Expert workshop

July 6, 2021

Report

Revisiting Sustainability: Challenges for science and policy

bonnalliance

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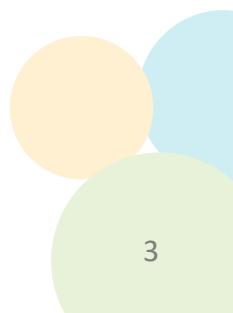with

**UNITED NATIONS
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UNU-EHS

Institute for Environment
and Human Security

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Contents

Preliminary remarks

Sustainability and sustainable development will accompany us in the years to come, challenging us intellectually in dealing with their scientific basis as well as related implementation. Particularly, this involves addressing the criticisms of the Sustainable Development Goals (SDGs) of the UN Agenda 2030 adopted in 2015, ranging from its inspiration by "Western" paradigms, economic (GDP based) growth and its silence on the trade-offs between goals. Whereas science's voice has often been claimed to be weak in the Agenda 2030 negotiation process, a clear scientific basis should have a major role in shaping the future, to ensure that it guides strategies and implementation measures in a complex and value-laden societal context. With the program line "Sustainability – Looking beyond 2030", we would like to create a platform for initiating, contributing to and shaping this discourse. The workshop "Revisiting Sustainability: Challenges for Science and Policy" on July 6, 2021, was a first step into this direction. The program line stands in cooperation with the emerging initiative "Wellbeing, Sustainability and Equity (WiSE) Transformation" at UNU-EHS and invites thematic engagement in future-oriented sustainability. In recognition that the current complex global challenges stem from a societal narrative influenced by and focused on economic growth as the most important goal of society, the WiSE Transformation Initiative aims to contribute to the acceleration of a global transformation towards wellbeing, sustainability and equity through "action research" (that seeks transformation by taking action and doing research in parallel). The WiSE Transformation Initiative's objective is to 1) deliver paths to **W**ellbe**i**ng for the current generations while considering 2) safeguarding **S**ustainability so the lives of future generations are not compromised and 3) ensuring **E**quity *within* and *between* countries.

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<p align="center">Our core lesson from the discussions with you is that there is extensive demand for discussion and mutual information, and we will do our best to keep the ball rolling!</p>

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We would like to thank all session facilitators and rapporteurs for their valuable support and contributions. Their engagement was directional for the discussions we had, and for the report that we have compiled for you.

We have gone through the session documentations and have written down the results of the discussions arranged according to topics, as a conservation and a starting point for future dialogues. This is a short version of the workshop documentation.

Introduction

Approach

We reached out to key members of the Bonn-based community engaged in the field of sustainable development. In the semi-structured open space discussions, we revisited some of the theoretical and practical frameworks in sustainability science and policy. The goal was to define critical elements of these frameworks, their "futurability" and how our joint processes can shape a new vision.

Four lenses were used through which we addressed sustainability science and policy with you:
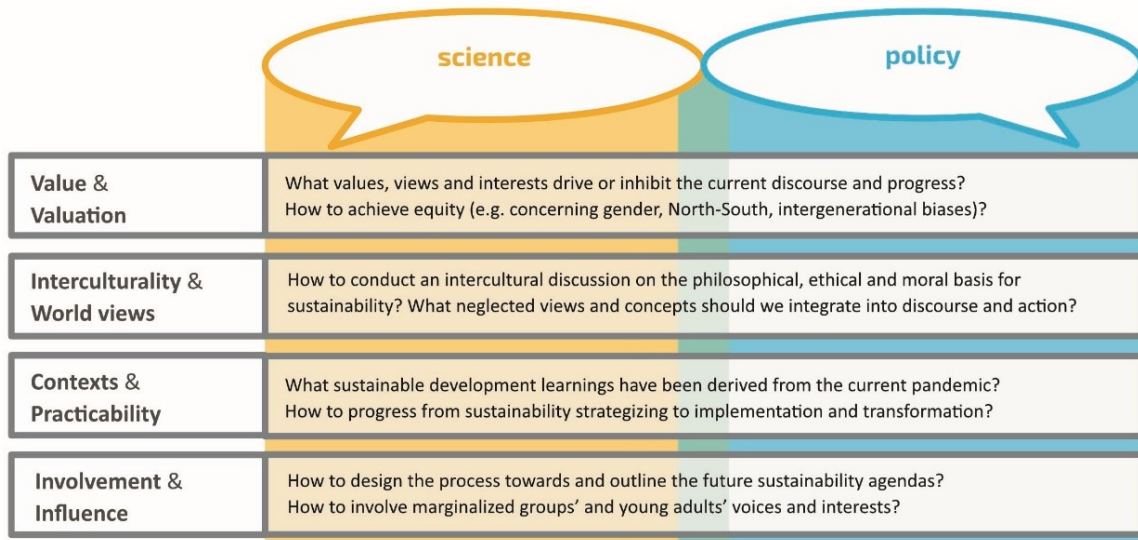
The lenses were the basis for the four parallel breakout sessions during the workshop. Every participant prepared a 5-minute statement/ response/ commentary for their respective session. These statements served as a foundational structure for the open space discussions, to jointly elicit the status quo of sustainability policy and science in the Bonn discourse. You will find the four lenses in the chapter headings, and the core discussion topics in the subheadings.

Background considerations for the discussions

Policy

Sustainable development has become entrenched in national and international policymaking as a long-term prospect for people's sustained habitation that stays within the natural boundaries of our planet. Concerns of sustainability, particularly with respect to the environment, are not new. It is the foundation of many non-western cultures (usually referred to as indigenous) around the world, grounded in ancient knowledge and transmitted through cultural values to subsequent generations. Land is considered sacred for all living beings, hence forms the basis of their ecological, economic, and cultural values, including spiritual beliefs and the need to protect it (Throsby & Petetskaya: 2016). The human-nature-relation as reflected in and encapsulated in indigenous worldviews helps us to embody what we have only conceptually coined as sustainability. An early German example is H.-C.v. Carlowitz[1] who recommended that no more wood should be taken from a forest than could grow back in an adequate time, thus proposing a concept for sustainable forest management in 1713 (Carlowitz 1713: 105-106). The notion of sustainability experienced a significant

[1] Carlowitz is considered the founder of the concept of sustainability in forestry.

conceptual expansion and discursive upswing in the political context of sustainable development in the 1980s. It was expanded to a more comprehensive intergenerational concept for wellbeing with the Brundtland report 1986, shifting the focus of policy action on the needs of people, especially the poor and marginalized.[2] So far, the most comprehensive formulation it has received was in 2015 with the UN Agenda 2030[3] with its 17 Sustainable Development Goals (SDGs), putting global equity ("Leaving no one behind") at the center.

The achievement of the UN Agenda 2030 was particularly impressive given its short time left for the negotiations, initiated at the Rio+20 conference in 2012 and culminating in the 2015 with the launch of the SDGs in 2015. However, while being widely respected as great achievement of the international community of states that has done much to include different voices, the Agenda has faced criticism from different sides, such as its being dominated by "Northern" and "Western" paradigms. This dominance results in concerns about insufficient inclusion of other worldviews and approaches, voices of indigenous populations (Madden & Coleman: 2018), and the inability to incorporate other internationally relevant frameworks such as the Agenda 2063 of the African Union. For a beyond 2030 perspective, we need to integrate anticipatory and adaptive mechanisms to address and take up newly emerging and rapidly changing developments such as technological advancement that influence sustainable development. And how can we go a step further and better react upon incisive events such as the COVID-19 pandemic, which unfolded even more rapidly?

Science

Science's voice has often been claimed to have been weak in the negotiation process towards the 17 SDGs of the UN Agenda 2030. Notwithstanding, sustainability science has now proliferated universities and think tanks worldwide. Scientific contributions to sustainability have started fragmented in separate (disciplinary) realms or with a view to measurement tools. Economists have created monetary values of "natural capital", such as the influential Dasgupta report on the economics of biodiversity. Natural Scientists have created the concept of "planetary boundaries". The ecological footprint has been used to illustrate humanity's unsustainable lifestyles. Ecologists have shown the destruction in the Living Planet index. These are disciplinary efforts for communicating the need of sustainability in modern society.

However, sustainability science is concerned with sustainable development at the interfaces of the systems of economy, nature and society. It is structured less by disciplines than by concrete problem settings (Spangenberg 2011: 275-276). It operates in a field of tension of social discourses and value systems; it refers to diverse actors and their interests. It is application-oriented and needs a practical understanding in its approaches, which is usually fed from several disciplines or cannot be set up from one discipline alone. In order to be actionable, it requires cooperation with practice – with various actors in the private sector, politics and civil society (Spangenberg 2011: 276, Nölting et al. 2004: 255, 258). Thus, sustainability science requires an understanding beyond historically developed disciplinary boundaries, of epistemologies and ontologies, and an operation within a scientific multilingualism (Spangenberg 2011: 279). Thus touching the very grounds of different worldviews, academia needs to integrate diverse cultural, religious and philosophical perspectives into the discourse, and help to negotiate between concepts and views, navigating in the same value-laden environment as policy and decision makers.

These have been our foundations for planning the workshop and our motivation for initiating the dialogue.

[2] Report of the World Commission on Environment and Development: Our Common Future (1987). Online: https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf
[3] Transforming our world: the 2030 Agenda for Sustainable Development (2015). Online: https://sdgs.un.org/2030agenda

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Session 1: Value and Valuation

As sustainability science is concerned with sustainable development at the interfaces of the systems of economy, nature and society, it inevitably operates in a field of tension between differing social discourses, value systems of diverse actors, and individual agendas and interests. This tension affects the interplay of science and policy; it defines how reality is seen and evaluated, how ideas of the future are formed, and how norms move society. Values are as much a challenge for science as science is for values. The concept of "value" displays itself in a complex manner, and the underlying process of valuation (how values emerge) has been analysed in economic, social and philosophical science. Human values express themselves in a range of subjective preferences such as desires, wants, and needs, and they are also inherent in areas we consider as more objective, such as the idea of progress, rationality, and truth. This makes it difficult to clearly distinguish between facts and values, as facts also depend on values. What we consider as factual reality is actually very much dependent on our underlying value systems and our worldviews, how we see the world and how we define ourselves toward it. Yet in science, we are often differentiating between what is "objective and factual" and what is a rather "subjective and value driven", which in itself can be a value driven decision, based on science's underlying core values of objectivity and rationality. Therefore, we need to be keen and realize what values influence our scientific work in what way, be it in the process of defining and conducting research, or concerning the use of its results. This is a challenge that requires us to be reflective upon our own actions.

Statements and discussion:

Values in sustainability science

There is a general consensus that values are important for social coexistence and often grounded on something that exceeds our own temporal or individual contexts, as we can see in human rights which are based on very foundational human values. When discussing core values in the context of sustainability, equity is brought up quite frequently, but in concrete practice, people operate in a hierarchy of values. This means that equity is mentioned as an ideal, but it is not yet inherent in sustainability practice. There is only little literature or research on the ways how sustainability scientists' individual values impact their generation of data in research and how their values are driven by their own subtle belief systems (which might be different from the belief system underlying their research context). However, it has been discussed in this session that ultimately, scientists' value systems shape their research and influence how they put information together and contextualize it.

Subsequently, these values influence the published papers that are also available for the general public. It has been brought up that still too often, social scientists are not aware of how their worldviews, preferences, and assumptions that impact the kinds of questions they ask, and how those questions are addressed in their research. Facing global challenges such as climate change, it is obvious that the inclusion of many diverse actors in related research is needed, and given the above-mentioned starting points in science, the demand came up to fundamentally question scientific daily work, especially the way of conducting research and involving people. The key message here is: **All of our work is based on values driven by our belief systems, but rarely people want to touch upon this fact**. In 1972, the Club of Rome started the discussion on value systems in relation to societies' use of the finite natural resource for industries and production in their study "Limits to Growth". Since then, various research has been published on the limits to planetary

boundaries, some with similar, and some with divergent modelling outcomes as compared to the 1972 study. This is interesting, as is illustrates quite clearly: While modelling assessments are often considered as facts-based "objective" truth, they are often influenced by modelers' value systems which are not explicitly part of forming the modelling outcomes. This results in policy makers interpreting the findings in various ways. For example, bio-economy might be considered as "good" from the perspective of somebody who advocates climate mitigation, but bio-economy has an impact on the way land is used, and from the perspective of somebody who is concerned with food production and food security, it might not look the same.

Furthermore, some (people's) values are valued lower than others, meaning that there is a hierarchy in between value systems. For example, indigenous people's perspective of nature and natural resources that is often described as "holistic" is on the one hand considered to be of critical value for global discourse on sustainability, but on the other hand, their voices and values are rarely given prominence as we see in current conceptual and theoretical valuation. Recently, COVID-19 has demonstrated though deprivation in lock-downs how much we need and desire culture and nature in our lives. Value systems that put these two at the very forefront could not only help us to drive a less materialistic (and more resource-saving) social development, but also increase our happiness and well-being that unfold in cultural innovation and interaction with nature. **All of our work is based on values driven by our belief systems, but rarely people want to touch upon this fact. This also applies to science that rests on historically developed disciplines arising from certain social contexts and their underlying values and value systems. Sustainability is challenging for science as it challenges science's (value-based) epistemological concern.**

Participation and inclusion in science

For starters, it has been pointed out that social (sustainability) science has numerous blind spots and black holes. It is being recognized that more input is needed to make better decisions on sustainability issues that are of global relevance. Along the same line, it has been suggested that the so-far Western driven science finds ways to incorporate indigenous voices and worldviews beyond the current tendency to hear but appropriate them according to the respective disciplinary frameworks. For example, the concept of ecosystem services (that measures nature's services for society, e.g., the pollination of crops provided by bees and other organisms contributes to food production) is based on the capitalist system of industrialized societies and it often clashes with indigenous worldviews that have a different stance towards human-nature-relations. If the participation and inclusion of indigenous voices in science is meant seriously, there needs to be openness toward more than one worldview and this challenges many established concepts.

Indigenous peoples' worldviews show different ways how humans relate to nature, which affects their resource management and ideas of economy. We haven't fully exhausted how much can be learned from it. Nevertheless, it is worth noting that indigenous communities are also constrained by neoliberal value systems. For example, in Chile, rapid City growth segregates people into urban and informal settlements. In Bolivia, the value of nature has been enshrined into the constitution, but the country is still subjected to economic pressure such as oil extraction. Furthermore, many indigenous communities have gender inequality due to patriarchal social/ community systems. This shows that there are perspectives of indigenous knowledge that may no longer be relevant in current society because we (society) have decided 'equality' is a foundational value for human progress.

Finally, it needs to be mentioned that it is not alone the individual researcher that can change science, but the researchers' choices of a research theme, approach and scope in sustainability is often constrained by available funds. It has been criticized that for example in Germany, many research funds target topics that are interesting to (potential) voters and focus on the parties' image, thus trading off long-term challenges for short-term interests. This also results in researchers' replicating mainstream research topics because there is certainty to get funded. This way, many important questions of our time run the risk of remaining unanswered (and even unasked). **The question then arises: who decides what is worthy enough for research and how much funds should be allocated?**

Legitimatizing science-policy interface

The progress of sustainable development defined by the Sustainable Development Goals (SDGs) is measured through data that shows improvement for certain indicators listed for the individual SDGs. Social (sustainability) scientists know for many of the SDGs, the data available is inefficient and inadequate, but it is still used for measures and evaluations. The adequacy of social science's results in this context is in question.

While it has been discussed that public science funding can be a challenge since it is often a pre-condition for what can be researched, participants have also called for better consideration of the realities of politics. Scientists who engage in sustainability-related research need to consider the conditions of the political space in which evidence-based policy decisions will be made based on their respective results. For example, the short government cycles of democratic systems often result in policymakers' tendency to forgo long-term plans for short-term programs that they can implement while they are in office. Inevitably, this affects the feasibility of policy options. This is particularly challenging when there are big topics such as addressing climate change by reducing emission for the wellbeing of future generation or ensuring a good quality of life for all, long-term goals that are met with general approval but that cannot be met by an (unconnected) sequence of programs that focus on short-term benefits. In Afghanistan, for example, climate change has reduced the snow cover and the groundwater recharge over the years. Cities' water resources are under pressure and more children die from polluted water than from terrorist attacks. Nevertheless, most available research funding keeps targeting security research through international development projects rather than sustainability and climate change research.

There is the need to realize that social (sustainability) research should progress towards the direction that understands that human beings are not always rational. **Research should "speak truth to power" in the science-policy interface, perhaps in a manner that is not descriptive and non-prescriptive.**

Key issues and questions from the session:

• What drives the value systems in research and how does it influence the information and theories we generate?
• Who decides which values matter in research and how much should be spent and on what is actually researched?
• Funding mechanisms are not always linked to sustainability; how can science policy support sustainability science better?
• Can investment in different perspectives address the dichotomy between funding constraints and the black holes of science?

• What values, views and interests drive or inhibit science policy interfaces for sustainability?

• Transforming our society beyond the focus on consumption and production will be difficult when there is a hierarchy of values, both in terms of individual ranking and asymmetries between value systems worldwide that inform research and policies. How can justice be brought into climate mitigation policies?

• Who gets to decide the format of involvement of historically marginalized peoples and at what stage their voices and knowledge are worthy of consideration?

• What are the limitations and benefits of broad participation (indigenous people, women, and youths) at the science policy interface?

• An important point that was also mentioned, but not discussed was how societal transformation through technology will have an impact on our value system and the need to work on establishing an international value system that includes sustainability. To what extent do we unlearn what we have learned including conventional publications and workshops?

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Session 2: Interculturality and Worldviews

Sustainability is linked to issues of societal development, taking into account planetary boundaries and the limited capacities of natural resources. It cannot escape global significance and debate. How human-environment relations are seen and evaluated worldwide is characterized by great divergence in cultural processes as society evolves. Thus, in the course of socioeconomic change and innovation in knowledge production, both science and policy are challenged to broaden their understanding and capacity for dialogue. Interculturalism is concerned with the fostering of dialogues, acknowledging the flexibility of identities, and aims to establish a sense of commonality, equality, and shared values for developing harmonious intergroup relations in a plural society.[4]

Unfortunately, this understanding is not present in international relations (IR) processes, which include the sustainability agenda. From the perspective of African philosophy, the dominant development paradigm has marginalized African philosophical and intellectual perspectives, necessitating a discourse on all development paradigms since World War II. "Sense-making" has been brought up as an alternative to knowledge generation based on external paradigms. It starts from the context of worldviews through which people structure the unknown and uncertainty in order to make decisions and take action. Understanding something starts from within its own context before it is brought in dialogue with other theories or frames. This kind of understanding is critical and necessary to arrive at a systemic comprehension of different cultural perspectives. There are a lot of cultural implications to the current dissonances that need to be understood and addressed.

Statements and discussion:
Interculturalism and Parochialism

Global topics like sustainability and development require of the global community to cooperate scholarly to generate and exchange new ideas, models, and findings to address the global issues and come to joint solutions. However, the current working realities are rather permeated with a certain parochialism, which means that the impact of culture and diverse views of the world are ignored for the benefit of individual concepts that are arbitrarily considered being the only way of thinking and acting and that are universalized from here. This leads to significant lacks of sense-making that

[4] Verkuyten, M., Yogeeswaran, K., Mepham, K., Sprong, S. (2020). Interculturalism: A new diversity ideology with interrelated components of dialogue, unity, and identity flexibility, European Journal of Social Psychology, https://doi.org/10.1002/ejsp.2628, 50 (3), (505-519), Available at: https://onlinelibrary.wiley.com/doi/full/10.1002/ejsp.2628

would otherwise take the local contexts into adequate consideration, and it inhibits much of the creative potential that is needed to transform social, political and economic structures. This amounts to an insufficient understanding of "personhood" and recognition of the cultural sides of peoples. It has been brought to discussion that parochial theorizing in sustainability research and policy has led to research projects approached with concepts and methodologies from the current dominant perspectives, which is underlined by their funding. This precludes research and development programs on political power that are needed to address the historical injustices of climate change. This raises the question of *whose* **sustainability is being addressed if research marginalizes and excludes local actors in setting research agendas?**

In the session, it has been discussed that cultural dichotomy is important to decrease vulnerability rather than increase it. However, funding schemes and scientific communities from the Global North are not using the Global South's knowledge, resulting in inequality in global discourse. When contemplating how to address this issue, it is also important to be aware of the historical impact which has led to many Global South scientists and decision-makers to already have the Northern perspective. This is not helpful to discern how the Global South's sense-making is different from the epistemological concerns of the Global North. To give an example at the political level: The pillars of the African Agenda 2063 are essentially focused on economic development but lack the principles of development that are the basis of such development, such as culture. Thus, it can be said that the Agenda 2063 does not fully pay homage to African worldviews, and therefore it is not really home-grown. If it was based on a "true African" view, the African primordial public space would not have been completely ignored.

Issues of legitimacy of research, participation in global discourses, and the meaning of territorial boundaries

When it comes to creativity and innovative solutions for universal goals like the SDGs to "leave no one behind", it is absolutely essential to include the technique or approach of sensemaking. We see the dissonance of SDGs in the marginalization of Africa's intellectual resources and perspectives. Values such as solidarity, collaboration, and reciprocity, as well as the values of African societies represented in the eco-social contract are disregarded in the Agenda 2030. While the African Agenda 2063 reflects the SDGs, the Agenda 2030 does not give culture a high priority in the SDGs. The understanding of the 2030 Agenda itself tends to have a negative impact on local acceptance and support, as individual and civic responsible action is disconnected from the current global system.

Africa has two public spaces, the civic public that is controlled by the government (state-level) and the primordial public (community-level), where ethics and moral values apply and prevail. This is where development processes take place or need to take place. The viewpoint that a development process needs to go through the government without understanding the intricacies is therefore unhelpful. Researchers are often challenged by government authorities who assert a "personal" legitimacy with the right to control or prevent development efforts. Rightly so, since governments are mandated to allow or prevent in-country activities such as the conduct of foreign research; it is precisely this legitimacy that has failed Africa in the post-colonial development process. The notions of rights and duties, especially the foundations of the norm of reciprocity as assumed in the Western thought, in the relationship between States and citizens, diverge in Africa. In the primordial public sphere, duties are paramount, while rights are taken for granted. Conversely, in the civic public sphere, rights are foregrounded rather than duties. In the civic public, the sense of community belonging (and ownership) of aspirations remains low. The internal absence of sense-making due to the disjunction between state and rights/duties is aided by the difficulties in transferring the organic

norm of reciprocity from the primordial public to the civic public. This is a problem when discussing frameworks of self-sustaining or perpetuating objectives, such as the sustainable development process.

The assumption that sustainability is a globally harmonizing "feel-good" concept generally contradicts itself and political interests. The term sustainable development is a tautology in most African languages. In Twi, a language spoken in Ghana, for example, the concept of sustainability makes no sense. This is because the concept of "development" inherently involves moving forward in a way that is enduring (sustainable) and inclusive of people. Thus, sustainable development is a tautology, and "participation" in a development process also loses meaning, since the concept of development already includes being involved. On the other hand, general political interests prevail at both national and global levels, through violent exclusion, racisms, particularism, and nationalism that drive the discussion, which in many countries is often linked to the general political economy of resources. Current sustainability policies marginalize the issues of legitimacy for research and understanding the needs of the African populations. By neglecting collaboration, personhood (relationships and duties), ethical concepts, public spaces, and democracy (note the difference between consensual and liberal democracy).

Trade-off and Inclusivity

It has been critically discussed that the harmonious concept of sustainable development conceals underlying conflicts or trade-offs on the pathway to sustainability. Currently, there is no sustainability for development, and recently more and more critical voices of African intellectuals are speaking out to join the sustainability debate. This provides new views and perspectives that have been missing and are now essential to the debate. New conceptual pathways that are opening up on the African continent, and when we talk about the future of humanity, we need to listen without proselytizing. What generally looks like participatory process ends up being more of a domination by those who provide the necessary resources. For example, in scientific bodies such as the IPCC that are advocated to ensure an inclusive global process, inclusivity is not a given. In one of the chapters of the recent IPCC report, the 15 involved authors included only one woman, one African with limited English proficiency, two Latin Americans, and one Chinese who did not have access to the google document used. The same "inclusive" disparities exist in other climate change and biodiversity processes.

Another critical point to consider in future development goal(s) are concepts such as the green growth economy. This vision does not paint a realistic picture of who wins and who loses. Rather, the political narrative is that everybody wins or it is a win-win situation. However, we are aware that transformation process always involves trade-offs. We need to figure out what can be done to compensate those who lose. Therefore, we can no longer ignore the inevitable political dimension of trade-offs on the road to sustainability. One stumbling block on this path are the United Nations (UN) processes, which do not want to discuss trade-offs because they prevent a global agreement. Nevertheless, conflicts tend to occur in the implementation phase rather than the major sustainability issues (on the abstract or overarching level). Unfortunately, global incentive structures conceal unavoidable conflicts over what can be considered sustainability or pathways to sustainability for actors at the local level.

This political dimension further marginalizes efforts to create balance through new forms of solidarity. At the level of implementation of the Agenda 2030, the social dimensions of sustainability such as equity, justice, solidarity, social inclusion and cohesion come into play. Therefore, **we also need to focus on re-politizing the concept of sustainability as social contracts for the future and the localization of concepts needs to be better understood**.

There is a lot of cultural dissonance, and its effects require recognition of the broken social contracts between states and citizens, including the relationship of humans to the environment. Although various subaltern voices[5] and people are calling for a new form of eco-social contract, they are also emphasizing the reasons we need a more transformative vision. We should begin by addressing the question of who has the rights and powers to whom. One important aspect is the question of injustice. For example, how we deal with the historical injustices of colonization and slavery, with compensation or land rights? We need to move away from the principle of "them versus us," where the powerful win, and unite against climate change, as has largely been done with COVID-19. How this is operationalized is also important. Currently, there is no organization or body that assesses and evaluates the work of the High Level Political Forum (HLPF) on Sustainable Development, or the multilateral agreements, to hold actors accountable when violations occur. From a human rights perspective, a universal peer review would be better rather than current voluntary reporting.

We need a transformative vision by incorporating the social aspects of life into sustainability research, discussions, and political dialogues. The different worldviews of eco-social contracts can help us identify a new way of relating to each other and to the environment that leaves behind the current narrative of "them versus us". The African concept of Ubuntu offers a good example; it has to do with ontology and how the "I" is a part of a community and not outside of it. In addition, indigenous worldviews about natural resources management have been found to be much more egalitarian than ours today. If we are dealing with a global phenomenon, sustainability scientists need to draw on concrete best practices by acknowledging cultural perspectives and blending worldviews on sustainability that could contribute to new eco-social contracts that address historical injustices. Perhaps African models of skills development, such as "Ubuntu," with its consensual democracy, could contribute to mainstreaming the social justice contract. However, it was also mentioned that in the African and Latin American indigenous worldview, there is no social 'contract' to be made. As the idea of being human is only possible through the existence of others, as such your being is part of the community and not a thing external. From such an explanation, it was mentioned that these are the some of the reasons why we need best practices from different parts of the world.

We need to understand the benefits of research projects for cooperation partners as well as and how implementers cope with challenges on ground. The current situation focuses mainly on the recipient's responses and feedback. For example, greater collaboration with African researchers can help raise broad, new, and contradictory questions that lead to results that challenge existing concepts of sustainability. **Achieving this kind of transformation requires moving from internationalization to interculturalization of approaches, tools, and funding, and actively creating spaces for the subaltern voices**. Bonn experts can use their position to identify, understand, and clearly define the nature of the broken contract between state(s), citizens, and nature.

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[5] Subalternity is a term that emerged in the 1930s, in relation to subordinate social groups and individuals whose histories have been repressed, ignored, misinterpreted or dominated by hegemonic histories, discourses and social formations. (Piermarco Piu)

• It is important to recognize that the different timeframes, such as the seasonal work of local communities and long-term development agendas such as the Agenda 2030 or Agenda 2063, must be reconciled.

• There are many views on how the system should be changed, not only from the Global South. However, how can the different responsibilities and roles of entities (individual and organisations, cities and states) be reconciled?

• Is the society responsible for the individual or is the individual responsible for the society?

• We need a mix of behavior change, laws and regulations, but the coordination of change along these lines is also important. To do this effectively, we need to define the necessary actions and the appropriate interdependent solutions.

• Who had the right and the mandate for African development, if the Agenda 2063 did not originate "at home"?

• What do the African people say about their development?

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Session 3: Contexts and Practicability

From the perspective of "context", sustainability is not seldom criticized because theory and practice do not match, and practical implementation falls behind set goals. Considerations about local dimensions of the (globalized) concept of sustainability need to be strengthened, especially in view of the global agenda (UN Agenda 2030) which currently dominates the (political) discourse on sustainability. It has been highlighted that it inadequately includes local sustainability contexts and mainly represents "Northern" ideas. This intensifies the North-South bias and fails to speak to concepts and action on local levels. What we also need to consider is that local development and actions trigger events on higher levels; consequences of local actions can have effects on the global level. We need to consider all levels, from both directions (local-global).

A heavy lack of contextual considerations is found in post-conflict settings. How could sustainable development be used better in rebuilding and rehabilitation in such settings? Esther Meininghaus and Katja Mielke (BICC) suggest a "Situated Sustainability" approach to include post-conflict settings, and to stress the overall importance of peace and conflict research for the sustainability discourse. Sustainability as a standard for rehabilitation is also discussed in context of a post-COVID recovery.

Finally, considerations of diverse contexts give us more flexibility in making use of concepts and measures in sustainable development and enhance its practicability. Perhaps current approaches fail because they do not sufficiently take on board local issues.

Statements and discussion:

The complexity of sustainable development in theory and practice

The complexity of the system of the sustainable development goals (SDGs) and sustainability as a holistic approach (i.e. encompassing many fields) challenges us in setting political and scientific agendas, in collaborating and in communicating. Topic wise, it encompasses economic, social and environmental concerns; timewise, it encompasses present demands which need to be considered vis-à-vis the future *and* the past; and locality wise, one needs to consider that incidents in one locations can have effects on other locations.

Among the political parties in Germany, sustainability as a whole has for long not been a topic; it appeared rather in subsections in singular policies, such as environment policy. There was no overarching narrative for this until the last election. The currently (still) ruling parties of the German parliament *(Bundestag)* started with the implementation and stocktaking of the UN Agenda 2030's SDGs. To simplify the field of sustainability, it has been broken down into digestible parts, i.e. six transformation areas, which guide action piece by piece. Furthermore, sustainability in its complexity and often abstraction in concept is hard to sell to the majority of the voters; it needs to be put into a context that speaks to the people. Thus, areas such as climate change and circular economy are much easier to sell than the "whole package".

Problematic here is, though, that one might oversimplify the interconnectedness of many elements in sustainability. The COVID-19 pandemic has shown how important these are indeed – food security became a real, or a more severe (depending on the context) issue in this time for many people because of interrupted chains. Another missing link, going back to Germany's national agenda, is the fact that the sustainability agenda is not connected with other agendas. However, the aforementioned interrelatedness factor also indicates that policy decisions in one field can affect other fields, signifying the relevance of other agendas . There are not only synergies and trade-offs to be considered within the SDG system, but also in between political agendas (even when they are not sustainability agendas, they might be sustainability relevant agendas).

This finally affects how we collaborate in sustainable development. We work in different institutions, organizations, contexts and thus realities. We have different interests and have different historical trails that brought us where we are. A potential barrier from the perspective of science that comes into such a context is that one starts from a detached observer stance when one assesses a system or certain context that is to be changed and needs to change into an involved observer stance that includes values and interests to make change happen. Suggestions are to include local people and people on the ground to find concrete solutions and implement them into their daily lives, focusing on involvement and (joint) priority-setting. **When we go for new ways and practices, we should ask ourselves if we are exploring or exploiting**.

Science and knowledge generation

When we talk about science's role in sustainability, we need to take into account that there is "Science *for* sustainability" and "Sustainability science", and they take up the topic differently. In this little section, we focus on sustainability science.

In the reality of disciplinary division of science, the world is split into partial stories, but we barely get to see the whole picture. Sustainability as a topic in science is always accompanied by the demand for interdisciplinarity. Would a sustainability paradigm in science ask for the end of our "single discipline stories"? When it comes to implementation-oriented sustainability science, we talk about transdisciplinarity, i.e. the cooperation with practitioners. Involvement of people outside of academia in science could be facilitated by open science approaches – but how to use open knowledge? And how can we open up to people outside of academia and outside of Europe – such as indigenous people who have valuable knowledge on environmental maintenance and social governance? How can a joint knowledge generation be operationalized? One idea is that it might come in the course of dialogue: **Sustainability is a discourse that comes with claims of "unlearning" old ways to acquire new ways**. Why not learn from people who have never learned what we have learned?

[6] Addition by the authors:
Spangenberg (2011: 276-278) refers to sustainability science as an emerging field of research defined by problems concerned with the interfaces of the systems of economy, nature and society, whereas science for sustainability meant knowledge transfer from science to the public, relating to sustainability topics. (Spangenberg, J. (2011): "Sustainability science: a review, an analysis and some empirical lessons." In: *Environmental Conservation* 38 (3): 275–287.)

People, emotions, and narratives

Sustainability is considered as not very prominent and popular in mainstream society, possibly because it seems very abstract and far away from what people deal with in their daily lives. On the one hand, it is argued that we have a communication problem and we thus need a better or (more) positive narrative around sustainability. However, the distinction between positive and negative narratives can also part people. The climate change discourse, given the urgency of the matter, uses much negative and admonishing vocabulary, and the claim for a positive narrative should not lead to exclusion here. On the other hand, it is argued that we need to address people's emotions better, which is not only about communication but also choice of topics, embedding, and contextualization of the matters one wants to address.

Furthermore, it has been mentioned that since we are very much involved in the "sustainability bubble", we might overlook that "outside the bubble", the concept hasn't gained adequate foothold yet. If the narratives around sustainability or even the concept itself is too abstract, concepts like wellbeing might resonate more with people. Around the SDGs, there are many campaigns (e.g. the SDG Action Festival), but the concepts still don't speak to the people.

Finally, we also need to realize that what we ask of people is really hard; we ask them to take a long-term perspective and think ahead for future generations; they need to overcome their own current and particular interests. This is why **we should practice what we preach**.

Systems and mechanisms for change

Sustainable development should not be seen as a process for which we have to re-invent everything; rather, it should be implemented into existing processes and mechanisms. Based on such a foundation, we should trigger innovation and seek for new ways. The challenge here lies in finding out *how* we can trigger people and institutions to move along new paths. Unanswered, however, remains the question what we would do if we found out that the existing system could not carry a desperately needed change in a process. Furthermore, we should also consider that concepts of positive development could in practice also turn into vicious cycles that deepen existing problems. Therefore, if we follow sustainability with a consequentiality, we need to cooperate and delegate better, and not let go of new ways.

When we talk about practicality in sustainability, it is outcome oriented, and are working in fixed (project-oriented) timelines. However, being tied to certain goals and to a time frame is also problematic, as it does not allow the contemplation of diverse values along the way, and as a result, integrating knowledge systems beyond Western academia becomes difficult. Increasingly being recognized in line with Throsby and Petetskaya's (2016: 130)[7] suggestion is that indigenous holistic frameworks on societal governance are more likely to focus on a steady state with an emphasis on maintenance, to maintain the resources around you for others as well. **Innovation and new ways *forward* (if we want to look at development as forward-striving dynamic) are sought in new economic opportunities, and new creative expressions, which themselves are understood as *cultural maintenance*.** Such a focus on production and consumption on non-material items, as well as the cultural aspects of sustainability, could be useful for such a reflection.

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[7] Throsby, D. & Petetskaya, E. (2016): "Sustainability Concepts in Indigenous and Non-Indigenous Cultures." *International Journal of Cultural Property*, 23: 119– 140.
Available at: https://www.cambridge.org/core/journals/international-journal-of-cultural-property/article/abs/sustainability-concepts-in-indigenous-and-nonindigenous-cultures/00C9321FC8ED4EA427B66A787CBAEE61

When it comes to the implementation of sustainable development measures, insights into local conditions are very important. In sustainable agriculture, for example, you need to look into institutions, policy, climate, the economy – all these items tell us what is possible. Apart from talking about what is implemented – e.g. the SDGs – it is also crucial to talk about *who* implements them and *how* it is done. It is very different to talk about global, national, or local level implementation, and if we are focusing on micro, meso or macro contexts on these levels. The contexts of implementing the same goal differ, and the contexts also experience change while implementation is done. Furthermore, it is also important to build towards systemic resilience within sustainable development. Staying in the field of agriculture and food: the COVID-19 pandemic has been a shock to food systems and has led to food insecurity in many places – system resilience is part of securing livelihoods.

On the global level or within international discourse on sustainability, sense-making of the whole matter is very different from local contexts. People cannot really argue against sustainability, because it is acknowledged as a good thing *per se*, but one has to become concrete – one has to start from concrete decision contexts and go ahead with action. However, when it comes to the very local level, there are sometimes conceptual barriers which also stop sense-making: in Kiswahili, the concept of sustainability does not work at all and it cannot really translate into the real space of people. This relates back to the item of *complexity* (see above): **global sustainability should be broken down into areas which make sense on the respective national and local levels, so that people find themselves included in the** respective frameworks and are able to act.

Inclusion: addressing people and their interests

Sustainability as an overarching topic is not well known, which is a pity since as a global agenda, it needs mindfulness and collective intelligence. An increase in inclusivity and especially inclusion of the people on the ground is called for. Local people are needed to solve problems which are of global concern and rooted in their contexts. With this, **we need to open towards diverse values and knowledge systems, we need to understand and deal with our respective interests and practice ourselves what we preach**. Here, we end with a core question: What kind of leadership and management (or more concrete: leaders and managers) do we need for this?

Technology and AI can potentially support sustainable development, but not solve all the problems. When it comes to addressing a diversity of people with different interests, it is suggested that with high resolution data, inclusion of different interests is possible. However, in many countries, data availability lags behind, which excludes this possibility. Data are also needed to model tools and policies. Finally, statistics help to set priorities: when we look at the SDGs and we see that there are 20% of indicators that present 80% of impact, we know where to focus our efforts. Priority setting is needed for decision-making, people involvement and the go-ahead for implementation.

Key issues and questions from the session:

• Complexity of the concept of sustainability and in related collaboration: The Agenda 2030, the SDGs and sustainable development as a concept are very abstract and complex; this makes it difficult to popularize them (e.g. among voters, in the general public) and interest people outside of the 'sustainability' bubble in topics and collaboration. Different contexts and backgrounds of involved actors add the practical complexity of different agendas, missions and understandings to the conceptual complexity.

• Need to zoom in and zoom out: Different levels and agendas are involved in sustainable development (global frameworks, national agendas, local concerns, personal interests), and we need to be able to "zoom in" and "zoom out" through these levels when we deal with issues of sustainability.
• Lack of popularity: Connected with the complexity issue (see above).
• What kind of leadership and management (or more concrete: leaders and managers) do we need for a sustainable future?

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Session 4: Involvement and Influence

In both science and policy, there are some who look at (local, national, global) social, economic, and environmental conditions, evaluate them, and recommend action. Involved are not always those who are most affected or know the most about local contexts, but those who can make themselves heard most directly because of their position, history or circle of influence.

Statements and discussion:

Transdisciplinarity: multiple stakeholders, their interests, and power constellations

In sustainability and sustainable development, we are dealing with research areas or projects in which different sectors work together; water governance has been brought up as one such example. Transdisciplinarity is of central interest because research findings need to be transferred into practice. **When a multidisciplinary and multi-stakeholder platform is set up in such a context, inclusion – who is invited, who can participate – is a crucial aspect. Here, aspects of power and power constellations are already decisive in the research process.** In the phase of dissemination and in science-policy-interaction, they are as well a topic. Transfer and science-policy interaction are broadly discussed and considered as important, but there is quite some unclarity about how to deal with aspects of power and hierarchy. Coping strategies prevent relevant knowledge or information from reaching the right places or may even lead to the need to enter grey areas.

Another challenge in transdisciplinary efforts is to ensure interaction between the different stakeholders. A range of different methodologies and tools have been brought to the table, such as setting up networks, reaching out to specific marginalized actors (urban poor, youth, indigenous groups) to ensure inclusion of multiple worldviews or context-relevant interests. One example for cooperation deals with urban sustainability: Citizens were invited to evaluate their quarters, were involved in the decision-making on common research questions as well as the data processing towards the goal of making the city of residence more climate and citizen friendly (in cooperation with schools and municipalities). *Citizen science* is about co-design and co-production, i.e. to come up with the project together. Both from organizational and content-related sides, these efforts are quite complex, e.g. because people operate on different time schedules. Information and content were provided through climate awareness lectures on what students can do for climate change.

In educational projects in schools, transdisciplinarity bears great potential for students and their education as multipliers for future-oriented behavior and action, such as through the incorporation of different companies, NGOs and municipalities. Students work with researchers, gather data, and analyze them to understand a problem and familiarize themselves with the scientific research and inquiry processes. Partners from the extended networks of schools bring real-life cases and problems to the schools, e.g. those related to contemporary challenges we face, or related to

sustainable development as captured by the sustainable development goals (SDGs). Students thus have the possibility to work together with different stakeholders, explore different perspectives and different opinions, and even cases in which conflicting views and perspectives make a common navigation difficult. These are also teachable moments.

It has been very difficult to carry out multi-stakeholder initiatives online during the COVID-19 pandemic; it challenged us on how to do initiatives for involvement and influence for sustainability.

Science and knowledge generation

When we talk about how science works, we often discuss the problems that scientists have: the cultures in different disciplines/ the culture in science, power issued and barriers or challenges in science communication. It is often said that scientists come with their privileged backgrounds into certain social contexts and give recommendations that rest on their views and experiences. However, there are also different and more promising voices: pupils and the young generation say that there should be more trust in science and scientists. Values that are stressed in this context are the transparency of science, and mutuality – **we need to find ways to not impose interpretations and actions upon people, by enabling them to bring in their knowledge and engage in co-creation of knowledge under a certain project frame**.

In the sustainability discourse, we often talk about the SDGs – other relevant works such as the Sendai framework are barely known or part of the larger discourse. We also do not question the suitability of the SDGs for concrete contexts enough. Analytical and critical thinking are needed here (also among families and pupils, outside of academia). The playground of sustainable development is not defined by clear right and wrong decisions or singular correct answers. It is much more about collecting relevant information, weighting evidence, analyzing processes, to support certain arguments, and to achieve compromises in decisions. It is crucial to reach out to certain actors in certain localities who can make sense of the SDGs in their contexts.

Systems and power issues

Systemic and institutional structures, power issues and limitations have been a core issue throughout the discussions. Issues occurred, for example, concerning the question of stakeholder involvement. Even though a project might be a multi stakeholder project, whom of the relevant stakeholders ended up as discussion partners at the round table can be a political question; there could be reasons why certain groups who are affected, or who affect certain contexts, are not included in discussions or data collections. Another example concerns the origin of budgets. Different funders of research in the same area can also be(come) rivals and hinder the research and thus the resulting recommendations by their political rivalry. Things can also be complicated when parties from national and international levels are involved in a project, due to their different agendas in the respective context.

For research grant proposals, the dissemination of research results is an important topic, yet there is no clear guidance on how to do it and how to deal with power constellations that might either obstruct dissemination, recommended follow-up action or that might block access to information, data or key persons in the research process. This poses the question of where the line for you as a researcher is: How far should you press your research agenda when you meet limitation or political obstacles? Where is the support for you as a researcher to possibly (re-)negotiate certain things?

Cooperation with informal institutions such as museums has been mentioned as a win-win solution for the inclusion of multiple stakeholders, also from industry, in a project. The reason is that they often have more freedom in the ways they can include people in projects. Universities have strict rules and it is hard to integrate different stakeholders, especially in long-term projects that require reflection and follow-up or continuing work. **Cooperation for sustainable development thus also confronts us with the question of the kind of infrastructures we need for it and how we can fund them.**

Stakeholder inclusion

In transdisciplinary and multi-stakeholder projects, inclusion is a core topic. It has been mentioned that sometimes, inclusion of certain parties makes discussions and negotiations more difficult, e.g. for environmental concerns, environmental organizations can coordinate better among themselves, and when industries are included, discussions take different directions (and possibly, existing controversies enter the discourse). There are also cases where exclusion is driven by the fact that involved decision makers do not consider the common local population as important (enough) to include them, or that urban identities are weighted more important over rural identities. **The ideal to bring different voices together and lead diverse discourses is met with realities in which power asymmetries and already existing social conflicts and controversies influence the success.** Nevertheless, there are efforts and considerations to include more connected voices into the relevant discourses, such as the Black Lives Matter and other social movements, to achieve a better inclusion of grassroots initiatives, information and efforts.

Inclusive discussions can also be embedded in education, e.g. in sustainability projects which involve partners from the media, industry, policy makers, NGOs, or museums. In these contexts, students can become knowledge multipliers; they have influence on their families; during open school days, they come together with media experts; they go into the wider community and reach the public. Young people have their careers in front of them, and it is a good investment to focus on them.

Self-reflection and the role of the researcher

The issues of systemic structures and contexts make the self-reflection of one's own role as a researcher indispensable. Some experience that there is a fine line only between being a researcher and a political activist, which is not easily reflected in *scientific* writing. It is rare that there are enough time and space to reflect on the own role, change the perspective and go on a different level. However, we have to be aware of the fact that when we go abroad to do research in societies in the Global South, we come from a privileged background and people in the field react upon this. **A trap "Western" researchers often step into is the attitude of wanting to be a savior and do-gooder; an approach to overcome this is co-development of a project with local people.** Recognizing this is also challenging because one needs to juggle between co-development and listening to local perspectives on the one hand and the need to achieve one's own (research) goals on the other hand. Here, we walk a fine line between doing more classical research and action research. We should also ask ourselves the question if we are compliant in creating inequality in the countries of the Global South.

Locality: the relevance of the sociopolitical and cultural context

For the implementation of the SDGs and sustainability goals and strategies, the local context and local realities must be probed appropriately to achieve a sound embedding. It is furthermore important to know where the boundaries of possible action and implementation are. In general, recommendations should not impose action upon local actors, and should fit their own plans and priorities. **The need to analyze and understand different contexts also helps us in the "sustainability bubble" to reflect on our "bubble-ness" and forces us to make goals and frameworks more relatable for others**.

To shift to a concrete example: In Mongolia, the Millennium Development Goals (MDGs) have been adopted in the 1990s, and they also have an overlap with the current Sustainable Development Goals (SDGs). However, these goals have produced local conflicts concerning sustainability. Under the framework of the SDGs, a campaign for responsible mining is run – but mining is harmful for the pastoral lifestyles and degrades the environment. It is considered as useful to combine traditional views with sustainable development, for example shamanism.

In teaching and education about sustainable development, it is considered as meaningful for students to discuss projects and cases that are relevant for both the local and global contexts. For example, forests in Sweden have a different value compared to those in Cyprus. Students can work on common cases and discuss different perspectives that emerge from them/ one can apply onto them.

Human-nature relations

One crucial theme in the discussions have been the current human-nature-relations. Considering the interrelation between social and ecological crises, it has been said, organizations and movements are calling for a new contract between people and the environment in the future – we need to reconsider how we see, design and govern our interrelations. Within and in between countries, there is a strong imbalance, both socially and environmentally. UNRISD is currently planning to build up a network that will bring together disparate and connected voices to build such a new eco-social contract; they especially want to create spaces for dialogue on these topics. **In our era, intergenerational justice and human rights-based approaches are crucial and need to be expanded towards nature and the *right* of nature.**

A shift in how people see their environment and envision their future development is perceivable in concrete contexts. Projects in urban environments that take on risk reduction as a crucial facet for development are mentioned here. Decarbonization is a goal that has been broadly taken over and it is decisive for the ways in which people envision the future of their cities. The countryside is thematized for the case of Mongolia: People in the countryside are dependent on natural resources, and if there is no care about environmental protection, it has direct repercussions on life. This is also a concern that is emphasized by shamanism which extends this interrelationship: all people are depended on natural resources which is why one needs to take good care of it and be responsible – it is a responsibility not only for oneself and one's own people, but for the whole world. Here, the high concern for the environment is connected with cultural and spiritual components; it is underpinned by the Mongolian concept of One Universe. Opposing behavior is rebuked; it is believed that natural spirits get angry when trees are cut, and water is getting polluted. The environmental concern is also connected to concrete and historically developed ways of life, such as the nomadic lifestyle.

The role of education and educators

Education was discussed in its importance for sustainable development and how the SDGs can be achieved with education. **Under the global and the context lens, we are required to understand how people learn in different contexts**. One context is ones' generation: the youth plays a key role for sustainable futures, and art and culture (such as street art, infotainment, film) are mentioned to reach the young. Another context is ones' locality: when we go abroad and establish education in capacity building programs, one also needs to think about ways to avoid building (more) inequality in the respective regions – how are the urban poor and indigenous communities involved, can they access these programs, or are they excluded? Infrastructures that are needed for education or participation are crucial here. For example, during the COVID-19 pandemic lockdowns, a lot of education (schools, universities) has been transferred into the digital world. However, about 40% of the rural population in Mongolia did not have enough infrastructure to participate in remote classes. What is being offered must suit real conditions to be equitable.

When diving more into the concrete content of education for sustainable development, we are confronted with cosmovisional education which requires us to combine different research, and to decide what kind of (research) topics we give to students. This is not an easy task. There is a need for special didactical tools; students are professionals and future decision makers who can push forward sustainable development. Another difficulty lies in the teachers and educators themselves: there are numerous teachers who either do not believe in sustainable development, or they do not believe in related goals being actually achieved in the foreseeable future (e.g. poverty alleviation will not happen within the next ten years; goals like zero carbon cities feel utopian and distant to people and they get exhausted from hearing this because it seems unrealistic). When they are obliged to teach something in which they themselves do not believe, it is problematic for the learners. This is where the collaboration between schools and science is seen as an opportunity.

Key issues and questions from the session:

• It is important to incorporate different stakeholders (from the industries, municipalities, NGOs, civil society) in educational initiatives for sustainable development.
• It is a challenge to integrate stakeholders like universities and research institutions who have strict rules regarding alternative teaching methods (such as media).
• Ways on how education and networks serve as tools to involve stakeholders and influence sustainable development need to be explored and discussed.
• The COVID-19 pandemic has had a significant impact on implementing educational initiatives for sustainable development.
• How do we navigate infrastructure issue when informal and formal learning is digitized?
• How do we make education accessible to remote areas where connectivity is difficult?
• What tools and approaches can we utilize to ensure multiple stakeholder involvement and their equal influence?
• How do we develop the infrastructure to make tools such as networks for stakeholder interactions available to everyone?
• There is a difference between classical and action (implementation-oriented) research. The latter confronts us with the question whether we want to intervene in systems or living worlds and get involved in or manage power dynamics among stakeholders, particularly political entities. How to deal with power dynamics in transdisciplinary research?
• How far should one press ones' own research agenda when one meets limitation or political obstacles? Where is the support for a researcher to possibly (re-)negotiate certain things?

Summary of the four thematic sessions

For every breakout session, we collected three key words to summarize the key concerns of the statements and discussions:

Values and valuation:

- Whose values matter, and who decides this?
- What does participation/ inclusion of indigenous views really mean?
- How do we move forward from what we have discussed today?

Interculturality and worldviews:

- Participation: Who needs to act, who is involved, and who is responsible?
- Interculturalization[8] and interculturalism[9]: There is a need for identifying and implementing strategies for working to improve primordial publics' participation and inclusion.
- Scale/ territorial boundaries: Who has the right to define what development for a country is? How can global models be translated/ modified for concrete country contexts? Who has interest in discussing the common good and why?

Contexts and practicability:

- Complexity of the concept of sustainability and in related collaboration: The Agenda 2030, the SDGs and sustainable development as a concept are very abstract and complex; this makes it difficult to popularize them (e.g. among voters, in the general public) and i interest people outside of the sustainability bubble in topics and collaboration. Different contexts and backgrounds of involved actors add the practical complexity of different agendas, missions and understandings to the conceptual complexity.
- Need to zoom in and zoom out: Different levels and agendas are involved in sustainable development (global frameworks, national agendas, local concerns, personal interests), and we need to be able to "zoom in" and "zoom out" through these levels when we deal with issues of sustainability.
- Lack of popularity: Connected with the complexity issue (see above).

Involvement and influence:

- Stakeholder incorporation: It is important to incorporate different stakeholders (industries, municipalities, NGOs, civil society) in educational initiatives for sustainable development.
- Power dynamics: How to deal with power conflicts or manage power dynamics in multi-stakeholder projects where many agendas and interests come together?
- Infrastructure and availability: How do we develop the infrastructure to make tools such as networks for stakeholder interactions available to everyone?

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[8] Interculturalization targets the respectful interaction between people from different cultural backgrounds.
[9] Interculturalism is concerned with fostering dialogue, acknowledging flexibility of identities, to establish a sense of commonality, equality, and shared values for developing harmonious intergroup relations in a plural society.

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