



# Eyes on the data—How the methodology of the 2030 Agenda contributes to its probable failure

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## ABSTRACT

More than halfway through the 15-year timeline, the world is still far from reaching the 17 Sustainable Development Goals (SDGs). This study locates one important reason for this in the specific design of the 2030 Agenda's methodology, the indicator-based goal-setting. In this, the Global Indicator Framework (GIF) should play a central role as a basis for political decisions and as an instrument for critical political communication. However, drawing on social science indicator research, this article shows that shortcomings in the GIF's genesis have led to the 2030 Agenda's effectiveness being severely limited. These limitations are: the one-sided focus on the provision of data, which results in the neglect of questions of implementation and tensions between and within political and statistical actors, which in turn leads to an undermining of the GIF itself. As a result, the GIF shows several crucial gaps in terms of content, is characterised by discrepancies between the political target and the measurement content of the indicators, and features indicators that change the goals through their measurement content. In response, the article notes a tendency towards non-use of the indicators, which undermines the whole 2030 Agenda. The results of this study can thus also be used as a basis for the future implementation of indicator-based policies.

## 1. Introduction

Since 2015, with the adoption of the 2030 Agenda by the United Nations, the most ambitious project of a global development policy has been underway. With an unprecedented scope and reach, the 17 Sustainable Development Goals (SDGs) aim to do nothing less than “Transform our world” [1]. But more than halfway through the 15-year timeline, the world is still well short of achieving the SDGs. Even though the COVID-19 pandemic has further contributed to slowing down or reversing positive developments as well as reinforcing negative developments [2–6] research from even before the pandemic has shown that countries are indeed “not on track” [7–9].

Here, I argue that an important reason for this lies in the specific methodological conception of the 2030 Agenda itself, which I describe as indicator-based goal-setting. In this methodology, the 248 indicators assigned to the goals and targets in the Global Indicator Framework (GIF) fulfil two essential functions: On the one hand, they provide information on the status of target achievement and thus offer guidance on political decisions. On the other hand, the indicators should lead to greater transparency and traceability in assessing whether the goals have been reached and thus substantially increase the accountability of

governments [1]. In the hands of civil society and the media, they also serve as an instrument of (critical) political communication in the sense of blaming and shaming [10,11].

This indicator-based goal-setting is the consequence of an increasing “expansion of quantification” [12] since the 1990s in the course of establishing New Public Management as a governance standard [13]. Like the complementary models of “governing by numbers” [14] and “informational-governance” [15], this methodology is based on the assumption that there is a direct link between the availability of data and actual progress, succinctly summed up by the United Nations Statistical Commission (STATCOM), which was entrusted with developing the indicators, under the motto “Better Data. Better Lives.” [16] The fact that STATCOM was commissioned to develop the indicators, reflects a general trend whereby the use of indicators in global governance increasingly leads to political discourses being replaced by technical questions of measuring practices, a development that Merry has described as a “slippage between the political and the technical” [12].

From social science research on indicators, it has long been known that several conditions must be met for indicators to become effective, that is, to be utilized [17]. These conditions are located in the genesis of the indicators and described as the necessity of a participatory

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development of the involved user groups. With the SDGs, these are statistical and political actors, as the latter have specified the value-based goals and targets, the quantitative i.e. objective content of which is determined by the former. The need for such participatory development is because indicators are “mutant creatures” originating from science and intended to influence politics [18]. Both groups pursue different interests: while statistical actors are primarily interested in the accuracy of the indicators by profession, for political actors, their usability is crucial. According to the assumptions derived from systems theory about the communication codes of the two primary user groups — the code of politics is power, that of science is truth — brokerage is thus an indispensable prerequisite for the effectiveness of indicators [19]. Indicators are attributed the ability to broker these diverse actors and perspectives within them. This brokerage is necessary because only if all user groups are convinced of the content of the indicators will they be used.

Bandola-Gill et al. have extensively dedicated research to this brokerage by the international statistical organisations (IOs) [20]. In their studies of the SDGs as “epistemic infrastructures,” they show that the UN Statistical Division (UNSD) and the UN Statistical Commission (STATCOM) play crucial roles: agreements on the content of the indicators, which include different interests, are due to the detailed work in the committees and their working groups. As long as this process runs smoothly, the epistemic infrastructure is invisible – it becomes visible when it breaks down. Such breakdowns are manifested as publicly waged conflicts over indicators and their data in and around the GIF.

The research question that this article seeks to answer is therefore: What are the consequences of the specific circumstances surrounding the shift towards indicator-based goal-setting in the SDGs for the functioning and effectiveness of the 2030 Agenda?

To answer this question, the study starts with the genesis of the indicators to systematise the consequences of such breakdowns, which are accordingly also consequences of the specific circumstances that accompanied the turn to indicator-based goal-setting in the SDGs. The paper distinguishes two key issues: on the one hand, a general focus on data collection, which pushes questions of implementation into the background. On the other hand, tendencies undermining the GIF, which manifest in terms of content and in terms of procedure.

The former is manifested in three ways: as gaps; as discrepancies between targets and their respective indicators; and as indicators manipulating the targets and goals through their assigned measurement content. In procedural terms, these undermining tendencies manifest as conflicts over procedural and sovereignty issues, as well as in the use of alternative indicators. The discussion of the key issues is preceded by a chapter that answers the question of why a methodology of indicator-based target setting was established as the centrepiece of the 2030 Agenda and by a theorisation of the conditions for success of indicator-based governance with a corresponding examination of the considerable differences from these conditions to the actual processes in the genesis of the SDGs.

## 2. Research design

In research on the SDG indicators, various strands can be distinguished. Several studies address the potentials and pitfalls of the indicators from a quantitative perspective [8,21-24], while others explicitly address possible interlinkages within the GIF [25,26] and with other sets of indicators [27,28]. There are studies on the indicators of individual SDGs [29-33] and the indicators of individual countries [34-36]. Nevertheless, there is still a great need for research in these areas [37].

At the interface of knowledge and politics, studies – grounded in Science and Technology Studies (STS) and the Sociology of Quantification [38-40] – address the actors involved in the production of the indicators [41-43], their path dependencies [32], and resulting structural questions about the relationship between the groups of actors [18,44].

With the recently published anthology “Governing the Sustainable Development Goals”, a group of researchers around Justyna Bandola-Gill has done pioneering work in the comprehensive analysis of various social science aspects of the SDGs’ quantification operation [20]. Their thesis of the SDGs as “epistemic infrastructures” follows the work of Merry [12] and proclaims them as carriers for the “new governing paradigm” of quantification. A consequence of this is that the tensions and complementarities between technocratic and normative imperatives, which characterise the relationship between statistical and political actors, come to the surface. While the authors highlight the progressive potential of these interactions, here the focus is on the consequences of the emerging conflicts. Thus, the study also ties into descriptions of possible risks of the SDGs’ comprehensive measurement operation [45], which here occurs as an analysis of the SDGs as an “operational framework” [46].

Methodologically, the study draws on social science research on indicators to examine the GIF using qualitative methods of empirical social research. The need to investigate aspects of the “megatrend” of quantification [13] beyond questions of statistical accuracy has long been recognised, but has gained urgency with the further spread of indicator-based governance operations. Merry [12] calls for the political and technical dimensions of the indicators to be scrutinised and their origins explored. Specifically, this manifests as questions about the involved actors and their specific interests [47]. Regarding the question of the influence of indicators, Bartl et al. talk about “synchronic approaches,” which focus on investigating the reasons for the use – or correspondingly: non-use – of specific indicators [48]. At the heart of these “synchronic approaches” is the assumption that a gap between the genesis and the use of indicators can be responsible for their lack of influence [13]. The analysis of the GIF’s genesis undertaken here represents such a synchronic approach.

In order to categorise the contentious aspects systematically, the first step was to examine material from STATCOM meetings using qualitative content analysis according to Mayring [49]. The aim of content analysis is to apply interpretative semantics that are inter-subjectively comprehensible because of their regularity. The theoretical background of the research question is of particular relevance here, as the results are interpreted from the respective theoretical background and the individual analysis steps are guided by theoretical considerations. With this study, the theoretical background is the field of tension between statistical and political actors, which is historically characterised by a conflict over the place (government) statistics should occupy in the definition of political objectives [50]. In addition, the related interference of political actors in data collection operations is a potential source of conflict, the consequences of which can be seen in the indicators themselves.

Accordingly, the qualitative content analysis serves to identify potential conflicts surrounding the GIF. To this end, the materials from the 52nd, 53rd and 54th sessions of STATCOM were analysed, as well as the submissions for the Comprehensive Review 2020. Also, the video material from the sessions was viewed. The aim of the analysis, which was conducted using statement coding, was to reveal which aspects of the work on the GIF are perceived as problematic by the stakeholders and which indicators are contentious. A categorisation of the material preceded the actual statement coding, in which, on the one hand, submissions relating to specific indicators were collected and, on the other hand, submissions addressing the procedure for collecting and validating the data for the indicators. This resulted in an overview of specific cases and recurring motifs in the debates surrounding the GIF. These were used to develop a coding scheme, which was validated at two interdisciplinary colloquia. This step results from the necessity of this type of interpretative methodology, the reproducibility of which is based on an interpersonal agreement on the coding.<sup>1</sup>

<sup>1</sup> The coding scheme is available on request from the author.

The aspects that emerged in this way provided the starting point for an in-depth analysis, whereby a triangulation of the results of the qualitative content analysis, the relevant literature with particular consideration of the remarks of practitioners involved in the GIF and a hermeneutic analysis of the indicators themselves was used.

The material for this hermeneutic analysis is therefore the *Global Indicator Framework after 2023 refinement* [51]. Shaped crucially by Descombes [52], Bell coined the term according to which the hermeneutic method is a “discourse interpretation” [53], which asks about the contexts that locate the object of investigation in its existence. These contexts do not present themselves ahistorically, but result from a “constant of history” that must be included [54]. Accordingly, a particular focus of the study is on the genesis of the indicators themselves. In the concrete procedure, the “hermeneutic circle” was applied, which, building on Heidegger’s idea of circular learning [55], postulates an approach that moves analytically from the whole to its part and back to the whole [56]. The significance of such an analysis of the individual indicators is based on two assumptions: Pintér et al. argue that the indicators are the places where the general intentions of sustainability are “demystified” and become concrete [57]. In addition, Bandola-Gill et al. assume that each indicator is “a microcosm of the knowledge and policy practices that fuel the epistemic infrastructure as a whole” and allows corresponding conclusions to be drawn [58].

The present study thus represents a contribution to the social science study of the SDG indicators. Its novelty lies in its systematic approach, which goes beyond the compilation of individual indicators and phenomena and focuses specifically on the GIF and the tensions in and around it as a comprehensive list of the critical consequences of the shift towards indicator-based goal-setting in the 2030 Agenda.

### 3. Why an indicator-based goal-setting is the centrepiece of the 2030 agenda

The shift towards indicator-based goal-setting represents the culmination of the establishment of its two components: first, the promotion of goal-setting as a governance methodology, a response to the deadlock of international policy initiatives; second, its methodological design through the use of indicators driven by increasing and far-reaching quantification trends.

Underlying these two developments is the elevation of sustainable development (SD) as the central development paradigm of global development policy. Since the emergence of ecological awareness from the mid-20th onwards, through the Brundtland Commission and the “Rio + X”-conferences, SD has become accepted as a legitimate and largely uncontroversial goal, even if the question of what exactly should be sustained is a social and thus normative-political one [59,60]. Sustainability is seen as a necessary basis for future development, because the consequences of non-sustainability harm developing countries above all [61]. Therefore, the shaping of sustainability is linked in a special way to the commitment of industrialised countries which have a historical responsibility for the state of the planet [62]. Thus, a demand for a comprehensive transformation of ways of living and doing business that addresses all states of the world is a consequence of the rise of former developing countries to global players in the world economy and the international security system [63].

#### 3.1. From rule-making to goal-setting

Power struggles over the design of global development initiatives in international relations are also part of the explanation for why global governance is organised through goal-setting in the SDGs. From a methodological perspective, goal-setting differs from traditional rule-based approaches. Such approaches, also referred to as “rule-making”, are characterised by implementing measures through the introduction of rules, compliance with which, monitoring and sanctioning determine their implementation [64]. This requires two prerequisites: first, an

agreement on the relevant measures and second, a monitoring and sanctioning body [65]. The successes of the Montreal Protocol, which contained regulations to protect the ozone layer, have not been repeated. Subsequent agreements were sometimes so watered down that they did not do justice to the problems, or the group of states involved in the agreements was so small that the actual changes were extremely minor [66]. In addition, even when binding targets have been agreed and ratified, the lack of real action in the face of rhetorical promises means that they have not been achieved. The attempt to achieve SD at the global level through rule-based approaches is therefore considered having largely failed [67]. A primary reason for turning to a goals-based approach is therefore to overcome this.

In addition, the governance-related characteristics of SD also necessitate a departure from traditional rules-based approaches. These characteristics can be presented in terms of content, process and context [68]. In terms of content, the issues of sustainability are mostly wicked problems, which point both to a discursive core in the problem definition and to difficulties in dealing with them [69]. In terms of the process, SD is characterised above all by including a wide variety of stakeholders. In terms of the context, there is also no institutional setting that would be able to meet the procedural requirements of SD. Questions of implementing sustainable development are thus ultimately questions of governance [70]. The form of governance must accordingly reflect the “functional prerequisites” arising from the characteristics of SD [71]. Goal-setting in the form it appears in the 2030 Agenda can be understood as a response to these functional prerequisites.

In terms of goal achievement, goal-setting also opens up scope for action for different actor groups. Regarding actors that are directly involved in the implementation, goal-setting aims at a certain type of behavioural governance, which gives states freedom regarding the instruments they use to achieve their goals. Ideally, this leads to greater willingness, and also offers motivational advantages which are based on international comparability [72]. Goal-setting as a governance strategy is oriented towards an inclusive processing of such goals, which are understood as “public goals”, in the sense that a wide variety of actors are involved in achieving the goals. This entanglement of private and public actors in achieving public goals – also referred to as “collaborative governance” [73] – is in practice shaped by neoliberal economic ideas and increasing material necessity as a result of the financial crisis [74]. Such a collaborative approach reflects the characteristics of SD’s “social complexity” described above. For the group of actors who can influence the success of implementation from the outside, transparency in tracking progress is crucial, which is opened up by goal-setting in general and quantification through indicators in particular. In the hands of civil society and the media, the reference to set goals should help to increase the accountability of governments through the traceability of progress towards goals [14,75]. A prerequisite for this is a close-meshed quantification of the goals.

#### 3.2. The emergence of indicators in global governance

In order to achieve this close-meshed quantification, the United Nations launched a so-called “Data Revolution” even before the adoption of the actual agenda. The phrase used therein, “Data is the lifeblood of decision-making and the raw material for accountability” [75], also points to the third aspect of the development of global governance trends: the increasing centrality of quantification and calculative practices that have accompanied neoliberal reforms since the 1980s [47]. As a means of socio-political functioning, mass quantification has its origins in the development of modern statistics [76]. However, since the 1990s and the increasing demand for evidence-based policies according to the standard of New Public Management, all socio-political fields have witnessed a massive “expansion of quantification” [12,47,77]. Not least also in development policy, where the turn to questions of quantifiable good governance models has been pushed by the large development organisations since the 1990s [78,79]. Referred to elsewhere as

“informational governance” [15] this type of measurement has been central to SD issues for decades. Here, too, a development similar to general questions of governance can be observed, according to which the measurement of SD-related data is no longer a matter for states alone, but corporate reporting, civil society organisations and individual citizen observers contribute to quantification [80,81]. The SDGs rely in particular on such contributions [82].

The emergence of indicators is to be understood accordingly as a methodological practice of the mega-trend of quantification [13]. Here, too, the major development organisations play a decisive role: from 1977 onwards, the World Bank developed sets of indicators as a basis for the allocation of resources in development policy [83]. A veritable boom of indicators followed this in the first decade of the 21st century [84]. Today, indicators have a firm place in development policy and society. What all these indicators have in common is that numerical representation remains crucial to their functionality: they exert their influence by comparing the actors with each other. Creating a role model from the higher rating and transmitting the policy that led to the measured performance should achieve a steering effect through the numerically represented differences [85]. The pronounced shift towards indicator-based goal-setting has led scholars to label it as a “new governing paradigm” in global public policy [20].

#### 4. How indicators can become impactful – and what prevents them from doing so

##### 4.1. Theorising the conditions for influential indicators

It is still not clear how indicators work and what influence they have on policy decisions [13,18,47,48]. This is a consequence of a “naïve realism” [38] that prevails through the political and scientific treatment of indicators and, more often than not, fails to ask questions about the conditions surrounding the quantification of indicators. In general, an impact on policy-making is expected if the indicator is only accurate enough. However, this idea, which is ideally rooted in the “expansion of quantification”, fundamentally contradicts findings from political science [86]. As these findings show, which pathways and which forms of knowledge become an effective basis for policy decisions depends on a variety of factors, making it extremely difficult to project these pathways [87,88]. In this vein, a gap between the genesis and the use of indicators is considered responsible for indicators failing to have their expected influence on policy. As far back as 2000, Judith Innes and David Booher had already identified the conditions required for the emergence of indicators which can prevent the opening of such a gap. Their focus is on the equal involvement of those who formally develop the indicators and their future users in the sense of a “participatory development”, thus leading to an “agreement on both methods and concepts” [17]. This is crucial, because only if all stakeholders trust the indicators’ content and validity, will they use and normalise them as a basis for political decisions. In practical terms, this means that the different user groups must be involved in the development of the indicators: statistical experts who provide methodology and scientific credibility; political actors who see their interests represented in the indicators and are therefore willing to use them; and the public in the sense of civil society and media, who play a significant role in the functionality’s unfolding of the indicators. Accordingly, the authors assume that a development period of five to ten years to form influential indicators is necessary [ibid.].

##### 4.2. The nature of indicators

The necessity of such an inclusive development, which aims at establishing agreement on the content of the indicators themselves, is directly related to the nature of indicators. Indicators are the numerical representation of complex facts, make them manageable and thus give them a communicative capacity [89]. In their appearance as numerical representations of this complexity, an “aura of objective truth” that

disguises the “political and theoretical origins” that underlie them surrounds them [12]. This contributes to a general tendency to treat indicators as apolitical instruments [46]. These considerations are particularly relevant for the indicators of the GIF, as they are “social indicators”, defined as indicators “used to monitor the social change, helping identify changes and to guide intervention to alter the course of social change.” [90] Scrutiny is therefore also required in a special way regarding the measurement content itself, as this is the guiding principle for the changes that should take place. Analytically, the focus must therefore be on the statistical and political actors involved in the development of the indicators and their respective interests [57].

##### 4.3. Trade-offs between data and policy

Even though the foundation of the expansive use of modern statistics lies in the relationship between governance and knowledge (“Governmentality” [91]), political and statistical actors have historically engaged in a conflict over the role that general social facts or (government) statistics should have within the framework of political objectives [14,50]. Questions of internal organisation, the “centres of calculation” as highlighted by the actor-network theory [40] play a special role. The interests of these actors, referred to as the “statistical chain” [92] or the “new regime of expertise” [93], can be classified in the tradition of rationalist-technocratic viewpoints. Political actors, on the other hand, are traditionally interested above all in the interest-specific, communicative possibilities of using the indicators [64]. The wording used by the actors themselves also demonstrates this, as they use the terms “science” and “policy” to differentiate and demarcate their respective activities [94]. In the genesis of the SDG indicators, these different perceptions are reflected by the political demand that there should be one indicator per target, which would be conducive to their discursive use, while statistical experts pointed out that the large number of targets would require at least 500 indicators for adequate measurement [95]. Hence, the interpretation of the indicators of the Global Indicator Framework as a trade-off between data and policy is necessary, as they are the outcome of a negotiation of these different interests in the indicators [96]. Such a negotiation does not necessarily have to be conflictual, but can, often at the same time, result in synergy effects from which both sides benefit [41]. However, if these negotiations encounter frictions, their impact can be observed in the indicators themselves, as explained in the following sections.

#### 5. The genesis of the GIF – and its flaws

The Global Indicator Framework (GIF) is described as the place where the general intentions of the SDGs are demystified and thus become concretely manageable [57,97]. Yet, the GIF remains a work in progress. According to the latest update, only 157 indicators are classified as Tier 1, while the rest of the indicators remain Tier 2 in terms of their development and usability.<sup>2</sup> This is a consequence of the lack of data [98], statistical capacity and methodological refinement, but also a consequence of the conditions of the development of the GIF itself. This becomes clear when applying the development conditions for influential indicators outlined above to the GIF.

Regarding the development of the SDGs, it is said that the process of negotiation is unprecedented within international politics in its

<sup>2</sup> Tier 1: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50 per cent of countries and of the population in every region where the indicator is relevant. It is important to note that the categorisation of the indicators in the highest tier does not mean that the data is complete. Tier 2: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.

inclusivity [99,100, critical: 101]. However, the development of the indicators themselves did not take place in the OWG but was delegated on to the United Nations Statistical Commission (STATCOM) – a technical body. When the question arose during negotiations within the OWG about whether the selection of indicators would also need greater intergovernmental involvement, i.e. political participation, it was too late: the potentially large number of indicators and the technical details involved already ruled out detailed negotiation at that point [57].

In the development of the 2030 Agenda, which is mostly characterised as a success story [99], the failure to consider the potential impact of handing over this responsibility to STATCOM is a surprising oversight. This is even more astonishing as there were always actors who expressed concerns, pointing out that “inadequate indicators will undermine implementation of the programmes needed to achieve the SDGs.” [102] Initially, there was also criticism from the OWG itself, since with a transfer of responsibility for creating the indicators, the decision-making power over their content thus passed from the General Assembly, in which each state has one vote, to the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) created by STATCOM, which consists of only statistical experts from 28 member countries. Even if these 28 experts are selected considering the UN’s regional representation principle, there are still clear knowledge hierarchies based on the enormously unequal statistical capacities of the national institutes [103]. Thus, it was feared that attempts could be made to change the content of the Goals and Targets through the GIF [99]. In response, Stefan Schweinfest, Director of the United Nations Statistics Division (UNSD), addressed the OWG and promised to ensure the sanctity of the goals and targets. At the post-2015 intergovernmental negotiations (IGN), the final step in the adoption of the 2030 Agenda, it was also decided that all indicators:

...must directly respond to the goals and targets agreed in the Open Working Group on SDGs and their level of ambition; must not undermine or re-interpret the targets; must cover all targets, including targets on means of implementation; must give equal weight to all targets and maintain the balance achieved; and should not introduce any new or contentious issues.” [102]

In light of the theoretical development conditions for influential indicators outlined in the previous chapter, several shortcomings stand out. Equal involvement of the statistical and political actors was not possible due to the transfer of responsibility for the development of the indicators to STATCOM, respectively, the IAEG-SDGs. This is as far as it gets with regards to a “participatory development”, nor can we speak of an “agreement on both methods and concepts” of the indicators. This also affects civil society organisations, the public, and the scientific community. Although it is possible to participate as an observer in the meetings of the Statistical Commission, at which the indicators are decided, the meetings of the IAEG-SDGs in which the substantive work occurs are held in closed session [103]. Thus, the SDG indicators do not pass the temporal criterion, which assumes a development period of five to ten years for their effectiveness. Conversely, the IAEG-SDGs had less than half a year to develop the first proposal for a set of indicators and send it to the Statistical Commission for adoption.

## 6. Contentious issues around the GIF

The shortcomings resulting from the genesis of the GIF have led to the GIF being anything but uncontroversial. Even more: it has become the centre of debates, the place where political and statistical actors wrestle among and between each other. This is also illustrated in the fact that the IAEG-SDGs have not met in New York since their first meeting to prevent the clash with political actors physically. That first meeting, which was attended by statistical experts as well as country representatives and diplomats, ended in a “shouting match, chaotic at times” [42] and caused a lasting disconnection between politicians and statisticians.

To understand why the debates around indicators are contentious, the 2030 Agenda’s commitment to the use of indicators and the handing over of responsibility for their development to the Statistical Commission must be scrutinised. The latter has been described as a “major triumph” [95] for the custodians of data themselves, who thereby received an unprecedented enhancement of their role in development policy. This is inherent in the mega-trend of quantification and the use of indicators, as they give those with expertise in their methodology an authority that they would not otherwise have in the political sphere [76]. In addition, a specific interest in the accuracy of the instruments and a corresponding self-image characterises the statistical chain. Zachary Mwangi Chege, UN Statistical Commission’s chair, announced at the press conference of the 50th session of the Statistical Commission: “The professional ethics of this statistical community are enshrined in the ten fundamental principles of official statistics [...] and these principles ensure us independence [sic] from political interference.” [104] The following year, however, Stefan Schweinfest, the director of the Statistical Division, was quoted saying that the result of the Comprehensive Review – the open review of the GIF that takes place every five years – is a “package deal” [105]. This is not surprising when one considers that developing the indicators is ultimately accompanied by interpreting the goals and targets [95] a highly political act in itself, which is further complicated by the constraints cited above – for example, the prohibition of touching on “contentious issues” through the indicators.

Consequently, there are two far-reaching consequences: first, the commitment to the use of indicators has led to data collection being the focus of the part of the SDG process led by IAEG-SDGs and STATCOM. Second, the conflicts around the GIF undermine its content and use and thus the foundation of the methodology of indicator-based goal-setting. This section of the paper discusses these two key issues in more detail.<sup>3</sup>

### 6.1. Key issue I: focusing on data collection and neglecting implementation

The 2030 Agenda’s focus on data collection already found expression in the definition of measurement as a “key element” in the resolution of the Rio +20 Conference [106] upon the follow-up process was based. This is also reflected in the aforementioned launch of a “Data Revolution”, which was submitted to the UN General Assembly as a concept of the IAEG-SDGs. The document, entitled “A World that Counts”, reflects the belief in a direct link between collecting data and achieving progress. Building on the premise that the reason for inequalities lies in the lack of visibility of them, it therefore states “we believe that the data revolution can be a revolution for equality” [75]. This has two consequences: first, they concern financial implications and second, reporting on progress in implementing the 2030 Agenda.

In financial terms, this linkage between data and progress described above gives rise to demands to the international community, which, in view of the poor capacities of the statistical system, relate decisively to its financial resources. Estimates by the Global Partnership for Sustainable Development Data assume that about USD 650 million per year is needed to collect the data [107]. The demand for funding for data collection corresponds to the logic of the quantification mega-trend, which is associated in particular with a rationalist tradition of thought in which the degree of informedness is the decisive criterion for the appropriateness of a decision and thus for actual progress [108]. This logic is not only theoretically debatable [109] but also extremely doubtful in relation to examples from the practice of development policy: the Global Fund to Fight AIDS, Tuberculosis and Malaria has long contributed to the greatest successes of global health efforts, a consequence of its financial endowment, which also serves as a precedent for

<sup>3</sup> This assessments do not apply to those activities that are not linked to the GIF indicators specifically and are only connected to the SDGs in a more general way.

the enormously underfunded Goal 4 – Education [110]. Despite this, it is the GIF, and the linked Global Database that has risen to the centre of international funding efforts for the implementation of the 2030 Agenda [111].

This narrowing of attention to data issues also applies to the reporting of progress on the 2030 Agenda, both in the reports on the status of the 2030 Agenda as a whole, and in the goal- and country-specific reports. The nodal organisation for the latter is the High-level Political Forum on Sustainable Development (HLPF). Under the auspices of the Economic and Social Council (ECOSOC), it is the highest body of the United Nations to be explicitly tasked with sustainable developmental issues. As such, it plays a crucial role within the 2030 Agenda. Within the HLPF, an annual meeting of representatives of the member states occurs in which the status of progress of the SDGs is evaluated and discussed [112]. This is based on the Voluntary National Reviews (VNRs), reports prepared by national governments on progress being made to meet the SDGs. While these have led to a lively and insightful emergence of so-called shadow reports by national NGOs, which critically complement the often sugar-coated official reports [113], they have above all also shifted the focus here to pure measurement. Marie Laberge notes accordingly a “tendency for countries to act as though VNRs were the end of the game” [114]. This trend is also reflected in the reports on individual goals prepared within the framework of the HLPF meetings. For example, in the 2018 Synthesis Report on Water and Sanitation (SDG 6), the focus of the report is directed towards the lack of data and less so on ways to implement progressive policies in this field [115]. Here, too, the focus on collecting data is evident, as with the reports on the status of the 2030 Agenda itself. In recent reports, the consequences of the measurement orientation are exemplified. More space is devoted to the lack of data and the need for additional financing to collect it than to the enormous shortcomings that stand in the way of the goal of allocating 0.7 percent of gross national income to official development assistance (ODA) [6,116,117]. The international community instead replaces its lack of ability or willingness to critically address this with calls for alternative, namely private, sources of funding [118,119]. That this kind of funding perpetuates colonial dependencies is a side effect that has been widely neglected [120].

## 6.2. Key issue II: undermining functionality by undermining the GIF

To fulfil their dichotomous functioning, as the basis of political goal-setting on the one hand and the basis of greater transparency on the other, the indicators are required to represent the goals of the 2030 Agenda. The claim of “transforming our world” with the inclusion of marginalised and previously disregarded groups – articulated in the motto “leave no one behind” – forms a self-defined benchmark, further defined through goals and targets. Only if there is congruence between these goals and the measurement content of the indicators does the invocation of the latter also lead to concrete change [121]. As described, however, the shortcomings in the genesis have led to the GIF becoming the place of disputes about the content of the SDGs. The destructive consequences of this can be seen in terms of content and in terms of process. In terms of content, the substance of the GIF is and continues to be increasingly undermined. In terms of process, there is an increasing tendency not to use the indicators at all. Both developments together contribute to an undermining of the entire 2030 Agenda.

### 6.2.1. In terms of content: hollowing out the content of the GIF

The shortcomings in the genesis and the ongoing conflicts around the GIF have led to an undermining of its content in three dimensions. First, the GIF has a number of gaps that undermine the ambition of the 2030 Agenda. Second, there are several discrepancies between the measurement methodology of the indicators and the objectives of the corresponding targets, which means that the former is unable to accurately assess the achievements of the latter. Third, the GIF contains indicators

which alter the corresponding targets through their measurement process. However, since the targets are sacrosanct, factually untrue correlations between the measurement content of the indicator and the qualitative statement of the target arise. The examples listed here are merely a selection intended to illustrate the different forms and do not aim to be exhaustive. They do, however, include all relevant manifestations of such undermining and are therefore of a systematic nature.

#### I. First dimension: gaps in the GIF

The first dimension refers to two different gaps in the GIF. On the one hand, there are gaps in the GIF due to the sheer scope of the indicators combined with a lack of statistical capacity. As of now, there are still 66 unique indicators for which no regular data is produced by countries (Tier 2 indicators). However, there are major differences between the Goals. While traditional metrics — such as poverty and health data — are available in large quantities, the environment-related SDGs are particularly affected by gaps: of the 92 environment-related indicators, only 42 % have sufficient data to assess progress [122]. A similar situation applies to the “data-gender-gap”, which, according to UN Women, will take 22 years to fill [123].

This is contrasted by numerous attempts to obtain data from a wide variety of sources. The most promising methods are those that make use of big data, which primarily refers to data from digital usage patterns [109]. Because of its two major advantages over conventional data sources — their high spatial resolution and their frequency — big data is considered by many to be the solution to the contemporary mixture of increasing demands for data, declining budgets, and rising data collection costs. However, on the one hand, the problem with the use of big data is that the data is usually collected by private actors such as social media giants and is therefore inaccessible [124]. On the other hand, such data is not reliable, and its use requires the development of best-practice standards regarding methodological issues. In addition, there are computing costs for analyzing the huge amounts of data, and there is an enormous need for trained personnel in all parts of the world [7]. Great hopes are also put on the inclusion of citizen science. But here, too, there is a lack of training and the necessary mechanisms to integrate this type of data into the GIF database [122]. Statements to STATCOM also point out the danger that such data can be easily manipulated [125].

Besides that, there are gaps that create a discrepancy between the political claim of the 2030 Agenda and the existence of corresponding indicators. The political claim is expressed in the two central slogans: “Transforming our world” and “Leave no one behind”. The content of “Transforming our world” is reflected in the totality of the goals and their specific characteristics. Taken together, they include not only goals of achieving a certain standard of living (Goals 1–9), but also aim at far-reaching shifts of power within and between states (especially Goals 10 and 16). The latter is the manifestation of the “Transforming our world” claim, as the universal and power-conscious character of the SDGs represents a decisive change from their predecessors, the Millennium Development Goals (MDGs) [126]. In terms of the GIF, applying this means the need for indicators that capture these inequalities accordingly.

The content of “Leave no one behind” also refers to insights from the shortcomings of the MDGs. Accusations of “cherry-picking” are commonly made against the MDG process, as it prioritized development efforts towards the groups that could be assisted more easily [127]. The SDGs, in contrast, are intended to ensure that all segments of society benefit from progress—and that the most excluded are given the most attention. Derived from the concept of “progressive universalism” [128], explicit targeting of those who suffer from discrimination in multiple ways, the so-called “worst-off” is therefore crucial. Implementing “Leave no one behind” in the GIF accordingly means an extensive disaggregation of data, which is broken down “by income, sex, age, race, ethnicity, migration status, disability and geographic location and other

characteristics relevant in national contexts” [1].

However, progress in providing such disaggregated data remains very limited. Anne Warchold et al. [129] note that the usable spectrum of the SDG database only includes gender- and age-disaggregated and geographically disaggregated indicators. Other categories cannot be used in a comparable way because of a lack of data. On the one hand, this is simply representative of the difficulties involved in collating such disaggregated data at all, as questions about certain categories can be politically undesirable [130,131]; on the other hand, the responsibility for the neglect of these categories lies with the indicators of the GIF itself. For example, the explicit reference to the category of “race”, which is significant for identifying multiple forms of discrimination, is not explicitly found in any of the indicators. This omission is particularly problematic in relation to indicator 10.2.1, which only addresses “sex, age and persons with disabilities” [51: 11], while the corresponding target 10.2 reads: “By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status” [51: 11]. The reference to these multiple forms of discrimination is found once again in target 17.18, but none of the three assigned indicators and the metadata on which they are based include them [51: 23].

Alex Cobham uses the term “uncounted” to describe reasons for this type of gaps, which is “used to describe a politically motivated failure to count.” [132,133] The term refers to the lack of data collection at both the lower and upper ends of distributions based on a lack or excess of power, respectively. Lower end, for example, refers to the “worst-off” groups described above, whose lack of power is reflected in their uncountedness in data collections. Particularly affected are those who live in informal settlements, whose households are fragile and/or disjointed, and those who live in insecure areas [134] and also those living with disabilities [135]. As described, these aspects are not adequately addressed in the GIF. The same applies to the “uncounted at the top” whose invisibility is based on an “excess of power”. In the GIF, this is reflected above all in two crucial gaps: on the one hand, the SDG 10 indicators are unable to adequately show inequalities within states, and on the other hand, there is a lack of an indicator for the collection of illicit financial flows (IFF) in Target 16.4.

The measurement methodology of Goal 10 “Reduce inequality within and among countries” has led to the exclusion of extreme inequality within states not being considered in the SDGs. This is seen as a success for national political elites who have prevented the problem of increasing wealth concentration from being put on the SDG agenda [30]. In response to numerous submissions from NGOs and other concerned stakeholders, the GINI coefficient is now listed as part of indicator 10.4.2, but its lack of sensitivity to spikes at the upper and lower ends of wealth distributions makes it an inadequate measurement tool vis-à-vis SDG 10 and especially target 10.4<sup>4</sup> [133]. That the Palma Ratio, which is much better suited for measuring the indicators in Goal 10 and its targets and — unlike the Gini coefficient — is based on tax data, has not been accepted to date must be understood in the context of such political efforts: the Palma ratio was still listed in the final draft of the indicators in March 2015, but was removed in the course of the final negotiations [136].

Similar to Goal 10, Goal 16 is also of enormous relevance regarding equality efforts, but is just as severely limited by the phenomenon of the “uncounted at the top”. The gap here can be found in the indicator 16.4.1 “Total value of inward and outward illicit financial flows (in current United States dollars)” assigned to target 16.4 [51: 14]. Including an indicator related to illicit financial flows in the SDGs is to be seen as an expression of the political efforts expressed in “Transforming our world”, especially by countries of the Global South [137]. The lack of a measurement methodology in the indicator 16.4.1 is

<sup>4</sup> „Adopt policies, especially fiscal, wage and social policies, and progressively achieve greater equality.” [51: 12]

crucial because it prevents accurate gauging and assessment of the volume of profit shifting and the extent of undeclared offshore assets, data that are enormously relevant for this political goal [136]. The lack of appropriate indicators, too, can be explained by the tension between technical and political interests, since it was primarily the USA and European countries — supported by several lobby organisations — that successfully prevented the explicit focus on the misdemeanours of multinational corporations from finding its way into the GIF from the High Panel’s basic report [ibid.: 182]. A final categorically distinct gap in the GIF concerns international inequalities related to climate issues. With the indicator 13.2.2, a measuring instrument was added in 2020 that reports the “total greenhouse gas emissions per year” [51: 15], but in line with the principles underlying the SDGs, it is emphasized that statements on equity in this field would only be possible via a per capita indicator [138].

## II. Second dimension: discrepancies between targets and indicators

The second dimension captures discrepancies between the policy objective of the target and the measurement content of the corresponding indicators. These discrepancies are found, for example, in target 7.b: “By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing states and landlocked developing countries, in accordance with their respective programmes of support.” However, the associated indicator 7.b.1 only measures “Installed renewable energy-generating capacity in developing countries (in watts per capita).” ([51]: 9) The same applies, for instance, to the relationship between target 8.3 and indicator 8.3.1.<sup>5</sup> These cases are examples of how a target is overloaded with policy objectives and its measurement can only fail if the requirement to keep the number of indicators as low as possible is met.

Mustajoki et al. have highlighted this issue in connection with the semantic ambitions of the targets: that targets are partly formulated as progress and partly as achievement not only makes it difficult to translate their expectations into concrete action but also has a considerable impact on the validity of the measurement content of the indicators [139]. This is exemplified by the relationship between target 17.6<sup>6</sup> and the associated indicator 17.6.1. The target calls for “Enhance North-North, South-South and triangular regional and international cooperation ... [...] through a global technology facilitation mechanism” and thus represents a progress target in the aforementioned distinction, but the associated indicator only measures “Fixed broadband subscriptions per 100 inhabitants, by speed” ([51]: 22). Apart from the fact that the target here is also overloaded with political demands, the indicator is static. The justification for the choice of indicator in the metadata (“the internet ... [...] can help foster and enhance regional and international cooperation” [140]) reflects this discrepancy.

Slightly different regarding this dimension is the case of target 16.3 “Promote the rule of law at the national and international levels and ensure equal access to justice for all.” ([51]: 19) While this target is measured by three different indicators, none of them measures the

<sup>5</sup> 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.” Indicator 8.3.1: “Proportion of informal employment in total employment, by sector and sex.” [51: 9]

<sup>6</sup> “Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.” [51: 22]

access to any civil justice system necessary to achieve the target [141]. This phenomenon can also be spotted within the targets of Goal 5 (“Achieve gender equality and empower all women and girls”). For example, target 5.b demands “Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.” However, the associated indicator only measures the “Proportion of individuals who own a mobile telephone, by sex” ([51]: 7). Together with the lack of political will to provide gender-specific data at all [142,143] targets and indicators are not only incoherent but also severely limited in their effectiveness by political conflicts of interest. Stakeholders involved in the Comprehensive Review therefore demanded — albeit unsuccessfully — a change in Indicator 5.2.2 in order to generate meaningful trends at all [144].

### III. Third dimension: indicators manipulating goals and targets

The third dimension, referred to as “creative manipulation” [76] due to its method of altering a stated reality through the measurement content of indicators, goes beyond the pure discrepancy between the targets and the measurement content of the indicators. Indicators in these cases not only make inadequate statements about the achievement of goals and targets, but also change their content through the chosen measurement method.

This can be seen regarding target 8.9: “By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.” While indicator 8.9.2 “Proportion of jobs in sustainable tourism industries out of total tourism jobs” was originally inserted for measurement purposes, it was deleted without replacement because of insufficient data. However, indicator 8.9.1 “Tourism direct GDP as a proportion of total GDP and in growth rate” remains, the measurement content of which makes a decidedly different statement to what one would reasonably expect from the target given ([51]: 10). The far-reaching effects of such a decision can be seen in a written statement for the 53rd Session of the Statistical Commission, Grenada on behalf of the Caribbean Community and the Small Island Developing States (SIDS), where it is emphasized that it “cannot begin to emphasise how important this indicator is for our SIDS given the great contribution of tourism to our economies and to our sustainable development” [145].

The third dimension is manifested even more drastically in the example of indicator 17.17.1. Target 17.17 “Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships” was originally intended to be measured by the “Amount of United States dollars committed to (a) public-private partnerships and (b) civil society partnerships”. In the course of the 2020 Comprehensive Review, however, this was replaced by the wording: “Amount in United States dollars committed to public-private partnerships for infrastructure.” ([51]: 23) This not only results in a serious alteration in the target’s orientation, but also encourages accusations that the SDGs not only mask the implementation of neoliberal policies, but downright support them [146].

#### 6.2.2. In terms of process: procedural conflicts, sovereignty questions and alternative indicators

In addition to and as a result of the hollowing out of the content of the GIF, genesis and ongoing conflicts around the GIF have also led to an undermining in terms of process. This is manifested in two dimensions: On the one hand, ongoing conflicts around administrative processes of data transmission and aggregation are touching on questions of sovereignty over data and are becoming politicised. On the other hand, and consequently, the functionality of the GIF is undermined by the use of so-called alternative indicators by member states and its promotion by the Statistical Commission. This calls into question the meaning and purpose of the GIF in general, as global comparability is no longer given.

The principles of the follow-up and review process through which

the GIF is populated are displayed in General Assembly Resolution 70/1 [1]. For the two dimensions stated above, it is crucial to consider the following aspects from the resolution.

1. Voluntariness and country-led-ness in the provision of data, which are “primarily based on national official data sources” which are the “foundation for reviews at the regional and global levels” ([1]: 31).
2. The objective of data collection that avoids duplications and thus contributes to “minimising the reporting burden on national administrations” [ibid.].
3. Supplementation of the GIF indicators, which “will be complemented by indicators at the regional and national levels which will be developed by Member State”, but only in cases “where national and global baseline data does not yet exist.” [ibid.]

These points form the baseline for the following discussion.

#### I. First dimension: administrative conflicts and questions of sovereignty

Regarding the first dimension, the working methods and concrete procedures for querying the data and handling the datasets provided by the countries have led to conflicts at the administrative level from the very beginning. The reason for this is that global comparability requires harmonisation of data flows [147]. The contemporary diversity of data sources requires small-scale methodological adaptation, which is conducted for the GIF indicators by the international statistical organisations and is also justified by the validation of the data [148], but in cases of disagreement may cause discontent of the countries concerned. This can be seen, for example, regarding procedural problems in a written statement by Statistics Denmark on the occasion of the 52nd session of the Statistical Commission, in which it is pointed out that procedural-temporal expectations often do not match the processes in the national authorities. Criticism has been levelled at the “extent and timing of data requests” and at the fact that the country data requested exceeds the variables agreed by the IAEG-SDGs. This has also resulted in “coordination challenges” because national authorities must first coordinate the provision of data among themselves [149]. In some cases, this has led to the establishment of parallel structures, which is particularly problematic for countries with low statistical capacity [150].

More important than such routine coordination problems, however, are the difficulties named by Statistics Denmark as “challenges with validation”, which refer to the handling of aggregated data. These are calculated by UN agencies and reported back to the countries for validation, but because of a lack of insight into the compilation of the data, the countries are unable to trace the data, which can lead to a situation where “data is neither accurate nor validated by the countries.” [149] In this context, NSO representatives from developing countries accuse IOs of neo-colonial practices regarding the establishment of statistical systems beyond the countries’ statistical organisations [148].

The question of data validation highlights the political relevance of such processes. Since the indicators can have a significant public perception, the respective countries have an interest in ensuring that the data they submit is also used—they naturally have no influence on the aggregates calculated by the IOs [151]. Thus, the validation is also intended to prevent the so-called “SDG-washing” [152]. The political relevance of data validation becomes even more apparent when they also appear to conflict with notions of national sovereignty over data; the second part of this first dimension. This is exemplified in a written statement by China. Referring to the principles of follow-up and review mentioned above, it is criticised that indicator 5.a.2 is based on ratings by FAO experts and not on the datasets provided by the nations [153]. The continuing inadequacies in the population of indicators with data means that aggregation is becoming increasingly important—and so are the conflicts over it, as statements from states from the 53rd Session of the Statistical Commission show [154]. With the recent geopolitical



escalation, security considerations linked to the collection of data are also playing a more prominent role: In a statement on the same 53rd session, the USA emphasizes that “data is considered a strategic asset” and that the storage of huge amounts of data by UN institutions is accompanied by a “heightened concern about cybersecurity.” [155]

## II. Second dimension: the use of alternative indicators

The political pressure manifested in the objections of the member countries towards the Statistical Commission leads to far-reaching consequences for implementing the GIF, which the second dimension regarding procedural issues refers to. As a result of the insistence by some states on their primary role in the provision of and sovereignty over data, the Statistical Commission has made far-reaching concessions to them. On the one hand, this concerns the Statistical Commissions’ continued acknowledgement of the voluntary nature of data collection by the member countries. While the 2030 Agenda Resolution enshrines this principle, the promotion of it by the custodians of the GIF itself clearly benefits states that have a decided interest in avoiding the provision of sensitive data. Very often, the groups left out of data in the GIF are those groups that should be promoted under the “leave no one behind” principle [130,131]. On the other hand, the use of “alternative indicators” at the national level is increasingly sanctioned by the Statistical Commission [156].

As explained above, the use of alternative indicators was not foreseen in the 2030 Agenda, only complementary indicators were mentioned. This is also a consequence of the use of indicators in the MDGs: the “Lessons Learned” report emphasizes that “discrepancies between national and international data” must be avoided in order to maintain global comparability [157]. With the de facto introduction of the possibility for states to use alternative indicators, the Statistical Commission undermines itself and the GIF in a way whose consequences are not yet foreseeable, but which contradict the principles of the SDG process to such an extent that participating statistical experts and observers are beginning to doubt the meaningfulness of working any further on the GIF [156,158,159]. These doubts are also articulated by some states themselves, especially by those most dependent on the success of the SDG process. For example, Indonesia and Burkina Faso on behalf of the African Group as well as Samoa on behalf of the Pacific Island Countries and Territories of the Pacific Community submitted statements to the 53rd and 54th session of the Statistical Commission expressing concern that the focus of the entire SDG process continues to be on issues of measurement methodology and that work on the actual problems is being structurally neglected [160-162].

## 7. Limitations

The Key Issues described here are of a general nature, as they potentially affect all actors who make use of the global indicators in the GIF. However, there are limitations between and within the key issues: The focus on data collection (Key Issue I) affects the official part of the entire SDG process and can therefore be seen as global in its impact. Undermining the entire 2030 Agenda by undermining the GIF (Key Issue II) is, though, subject to several important limitations. Regarding the content of the GIF, it is primarily those areas for which the data situation is poor and those areas that are weakened by conflicts between political and statistical actors, such as SDG 10, that lose significance. In areas where the data basis is solid, such as SDG 1, there are few to no restrictions in terms of content regarding the usability of the indicators. Large differences can also be observed on a geographical scale. For the OECD, for example, 57 % of the indicators have at least some data, but the figure for Africa is only 37.8 % [163]. In terms of process, the undermining of the GIF also has different ranges: procedural conflicts and sovereignty questions are widespread across countries; however, the use of alternative indicators, which is tantamount to a de facto exit from the GIF, occurs only sporadically. This circumstance also represents a

limitation of the statements made here. Nevertheless, it should be pointed out that even partial undermining has consequences for the entire Agenda. As described, the effectiveness of indicator-based goal-setting depends on the trust of the stakeholders in the credibility of the indicators themselves. If this is not fully given, the whole construct loses its validity.

Nonetheless, an important limitation is that use for purposes other than those specified in the methodology is conceivable and is also practised [152,164,165]. It is also possible that indicators that do not originate from the GIF, but are based on it, will gain influence. For example, numerous countries collect national indicator sets based on the GIF, and no conclusions can be drawn here about their impact. It is conceivable that these indicator sets can have a greater impact on achieving the SDGs than the GIF itself. However, it is important to acknowledge that such an outcome is far from guaranteed.

## 8. Conclusion

This article has shown how the specific circumstances that mark the methodology of indicator-based goal-setting as SDGs have the effect of severely limiting its effectiveness. This methodology is based on the fundamental link between the availability of data and actual progress, with indicators as the numerical representation of this data having a dual functionality: they should lead to greater transparency and traceability in assessing whether the goals have been reached and thus substantially increase the accountability of governments and serving as an instrument of critical political communication in the hands of civil society and the media. However, shortcomings in the GIF’s genesis and in the understanding of how indicators work have led to two far-reaching consequences: first, the commitment to the use of indicators has led to data collection being the primary focus of the SDG process. Besides a structural exclusion of implementation issues, this has also led to the funding of data collection being the primary goal of SDG funding. Second, the conflicts around the GIF undermine its content and thus the foundation of the entire methodology.

This undermining becomes visible in several dimensions: in terms of content, it appears as crucial gaps in the GIF, as discrepancies between targets and indicators and as “creative manipulation” [76] of the stated reality by the indicators. In procedural terms, it is manifested in administrative conflicts and sovereignty issues as well as in the use of alternative indicators encouraged by the Statistical Commission. The consequences of this are particularly evident in the increasingly urgent appeals from those states that depend most on the success of the 2030 Agenda and are accordingly most concerned about the lack of progress in achieving the goals.

What does this mean for the remaining period of the 2030 Agenda? While some authors call for radical alternatives to the SDG process [166] this article remains hopeful—provided the reorientation demanded by observers and stakeholders is implemented. This does not have to mean a departure from the methodology, but at least a shift in its priorities. Instead of a one-sided focus on collecting data, it is important to provide more space in the various processes for concrete propositions for change and ways to achieve the goals.

However, such proposals cannot be anchored in the indicator’s framework, i.e., the GIF. The divide between political and statistical actors, which has been created by the one-sided development of the GIF by the statistical chain, can no longer be overcome. The Statistical Commission should prioritize remembering its task as the guardian of the data and preparing these data according to the principle of disaggregation. This is more important than harmonising these interests, as it has been shown that this is usually at the expense of the informative value of the indicators. Only then can the indicators be used productively in the future and not remain as silent witnesses of an ambitious but ultimately failed development project.

## CRediT authorship contribution statement

**Wiegand Koerber:** Writing – review & editing, Writing – original draft.

## Declaration of competing interest

The author declares that he has no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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