Putting SDGs to Work in Ports: Institutional and Governance Arrangements

Harry Barnes-Dabban (PhD), Ports Environmental Network-Africa (PENAf)

Abstract

Years following the 1992 Earth Summit have seen a couple of agendas to link environment to global development. The current agenda is the United Nations Global Sustainable Development Goals, which succeeded the Millennium Development Goals aimed at a global effort in inspiring countries to invest in their future generations between the years 2000 and 2015. The Global Sustainable Development Goals focus on involving individuals and sectors to build a more sustainable, safer and prosperous planet for all humanity. Ports are contributors to economic growth and prosperity of countries globally but they are known to be one of the most polluting sectors due to their nature and activities. Many ports in contemporary times, however, are beginning to develop and implement more sustainable solutions for their polluting activities. But these solutions remain fragmented without wide acceptance and adaptation among stakeholders in a level playing field to ensure effective realisation. Many scholars and international organisations have offered a variety of concepts, discourses, theories, regulations, initiatives and tools for the sustainable development. However, how these are aligning the development and implementation of sustainable port solutions in effective governance arrangements to steer ports towards sustainable futures and achieving Sustainable Development Goals is less clear. The objective of this paper is to explore institutional dynamics within which port sustainability solutions are being developed and implemented through actor interactions towards the implementation of the Global Sustainable Development Goals. Aspects of global environmental governance and politics – agency, architecture, adaptiveness, inclusiveness, and coherence – are used as an analytical framework. Findings are expected to contribute to an adequate theoretical and empirical understanding of linkages and interconnectedness of the Sustainable Development Goals and how they can be harnessed integrated interactively through actions that support port sustainable development.

Key words: Sustainable Development Goals; Port Sustainability governance; Sustainable Solutions; Institutional Arrangements; Global Environmental Governance and Politics

Introduction

The 1992 Earth Summit has birthed a couple of agendas aimed at linking global development with the environment. Notable is the Millennium Development Goals (MDGs), launched by United Nations (UN) as a global effort in inspiring countries to invest in their future generations between the years 2000 and 2015. It was historic in mobilising global attention towards a set of social priority issues of public concern including poverty, education, disease, gender inequality, and environmental deterioration. MDGs established measurable and timebound objectives that promoted political accountability, and social feedback (Sachs, 2012)[1] on how the prioritised issues were being addressed and progressing among both industrialised and developing economies.

[1] Sachs, J.D. 2012. From Millennium Development Goals to Sustainable Development Goals. Lancet 379: 2206-2211.

MDGs are acknowledged to have accomplished uneven progress. While good progress could be observed against poverty and disease, the same could not however be said for environmental deterioration. MDG 7 that sought to ensure environmental sustainability required natural resource base and ecosystems to be managed sustainably to meet environmental, social and economic needs. It focused on reversing environmental deterioration as deforestation and providing people with drinking water and sanitation. Though there was global commitment to achieving the goal of environmental sustainability, progress was slow. Deforestation actually slowed, but global greenhouse emission continued their upward trend (UNDP, 2015)[2]. Progress was made in access to improved water sources, but access to improved sanitation remained a challenge in most economies, especially developing ones. The threat of climate change and its potential negative impacts on ecosystems and the degradation of biodiversity also remained.

At the closure of MDGs Agenda in 2015, it became apparent that while MDGs had produced the most successful poverty awareness raising with actions to overcome it in history, moving forward, implications from global environmental risks required that environmental deterioration had to be given a higher profile alongside poverty-reduction (ibid)[1]. The MDGs Agenda could thus be seen as the jumping-off point for the subsequent UN Agenda - Agenda 2030 on Sustainable Development Goals (SDGs) - aimed at a global sustainable development trajectory. The SDGs agenda calls for global action to promote prosperity while protecting the planet.

The urgency for global sustainable development has given the grounds for international acceptance of SDGs and commitment to a shared focus on a combination of its dimensions of social inclusion, economic development, and environmental sustainability (United Nations, 2015)[3]. This in effect is the mainstreaming of sustainable development at all levels of society, integrating social, economic, and environmental aspects and recognising their interlinkages, so as to achieve sustainable development in all its dimensions (United Nations, 2012)[4]. The SDG Agenda has become emergent in the wake of globalisation processes with increasing global interconnectedness. Its 17 goals, 169 targets, and 243 indicators are also universal, integrated and indivisible in response to the interconnectivity of globalising human activities.

Institutions are crucial in ensuring the achievement of SDGs. Their role is captured in SDG 16, which requires them to be transparent, effective, inclusive and accountable (Nachef et al., 2019)[5]. In this regard, institutions have to integrate SDGs through holistic and coherent policy-making where decision-making, implementation and monitoring involves multiple actors and

---

[2] UNDP. 2015. Millennium Development Goals Report.
[3] United Nations. 2015. General Assembly Resolution 70/1. Transforming Our World: The 2030 Agenda for Sustainable Development A/RES/70/1: 27 (25th September 2015) https://undocs.org/A/RES/70/1 (Accessed 21st May 2020).
[4] United Nations. The future we want. In Resolution Adopted by the General Assembly on 27 July 2012; A/RES/66/288; UN: New York, NY, USA, 2012.
[5] Nachef, H., Phade, U., Sturdevant, L., and Zhou, D. 2019. Effective Public Institutions in Advancing the SDGs: A Conceptual Framework for Building Effectiveness in Local Public Entities. Prepared by University of Southern California, Sol Price School of Public Policy. For United Nations Department of Economic and Social Affairs Division of Public Institutions and Digital Governance Public Service Innovation Branch.

stakeholders including public, private and civil society (Glass and Newig, 2019[6]; cf. Boas et al., 2016[7]; Meuleman and Niestroy, 2015)[8]. How to do this is however challenging for different institutions and actors at different levels of society for a number of reasons. First, SDGs are not legally binding. Actors and stakeholders are expected to take ownership in translating them into achievable actions. Second, there are complexities arising from uncertainties and contradiction regarding the interrelation between the 17 SDGs (see Janoušková et al., 2018[9]; Newig et al., 2007)[10]. Actors and stakeholders need to understand and map out trade-offs as well as mutually reinforcing interlinkages among the goals, targets and indicators contained in the Agenda. Ports, for instance, pursuing the sustainable development path require sustainable transport as a key enabler for achieving inclusive economic and social growth. To do this, they need to establish an adequate understanding of important interactions among SDGs that need to be taken into account. In his work, *'Living With Paradoxes'* Jansen (2015)[11] asserts that ports improving their sustainability face complex issues. He first identifies the complexity of ports merging opposing objectives towards the implementation of SDGs. And second, the complexity of environmental protection, urban development, labour conditions, resident interests, and overall economic development as conflicts of interests for sustainable port development within the SDGs trajectory. Both the merging of opposing objectives and conflicts of interests call for complex trade-offs between relevant SDGs, fostered by institutional and governance arrangements for ports, that enable actor involvement and collective action for implementation (see Bowen et al., 2017)[12].

Ensuring such institutional and governance arrangement is particularly essential for SDG implementation, to overcome limitations of its precedent MDGs Agenda from its process, structure, and content (Fehling et al., 2013)[13]. These left the Agenda to be criticised as not having had greater impact, because it was created by few and exclusive actors, was simplistic, not adapted to localised needs, and having no specific accountable parties to reinforce vertical interventions and integrations across different levels of society.

[6] Glass, L.-M., and Newig, J. 2019. Governance for achieving the Sustainable Development Goals: How important are participation, policy coherence, reflexivity, adaptation and democratic institutions?, Earth System Governance, https://doi.org/10.1016/j.esg.2019.100031

[7] Boas, I., Biermann, F., Kanie, N., 2016. Cross-sectoral strategies in global sustainability governance: towards a nexus approach. Int. Environ. Agreements Polit. Law Econ. 16, 449e464. https://doi.org/10.1007/s10784-016-9321-1.

[8] Meuleman, L., Niestroy, I., 2015. Common but differentiated governance: a meta-governance approach to make the SDGs work. Sustainability 7, 12295e12321. https://doi.org/10.3390/su70912295.

[9] Janoušková, S., Hák, T., and Moldan, B. 2018. Global SDGs Assessments: Helping or Confusing Indicators? Sustainability 2018, 10, 1540; doi:10.3390/su10051540 www.mdpi.com/journal/sustainability (Accessed 26th May 2020).

[10] Newig, J., Voß, J.-P., Monstadt, J., 2007. Editorial: governance for sustainable development in the face of ambivalence, uncertainty and distributed power: an introduction. J. Environ. Policy Plan. 9, 185e192. https://doi.org/10.1080/15239080701622832.

[11] Jansen, M. 2015. Living With Paradoxes. In: Port Strategy (Issue 10th October 2015). https://www.portstrategy.com/news101/port-operations/port-performance/port-paradoxes (Accessed 28th May 2015).

[12] Bowen, K.J., Cradock-Henry, N.A., Koch, F., Patterson, J., Häyhä, T., Vogt, J., et al., 2017. Implementing the "Sustainable Development Goals": Towards Addressing Three Key Governance Challenges-Collective Action, Trade-Offs, and Accountability. Curr. Opin. Environ. Sustain. 26 (27): 90-96. https://doi.org/10.1016/j.cosust.2017.05.002.

[13] Fehling, M., Nelson, B.D., and Venkatapuram, S. 2013. Limitations of the Millennium Development Goals: A Literature Review, Global Public Health, 8(10): 1109-1122, DOI: 10.1080/17441692.2013.845676.

Particularly for ports, some port authorities and affiliated institutions as the International Maritime Organisation (IMO), International Association for Ports and Harbours (IAPH), and the International Port Cities Network (AIVP) have initiated sustainability solutions aimed at implementing and achieving SDGs. IMO seeks to achieve implementation through a global sustainable transport sector that supports world trade and facilitates a global economy. It identifies SDG 14 as central to its work but further draws linkages to SDGs 1, 2, 4, 5, 6, 8, 7, 9, 10, 11, 12, 13, 16, and 17 and integrates these with its work. IAPH also, building on its World Ports Climate Initiative started in 2008 and extended it into the World Ports Sustainability Programme (WPSP) with the aim of demonstrating global leadership of ports in contributing to SDGs. IAPH considers the 17 SDGs as indivisible and implements them integratively along five themes – climate and energy, community outreach and port city dialogue, governance and ethics, resilient infrastructure, and safety and security. AIVP also has the AIVP Agenda 2030 aimed at inspiring port and city actors into coordinated action in contributing to sustainable development through port-city relationships in a holistic approach. Their Agenda has 10 goals and 46 measures, with each linked to several SDGs in ways that seek to minimize investment and resources, and explore interconnectedness to each goal. Regional port associations as European Sea Ports Organisation (ESPO) and Port Management Association for West and Central Africa (PMAWCA) have also put in place governance arrangements to guide and report on environmental and sustainability performance and management by their member ports (see ESPO, 2019)[14]. Alongside these port affiliated institutions and associations, port authorities across different regions and continents, including Hamburg, Barcelona, Antwerp, Los Angeles, Long Beach, Vancouver, and Rotterdam, have also initiated several sustainability solutions aimed at implementing to SDGs and contributing to global sustainability development. Broadly, the solutions could be classified under five themes - energy transition, circular economy, digitalization, climate action, human capital & social inclusion.

The literature on SDGs is huge. Some have considered the interrelation, synergies and trade-offs between the goals (Nilsson et al., 2018[15]; Weitz et al., 2018[16]; Pradhan et al., 2017)[17]; SDG indicators and Measurements (Reyers et al., 2017[18]; Allen et al., 2017)[19]. Governance of SDGs have been studied from the view point of changing role of partnerships (Bull and McNeill, 2019)[20]; and participation (ibid)[6]. However, institutional and governance arrangements within

[14] European Sea Port Organisation Environmental Report (EcoPortsinSights). 2019. ESPO: Brussels.

[15] Nilsson, M., Chisholm, E., Griggs, D., Howden-Chapman, P., McCollum, D., Messerli, P., et al., 2018. Mapping Interactions Between the Sustainable Development Goals: Lessons Learned and Ways Forward. Sustain. Sci. 13, 1489e1503. https://doi.org/10.1007/s11625-018-0604-z.

[16] Weitz, N., Carlsen, H., Nilsson, M., Skånberg, K., 2018. Towards Systemic and Contextual Priority Setting for Implementing the 2030 Agenda. Sustain. Sci. 13, 531e548. https://doi.org/10.1007/s11625-017-0470-0.

[17] Pradhan, P., Costa, L., Rybski, D., Lucht, W., Kropp, J.P., 2017. A Systematic Study of Sustainable Development Goal (SDG) Interactions. Earth's Future 5, 1169e1179. https://doi.org/10.1002/2017EF000632.

[18] Reyers, B., Stafford-Smith, M., Erb, K.H., Scholes, R.J., Selomane, O., 2017. Essential Variables Help to Focus Sustainable Development Goals Monitoring. Curr. Opin. Environ. Sustain. 26 (27), 97e105. https://doi.org/10.1016/j.cosust.2017.05.003.

[19] Allen, C., Nejdawi, R., El-Baba, J., Hamati, K., Metternicht, G., Wiedmann, T., 2017. Indicator-Based Assessments of Progress Towards the Sustainable Development Goals (SDGs): A Case Study from the Arab Region. Sustain. Sci. 12, 975e989. https://doi.org/10.1007/s11625-017-0437-1.

[20] Bull, B. and McNeill, D. 2019. From Market Multilateralism to Governance by Goal Setting: SDGs and the Changing Role of Partnerships in New Global Order. Business and Politics. DOI:10.1017/bap.2019.9.

which the initiatives and innovations by port affiliated institutions and port authorities are initiated, developed and implemented to contribute the sustainable development of ports remain less explored.

The objective of this paper is therefore, to explore institutional dynamics within which port sustainability solutions are being developed and implemented through actor interactions. This is to contribute to the discussion, literature and adequate understanding on how extant governance concepts and discourses align with institutional arrangements for empirical development and implementation of sustainable port solutions towards achieving SDGs. The central question to be answered is 'how are port authorities and their affiliated institutions developing and implementing sustainability solutions towards SDGs implementation?'. Using comparative analysis covering three international port affiliated institutions, two regional port associations, and five port authorities, the processes by which they are developing and implementing sustainability solutions towards contributing to SDGs implementation are investigated. This is done by applying some aspects of governance as elements for a conceptual and analytical framework.

The remainder of this paper, which is work in progress, is organised as follows. First, some aspects of environmental and sustainability governance put together interconnectedly as a conceptual framework are introduced. Subsequently, the methodology for comparing the institutions studied is presented. Finally, the challenges inhibiting the completion of this paper are explained.

Conceptual Framework: Port sustainability solutions governance

As global environmental change has accelerated, new institutions and governance approaches for political and policy negotiations have emerged for environment and sustainability while existing ones have undergone reform in a 'new politics of pollution' (Weale, 1992)[21]. Put simply, dealing effectively with rapidly accelerating environmental change has required a dynamic and functional institutional arrangements and environmental governance system for the design and execution of policy to address environmental and sustainability challenges. This has faded conventional statist environmental policy-making (see Biermann and Dingwerth, 2004[22]; Arts et al., 2006)[23], in which negotiations are made by governments, as territorially based body, with responsibility for the implementation of international environmental agreements. New processes of governance, within the specific context of sustainability, have emerged which rely on a diversity of actors and stakeholders in a collective formulation and execution of policies intended to affect societal outcomes, including economic, social and environmental outcomes (Broadway and Shah, 2009)[24].

[21] Weale, A. 1992. The New Politics of Pollution. Oxford: Manchester University Press.

[22] Biermann, F. and Dingwerth, K. 2004. Global Environmental Governance and The Nation-State. Global Environmental Politics 4(1): 1-22.

[23] Arts, B. and Van Tatenhove, J. 2006. Political Modernisation. In: Institutional Dynamics in Environmental Governance. Arts, B & Leroy, P (Eds.) Springer: 21-43.

[24] Broadway, R. and Anwar, S. 2009. Fiscal Federalism: Principles and Practice of Multilevel Governance. Cambridge. Cambridge University Press.

In contrast to government, sustainability governance depends connotes the sum of formal and informal rule systems and actor-networks set up at all levels of society to steer towards preventing, mitigating, and adapting environmental change (ibid)[30]. This process and interaction involve several aspects as contained in extant global environmental and sustainability governance literature. Five of these aspects – Agency, Architecture, Adaptiveness, Inclusiveness, and Coherence – are put together interconnectedly in a conceptual framework (Fig. 1). They are applied in this paper to investigate the institutional dynamics within which the IMO, AIVP, ESPO, PMAWCA, and the ports of Rotterdam, Amsterdam, Aalborg, Tema, and Pointe Noire are initiating and implementing environmental and sustainability solutions towards the implementation of SDGs. The five sustainability governance aspects are explained below.
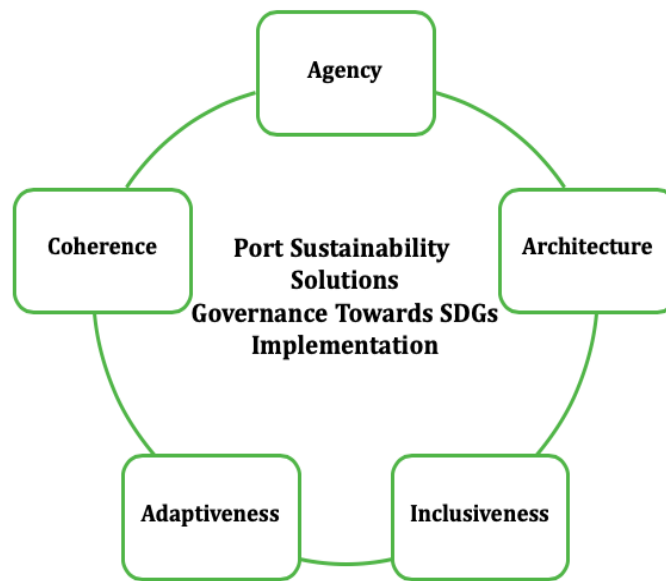
Figure 1: Governing port sustainability solutions

Agency
Actors are core in sustainability governance arrangements. These span across the public – private divide to include public non-state actors such as intergovernmental bureaucracies, public-private partnerships (Bäckstrand et al., 2012)[25], civil society alliances and non-governmental organisations (Betsill and Corell, 2001)[26] such as WWF, network of scientists and experts (Gupta et al., 2012)[27], and private actors such as business organisations and associations (Falkner, 2003)[28]. By their activities, these actors become agents of governance,

[25] Bäckstrand, K., Campe, S., Chan, S., Mert, A., and Schäfferhof. 2012. Transnational Public-Private Partnerships. In: F. Biermann and P. Pattberg (Eds.), Global Environmental Governance Reconsidered, Cambridge, MA: MIT Press, pp. 123-147.
[26] Betsill, M.M. and Corell, E. 2001. NGO Influence in International Environmental Negotiations: A Framework for Analysis. Global Environmental Politics, 1(4):65-85.
[27] Gupta, A., Andresen, S., Biermann, F., and Siebenhüner, B. 2012. Science Networks. In: F. Biermann and P. Pattberg (Eds.), Global Environmental Governance Reconsidered, Cambridge, MA: MIT Press, pp. 69-93.
[28] Falkner, R. 2003. Private Environmental Governance and International Relations: Exploring the Links. Global Environmental Politics, 3(2): 72-87.

beyond states and their actors (Pálsson et al., 2007)[29], by participating substantively in rule and agenda setting processes including negotiating their own standards as it pertains with Forest Stewardship Council and Marine Stewardship Council (Dellas et al., 2011)[30]. Agency in sustainability governance emphasises the contribution (positive and negative) of different actors and their source of authority outside the domain of states and inter-governmental arrangements to address issues of sustainability. They have the ability to prescribe behaviour and obtain consent of the specific issue area they seek to govern and become a constituent part of the cumulative steering sustainability transition effort and performance improvement. UNEP's Regional Coordinating Unit (RCU) of The Abidjan Convention, for instance, gained agency beyond its conventional statist intergovernmental negotiation to initiate direct dealings with port authorities in West, Central and Southern Africa on improving their environmental policy and performance (Barnes-Dabban and Vinkhuyzen, 2018)[31]. RCU did this by collaborating with Ports Environmental Network-Africa (PENAf), an Environmental Non-Governmental Organisation (ENGO), and Ports Management Association for West and Central Africa (PMAWCA), which is a regional port association. In sum, agency emerges as non-state or private actors gain relevance, with or without state actors, for enhancing efforts towards environmental protection through non-state approaches outside state decisions.

Architecture
The overarching system of public or private institutions, principles, norms, regulations, decision-making process and procedures, and organisations valid or active in an issue area is referred to as governance architectures (Biermann et al., 2009)[32]. These highlight institutional arrangements, interlinkages, principles and mode of steering for implementing measures among different actors in an issue domain. Multiple actors acting in the environment and sustainability domain, for instance, get interlocked in norm-setting and norm-implementation processes and procedures for sustainability solutions in a governance architecture. Governance architectures can have vertical and multi-layered institutional interactions and systems and be embedded in larger architectures. They straddle along a continuum of hierarchical top-down to co-management governance styles. In sum architectures represent the interplay between institutions, actors and norms that shape rule-making initiatives across different levels of society.

Adaptiveness
Social groups respond to or anticipate challenges that come along with global environmental changes in a socio-ecological change process towards sustainable development. The process for governing such response or anticipation by social groups in preparation for inevitable sustainability improvements as well as the process for adaptation by social groups within the

---

[29] Pálsson, G., Harding, A., and Raballan, G. 2007. Port and Maritime Transport Challenges in West and Central Africa. Sub-Saharan Africa Transport Policy Programme (SSATP) Working Paper No. 84, Washington DC: World Bank.

[30] Dellas, E., Pattberg, P., and Betsill, M.M. 2011. Agency in Earth System Governance: Refining a Research Agenda. International Environmental Agreements: Politics, Law and Economics, 11(1): 85-98.

[31] Barnes-Dabban, H. and Karlsson-Vinkhuyzen, S. 2018. The influence of the Regional Coordinating Unit of the Abidjan Convention: implementing environmental agreements to prevent shipping pollution in West and Central Africa. Journal of International Environmental Agreements: Politics, Law and Economics. DOI: 10.1007/s10784-018-9399-8

[32] Biermann, F., Pattberg, P., van Asselt, H., and Zelli, F. 2009. The Fragmentation of Global Governance Architectures: A Framework for Analysis. Global Environmental Politics, 9(4): 14-40.

governance arrangement constitute adaptiveness. Achieving adaptiveness is dependent on the vulnerability, resilience, robustness, adaptive capacity, or social learning (Biermann, 2015)[33] of social groups connected with a given issue domain.

Inclusiveness

Inclusiveness connotes equal access to opportunities created for all segments of society, particularly for the poor (Ali and Son, 2007)[34]. Wilful development has potential for the exclusion of some people in society. An enablement of direct participation of all in the management and use of environmental resources and ecosystem services as well as in the distribution of amenities such as education, health and infrastructure (Sachs, 2004)[35] in ways that focus on human wellbeing, including future generations, offers potential for securing sustainable development. Inclusiveness therefore enhances development prospects by enlarging participation in production and consumption processes and promotes societal material, relational and subjective wellbeing (see Pouw and McGregor, 2014)[36]. In these ways then, institutionalised inclusiveness leads to needs of society being taken into account in product development and service delivery, prevents the exploitation of resource base, and overcoming potential threats to sustainable development.

Coherence

UN Agenda 2030 identifies policy and institutional coherence as an important means of implementation (United Nations, 2015)[37]. Sustainable Development Goal 17, specifically Target 17.14, elaborates this. Coherence is seen as one of the principles of good governance approach (CEC, 2001)[38]. Although it has no one canonical definition, policy coherence for sustainable development can be understood as involving 'the systematic promotion of mutually reinforcing policy actions across government departments and agencies and creating synergies towards achieving the defined objective (OECD, 2001)[39]. Traditional approaches to development have focused on sector-specific outcomes in ways that ignore externalities and also do not account for transboundary and intergenerational effects. However, the interconnectedness of the various dimensions of sustainable development require integrated approaches that use a holistic lens to systematically take account of causal relationship, synergies, and trade-offs among economic, social and environmental dimensions in a comprehensive and coherent manner. In this way, policy coherence can effectively tackle fragmented policies that often contradict and undermine one another

[33] Biermann, F. 2015. Earth System Governance. In: P. Pattberg and F. Zelli (Eds.), Encyclopedia of Global Environmental Governance and Politics, Cheltham, UK: Edward Elgar Publishing, pp. 16-22.

[34] Ali, I and Son, H.H. 2007. Measuring Inclusive Growth. Asian Development Review, 24(1): 11-31.

[35] Sachs, I. 2004. Inclusive Development Strategy in an Era of Globalisation. Working Paper No. 35,Policy Integration Department, World Commission on Social Dimension of Globalisation, Geneva: International Labour Office.

[36] Pouw, N. and McGregor, A. 2014. An Economics of Wellbeing: What Would Economics Look Like if it Were Focused on Human Wellbeing? Institute of Development Studies Working Paper No. 436. London: IDS.

[37] United Nations. 2015. General Assembly Resolution 70/1. Transforming Our World: The 2030 Agenda for Sustainable Development A/RES/70/1: 27 (25th September 2015) https://undocs.org/A/RES/70/1 (Accessed 21 May 2020).

[38] Commission of the European Communities (CEC). 2001. European Governance: A White Paper. Com/2001/0428 Final. https://ec.europa.eu/europeaid/sites/devco/files/communication-white-paper-governance-com2001428-20010725_en_pdf. (Accessed 21 May 2020).

[39] OECD. 2001. The DAC Guidelines – Poverty Reduction. OECD Publishing: Paris. http://www.oecd.org/development/povertyreduction/2672753.pdf. (Accessed 24 May 2020).

across different sectors in dealing with complex sustainability development issues (see Stafford-Smith et al., 2017[40]; Meuleman and Niestroy, 2015[41]; Meadowcroft, 2011)[42]. Policy coherence is fostered by institutional structures and processes that allow for more informed decision-making (Monkelbaan, 2019)[43] and furthermore generate high political commitment and strong leaderships. Scholars as Zeigermann (2018)[44] and Carbone (2016)[45] assert that coherence is more effective in less complex policy areas where there are less divergent interests, greater targeting and stronger issue focus (May et al., 2006[46]; cf. Glass and Newig, 2019)[47]. Putting SDGs to work through policy coherence may therefore require extensive coordination efforts with potential delays in feedback loops for developing and implementing sustainable solutions in issue areas with complexities.

Methodology

To investigate the processes and procedures for initiating the development and implementation of sustainability solutions by port authorities and associated institutions towards contributing to SDGs implementation, this paper seeks to do a comparative case study in a qualitative analysis of a mix of three international port affiliated institutions, two regional port associations, and five port authorities with some forms of similarities and differences. The cases are selected using judgemental and purposive sampling. The phenomenon of study, SDGs, is a global one requiring or obliging implementation by all facets of society globally, developed and developing alike. IMO, IAPH, and AIVP are thus selected as international (global) port affiliated institutions. ESPO is selected as a regional port organisation in a developed region. Ports of Rotterdam, Amsterdam, and Aalborg are selected as ports authorities in developed societies. PMAWCA is selected as a regional port association in a developing region. Ports of Tema and Pointe Noire are selected as port authorities in developing societies. All the cases are initiated sustainability solutions actions in some form in different ways and approaches towards SDG implementation and are at different levels progress. The approach is used so as to go deeper into issues and explore nuances related to SDGs implementation by ports.

[40] Stafford-Smith, M., Griggs, D., Gaffney, O., Ullah, F., Reyers, B., Kanie, N., et al., 2017. Integration: the key to implementing the sustainable development goals. Sus- tain. Sci. 12, 911e919. https://doi.org/10.1007/s11625-016-0383-3.

[41] Meuleman, L., Niestroy, I., 2015. Common but differentiated governance: a meta-governance approach to make the SDGs work. Sustainability 7, 12295e12321. https://doi.org/10.3390/su70912295.

[42] Meadowcroft, J., 2011. Sustainable development. In: Bevir, M. (Ed.), The SAGE Handbook of Governance. Sage Publications, Ltd., London, pp. 535e551.

[43] Monkelbaan, J., 2019. Governance for the Sustainable Development Goals. Exploring and Integrative Framework of Theories, Tools and Competencies. Springer, Singapore.

[44] Zeigermann, U., 2018. Governing sustainable development through 'policy coherence'? The production and circulation of knowledge in the Eu and the oecd. Eur. J. Sustain. Dev. 7, 133e149. https://doi.org/10.14207/ejsd.2018.v7n1p133.

[45] Carbone, M., 2016. The European Union and Policy Coherence for Development: High on Mechanisms, Low on Achievements - Expert Briefing. European Commission, Brussels. https://doi.org/10.2861/40214.

[46] May, P.J., Sapotichne, J., Workman, S., 2006. Policy coherence and policy domains. Policy Stud. J. 34, 381e403. https://doi.org/10.1111/j.1541-0072.2006.00178.x.

[47] Glass, L.-M., and Newig, J. 2019. Governance for achieving the Sustainable Development Goals: How important are participation, policy coherence, reflexivity, adaptation and democratic institutions?, Earth System Governance, https://doi.org/10.1016/j.esg.2019.100031

Data collection is to be based on contextual and relevant textual data (Wood and Kroger, 2000)[48] mainly to be obtained through primary and secondary sources. Primary sources would be from semi-structured in-depth interviews and closed and open-ended questionnaire. Secondary sources would be obtained from review of relevant scientific literature, the internet, newspapers and newsletters, management and operational reports and other relevant documents.

To analyse data obtained, these will be analysed and organised in data sets by labelling and coding to identify using a set of themes with reference to elements of the conceptual framework used as an analytical tool and lens for the study. Similar and differing issues recurring will be identified, searched for in detail, and tabulated under relevant themes. Narratives from respondents and texts from documents will be examined in detail to identify how they interrelate across the data sets. They will be compared and contrasted to determine differences and similarities in interactions and approaches by case study institutions in developing and implementing their sustainability solutions. Coding will be done by looking for precise descriptions and developing extraction tables to facilitate accuracy.

Challenges Inhibiting Completion of Paper

The Covid-19 pandemic has disrupted activities in all fields of endeavour to a great extent globally. Research and academic activities have also not been spared, with most of these having to be shifted online. Unfortunately, however, not all global societies, especially developing ones, have access to the needed technology. Field-oriented academic research based on qualitative analytical aspects with focus areas straddling across different geographic locations, developed and developing societies alike, including this paper, have also suffered from the negative impacts of the pandemic. Institutions, as subjects for scientific study, have generally had to shift and refocus their priorities and energies on what matters most for retaining their relevance and existence. This includes their having to develop coping mechanisms to withstand and stay resilient to the pandemic, which has meant that issues of responding to interviews and questionnaire has become rather secondary.

Collecting primary data, which is core for a scientific paper and this one, has been adversely affected by the pandemic. Ports are key in the global supply chain and international trade. They inherently operate on two segments; operational (cargo and terminal), which is core, and non-operational (management and administration), which is supporting service. To ensure minimal disruption of the flow of trade and essential goods, including food and medicine etc, cargo and terminal operations have had to be intensified, with physical presence of operational staff in the ports. Non-operational staff, with supporting services have however had to, where possible work from home, laid off or have alternate working arrangements. Similarly, port affiliated institutions have also had to shift to focusing on supporting the ports to adjust to the 'new normal' in ways that can support the ports continue to a seamless flow of maritime trade across different regions in the world, while mostly working from home.

---

48 Wood, I.A. and Kroger, R.O. 2000. Doing Discourse Analysis: Methods for Studying Action in Talk and Text. Thousand Oaks: Sage Publications.

In all of the shifting and adjusting, attention to responding to interviews and questionnaire to obtain primary data for this paper became hampered. The paper could therefore not be completed to be presented at the GlobalGoals Symposium. It has to be put on hold pending the opportune time in a post-Covid-19 era. It is anticipated, in the midst of all the uncertainty, that this will happen soon. This draft, comprising introduction, conceptual framework, methodology is however presented for discussion pending eventual completion in the near future.