



Human Security Starts at Home: The Case for SDG Localisation

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Abstract

This article discusses the issue of localizing the Sustainable Development Goals (SDGs) and how this is critical for achieving human security globally. It notes that while the SDGs have been successful in generating consensus around sustainability, progress has been lacking and many targets may not be met. A key obstacle is that the SDGs have not been properly localized, which is essential given that real change needs to happen at the local level. The author argues that a bottom-up, localization-driven approach is needed to complement the existing top-down monitoring approach. This would empower local actors and allow them to develop diverse solutions through connecting and sharing ideas. A proposed solution is a digital platform that is co-created with local stakeholders and facilitates the networking of local actors as well as access to expertise. This could help drive cultural and social change from the bottom-up in support of the SDGs.

1. Introduction

The Sustainable Development Goals (SDGs) are an ambitious attempt to help advance the cause of social and environmental sustainability at a global level through international cooperation. Social and environmental sustainability is in turn a prerequisite for attaining a state of human security. A world in which the SDGs were fully realised would be a secure world for all. Although it would not eliminate the possibility of armed conflict, the appetite for military adventures is reduced when human rights are respected and basic needs are satisfied in a lasting and sustainable way. Sustainable development, when it includes social justice concerns, as the SDGs do, is thus the best foundation for human security. Given that the SDGs reflect a broad political consensus, they are also the best political instrument we have to promote human security. Unfortunately, however, we are far from realising the SDGs and sliding backward on a number of key indicators. Global food insecurity (SDG 2), for example, has been on the rise again even before the COVID-19 pandemic and the Ukraine conflict, and is now excluding a fast-growing proportion of humanity from enjoying a condition of security even at the most basic and vital level. In some places, SDG2 is hardly an issue (or only at the extreme margins of society), at least for now, while elsewhere it seems like an insurmountable challenge, and yet we lack the tools to properly inflect the SDG model to make it relevant in such very different localities. This paper therefore seeks

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to address the persistent lack of SDG localisation, as one of the main structural obstacles to SDG implementation and achieving human security for all.

The SDGs have been very successful in generating an unprecedented degree of global consensus about what is needed to move the world system from the present state of dangerously unsustainable economic practices and severe inequality to a more secure future state of peace with nature and social justice for humanity. The 17 goals, 165 targets and 230 associated indicators effectively constitute a map of the key elements within an imagined process of systemic transformation. Much thought and scientific advice have gone into the making of this ‘map’, and great diplomatic efforts were required to bring about its adoption as a political program and discourse of development. The SDGs, however, are not the ‘territory’ of sustainability transformation, as it is actually unfolding in countless locations around the world. The SDGs are merely a map, coloured by the ambition to change the territory; in short, they form a prescriptive model designed to shape the transformation space and thus the future state of the world, as it ought to be, in 2030. As the Stockholm+50 conference has revealed, the future, when it arrives, will not be anything like what we had hoped. We must understand why that is so if the post-2030 agenda is to become more successful.

If the SDGs were a tentative model and guideline to encourage global action in the direction of human security, that alone would be a worthy cause and justify all the time and efforts invested by the UN and signatory nations, even if it turns out that the SDGs will not be realised completely by 2030. A prescriptive model, however, is a rather different case. It is a statement of ambition that demands compliance and results. While the initial decision to become a signatory may have been voluntary for nation states, there is an element of binding commitment, and various mechanisms of centralised control have been created to reach down not just to national governments but also to federal states and local territories. This may be well-intentioned and also necessary to an extent, but the further this bureaucratic apparatus reaches down from the visionary centres in Geneva and New York, the more it risks being perceived as an imposition, namely by those who had no say in setting or ratifying the 2030 agenda but, ironically, bear much of the ultimate responsibility for realising it: local actors and change makers. Along with the SDGs’ prescriptive agenda comes a desire to benchmark, measure and monitor from above, and a sense of puzzlement and sometimes open resentment from below.

A growing literature on SDG localisation has sought to shed light on these tensions but, I argue, has struggled to identify solutions. In part, this is because this literature does not explore the opportunities inherent within emerging networks of local actors. I propose a solution based on such networks, that is, on a complementary, reverse process of global data aggregation and simultaneous local empowerment in the service of a new global culture of sustainability, without which both the 2030 and the post-2030 Agenda are most likely doomed to failure.

2. Human Security at Home: The Trouble with SDG Localisation

The tension arising from the ambivalent, guiding, as well as prescriptive character of the SDGs is felt right through the political process of implementation. National signatories

have joined the 2030 agenda as a matter of choice but are now committed not only to the sustainability ideal but also to mandatory national progress reporting. The obligation to respond to the map of indicators is thus exerting moral pressure on policymakers to pay attention to each indicator, and somehow juggle the often intrinsically contradictory nature of these demands, for example, weighing forest and biodiversity conservation against the need for more agricultural land to reduce hunger. Then there are political interests to weigh up, such as the need to reduce carbon emissions against the pressure exerted by the national fossil fuel lobby. The vision-reality gap increases further as the implementation process moves down to the local level, where the real action needs to happen and where local actors in government, business and communities may not feel a sense of ownership of the agenda at all. Even to the extent that local actors are convinced by the plausibility of and scientific evidence base behind the SDGs, and thus half-willing to yield to the compliance demands issuing from their national bureaucracy, they may not have the necessary funding or practical know-how to accomplish the very difficult task of integrated change.

The difficulty of SDG localisation is thus a serious and potentially fatal impediment to human security, an observation made in almost every report and research paper cited herein. The approaches to remedying localisation issues differ, however, and tend to fall within two broad categories: increased prescriptiveness and monitoring vs. increased sensitivity to the uniqueness of local constraints, opportunities, priorities and creativity. Many commentators oscillate between these opposite approaches, reflecting the unfortunate fact that neither is entirely satisfactory.

The prescriptive approach is to enforce obedience to the 2030 agenda by exerting more and more bureaucratic control from the centre, with the help of an ever stricter and ever more detailed framework for regular reporting, standardised accounting and, hopefully, compliance all the way down. If this were possible, the benefit would be that the realisation of the SDGs could be guaranteed. Such a prescriptive monitoring system is, arguably, a nightmare to some, but certainly a dream, far from the reality of even the most highly developed and SDG-supportive regions of the world. For example, the European Commission's Joint Research Centre (JRC) published the 'European Handbook for SDG Voluntary Local Reviews' in 2020, and by February 2021, some 24 local city governments had submitted Voluntary Local Reports (VLRs) in response, though only 16 of these included some kind of indicator and data analysis. The relevant EU report notes that the challenge lies in "providing a framework to inspire the selection of appropriate indicators, making reviews both comparable across Europe and targeting local situations and challenges" (Ciambra, Siragusa & Proietti 2021:6). In short, the bureaucratic approach runs into difficulties because SDG localisation seems to be impossible without setting specific local targets that make sense to local policymakers and actors, but the more localised and unique these targets are, the more difficult they also are to compare. Similarly, an Institute for Global Environmental Strategies report, commenting on 15 VLRs (4 of them in Japan), notes that local governments struggle to translate their own, often quite advanced sustainability agenda into the language of the national reports (Ortiz-Moya, et al. 2020), which may explain why only a few dozen among the millions of local jurisdictions around the world have tried to do so.

The UN itself also has realised that SDG localisation is necessary and requires concessions in terms of comparability, no matter if that incurs a cost in terms of accountability and control. Thus a roadmap for localizing the SDGs was drawn up by the Global Taskforce of Local and Regional Governments, UNDP and UN Habitat to “support cities and regions to deliver the 2030 Agenda” whereby “the roadmap is not a prescriptive ‘how to’; rather, it covers a range of strategies that can be adapted to the specific contexts and needs of different cities and regions” (GTLRG 2016:1), noting that “all of the SDGs have targets directly related to the responsibilities of local and regional governments, [who therefore] must be at the heart of the 2030 Agenda” (p.7). In short, the SDGs are not locally enforceable except in a broad sense, as an exemplary cultural model for sustainable living (see UCLG 2015, recommendation no. 4). Implementing, however, is a more complex matter than visioning. This is because integrated sustainable ways of life cannot be prescribed; rather, they emerge “at the nexus of ecological, social, economic and cultural aspects as well as of normative and political issues of equity and justice” (Caniglia et al. 2021:93). Herrera (2019:107), in a study focused on SDG 6, points out that “access to water [for example] is a problem of governance—and particularly local governance—rather than merely a problem of technology, infrastructure or financing.” Such realisations remain slow in their uptake. As Fisher & Fukuda-Parr (2019:383) note, “despite their aspirational claims of transformative impact, substantively, SDGs [have] retained the centrality of metrics, data and measurement, framing development problems as ‘technical, managerial and measurable’ and, [...] “through the infrastructure of measurement, construct and reinforce an ‘evaluation’ society.” Even advanced countries like the UK struggle to overcome this attitude, and thus show a “lack of a clear national policy framework for the localisation of the SDGs” (Jones & Comfort 2019:1).

It is perhaps an inconvenient truth that sustainability, justice and security cannot simply be prescribed, and compliance measured, incentivised and sanctioned, given that the urgency of the global sustainability crisis would seem to warrant drastic measures. It is also inconvenient because, in the absence of adequate accounting and benchmarking, it is not possible to fairly incentivise local actions to further the SDG agenda if tailoring them to specific local (or even national) conditions makes these actions incomparable. It is thus unsurprising to find that top-down efforts to measure and monitor continue relentlessly, even though the problems with this approach are known. The need for benchmarking does not go away, despite the danger of being caught between the Scylla of reductionist positivism and the Charybdis of relativist particularism.

Some academics thus continue to work on lists of “recommended indicators for cities and communities” (e.g., Abraham 2021), as do major geopolitical players. For example, in an influential report, the OECD recommends the use of “the SDGs as a vehicle to enhance accountability and transparency through engaging all territorial stakeholders,” given that “at least 105 of the 169 SDG targets will not be reached without proper engagement and coordination with local and regional governments” (OECD 2020:1). Building on this report, the European Observation Network for Territorial Development and Cohesion (ESPON) prepared an SDG localising tool for the EU “to measure, monitor and benchmark the SDGs at the regional level [based on] Eurostat’s SDGs reference indicator framework, which is used to monitor progress towards the SDGs in the EU context and particularly at the

national level” (ESPON 2020:7). A pilot study was conducted in three locations, and local indicators were selected following the OECD ‘RACER’ criteria (Relevant, Acceptable, Credible, Easy and Robust). The report shows just how laborious SDG localisation can be if a top-down approach is adopted. Amidst all the measurement frenzy, consensus is also nowhere in sight. The following are but a few of the competing indicator sets: Ecological Footprint, Environmental Sustainability Index, Dashboard of Sustainability, Welfare Index, Index of Sustainable Economic Welfare, City Development Index, Energy/Exergy, Human Development Index, Environmental Vulnerability Index, Living Planet Index, and Environmentally-adjusted Domestic Product (for a comparative analysis, see Zinkernagel 2018). All this begs the question of whether it would not be easier to trust, empower and support local actors.

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Many local governments do need help in mapping their own sustainability transformation space, however. As another report notes, “without having technical capacity or know-how, a regional government might not be able to map the field and design an adequate policy. [A] wareness raising campaigns and partnerships for capacity building and technical support might be needed” (Regions4 2018:15). Notably, many local actors lack direct access to the precise science expertise they need, and there is no global facility available yet to help them gain such access. Moreover, this access must take the form of collaborative engagement between local actors and scientists, rather than a search for prescriptive advice. As Canigli et al. (2021:98-99) note, “in research, we too often try to direct processes of change but fail to create the conditions for change to unfold. When we advocate for the implementation of policy advice based on previously done research and expect that others implement our advice, for instance, we try to direct change instead of attempting to cultivate the relationships and conditions that allow for change to unfold.” Collaborative engagement is itself a form of research, rather than a simple application thereof.

A pragmatic compromise solution to these localisation dilemmas would be to measure what can be measured and compare what can be compared, but to avoid bureaucratic monitoring and accounting overreach. There is much that speaks for allowing a wide-open space for local actors to develop an equally wide diversity of SDG solutions, having noted earlier that the SDGs are a transformation map, and not the transformation territory. No map is perfect. Indeed, while local actors could do with more central support in many ways, much of today’s sustainability innovation is also taking place independently at the local level, both in terms of problem identification and solutions. This creativity should not be stifled or dismissed but encouraged, disseminated and, where possible, scaled up.

“Promoting innovation, leadership ... [and] systems thinking” at the local level is thus a better option than exerting centralised control over every detail of local policy (NITI Aayog & UN India 2019:31). Such empowered local leadership of the SDG effort is what some researchers refer to as “deep localisation” (Lanshina et al. 2019:219). Others take a more shallow or hybrid approach, and thus tend to speak more cautiously of the need to “work with local communities to downscale global sustainability goals and co-create pathways to their achievement” (Szetey et al. 2021:2).

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Cross-sectoral engagement among different actors, including the government, the private sector, civil society organisations and individual citizens, is another important step toward SDG implementation. At the local level, such engagement tends to be very strong because of the benefits of small scale and proximity. Local actors are thus well placed to take a lead in such engagement, and this presents another argument for the advantages of deep localisation.

The problem remains that a locally led SDG implementation approach, while it is very sensible in many ways and probably indispensable overall, could make it difficult to assess progress on the SDGs or sustainability transformation more broadly. That is, unless an alternative, decentralised, diversified and bottom-up process of data aggregation was available, not only to reveal what solutions local actors are in fact developing, but also to support peer exchange of innovative ideas among them. This is precisely the solution I propose to escape the currently prevailing ambivalence.

Any such solution should be globally accessible to ensure that developing countries are not left behind. As Rahman, Khan & Sadique (2020:1) point out, “in localisation of the SDGs and ensuring disaggregated and inclusive implementation of the goals, Asia [for example] is facing formidable challenges both at regional and sub-regional levels.” What would such a global and fully inclusive bottom-up process of data aggregation and networking look like, and how would it further human security and the SDGs?

3. Local Solutions for Global Challenges: Human Security from Below

What we need is a bottom-up process for facilitating SDG implementation and the promotion of human security for all, which would complement the top-down, ‘monitor, incentivise and control’ approach inherent in the prescriptive aspect of the SDG model. This would be in line with the SDG’s role as an exemplary global guideline for systemic transformation. Ideally such a local actor-driven process would deliver ‘compliance’ largely as a by-product, without the need to control, because it would build on and amplify cultural change from below. Cultural orientations are largely driven by peer-to-peer interactions, however, and that means local actors would need to become connected with one another in new ways that allow them to gain better access to diverse solutions oriented toward broadly shared common goals. Local actors could also benefit from the efforts of experts to model

change if this were done not only at an abstract, generic level (such as the SDGs) but if researchers could map the myriad of unique local actions by meta-analysis of an emerging pool of empirical data concerning the solution space. This does not preclude impact assessment, though it may sacrifice some of the more fanatical monitoring zeal in exchange for greater empirical realism and more willingness among local actors to identify with the SDG agenda.

This is consistent with what local and regional governments (LRGs) themselves have been asking for. For example, a major UCLG report to the HLPF states that “bottom-up localization works better than top-down approaches [...and yet] many countries don’t take subnational levels into consideration or conceive localization as a top-down process in which the SDGs passively ‘trickle down’ to LRGs. Approaches revolving too strongly around a top-down decision-making process can ultimately feed the misconception of the SDGs being an external burden or imposition, hindering local participation and restraining the richness and vision of local initiatives” (UCLG 2018: 11). The report instead recommends decentralized, territorial approaches to public investment, bottom-up monitoring supported by disaggregated data, and support for international knowledge exchange and peer-to-peer learning between LRGs. UCLG also understands the necessity of inter-sector collaboration as a prerequisite for “systemic action” (see Tan et al. 2019), arguing that “strong partnerships and the participation of LRGs, the civil society, the private sector, social partners and academia in national SDG coordination mechanisms, and also in the definition, follow-up and monitoring of the SDGs, are critical” (UCLG 2020:120). In all this, the role of the SDGs, they say, is to “inspire our [local] actions” (UCLG 2020:10). This inspiration should not stop with local governments but extend to all sectors, but “many [national] countries are yet to discover the full power of local partnerships (between sub-national governments, enterprises, civil society, universities, philanthropies and communities) in SDG delivery” (Revi 2017:ix).

“Digital Network Architecture infrastructure” would seem the only way to coordinate such a complementary bottom-up effort to realise the SDGs at a global scale, because it is the best available means to connect local actors globally and inclusively (ElMassaha & Mohieldinb 2020:4). As a recent Brookings report notes, “serious local implementation is unlikely to achieve meaningful scale if perceived as a compliance exercise or just another reporting requirement. [...] Increasing the spaces for sharing of best practices, challenges, and innovations, with city-specific tools and products, will be critical,” but, until now, “there is no active facilitation of city-to-city dialogues or platform for curated, city-specific information that shares and showcases implementation efforts” (Pipa 2019:2). This excellent report was based directly on the feedback of local city leaders who met in Bellagio in 2019 to discuss SDG localisation, and thus reflects the local perspective. Local leaders were reported to be

“sceptical about attempts to standardize a set of city targets or indicators that would be applicable to each of their specific contexts. Instead, they suggested identifying a small subset, or a data floor, that might be common to all cities pursuing the SDGs. They recognized a healthy tension between comparability across cities, which helps spur innovation and share lessons, and customization to their local realities” (p.3).

The city leaders recommended “an online research platform with material designed specifically for city and local governments, and curated for applicability and usefulness to make it as easy as possible to identify high quality tools applicable to a city’s specific needs” (p.7). Some researchers refer to such specific local needs as “community-defined sustainable development goals (CSDSDGs)” (Winans et al., 2021:2).

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A recent report by the Sustainable Development Solutions Network’s Thematic Research Network on Data and Statistics echoes these views, noting that “TReNDS’ vision is a user-centric system that actively supports public and private data users and encourages collaboration” (SDSN 2019:8). The UN Environment Programme too has proposed a ‘digital ecosystem framework,’ according to the TReNDS report. Researchers too have made similar recommendations, arguing that “modern communication technologies and social media platforms could play a major, even transformative role, in participatory decision-making” (Guha & Chakrabarti 2019:15).

These calls have not gone completely unheeded. For example, Kawakubo & Murakami (2020:1) report on experiments in Hokkaido and Kyushu, Japan, with the goal of building a “local SDGs Platform that enables stakeholders to register, search and share their efforts and best practices toward achieving the SDGs.” The researchers found that “only 5% of global SDG indicators proposed by the United Nations Statistics Division could be used without modification at the local level in Japan. [...] However, approximately 50% of global SDG indicators could be used after localization” (p.7). Such experiments are few, and even fewer are designed to map the solutions space empirically by capturing local innovations. For example, the SDG Portal (<https://sdg-portal.de/>) provided by the German Association of Cities and Bertelsmann Foundation, for now, is more focused on measuring and comparing achievements relating to SDG indicators than facilitating peer-to-peer sharing of ideas within the solutions space.

The idea of digital solutions for sustainability is of course not new, and indeed, there are already numerous platforms that aim to address some of the issues local actors contend with, as identified above. The key question is: What services should a platform ideally provide for local sustainability actors? This question, however, is not one to be answered by academic experts. If digital approaches are to avoid falling into the same pit as centralised policy-driven approaches, the answer would seem obvious: Such digital services must be built from the outset with the full participation of local stakeholders—in the initial design and continuous review of a flexible and portable set of digital tools, and in the generation of a

database of peer-generated solutions that they have tried and tested. This could be augmented by a demand-driven system for accessing scientific expertise across a wide range of themes.

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Bibliography

1. Abraham, David 2021. 'Local SDG Indicators for US Cities and Communities.' In David B. Abraham & Seema D. Iyer (eds), *Promoting the Sustainable Development Goals in North American Cities*. Cham (Switzerland): Springer Nature. Pp 147-155.
2. Arnold RD, Wade JP. 2015. 'A definition of systems thinking: a systems approach.' *Procedia Computer Science*. 2015 Jan 1;44:669–78.
3. Caniglia, G., Luederitz, C., von Wirth, T. et al. 2021. 'A pluralistic and integrated approach to action-oriented knowledge for sustainability.' *Nature Sustainability* 4, 93–100. <https://doi.org/10.1038/s41893-020-00616-z>
4. Ciambra, Andrea; Siragusa; Alice & Paola Proietti (eds.) 2021. *European SDG Voluntary Local Reviews: A comparative analysis of local indicators and data*. Report commissioned by the EU. Accessed online on 28/4/2021 at https://www.researchgate.net/publication/350994235_European_SDG_Voluntary_Local_Reviews_A_comparative_analysis_of_local_indicators_and_data
5. ElMassaha, Suzanna & Mohieldinb, Mahmoud 2020. 'Digital transformation and localizing the Sustainable Development Goals (SDGs).' *Ecological Economics* 169 (2020):1-10.
6. ESPON 2020. *SDG Localising Tool Draft Final Report*. Report by ESPON for the European Union. Accessed online on 28/4/2021 at <https://www.espon.eu/sites/default/files/attachments/SDG%20Localising%20Tool%20Draft%20Final%20Report.pdf>
7. Fisher, Angelina & Fukuda-Parr, Sakiko 2019. 'Introduction: Data, Knowledge, Politics and Localizing the SDGs.' *Journal of Human Development and Capabilities* 20(4):375-385. DOI: 10.1080/19452829.2019.1669144
8. GTLRG 2016. *Roadmap for Localizing the SDGs: Implementation and Monitoring at the Subnational level*. Report by the Global Taskforce of Local and Regional Governments, UNDP and UN Habitat. Accessed online on 28/4/2021 at https://sustainabledevelopment.un.org/content/documents/commitments/818_11195_commitment_ROADMAR%20LOCALIZING%20SDGS.pdf
9. Guha, Joydeep & Chakrabarti, Bhaskar 2019. 'Achieving the Sustainable Development Goals (SDGs) Through Decentralisation and the Role of Local Governments: A systematic review.' *Commonwealth Journal of Local Governance* 22(2019):1-21. <http://epress.lib.uts.edu.au/ojs/index.php/cjlg>
10. Herrera, Veronica 2019. 'Reconciling global aspirations and local realities: Challenges facing the Sustainable Development Goals for water and sanitation.' *World Development* 118(2018):106-117. <https://doi.org/10.1016/j.worlddev.2019.02.009>
11. Jones, Peter & Comfort, Daphne 2019. 'A commentary on the localisation of the sustainable development goals.' *Journal of Public Affairs* 20 (1, 2020), published online at <https://doi.org/10.1002/pa.1943>
12. Kawakubo, Shun & Murakami, Shuzo 2020. 'Development of the Local SDGs Platform for information sharing to contribute to achieving the SDGs.' In the proceedings of the conference 'BEYOND 2020 – World Sustainable Built Environment.' *IOP Conf. Series: Earth and Environmental Science* 588(2020):022019 doi:10.1088/1755-1315/588/2/022019
13. Lanshina, Tatyana, Barinova, Vera, Loginova, Arina, Edward, Lavrovskii and Ponedelnik, I. 2019. 'Localizing and Achieving the Sustainable Development Goals at the National Level: Cases of Leadership.' *International Organisations Research Journal* 14: 207-224. Accessed online on 29/4/2021 at https://www.researchgate.net/publication/332868261_Localizing_and_Achieving_the_Sustainable_Development_Goals_at_the_National_Level_Cases_of_Leadership
14. NITI Aayog & UN India 2019. *Localising the SDGs: Early Lessons from India*. Accessed online on 28/4/2021 at http://niti.gov.in/writereaddata/files/LSDGs_July_8_Web.pdf
15. OECD 2020. *A Territorial Approach to the Sustainable Development Goals*. OECD Library, accessed 28/4/2021 at <https://www.oecd-ilibrary.org/sites/e86fa715-en/index.html?itemId=/content/publication/e86fa715-en#section-d1e2363>
16. Ortiz-Moya, Fernando; Koike, Hirotaka; Ota, Junko; Kataoka, Yatsuka & Fujino, Junichi 2020. *State of the Voluntary Local Reviews 2020: Local Action for Global Impact in Achieving the SDGs*. Report for the Institute for Global Environmental Strategies. Accessed online on 6/5/2021 at <https://www.jstor.org/stable/resrep24977.12>
17. Pipa, Anthony F. 2019. *Shaping the global agenda to maximize city leadership on the SDGs: The experiences of vanguard cities*. Report for the Brookings Institute, Global Economy and Development. Accessed online on 3/5/2021 at <https://www.brookings.edu/wp-content/uploads/2019/06/City-leadership-on-the-SDGs.pdf>
18. Rahman, Mustafizur; Khan, Towfiqul Islam & Sadique, Md. Zafar 2020. *SDG Implementation progress: What does*

- the Asian experience reveal?' *Southern Voice*, Case Study Series 8, Jan 2020. Accessed online on 29/4/2021 at <http://southernvoice.org/wp-content/uploads/2020/01/200122-Summary-ASIA-FINAL.pdf>
19. Regions4 2018. *Localizing the SDGs: Regional Governments Paving the Way*. Report by Regions4. Accessed online on 28/4/2021 at <https://www.regions4.org/wp-content/uploads/2019/06/Localizing-the-SDGs.pdf>
 20. Revi, Aromar 2017. 'Re-imagining the United Nations' Response to a Twenty-first-century Urban World.' *Urbanisation* 2(2) ix–xv. <https://doi.org/10.1177/2455747117740438>
 21. SDSN 2019. *Counting on The World to Act: A Roadmap for Governments to Achieve Modern Data Systems for Sustainable Development*. A Report by the Sustainable Development Solutions Network's Thematic Research Network on Data and Statistics. Accessed online on 2/5/2021 at <https://countingontheworld.sdsntrends.org/static/files/19COTW.pdf>
 22. Szetey, Katrina; Moallemi, Enayat A.; Ashton, Emma; Butcher, Martin; Sprunt, Beth & Bryan, Brett A. 2021. 'Co-creating local socioeconomic pathways for achieving the sustainable development goals.' *Sustainability Science* (online, 13 March 2021). <https://doi.org/10.1007/s11625-021-00921-2>
 23. Tan, D.T., Siri, J.G., Gong, Y. et al. 2019. 'Systems approaches for localising the SDGs: co-production of place-based case studies.' *Global Health* 15, 85 (2019), open acces. <https://doi.org/10.1186/s12992-019-0527-1>
 24. UCLG 2015. *The Sustainable Development Goals: What local governments need to know*. Report by United Cities and Local Governments. Accessed online on 28/4/2021 at https://www.uclg.org/sites/default/files/our_post-2015_journey.pdf?utm_source=Base+de+datos+%5BEN%5D&utm_campaign=dd53fb36ac-The+SDGs+what+local+governments+need+to+know&utm_medium=email&utm_term=0_f6d8315489-dd53fb36ac-73772521
 25. UCLG 2017. *National and Sub-National Governments on the Way Towards the Localisation of the SDGs*. Local and regional Governments; Report to the HLPF 2017. Accessed online on 2/5/2021 at https://www.uclg.org/sites/default/files/localgov_report_localizationsdg_hlpf.pdf
 26. UCLG 2020. *Towards the Localization of the SDGs: How to accelerate transformative actions in the aftermath of the COVID-19 outbreak*. Report by United Cities and Local Governments. Accessed online on 28/4/2021 at https://www.uclg.org/sites/default/files/report_localization_hlpf_2020.pdf
 27. Winans, K.; Dlott, F.E.; Harris, E. & Dlott, J. 2021. 'Sustainable value mapping and analysis methodology: Enabling stakeholder participation to develop localized indicators mapped to broader sustainable development goals.' *Journal of Cleaner Production* 291(2021):125797
 28. Zinkemagel, Roland; Evans, James & Neij, Lena 2018. 'Applying the SDGs to Cities: Business as Usual or a New Dawn?' *Sustainability* 2018 (10)3201:1-18. <http://dx.doi.org/10.3390/su10093201>