sustainability is not expanding the essence but uncovering what has been an integral component all along. Though previous generations may not have given voice to the reality that without the natural world no society can develop, it is increasingly apparent in our modern world.

According to Green (then ICA president), the motion failed largely due to the timing of the proposal. Further emphasizing ecological concerns within the principles was, she said, a relatively uncontentious idea, but it was one that occurred while substantial work was being done by the ICA with national governments to update their co-operative laws. Compounding the inopportune timing was the relatively sudden and unexpected nature of the proposal. David Button (then Chair of Co-operatives UK) noted, "we have difficulty voting for the resolution because we have not had the time to discuss this with our members" (Murray, 2011). While expressing fervent support for the motion, Button proposed the issue be referred to the ICA board, which subsequently decided on the creation of the Principles Committee. Tasked with the responsibility of recommending changes to the principles, the Committee was also intended to offer guidance on how to enact the principles--eventually giving rise to the Guidance Notes to the Co-operative Principles in 2016 (ICA, n.d.) wherein the three components of sustainability are articulated and given full definition.

Other obstacles to adopting the motion, according to Dante Cracogna (a member of the Principles Committee and author of the initial draft of the seventh principle within the Guidance Notes (ICA, 2015, p. xii)), included a belief that environmental sustainability is already encapsulated within the seventh principle, and that not all concerns co-operators bring forward are worthy of elevation to principle-status (D. Cracogna, personal communication, March 17, 2020). The latter argument seems to echo Bööck's concern about the principles "becoming too marked by contemporary practice" (Bööck, 1992, pp. 235). Yet within the context of environmental degradation posing an existential threat to all human civilization, it appears a weak argument to make; the thought and care put into finding the essential aspects of co-operation will mean very little if life support systems become so degraded that a coherent co-operative movement becomes secondary to basic survival.

Irrespective of the outcome of the 2011 proposal, it is worth noting that ICA congresses have been stressing environmental protection since at least 1984 (Bööck, 1992). It is clear, then, that not enough has been done. It is time for the Principles Committee to begin the process, with ample prior notice and without the impediment of other

important yet incompatible work, of updating the principles to give environmental sustainability its proper place--as essential to both human life and co-operative enterprise.

Making a Coherent Change

As the principles are considered by co-operators around the world as “sacrosanct and precious” (Murray, 2011), any changes should be given ample thought. They must be consistent with the philosophical underpinnings that informed their original adoption and subsequent revisions. To be acceptable to co-operators the world over, a potential new principle on environmental sustainability, “must be universal enough to embrace all essentially true co-operative organizations” (Böök, 1992, p. 237). It must also be close to the “essential nature of co-operation” (p. 238). In order to be universal, the principle would have to be broadly agreeable across the spectrum of co-operative practice; if it were perceived as a mandate that all co-operators must be vegetarian, for example, it would surely not gain wide acceptance. The principle must foster reverence, respect, and care for the natural world, while also allowing for the sustainable use of resources (whether non-living, plant, or animal) as seen fit by each society. Yet it must, pivotally, help constrain the prevalence of destructive and inhumane practices that leave societies worse off in the end.

In his interview for this research, Ahsan Ali Thakur (Chairperson of the ICA’s Asia-Pacific Committee on Youth Cooperation) noted that it would be important for such a principle to highlight how protecting the environment benefits co-operators. Sean Doyle framed this as a potential business case to be made that, “if the results of short term profits remove any potential capital development in the future because you consume one of the core sources of that, then you’re killing the business in the long run.” Thus, it may be important that a new principle concerning environmental protection makes plain that the natural world is the foundation for everything humans hold dear. Otherwise, co-operators may see the needs of the natural world as opposed to--or at the very least irrelevant to--their own needs.

Böök’s direction that the principles reflect the values-oriented perspective may be a starting point for crafting this principle and satisfying the varying concerns. Webb (2016) articulates what may be considered a universal philosophy behind co-operation (and thereby provides that values-oriented starting point) in his suggestion for an eighth principle:

Co-operatives recognize that the human species is but one part of an interconnected and interdependent universe and that respecting nature and life in all its expressions is not separable from respect for the dignity and value of each person. (p. 142)

This wording suggests that Webb embraces the idea of co-operation among different life-forms--which is the idea of mutualism: those symbiotic relationships benefiting both species. In other words, the recognition that the whole world is intertwined is at the heart of the idea of co-operation. This accurately represents Pobihushchy’s belief that respect for the dignity of all life is central to the values and principles, and it underlines that protection of the environment benefits those protecting it. This, then, could become the quintessential principle reflecting the essence of co-operation and the core value that Böök notes is behind all the others: solidarity.

Alternative Approaches

Adding an eighth principle is not the only way to highlight the importance of environmental sustainability. An alternative, which, based on her interview, Green seems to support, might be to craft within the Statement on the Co-operative Identity an acknowledgment that economies are dependent upon societies, which are themselves dependent upon the environment. Placing such recognition at the beginning of the Statement on the Co-operative Identity would align the current reality with the ideas of co-operation as presented within the Statement and the principles. Given that none of the principles can manifest without a supportive ecological underpinning, it would be appropriate to stress environmental protection prior to articulating the principles.

Another alternative would be to revisit the 2011 proposal and reword the seventh principle to specifically mention environmental protection. This may be a more palatable option for those concerned that the default response to new issues is to add additional principles. As Crowell put it in his interview:

If our solution to every challenge that we seek to address is to add another principle, we may miss the important work of clarifying the meaning behind each principle and how it is implemented within the co-operative structure. This, I think, is the purpose of the Guidance Notes.

There are many options available to the movement for how to make its commitment to protection of the natural world clear to those exploring the co-operative identity. It may even be that environmental sustainability is worthy of mention within both the definition of co-operation and the principles--thus demonstrating its imperative for any kind of human progress. Regardless, any of these methods of emphasizing the importance of protecting the natural world would be immeasurably better than leaving the Statement on the Co-operative Identity and principles as they are, as doing so would indicate that leaders of the movement view the current articulated identity as sufficient for addressing the environmental challenges we face.

Discussion

There is a case to be made that the co-operative movement has not lived up to its environmental stewardship aspirations as stated within the Concern for Community principle. Some reasons for this may (for the time being) be outside the general control of the movement, while the movement may be culpable in others. Perhaps one of the most salient reasons currently outside the movement's control is that co-operatives do not leverage the same economic power as IOFs, comprising at most 17.5% of the GDP in any individual country (New Zealand, as previously mentioned). This may reflect the concerns of Bedford et al. (1994) that to remain a sector of the capitalist economy is to give up on the potential of an economy wherein co-operation is the dominant form above and beyond capitalism (p. 23). During his interview, Doyle voiced this same concern regarding many co-operatives not doing as much as they should about environmental concerns, noting, "it's not necessarily malicious intent; it's more logistically out of their control." Yet even as a sector of the economy, the worldwide co-operative movement is a coherent force with a shared identity. Co-operatives thus have the unique opportunity to craft a unified narrative that may find purchase within both the movement and wider society, facilitating the changes needed to make headway on the myriad problems faced. As David Morgan (EPA contractor and former board member of the U.S. Federation of Worker Co-operatives) noted during his interview, this wouldn't have to require a completely co-operative economy, but (using the craft brewing industry as an example) could be accomplished with relatively minimal market penetration yet wide familiarity/recognition.

Another societal trend that constrains the power of individual co-operatives (or even regional co-operative networks) to make more substantial progress is that corporations may be supplanting nation states as the primary mode of governance in society--as nation-states may be more and more hamstrung by corporation control (Terzi & Marcuzzi, 2019). Those thinking that governments can act as a sufficient check on the reckless and harmful actions of business should recognize how often this approach fails. Global co-operation may be one of the only real countermeasures available to avoid the environmental catastrophes threatening humanity.

Concerning that which is within the movement's immediate control, is the capacity to encourage more environmental leadership, principally by addressing the inconspicuous nature of environmental sustainability within the principles. The analysis done here helps demonstrate that the seventh principle, Concern for Community, does not accurately reflect the co-operative promise on environmental stewardship and therefore does not act as a sufficient guideline for co-operative environmental action. This may, at least in part, be because the Concern for Community principle, and the phrase "sustainable development of their communities" within the definition, may encourage co-operators to consider the social and economic aspects of sustainable development--due to the explicit mention of community--in lieu of the environmental component. Compounding this is the related concern, raised both within the literature and by Irvin and Crowell during their interviews, that the concept of sustainability carries different connotations now than when it was defined at the 1992 Earth Summit. It has become more broadly popular in (and perhaps subsumed by) the predominant business culture which places profits as the bottom line. As Crowell noted, "from this perspective, sustainability is defined as the ability to generate a satisfactory return on capital over time." These concerns point strongly to the conclusion that environmental sustainability, as it currently exists within the principles, does not accurately reflect the co-operative promise.

There are arguments to be made against the idea of further emphasizing environmental sustainability--perhaps most readily vocalised by Bob Burlton (former CEO of The Midcounties (consumer) Co-operative and former chair of The Co-operative Group, Cooperatives-UK and The Ethical Property Company), who, during his interview for this research, stressed the importance of taking action above any kind of codification. He believes action is far more important than stressing environmental protection within the principles, which may be seen as "words on a dusty piece of paper". Burlton strongly advocates that co-operatives make progress through a combination of hiring the right leaders (i.e. not simply leaders from IOFs), "demonstrating clarity of purpose and thought, and clarity and consistency of action", and having a mobilizable membership that can act as "foot soldiers in the climate change war". He expresses concern that a rearticulation of the principles would largely be ignored in much the same way that his work seeking to get European co-operatives to "raise their game" on climate change was not as successful as he had hoped. Although it resulted in some policy changes, those changes did not instigate action: "Ten years later, how many current chief executives and boards have it on their radar? Probably very few if any." Recognizing Burlton's critique, it is important to recognize that a simple change to the Statement on the Co-operative Identity or principles would not by itself be sufficient to help the co-operative movement address environmental problems. Yet, conversely, if further emphasizing environmental sustainability is largely a fruitless endeavor, then it is difficult to justify the need for a co-operative identity and guidelines at all.

Regardless of the direction taken, it should be acknowledged that leaving concern for the environment as a relatively obscure part of the Concern for Community principle is out of alignment with the needs of the twenty-first century. Given the relative lack of opposition to the ICA Americas proposal in 2011--as well as the dire warnings from scientists about cutting emissions--co-operatives must make a change now that is consistent with the overall philosophy behind co-operation, appropriate for the needs of future generations, and actionable within our current context.

Though co-operation may not be the only solution to the problems the world faces, it should be given due consideration (by those both outside the movement and within it); it is a solution that goes to the roots of the flaws within our modern economies and the wider society that give rise to environmental issues in a way that may be unparalleled by any other potential solution. Co-operation is a way to bridge the gap between what is needed ethically in society and what may be workable within economic endeavors. Put more forcefully--co-operation is the missing glue that can bind humanity to itself and to the wider world.

Next Steps

If the co-operative movement is to emphasize environmental sustainability within the Statement on the Co-operative Identity or principles, ensuing steps must of course occur. During her interview, Green emphasized the importance of incorporating the co-operative movement into international business consortiums such as the G20, thus giving co-operatives a voice at the table alongside IOFs. If IOFs--as discussed above--are superseding national powers in many respects (Webb, 2016, pp. 72-73), nations may find themselves impotent to craft legislation that protects the environment, as large corporations can threaten to wreck national economies through capital flight. It may then be an imperative for international co-operative organizations to develop their own power to counter that held by those firms. This highlights the importance of the co-operative movement on the global stage.

Other connections and collaborations will also be important. For example, Thakur's work in his Go Green 3.0 campaign, described during his interview, may be vital. Inspired by his recognition that co-operatives could enlist youth in working towards the United Nations' Sustainable Development Goal (SDG) 13: Climate Action, such collaboration to align co-operatives and the SDGs may amplify the power of both. And, of course, bringing younger generations on board with co-operatives is an undeniably important task for co-operative development.

It is also important to recognize, as Crowell stressed during his interview, that the values and principles "are irrelevant if they are not reflected in the legal statutes that regulate co-operatives". In other words, to function properly, co-operatives have to exist within a legal framework that recognizes their distinct and unique approach to business; otherwise, they will be treated (and often act) in much the same way as those IOFs they ostensibly stand in opposition to. The effort, therefore, must be to both create the legislative space for co-operative action and to

allow co-operation to grow beyond any individual national constraint--thus becoming a global player capable of dictating the nature of broader economic activity.

Due consideration should also be given to how the co-operative movement would assess and manage the environmental impacts of individual co-operatives--whether internally, or via the laws governing co-operatives. This may be an even more difficult process than revising the principles or Statement, as complex decisions would have to be made in a consistent manner across the movement about what practices sufficiently protect the environment.

Opportunities for Future Research

Several areas of study follow from this paper. First is the question of how co-operative development can be strengthened by reaching out to environmental groups and social movements encountering significant corporate and political resistance. They may be particularly receptive to shifting their energies towards developing economic organizational forms aligned with their goals. Secondly, a further case could be made for emphasizing environmental sustainability within the Statement/principles. Given the relative dearth of quantitative data on the performance of co-operatives in relation to the environment, more research in this area could shed considerable light on whether co-operatives are living up to the aspirations of that part of the seventh principle. Lastly, future research could be directed towards assessing the degree to which co-operatives involved in the fossil fuel industry (or other sectors of the economy that are environmentally unsustainable) consider it important to shift to a more renewable economy and how higher level co-operation could support them and further the movement's leadership on environmental stewardship within national and international economies.

Conclusions

The arguments presented in this paper hopefully lay bare some of the poor logic of the dialogue around how we currently structure our economies and the errors that cannot find redress without systemic changes. Markets, as they currently function, have significant flaws--and the predominant economic paradigms cannot ameliorate them. Public institutions thus far have also not been the solution--and it is questionable to what extent they can ever reach the roots of the problems.

Embodying the best traits to which humans can aspire, co-operatives--as a humane alternative to capitalism--must leverage every available tool to address and ameliorate the problems the world is already seeing and to provide future generations with as much opportunity as we ourselves have been given. Currently, environmental sustainability is a minor component of the ICA's explanation of co-operation within the Statement on the Co-operative Identity. Now is the time to demonstrate how wide the circle of co-operative care truly is by rearticulating the principles to recognize humanity's inextricable links with the natural world. This must then be used to rally and guide all co-operators to become, as Burlton advocated, "foot soldiers in the climate change war"--spurring the movement on to become a major player in the world's economies and the leader in sustainable development.

References

- Allen, B. (2014). A role for co-operatives in governance of common-pool resources and common property systems. In S. Novkovic & T. Webb (Eds.), *Co-operatives in a post-growth era: Creating co-operative economics* (pp. 242-263). Zed Books Ltd.
- Aras, G., & Crowther, D. (2009). Corporate Sustainability Reporting: A Study in Disingenuity? *Journal of Business Ethics*, 87, 279-288. <http://www.jstor.com/stable/40294968>
- Bedford, D., Ford, E., & Pobihushchy, S. (1994). *Co-operatives Values in a Changing World: A Co-operative Critique* [PDF document]. Retrieved from <https://smu.brightspace.com/d2l/le/content/33702/viewContent/287115/View>
- Bjornstad, D.J., & Brown, M.A. (2004, June). *A Market Failures Framework for Defining the Government's Role in Energy Efficiency*. Joint Institute for Energy and Environment. https://www.researchgate.net/profile/David_Bjornstad/publication/254209802_A_Market_Failures_Fra

- mework_for_Defining_the_Government%27s_Role_in_Energy_Efficiency/links/00463539efac9bfff8000000/A-Market-Failures-Framework-for-Defining-the-Governments-Role-in-Energy-Efficiency.pdf
- Block, F., & Somers, M.R. (2016, August 29). *The Power of Market Fundamentalism: Karl Polanyi's Critique*. Harvard University Press.
<https://books.google.com/books?hl=en&lr=&id=FSuAAwAAQBAJ&oi=fnd&pg=PR7&dq=market+fundamentalism&ots=iUk2mCqcuE&sig=2NggQtpoKfXpMp42xALKZsz8X3l#v=onepage&q=fundamentalism&f=false>
- Böök, S.A. (1992, May). *Co-operative values in a changing world*. International Co-operative Alliance.
- Brown, B. (2012). *Daring greatly: How the courage to be vulnerable transforms the way we live, love, parent, and lead*. Gotham Books
- Ceballos, G., Ehrlich, P.R., Barnosky, A.D., Garcia, A., Pringle, R.M., & Palmer, T.M. (2015). Accelerated modern human-induced species losses: Entering the sixth mass extinction. *Science Advances*, 1(5). <https://doi.org/10.1126/sciadv.1400253>
- Ceballos, G., Ehrlich, P.R., & Raven, P.H. (2020, June 01). Vertebrates on the brink as indicators of biological annihilation and the sixth mass extinction. *Proceedings of the National Academy of Sciences of the United States of America*, 117(24), 13,596-13,602.
<https://doi.org/10.1073/pnas.1922686117>
- Centers for Disease Control and Prevention. (2018, November 05). *One Health Basics*.
<https://www.cdc.gov/onehealth/basics/index.html>
- Chomsky, N. (2012, July 22). *Destroying the Commons: How the Magna Carta Became a Minor Carta*. <https://chomsky.info/20120722/>
- The Co-operative Bank. (n.d.). *Values and Ethics Reporting and Sustainability Reports*.
<https://www.co-operativebank.co.uk/values-and-ethics/ethical-banking/sustainability-reports>
- Co-operative Group Limited. (n.d.). *Responsible sourcing*.
<https://www.coop.co.uk/environment/sustainability>
- Dale, A., Duguid, F., Lamarca, M.G., Hough, P., Tyson, P., Foon, R., Newell, R., & Herbert, Y. (2013, October 23). *Co-operatives and Sustainability: An investigation into the relationship*. International Co-operative Alliance. <https://www.ica.coop/sites/default/files/basic-page-attachments/sustainability-scan-2013-revised-sep-2015-559438094.pdf>
- D'Aquila, J.M. (2018, July). *The Current State of Sustainability Reporting: A Work in Progress*. The CPA Journal. <https://www.cpajournal.com/2018/07/30/the-current-state-of-sustainability-reporting/>
- Duda, J. (2016, July 05). *The Italian Region Where Co-ops Produce a Third of Its GDP. YES!* Magazine. <https://www.yesmagazine.org/economy/2016/07/05/the-italian-place-where-co-ops-drive-the-economy-and-most-people-are-members/>
- Duguid, F., & Balkan, D. (2016). Talking the Talk: Canadian co-operatives and sustainability reporting. *Journal of Co-operative Accounting and Reporting*, 4(1). <https://smu.ca/webfiles/1-JCARTalkingtheTalk.pdf>
- Duguid, F. (2017, December). Non-financial tools and indicators for measuring the impact of co-operatives. *Journal of Co-operative Accounting and Reporting*, 5(1). <https://smu.ca/webfiles/Non-FinancialToolsandIndicatorsforMeasuringtheImpactofCo-operatives.pdf>
- Environmental Investigation Agency, & Greenpeace. (2019, November). *Checking Out on Plastics II: Breakthrough and backtracking from supermarkets*. <https://eia-international.org/wp-content/uploads/Checking-Out-on-Plastics-2-report.pdf>
- Fairbairn, B. (1994). *The Meaning of Rochdale: The Rochdale Pioneers and the Co-operative Principles* [PDF document]. Retrieved from
<https://smu.brightspace.com/d2l/le/content/33702/viewContent/287096/View>
- Federated Co-operatives Limited. (n.d.). *Overview*. <https://www.fcl.crs/our-business/overview>
- Federated Co-operatives Limited. (2019, June 20). *FCL recognized with Canadian co-operative award*. <https://www.fcl.crs/news-reports/news/article/fcl-recognized-with-canada-coop-award>
- Friedman, M. (1970, September 13). *The Social Responsibility of Business is to Increase its Profits*. <http://umich.edu/~thecore/doc/Friedman.pdf>
- Fullerton, J. (2014). Finance for the Anthropocene. In S. Novkovic & T. Webb

- (Eds.), *Co-operatives in a post-growth era: Creating co-operative economics* (pp. 134-156). Zed Books Ltd.
- Global Reporting Initiative. (2013, April 04). *GRI among the most popular CSR instruments*.
<https://www.globalreporting.org/information/news-and-press-center/Pages/GRI-among-the-most-popular-CSR-instruments.aspx>
- Global Reporting Initiative. (2015, May). *Sustainability and Reporting Trends in 2025: Preparing for the Future*. <https://www.globalreporting.org/resourcelibrary/Sustainability-and-Reporting-Trends-in-2025-1.pdf>
- Intergovernmental Panel on Climate Change (2018). *Summary for Policymakers of IPCC Special Report on Global Warming of 1.5C approved by governments*. Retrieved from <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>
- International Co-operative Alliance. (n.d.a.). *Co-operative Principles and Values – Revisions*. Archived content retrieved Sept. 16, 2020, from:
<https://web.archive.org/web/20091029163330/http://www.ica.coop/coop/principles-revisions.html>
- International Co-operative Alliance. (n.d.b.). *Cooperative identity, values & principles*.
<https://www.ica.coop/en/cooperatives/cooperative-identity>
- International Co-operative Alliance. (2014, June 09). *Co-operators pay tribute to Ian MacPherson*. <https://www.ica.coop/fr/node/9918>
- International Co-operative Alliance. (2015). *Guidance Notes to the Co-operative Principles*.
<https://www.ica.coop/sites/default/files/publication-files/ica-guidance-notes-en-310629900.pdf>
- International Co-operative Alliance. (2017, February 06). *New report: The Co-operative Economy of New Zealand*. <https://www.ica.coop/en/newsroom/news/new-report-co-operative-economy-new-zealand>
- Islam, S.N., & Winkel, J. (2017, October). *Climate Change and Social Inequality*. United Nations Department of Economic & Social Affairs. https://www.un.org/esa/desa/papers/2017/wp152_2017.pdf
- KPMG. (2017). *The road ahead: The KPMG Survey of Corporate Responsibility Reporting 2017*. <https://assets.kpmg/content/dam/kpmg/xx/pdf/2017/10/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf>
- The Lancet. (2017, October 19). *The Lancet Commission on pollution and health* [Executive summary]. <https://www.thelancet.com/commissions/pollution-and-health>
- Landrigan, P.J., Fuller, R., Acosta, N.J.R., Adeyi, O., Arnold, R., Basu, N., Baldé, A.B., Bertollini, R., Bose-O'Reilly, S., Boufford, J.I., Breyse, P.N., Chiles, T., Mahidol, C., Coll-Seck, A.M., Cropper, M.L., Fobil, J., Fuster, V., Greenstone, M., Haines, A.,... Yadama, G.N. (2017, October 19). The Lancet Commission on pollution and health. *The Lancet Commissions*, 391(10119), 462-512. [https://doi.org/10.1016/S0140-6736\(17\)32345-0](https://doi.org/10.1016/S0140-6736(17)32345-0)
- Longview Institute. (n.d.). *Market Fundamentalism*.
<http://www.longviewinstitute.org/projects/marketfundamentalism/marketfundamentalism/>
- MacPherson, Ian. (2012). "... What is the end purpose of it all?": The centrality of values for cooperative success in the marketplace. In P. Battilani & H. Schröter (Eds.), *The Cooperative Business Movement, 1950 to the Present* (Comparative Perspectives in Business History, pp. 107-125). Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139237208.006>
- MacPherson, Ian. (2013, January 03). Cooperatives' Concern for the Community: From Members Towards Local Communities' Interests. *Euricse Working Paper*, 46(13). <http://dx.doi.org/10.2139/ssrn.2196031>
- Manabe, S., & Wetherald, R.T. (1967, May 01). Thermal Equilibrium of the Atmosphere with a Given Distribution of Relative Humidity. *Journal of Atmospheric Sciences*, 24(3), 241-259. [https://doi.org/10.1175/1520-0469\(1967\)024%3C0241:TEOTAW%3E2.0.CO;2](https://doi.org/10.1175/1520-0469(1967)024%3C0241:TEOTAW%3E2.0.CO;2)
- Milne, M.J., & Gray, R. (2012, November 18). W(h)ither Ecology? The Triple Bottom Line, the Global Reporting Initiative, and Corporate Sustainability Reporting. *Journal of Business Ethics*, 118, 13-29. <https://doi.org/10.1007/s10551-012-1543-8>
- Mondragon Corporation. (n.d.). *Our Principles*.
<https://www.mondragon-corporation.com/en/co-operative-experience/our-principles/>

- Murray, A. (2011, November 18). *Change to Co-op Principle referred back to ICA Board*. Co-op News. <https://www.comms.coop/36796/sector/change-co-op-principle-referred-back-ica-board/>
- Ostry, J.D., Loungani, P., & Furceri, D. (2016, June). *Neoliberalism: Oversold?*. International Monetary Fund. <https://www.imf.org/external/pubs/ft/fandd/2016/06/ostry.htm>
- Pacific Institute. (2013a). *Total Renewable Freshwater Supply by Country (2013 Update)* [Data set]. <http://worldwater.org/wp-content/uploads/2013/07/ww8-table1.pdf>
- Pacific Institute. (2013b). *Freshwater Withdrawal by Country and Sector (2013 Update)* [Data set]. <http://worldwater.org/wp-content/uploads/2013/07/ww8-table2.pdf>
- Rees, W.E. (2014). Are prosperity and sustainability compatible?. In S. Novkovic & T. Webb (Eds.), *Co-operatives in a post-growth era: Creating co-operative economics* (pp. 83-100). Zed Books Ltd.
- Ripple, W.J., Wolf, C., Newsome, T.M., Galetti, M., Alamgir, M., Crist, E., Mahmoud, M.I., Laurance, W.F., and 15,364 scientist signatories from 184 countries. (2017, December). World Scientists' Warning to Humanity: A Second Notice. *BioScience*, 67(12), 1026–1028. <https://doi.org/10.1093/biosci/bix125>
- Rixon, D., & Beaubien, L. (2015). Integrated reporting for co-operatives: A case study of Vancity Credit Union. In L. Brown, C. Carini, J. G. Nembhard, L. H. Ketilson, E. Hicks, J. McNamara, S. Novkovic, D. Rixon, & R. Simmons (Eds.), *Co-operatives for Sustainable Communities: Tools to Measure Co-operative Impact and Performance* (pp. 337-352). Centre for the Study of Co-operatives
- Seguí-Mas, E., Bolas-Araya, H.M., & Peiró, P.A. (2016). Why do cooperatives assure their CSR reports? an analysis of the motivations and benefits in a big retail cooperative. *CIRIEC - Espana*, 87, 39-68. Retrieved from <https://login.library.smu.ca/login?url=https%3A%2F%2Fsearch.proquest.com%2Fdocview%2F1900342944%3Faccountid%3D13908>
- Segui-Mas, E., Bolas-Araya, H.M., & Polo-Garrido, F. (2015). Sustainability Assurance on the Biggest Cooperatives of the World: An Analysis of Their Adoption and Quality. *Annals of Public and Cooperative Economics*, 86(2), 363-383. <https://doi.org/10.1111/apce.12073>
- Slaper, T.F., & Hall, T.J. (2011). The Triple Bottom Line: What Is It and How Does It Work?. *Indiana Business Review*, 86(1). <http://www.ibrc.indiana.edu/ibr/2011/spring/article2.html>
- Smith, P., & Max-Neef, M. (n.d.). *Introduction: The case for a new economics* [PDF document]. Retrieved from <https://smu.brightspace.com/d2l/le/content/68921/viewContent/487224/View>
- Sneed, A. (2020, June 12). *'Forever Chemicals' Are Building Up in the Arctic—and Likely Worldwide*. Scientific American. <https://www.scientificamerican.com/article/forever-chemicals-are-building-up-in-the-arctic-and-likely-worldwide/>
- Spratt, D., & Dunlop, I. (2019, May). *Existential climate-related security risk: A scenario approach*. Breakthrough - National Centre for Climate Restoration. https://docs.wixstatic.com/ugd/148cb0_b2c0c79dc4344b279bcf2365336ff23b.pdf
- Steffen, W., Rockström, J., Richardson, K., Lenton, T.M., Folke, C., Liverman, D., Summerhayes, C.P., Barnosky, A.D., Cornell, S.E., Crucifix, M., Donges, J.F., Fetzer, I., Lade, S.J., Scheffer, M., Winkelmann, R., & Schellnhuber, H.J. (2018a, August 6). Trajectories of the Earth System in the Anthropocene. *Proceedings of the National Academy of Sciences of the United States of America*, 115(33), 8252-8259. <https://doi.org/10.1073/pnas.1810141115>
- Steffen, W., Rockström, J., Richardson, K., Lenton, T.M., Folke, C., Liverman, D., Summerhayes, C.P., Barnosky, A.D., Cornell, S.E., Crucifix, M., Donges, J.F., Fetzer, I., Lade, S.J., Scheffer, M., Winkelmann, R., & Schellnhuber, H.J. (2018b, August 6). Trajectories of the Earth System in the Anthropocene [Appendix]. *Proceedings of the National Academy of Sciences of the United States of America*, 115(33), 8252-8259. <https://www.pnas.org/content/pnas/suppl/2018/07/31/1810141115.DCSupplemental/pnas.1810141115.sapp.pdf>
- Stern, N. (2007, January). *The Economics of Climate Change: The Stern Review*. http://mudancasclimaticas.cptec.inpe.br/~rmclima/pdfs/destaques/sternreview_report_complete.pdf
- Stiglitz, D.J. (2009). Moving Beyond Market Fundamentalism to a More Balanced Economy. *Annal of Public and Cooperative Economics*, 80(3), 345-360. <https://doi.org/10.7916/D8988HV1>

- Sustainability Solutions Group. (2016, March 16). *Sustainability Reporting for Co-operatives: A Guidebook*. International Co-operative Alliance. <https://www.ica.coop/sites/default/files/publication-files/ica-sustainability-reporting-guidebook-1575997496.pdf>
- Tantram, J. (2015). *All capitals are unequal, but some are more unequal than others* [PDF document]. Retrieved from <https://smu.brightspace.com/d2l/le/content/45433/viewContent/445637/View>
- Terzi, A., & Marcuzzi, S. (2019, June 02). *Are multinationals eclipsing nation-states?*. International Politics and Society. <https://www.ips-journal.eu/regions/global/article/show/are-multinationals-eclipsing-nation-states-3245/>
- Trisos, C.H., Merow, C., & Pigot, A.L. (2020, April 08). The projected timing of abrupt ecological disruption from climate change. *Nature*, 580, 496–501. <https://doi.org/10.1038/s41586-020-2189-9>
- United Nations Environment Programme. (2019, September 24). *US outdoor clothing brand Patagonia wins UN Champions of the Earth award*. <https://www.unenvironment.org/news-and-stories/press-release/us-outdoor-clothing-brand-patagonia-wins-un-champions-earth-award>
- United Nations Framework Convention on Climate Change. (n.d.). *The Paris Agreement*. Retrieved July 01, 2020, from <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
- United States Department of Agriculture Rural Development. (2011, April). *Understanding Cooperatives: Cooperative Business Principles*. https://www.rd.usda.gov/files/CIR45_2.pdf
- Vancouver City Savings Credit Union. (n.d.). *Global Alliance for Banking on Values (GABV)*. <https://www.vancity.com/AboutVancity/VisionAndValues/ValuesBasedBanking/GlobalAllianceBankingValues/>
- Van Vuuren, D.P., Bouwman, A.F., & Beusen, A.H.W. (2010, August). Phosphorus demand for the 1970–2100 period: A scenario analysis of resource depletion. *Global Environmental Change*, 20(3), 428–439. <https://doi.org/10.1016/j.gloenvcha.2010.04.004>
- Viardot, E. (2013). The role of cooperatives in overcoming the barriers to adoption of renewable energy. *Energy Policy*, 63, 756–764. <https://doi.org/10.1016/j.enpol.2013.08.034>
- Vox. (2020, March 06). *How wildlife trade is linked to coronavirus* [Video]. YouTube. <https://www.youtube.com/watch?v=TPpoJGYIW54>
- Webb, J.T. (2016). *From Corporate Globalization to Global Co-operation: We Owe it to Our Grandchildren*. Fernwood Publishing.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford: Oxford University Press.
- Xu, C., Kohler, T.A., Lenton, T.M., Svenning, J.C., & Scheffer, M. (2020, May 04). Future of the human climate niche. *Proceedings of the National Academy of Sciences*, 117(21), 11350–11355. <https://doi.org/10.1073/pnas.1910114117>
- Zamagni, S., & Zamagni, V. (n.d.). *Demand Vs Supply* [PDF document]. Retrieved from <https://smu.brightspace.com/d2l/le/content/70324/viewContent/519756/View>
- Zamagni, V. (2014). The co-operative enterprise: A valid alternative for a balanced society. In S. Novkovic & T. Webb (Eds.), *Co-operatives in a post-growth era: Creating co-operative economics* (pp. 194–209). Zed Books Ltd.