CONFLICTING GOALS

- LOCAL APPROACHES FOR AN INTEGRATED NEXUS GOVERNANCE TOWARDS THE SDGS

JOINT PAPER OF THE CO-CREATION-TEAM OF THE BELONGING SESSION AT THE HAMBURG SUSTAINABILITY CONFERENCE ON 7TH AND 8TH OCTOBER 2024

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Introduction

The *Hamburg Sustainability Conference* (HSC) took place in Hamburg for the first time in 2024. It aimed at achieving breakthroughs in the implementation of the *2030 Agenda on Sustainable Development* with its 17 *Sustainable Development Goals* (SDGs). The German Chancellor Olaf Scholz opened the conference by saying: *"To strengthen mutual trust of the global community once again and at the same time to show: With strong international partners, global challenges can be mastered, that is the goal of this conference."*

The conference not solely aims at presenting one-sided lectures on what has already been achieved but rather fosters new or strengthens existing cooperations. Following this claim Hamburg together with its partner city Dar es Salaam presented a panel-discussion at the conference. The work of the partner cities began months before the conference itself: in joint workshops and many exchange formats, the experts from science, civil society and administration came together in a so-called *Co-Creation Team* to discuss how they encounter challenges while implementing the 2030 Agenda. The Co-Creation-Teams are an integral part of the pre-conference work phase. This is

where interdisciplinary breakthroughs are developed - a special feature of the conference. The experts in this Co-Creation Team shared their experiences regarding the concrete trade-off between the need for spaces for housing and for open areas in their cities. The discussions of the Team aimed for identifying technical tools for dialogue and learning on how local governments, science and civil society can work effectively together to deal successfully with this concrete conflict. In particular, the *Nexus Approach*, meaning considering the interdependencies between the SDGs and not looking at them in isolation, played a major role in the discussions. The results were further discussed with the international audience at the HSC 2024.

Aims and objectives of this paper

This paper is the outcome of the several workshops and the session: *"Conflicting goals – local solutions"* at the first HSC 2024. The paper describes the existing challenges in implementing the SDGs - especially in dealing with conflicting goals. In response to the conflict situation, the paper takes a closer look at the nexus approach. This theoretical derivation is then filled with the concrete example of competition for space in cities. Projects and initiatives in Hamburg and Dar es Salaam are used to show how a procedure modelled on the nexus approach has been used to address conflicts. In addition, successful projects are presented that have recognized and used synergies between SDGs at the local level. The paper is intended to focus on the role of municipalities and cities in implementing the 2030 Agenda and dealing with conflicting goals.

Conflicting goals on local level

The 2030 Agenda for Sustainable Development with its 17 SDGs and 169 targets sets the frame that all *United Nations* (UN) member states have committed to achieving significant changes at both political and societal level towards sustainable development. The realization of these comprehensive goals inevitably leads to conflicts between the divergent objectives. We must focus on these conflicts in order to realize the implementation of the 2030 Agenda by the end of its term. It is the local level that ultimately sets the decisive course for that realization. The local level has a direct impact on the lives of its citizens: SDG 11: "Make cities and human settlements inclusive, safe, resilient and sustainable" emphasises this important role.

Half of the implementation period of the 2030 Agenda has been reached, and action has to be accelerated. The UN does not draw a positive conclusion for 2023, as Secretary-General of the UN Antonio Guterres explains: "*Progress on more than 50 per cent of targets of the SDGs is weak and insufficient; on 30 per cent, it has stalled or gone into reverse. These include key targets on poverty, hunger and climate. Unless*

we act now, the 2030 Agenda could become an epitaph for a world that might have been."[1]

The SDGs are supposed to provide a benchmark for sustainable development, e.g. political action with the goal of "leaving no one behind" being the explicit aspiration of the 2030 Agenda. It is time to take that action. The obligations of governments that have committed to the SDGs extend to all levels and across all sectors. National and regional governments are key actors in achieving the SDGs. Local governments have a special responsibility: often this level of governance that directly influences the specific conditions under which citizens live. Authorities at local level frequently take care of the infrastructure (socially and physically) and are closest to local civil societies and businesses.[2] With this particular perspective, also the local levels do recognize and address conflicts and synergies between the SDGs. Especially in cities, districts and municipalities the issue of whether sustainable development succeeds will ultimately be decided. It is therefore crucially important how cities approach and develop the topic of sustainability and the implementation of the SDGs and targets.[3]

Not without reason, the UN encourages the local level to draw up *Voluntary Local Reviews* (VLRs). These reviews give an overview about the status of the implementation of the SDGs and targets and names the relevant indicators. Hamburg, as one of the first federal states in Germany for example, has published its first VLR in 2023. The UN explains it as follows: "*While the SDGs are global, their achievement will depend on our ability to make them a reality in our cities and regions. All of the SDGs have targets directly related to the responsibilities of local and regional governments, particularly to their role in delivering basic services. That's why local and regional governments must be at the heart of the 2030 Agenda."*[4]

Cities are also called upon to find practicable ways of dealing with conflicts among the SDGs and targets. The leading role that is attributed to cities or municipalities regarding the implementation of the SDGs is also likely to affect them regarding the resolution of conflicts in this very implementation. Conflicting goals and trade-offs deserve greater attention. If we fail to resolve the conflicts, there will always be competition between the various stakeholders who want to realize 'their' supposed goals, regardless of other goals. We therefore focus on the role of the local level and how the nexus approach can support cities while dealing with conflicts among SDGs and targets.

[1] The Sustainable Development Goals Report, special edition, 2023 The Sustainable Development Goals Report 2023 | Department of Economic and Social Affairs.
[2] Global Goals for local priorities: the 2030 Agenda at local level, Nordregio Report 2018, Sánchez Gassen et al., p. 8, FULLTEXT03.pdf (diva-portal.org).
[3] Global Goals for local priorities: the 2030 Agenda at local level, Nordregio Report 2018, Sánchez Gassen et al., p. 8, FULLTEXT03.pdf (diva-portal.org).
[4] Roadmap for localizing the SDGs: Implementation and monitoring at subnational level, 818_11195_commitment_ROADMAP LOCALIZING SDGS.pdf (un.org), last visit: 13.09.2024.

The Relevance of Nexus Governance on Local Level

The global implementation of the SDGs and targets is often viewed one-sidedly. Social driven SDGs are considered by the responsible ministry for social affairs, NGOs or professorships, while environmental SDGs and targets are considered by the ministry for environment, professorships or responsible NGOs. The 2030 Agenda provides for a networked implementation of the goals. The 17 SDGs do not stand in isolation, but multiple interlinkages, including synergies and trade-offs, exist between the 17 SDGs and their targets.[5] Therefore, implementing the 2030 Agenda requires the mobilization of synergies and the management of trade-offs. This is essentially a governance task. Governing interlinkages requires coordination among different policy sectors (horizontal coordination), levels of government (vertical coordination) and coordination among different actor-types, including the public, private and civil society actors. The

2030 Agenda itself mentions the need to *"[d]evelop effective, accountable and transparent institutions at all levels"* (SDG 16.6) and to *"[e]nsure … inclusive, participatory and representative decision-making at all levels"* (SDG 16.7). Beyond respective transparent, inclusive and participatory decision-making, the Agenda also points to the need to *"[e]nhance policy coherence for sustainable development"* in SDG 17.16. Politics and academia still have some catching up to do. *"The recognition of the interdependent nature of the SDGs is one of the major paradigm shifts that differentiate the 2030 Agenda from previous global development frameworks"*.[6] This realization leads to the necessity of an improved political coherence and *"will require deep institutional reforms and the adoption of innovative governance approaches".*[7]

The World in 2050 Initiative states: *"We need normative societal, political and institutional changes (alliances/ cooperation between science, public institutions, civil society, private sector) and a formulation of plans and roadmaps to achieve SDGs".*[8]

Beyond inclusive and participatory planning and decision-making across governance levels, policy coherence within the public sector is also important in governing SDG interlinkages. In the public sector, specific policy goals are usually pursued through different types of policy instruments. These include regulatory, economic and information instruments, which are typically assessed against effectiveness, efficiency,

[5] BREUER, A., MALERBA, D., SRIGIRI, S. & BALASUBRAMANIA, P. 2022. Governing the Interlinkages between the SDGs: Approaches, Opportunities and Challenges (Introduction). In: BREUER, A., MALERBA, D., SRIGIRI, S. & BALASUBRAMANIA, P. (eds.) Governing the interlinkages between the SDGs: approaches, opportunities and challenges. London: Routledge; NILSSON, M. & WEITZ, N. 2019. Governing Trade-Offs and Building Coherence in Policy-Making for the 2030 Agenda. Politics and Governance, 7, 254-263.

[6] Sustainable Development Goal Integration, Interdependence and Implementation: the Environment–Economic–Health Nexus and Universal Health Coverage, 2019, Cerf, p 1 (6); cf. Governing the interlinkages between the SDGs, 2023, Breuer et al., chapter 4, p.51, Nexus approaches to global sustainable development | Nature Sustainability.

[7] Governing the interlinkages between the SDGs, 2023, Breuer et al., chapter 4, p.51, Nexus approaches to global sustainable development | Nature Sustainability, with further references.

[8] Transformations to achieve the Sustainable Development Goals, report prepared by The World in 2050 initiative, Kriegler et al., p. 13.

equity and feasibility criteria[9]. Regulatory instruments are based on a command-and-control policies and theoretically able to meet certain targets but often go along with high enforcement costs and acceptability issues. Economic instruments are intended to correct market failures through internalisation of external costs and incentivising a certain behaviour. In particular, environmental taxes and tradable permits are considered efficient and effective[10], but acceptability is often low. Subsidies have high acceptability but can be costly. Information (or persuasive) instruments target voluntary behavioural changes and social learning, but they may not reach uninterested or resisting parties.[11] The choice of different policy instrument types can be seen as reflecting different preferences for governance modes, with a preference for regulatory instruments in hierarchies. Societies that strongly rely on markets tend to prefer economic instruments. Networks may prefer information instruments.

Usually, at least one instrument is required to achieve one policy goal.[12] However, if several goals (SDGs and their targets) are to be pursued simultaneously, this usually requires a mix of policy instruments. In such a policy mix, it is important that economic, regulative and information instruments should reinforce rather than undermine each other in pursuit of policy objectives.[13] Therefore, there is a need to ensure the consistency of elements of the policy mix and the coherence of policy processes.[14]

And although the 2030 Agenda is a global and national agreement that invites the respective states to rethink their political, societal and institutional structures, the local level is key.[15] A study has found that most countries chose an institutional design of their government SDGs bodies that ensure high-level political leadership. The civil society and local level are frequently not formally represented[16] although concrete decisions that concern the citizens are made at the local level.

[9] ROGGE, K. S. & REICHARDT, K. 2016. Policy mixes for sustainability transitions: An extended concept and framework for analysis. Research Policy, 45, 1620-1635.
[10] BARANZINI, A., VAN DEN BERGH, J. C. J. M., CARATTINI, S., HOWARTH, R. B., PADILLA, E. & ROCA, J. 2017. Carbon pricing in climate policy: seven reasons, complementary instruments, and political economy considerations. WIREs Climate Change, 8.
[11] BOUWMA, I., GERRITSEN, A., KAMPHORST, D. & KISTENKAS, F. 2015. Policy instruments and modes of governance in environmental policies of the European Union; Past, present and future. Wot-technical report. Statutory Research Tasks Unit for Nature & the Environment (WOT Natuur & Milieu).
[12] TINBERGEN, J. 1952. On the Theory of Economic Policy, North-Holland Publishing Company, Amsterdam.
[13] DEL RIO, P. & HOWLETT, M. 2013. Beyond the "Tinbergen Rule" in Policy Design: Matching Tools and Goals in Policy Portfolios. Annual Review of Policy Design, 1, 16.
[14] OGGE, K. S. & REICHARDT, K. 2016. Policy mixes for sustainability transitions: An extended concept and framework for analysis. Research Policy, 45, 1620-1635.
[15] cf Transformations to achieve the Sustainable Development Goals, report prepared by The World in 2050 initiative, Kriegler et al., p. 13; cf Governing the interlinkages between the SDGs, 2023, Breuer et al., chapter 4, p.55, Nexus approaches to global sustainable development | Nature Sustainability.
[16] cf Governing the interlinkages between the SDGs, 2023, Breuer et al., chapter 4, p.55, Nexus approaches to global sustainable development | Nature Sustainability.

The Conflict over Space in Cities

To better understand the role of the nexus approach in resolving certain trade-offs at a local level, we focus on the trade-off between the urgent need for space in cities for housing and living on the one hand, and for open and green spaces on the other hand.

In growing cities, the need for space for housing is self-explanatory. The United Nations explained: *"The world's population has grown rapidly. Around one billion people have been added to our planet in the last ten years. […] Two of the reasons for the rapid growth in our population is falling infant mortality and rising life expectancy because of an improved healthcare system".*[17]

By the year 2050, 68.4 percent of the world's population will live in cities.[18] Population growth and the associated growth of cities inevitably leads to a higher demand for living space. Costs for constructions have also risen due to the inflation.[19] Countering this is a challenge and an ongoing part of political debates.

For health, ecologic and social reasons cities cannot do without green areas. These areas also serve for buffering climate-related weather events such as heavy rainfalls or floodings. Due to sealing, the soil loses its ecological function. Water infiltrates more slowly, groundwater reservoirs are only replenished slowly, and floods appear more often.

The need for open spaces, on the one hand, and the demand resulting from migration into cities and growing populations on the other hand, create a conflict among the SDGs and targets. In addition to that there are interests in transport or commerce. So how can space-consuming demands in cities be reconciled, combined and resolved? And what answers does the 2030 Agenda provide?

SDG 11 addresses this issue, at least to some extent. It proclaims: *"Make cities and human settlements inclusive, safe, resilient and sustainable".* Target 11.1 aims to ensure by 2030 access for all to adequate, safe and affordable housing and basic services and upgrade slums. The SDG and its targets contain the necessary intermediate step of providing or creating sufficient space for these liveable cities and communities.

[17] World Population Prospects - Population Division - United Nations .
[18] Statista 2024, Grad der Urbanisierung in Deutschland und weltweit von 1950 bis 2015 und Prognose bis 2050, Urbanisierung in Deutschland und weltweit bis 2050 | Statista.
[19] BMWSB - Fakten zum Wohnungsmarkt (bund.de).

At the same time, cities are confronted with the demand to take urgent action to combat climate change and its impacts. SDG 13 and its target 13.1 focus on strengthening resilience and adaptive capacity to climate-related hazards and natural disasters in all countries. At this point, the SDGs and targets clash: inclusive, safe, green and public spaces in cities, on the one hand, and the need for housing, on the other hand, are opposed. Although the SDGs recognise the individual challenges for cities, they do not answer the question of how to deal with conflicts among the SDGs in general.

Cities therefore often go their own way and come up with creative solutions to their individual problems. To meet the need for more living space, one solution of cities is to expand their land. Copenhagen, for example, builds a whole new island *"Lynetteholmen"* next to the city center, to counter the housing shortage.[20] Dar es Salaam is witnessing a proliferation of informal settlements on the outskirts of the city. And Hamburg expands with the new city district *"Oberbillwerder"*.[21]

The situation is different when it comes to the need for green spaces in cities. Keeping areas free for green spaces is a major challenge, but one that is essential for healthy cities. Already in 1932 Hamburg's Chief Building Director Fritz Schumacher said: *"Building sites are created, even if you don't take care of them! Open spaces disappear if you don't take care of them."*[22] While the need for housing for the growing population is increasingly being recognized and enforced by politicians, green spaces suffer from the growth of cities and their population. This can be the result of short-term measures, that achieve more visibility than long-term measures in the context of a limited legislative period of a government. In addition, it is more difficult for citizens to understand that we must take some restrictive measures today in order to see an effect in 30-, 40- or 50-years' time.

Conflicts over space in Hamburg and Dar es Salaam

Hamburg: Conflicts and Approaches

The *Free and Hanseatic City of Hamburg* is the second biggest city in Germany and with its 1.85 million inhabitants[23] Hamburg, like many other large cities, is facing the question of which demand gets which space? The responsible ministry for urban planning and housing of Hamburg proclaims that urban growth and high environmental quality are no longer mutually exclusive. Technical advances in production and mobility, resource conservation, the energy transition and the change in social values are important drivers for sustainable urban development and offer completely new

[20] BBC News, The new island solving a Nordic housing crisis, 20th September 2019, The new island solving a Nordic housing crisis.
[21] Home - Oberbillwerder.
[22] Ground Sealing, Umweltbundesamt, 2024, Bodenversiegelung | Umweltbundesamt.
[23] December 2024.

perspectives for living together.[24] Nevertheless, the need for living space is the driving force behind development in growing cities.

Hamburg´s population will grow to 2.03 million citizens by 2035.[25] The expected growth of Hamburg´s population will require an increase in living space for approximately 72.000 households. At the same time, the green spaces of Hamburg need to remain preserved as they are decisive for upcoming climate-related weather events, for the wellbeing of the people and as space for the wildlife. In a city state like Hamburg with limited space, this conflict is inevitable.

In the following, we will show what has been done in the city of Hamburg to deal with the conflict between space for housing and for green areas, in addition to the conservation impact regulation. We will take a closer look on how different actors have found different answers on the conflict.

Example: Agreement for Urban Green Spaces in Hamburg

As we learned, green or open spaces in cities compete with the need for urgently required housing. Hamburg´s civil society recognized this grievance after the *Hamburg Ministry for Urban Planning and Housing* agreed with some associations of the housing industry, a local housing cooperation and under participation of tenants' associations on the so-called alliance for housing.[26] In 2011, the *Senate of Hamburg*, the districts and the aforementioned associations of the housing industry declared to approve 10.000 flats per year.[27] At that point the local organization for nature conservation, *NABU*, reacted. By campaigning for the preservation of the city's green spaces, the NABU started a petition for a referendum.

In Hamburg, as well as in other German federal states, citizens and local NGOs have the right to launch a popular initiative based on their own constitution. The people may request the enactment, amendment or repeal of a law or a referral of certain matters of political decision-making. Once they have collected 10.000 or more signatures by Hamburg's citizens, the *Parliament of Hamburg* is obliged to take up the issue. This is accompanied by the right to present the request to the committees of the parliament.

In 2017, the NABU successfully started the initiative "Preserving Hamburg´s Green" to collect signatures for the agreement relating to the protection of green spaces in Hamburg. A half year later, the NGO handed in 23.000 signatures to the *Senate of Hamburg*. The petition aimed to protect the city's green spaces in line with the residential development in Hamburg. The petition stipulated that the city was to place a large percentage of the Hamburg's area under legally binding nature and landscape protection. The City (the government and the parliament) shall guarantee the protection for the future. Further, the initiative demanded that areas of the inner city's

[24] Perspektiven der Stadtentwicklung: Grüne, gerechte, wachsende Stadt am Wasser (hamburg.de).
[25] Ministry for urban planning and housing Hamburg, urban planning projects 2024 pdf.
[26] Alliance for Housing Website: Bündnis für das Wohnen (hamburg.de).
[27] Bündnis für das Wohnen (hamburg.de).

green network up to and including the city's so-called second green ring should not be built on in the future. If building development is inevitable, the loss of green space must be compensated.

After the NABU delivered the necessary signatures, the government fractions of the parliament negotiated the details. This process took about one year of monthly to weekly meetings with the NABU. The participants agreed on comprehensive goals for the preservation and development of green spaces in Hamburg. The Senate agreed to support the plans financially and with workforce in the *Ministry for Environment*. The agreement was formally adopted in 2021 by Hamburg´s Ministries for Environment, for Urban Planning and Housing, for Economy, for Traffic and Mobility and for Finances. Additionally, all districts signed the agreement as well as some municipal enterprises that are regularly involved in city planning.

The contract regulates in detail the implementation of the agreement in practical administrative action. Building and planning approvals are not being delayed. Existing building permits were honored within certain references dates. The loss of green space is to be compensated for by the purchase of land and the creation of compensation by the authorities. Around 8 million euros per year are available for this purpose. This is intended to protect the green network of Hamburg in a growing and densifying city. Two SDGs are addressed at the same time: SDG 11 as well as SDG 13.

The agreement aims to increase nature conservation areas to 10 percent of the city area. 23.2 percent of the city area shall be secured as a biotope network and 18.5 percent as a landscape conservation area with modernized ordinances.

The initiative shows how various SDGs can be addressed and that SDGs that do not appear relevant at first glance also play a role. And as the Nexus Approach describes, no goal in the implementation of the 2030 Agenda should be viewed in isolation, but always in conjunction with others. In this concrete case, the administration of Hamburg emphasizes the creation of new communication structures as a particularly positive aspect of the process. Nevertheless, optimizing the cooperation between the government and civil society is still an important part of the ongoing implementation. Meanwhile, the working level and management level of the partners exchange regularly. This is just another example of how another SDG, in this case SDG 16, target 16.6, can be met. According to this target, the Member states are asked to develop effective, accountable and transparent institutions at all levels.

One lesson from this example is that the interests of nature need advocates. The agreement shows how the different points of view – the civil society, the administration, the districts and the cities government – can converge and contribute to joint success.

The fact that the *Ministry for Urban Planning and Housing* has signed the contract shows that the extensive discussions between all parties involved have led to an acceptable compromise. It also shows that the local level, here the civil society, was the one to name the existing conflict. The thesis can be confirmed that the consideration of conflicting goals at the local level forms a basis for arriving at synergistic approaches together with the various stakeholders concerned.

In this example, the conflicting goals concerning the use of space were addressed by a strong civil society and resolved through joint negotiations. The supposedly weaker demand for open spaces was given a stronger position by the agreement. The parties agreed on various solutions: Certain areas will stay clear of buildings, while others will be compensated if they are built on. This various solutions for an inevitable conflict in urban areas would not have been reached without the advocacy of civil society.

Example: Hamburg´s Green Roof Strategy

Limited space in cities and a growing sealing of the surfaces confront cities worldwide with challenges. For this reason, many cities have resorted to creative solutions by using roofs as an additional planning level.[28] Hamburg has adopted this approach and launched the *Hamburg Green Roof Strategy* in 2014. This made Hamburg the first major German city to intensively promote the greening of roofs. The target is to green at least 70 percent of both, new buildings and roofs suitable for renovation.

The use of roofs in general offers huge potential concerning limited space in cities. Roofs can be developed as usable open spaces (leisure, sports and play areas, nature experience, quiet zones, social interaction) and thus increase the quality of life. They improve the appearance of the city and enhance neighbouring flats or offices. Green roofs provide a habitat for plants and animals and increase biodiversity in the city. They can be combined with the energy-efficient utilisation of roof surfaces through photovoltaics/solar thermal energy. Green roofs contribute to improving the energy balance of buildings (heat shielding and thermal insulation), they reduce energy consumption and CO2 emissions, they reduce noise and bind dust and pollutants. Green roofs ensure the retention and evaporation of precipitation to relieve the strain on the sewers in inner-city areas; they thus contribute to climate impact adaptation.[29] These effects of green roofs touch SDG 11, target 11.6: "*By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality […]".* At the same time, SDG 13 is met. In particular, the target of CO2 reduction is being addressed. The conflict of finite

[28] E.g.: Rotterdam: World economic forum: What we can learn from one Dutch city about green roofs | World Economic Forum (weforum.org), last visited: 30.09.2024; Copenhagen: Copenhagen's green future is built on the rooftops - Tomorrow.City - The biggest platform about urban innovation, last visited 12.12.2024.

[29] Printed Document 20/11432 of Hamburg´s Parliament, 08th April 2014.

space in cities for different purposes is countered by considering a new level.

Until 31st December 2026, the *Hamburg Ministry for Environment* will fund the voluntary greening of roofs and facades to the tune of 7 million euros. Property owners can receive up to 60 per cent of the costs as grants, which they do not have to repay. In dialogue, interested parties can discuss the benefits of green roofs with planners and members of the authorities. Furthermore, legal instruments are also used to promote the greening of buildings in Hamburg. From 2027 on, green roofs in combination with solar panels will be mandatory in Hamburg. Solar green roofs combine the generation of renewable energies with heat provision and rainwater management. The number of solar green roofs will increase significantly in the next years. The green roof strategy is part of sustainable urban development.[30]

The city's most recent example of a successful green roof gardens is the green bunker St. Pauli from the Second World War, which is located in the city centre. The extension of the existing historic listed bunker offers space for a hotel, a sports hall, cafés, a music school, a discotheque and bars. At the same time, it is being used as a public accessible viewing platform at a height of 58 m. The large number of plants and trees that have been planted fulfil the ecological purpose.

It is clear that the city´s area is already being used extensively for housing and that the need for green spaces is only of secondary importance. The need for green spaces requires an advocate, in order to rethink existing space. In this concrete project of the green rooftop strategy, the stakeholders combined the two needs for green spaces and for housing. The area is being used for both needs, with positive effects on the climate, the lack of space and the cleanliness of the city. Hamburg is planning on using this solution for several cases: Kindergartens and schools can provide additional space for playground and physical education without taking up additional space. Covered underground car parks enrich the cityscape and everyday life as tree-lined neighbourhood squares.

The strategy is a great example of how an identified conflict between SDGs at local level can be resolved. The city's limited space is simply utilised multiple times. It not only thinks in terms of the previously known dimensions but also expands the perspective to include the diverse structure of the city and the previously unused area of walls and roofs. This is a great example of how interdependence among SDGs and targets has been recognized and resolved at a local level.

Dar es Salaam: conflicts, synergies and approaches

Climate change, growing inequality and gentrification, increasing health issues, and aging are the same challenges in the emerging societies.[31] Many cities in the emerging

[30] https://www.hamburg.de/resource/blob/281688/a5544533af6cba7305c0d8c58946fa96/d-more-green-roofs-for-hamburg-data.pdf ; Green Roofs in Hamburg.

[31] Access to Urban Green Space in Cities of the Global South: A Systematic Literature Review, *Urban Sci.* **2018**, *2*(3), 67; https://doi.org/10.3390/urbansci2030067.

societies have to deal with additional challenges, e.g. the development of informal settlements; larger wealth inequalities than cities in the emerged societies; a greater extent of pollution due to rapidly growing industries; and high rates of urban growth and population.[32] In 2015, there were 54 African cities with more than 1 Mio. inhabitants. This number will likely grow to 89 cities with more than 1 Mio. inhabitants in 2030.[33]

Dar es Salaam has by far the highest population in the urban area of Tanzania with over eight million people. The population of the harbor city is growing rapidly (population growth rate 2.1%).[34] Dar es Salaam is not only confronted with the challenges named above but also with the limited space of the city, just as Hamburg. Although 50 % of the city is unplanned in term of urban development, the city is witnessing urban sprawl resulting in dwindling green spaces. The city gives priority to space demand for land required for public goods – (transport, public school, health facilities, utilities). If this land is occupied, the people affected by the new planning receive compensation. The planning directives from the government in Tanzania include a general clause on adhering to different policies, guidelines and agreements. And again, open spaces seem to be considered secondary.

Next to the conflict between open spaces and spaces for housing, civil society and the government in Dar es Salaam are aware of identifying synergies among sustainability goals and targets. While the examples of Hamburg specifically look into competition of space for housing and green spaces, the case of Dar es Salaam takes a broader perspective on different local conflicts and synergies and also includes transport and gender issues.

Example: Project Flooding Map for Dar es Salaam

The harbour city of Dar es Salaam is located directly at the Indian Ocean and has a wide waterway into the city. Flooding is frequently affecting residents in the area. The need for addressing flooding was a constant demand from the community and the government of Tanzania. That is why the *Msimbazi Basin Development Project* (MBDP)[35] was initiated.

The *MBDP,* a flooding map for Dar es Salaam, is an example of a concrete way of dealing with the conflict between the need for areas for housing versus the need for enough space to absorb flooding within the city. The frequent floodings show how nature takes its space, regardless of whether people have settled there or not. The limited space in the city of Dar es Salaam cannot be provided for both housing and

[32] Access to Urban Green Space in Cities of the Global South: A Systematic Literature Review
by Alessandro Rigolon; Matthew H. E. M. Browning; Kangjae Lee and Seunguk Shin; *Urban Science* 2018, *2*(3), 67; Access to Urban Green Space in Cities of the Global South: A Systematic Literature Review.
[33] Statista, Anzahl afrikanischer Großstädte | Statista.
[34] Dar es Salaam, Tanzania Population 2024 (worldpopulationreview.com).
[35] Development Projects : Msimbazi Basin Development Project - P169425.

open spaces for flooding and water infiltration. The MBDP was developed to warn and inform the people of possible floodings.

In 2017, the Tanzanian government requested stakeholders to work together to find a solution for this challenge. Development partners for community members, civil societies, and government officials joined forces. The project was realized through different stages. The development of the conceptual design for the area was done through the participatory process *charrette*[36]. More than 1.000 people from community members, civil societies, local leaders and government officials participated for a period of 9 months. This process was used to develop the detail design for the flooding map of the area. The participants worked out where informal settlements are located and to what extent the people who live there will be affected by possible flooding. The following process took another four years of professional detail design, resource mobilization and implementation.

The MBDP was finally launched to protect endangered areas near the river from possible flooding.[37] The map is used to inform people living in the informal settlements about the risk of flooding and to show where the water can spread. As a result of the participation process, most community members chose to relocate and accept a cash settlement instead of staying in the endangered informal settlement. A positive aspect of the project design was the involvement of most stakeholders. By the direct participation of community members and civil society in this urban planning exercise, people got convinced of the idea to move and live in a safer area.

The project addresses various SDGs and targets and contributes to the realization of the various goals: SDG 11 and target 11.1, to ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums. Also target 11.b is touched. SDG 13, adaption to climate change, especially target 13.2: Integrate climate change measures into national policies, strategies and planning, is also considered by the map. At the same time, the map addressed SDG 15, in which the UN asks the member states to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss. Dar es Salaam has decided to give the forces of nature back their space. With the realization that flooding would be a permanent feature of the city, the solution was to dissolve informal

[36] The charrette is a public planning workshop. In several steps, citizens, administrative staff and experts in the planning area discuss and work together on good solutions for the planning tasks at hand. At the end there is a public forum in which the results are presented and incorporated into the political decision-making process; Wegweiser Bürgergesellschaft: Methodenbeschreibung; last visited: 19.11.2024.
[37] Msimbazi Basin Development Project.

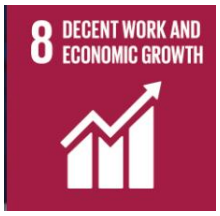
settlements. The people were persuaded to leave the endangered areas through financial incentives.

This project shows how cooperation between different perspectives at local level can help to resolve conflicts. The new flood map can help to show citizens areas at risk of flooding. This in turn helps to ensure that citizens do not settle in high-risk areas in the first place. The area that is left free can then be used again as an infiltration area for flooding.

Example: Work of the NGO Tanzanian Women Architects for Humanity

The rapid growth of cities has led to urgent needs: space, energy, decent work, and sustainable economic growth. These demands must be balanced with the critical goals of gender equality and poverty reduction, particularly housing poverty. The NGO *Tanzania Women Architects for Humanity* (TAWAH) saw this as an opportunity to resolve various conflicting goals in Tanzania and use their synergies. They focus on rural areas, primarily working with women, aligning with SDG 5 on gender equality, especially in the workplace. In the construction sector – long considered a male-dominated field – many countries challenge the question: Do women have what it takes to be in construction? The answer lies not only in the skills but also in their access to opportunities. TAWAH empowers women by providing practical training, including the production of earth bricks using local machines and constructing homes with interlocking technology. This reduces reliance on cement and lowers construction costs without compromising quality. Women gain hands-on experience, from laying foundations to roofing.

At the culmination of their efforts, the homes are given to elderly individuals living in extreme poverty. SDG 1 is considered as well. Beyond creating decent work opportunities and improving incomes for women (SDG 8), the model of TAWAH builds sustainable communities (SDG 11) across environmental, economic, and social spheres. By using locally available materials, the work of TAWAH addresses both poverty and environmental challenges. Women who once relied on cutting trees for charcoal or fired bricks now contribute to greener, more sustainable practices. Unexpectedly, the ripple effects of that work extend beyond construction. Women are finding forma employment in the sector improving their family homes and contributing to the reduction of carbon footprints. These grassroots efforts are leading to positive change, equalities within families, and reduced migration to urban areas. In this light, we can see positive synergies between the efforts and the broader goals. Building sustainable, rural communities will reduce the push towards urbanization and create lasting impact.



Example: Work of the NGO She drives to change

The project *She drives to Change* illustrates how synergies between SDGs at a local level can already be utilized:

In Tanzania, 95% of the drivers are male drivers. The initiators of She drives to change saw the gap between men and women driving scooters and at the same time the need for more green energy for vehicles. The project was initiated by the NGO *Ladies Joint Forum*, the *Marie Schlei Foundation*, the *Administration of Dar es Salaam* (city council, community development department; local communities) and the *Police Gender Force*. It aims at supporting women in obtaining their driving licence. At the same time, the project supports women to be independent and to buy their first own vehicle, mostly an electric or solar-powered scooter. The scooters are parked underneath the sun to charge via the solar panel while the women are working or are at home. The electric-powered scooters have a battery that can be charged at home. This means that no extra space is needed in the city for charging the scooters and less petrol-powered scooters pollute the city. Around 30 women between the age of 18 and 40 were already educated via the project and have received their driving licences.

The project was mainly advertised via social media and in stakeholder meetings with the local community, e.g. at sports groups or the centre for women in the city. The focus is on younger women. The women are introduced to different opportunities in the city. They are trained in driving, climate change, conflict resolution and gender questions for 6 months. A huge advantage of the project is the costs for electric scooter. Their use is much cheaper than buying petroleum. Although the investment in the scooter itself can be high, the women save money in a long term. Improvement within the project can be reached in terms of much bureaucracy. For buying the climate-friendly scooter, taxes are incurred. The scooters are not charitable. Another idea of the project to improve is to reach a funding of the state for buying the scooters.

The project refers to SDG 5: “Gender equality and women´s empowerment”. Target 5.a is involved as well: “*Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws”*. Simultaneously, SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable”, target 11.2: *“By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons”* is considered.

The project refers to SDG 13 as well. Member states are called to take urgent action to combat climate change and its impacts, Target 13.3 concretizes this goal and calls for improving education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning. The name of the project precisely describes the synergies that will be realized: She drives to change. It shows how an idea and a motivated civil society can reach the combined implication of different SDGs and targets.

Implications and Findings

A closer look at the individual measures in Hamburg and Dar es Salaam to balance out the competition for space has made clear what we suspected in advance: The resolution of conflicting goals at a local level within the SDGs is central to the full implementation of the 2030 Agenda. The different needs in cities for space have made this even clearer. A coordination among different levels of government and among different actor-types, including the public, private and civil society actors, can identify conflicting goals, create synergies and take an important step towards implementing the 2030 Agenda.

Many needs in a city like Hamburg can be met by political will. The green roof strategy is just one evidence for that thesis. The case also shows, how an area can be used jointly for different residential and green uses. Another learning of this process in this respective is, that when citizens benefit from a project, they are more willing to accept the changes. The city of Hamburg has financially supported the greening of new building roofs. This has incentivised the greening of roofs and, at the same time, the citizens have contributed to the health of their city.

Other needs, however, need an advocate. The agreement for Hamburg´s green is a good example. The strong public voice of civil society organisation NABU in Hamburg campaigned for more greenery and convinced the politics of its demands. Nevertheless, without the corresponding legal basis in the Hamburg constitution this would not have been possible.

The projects of the city of Dar es Salaam also confirm the thesis, that a cooperation between the different sectors at local level can lead to a successful implementation of the 2030 Agenda. The project She drives to change as well as the project of TAWAH illustrate how social issues such as gender equality can successfully be combined with climate issues or infrastructure projects.

In the example of the flooding map for Dar es Salaam, the green areas are kept free for the case of a flooding by making it unattractive to people living in informal settlements. With a strong public participation Dar es Salaam´s administration created the informative map. Acceptance of the citizens is key in this context. Without a

community that trusts the processes and decisions made by their governments – together with the relevant stakeholders – the sustainable implementation of the SDGs at local level is challenging. The project of the flooding map in Dar es Salaam illustrates this: the citizens in the informal settlements who did not trust the government rejected the offered compensation and did not move.

The examples from the two cities show that civil society plays an indispensable role in the implementation of the SDGs at local level. But civil society may not reach the goals alone: without communication between the stakeholders, e.g. administration, politicians and civil society, implementing the SDGs at local level is a real challenge. It is the local levels that do recognize and address conflicts among the SDGs and targets. However, the examples from Hamburg and Dar illustrate that successes can be celebrated when an exchange takes place, and the goal is seen as a common objective.

In addition to the projects presented in this paper, the corresponding panel discussion at the HSC also resulted in additional findings. As the nexus approach emphasises, bringing together different disciplines is key to successfully resolve conflicts and implementing the 2030 Agenda at local level. There are other aspects to consider along the way: many people have not yet realised how serious the situation is and how crucial the implementation of the 2030 Agenda is. One decisive aspect is, therefore, to create sufficient educational opportunities. However, this also applies across national borders: if one city has been particularly successful in overcoming a conflict of objectives or has utilised synergies particularly successfully, other cities should learn from this.

This also fulfils the call of SDG 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development, especially target 17.16: Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries. Also, city partnerships, as between Hamburg and Dar es Salaam, can promote the implementation of this SDG.

The session at the HSC 2024 revealed the need to break out of the familiar, entrenched patterns of thoughts and uncover new potential by utilising synergies. All in all, it has been shown that trade-offs among SDGs and targets are not being discussed in the depth they must be discussed to reach a breakthrough. Therefore, a long-term commitment on how to deal with trade-offs by the local stakeholders involved is necessary. Another finding of the session at the HSC was the huge relevance of engaging the youth in decision-making processes. By engaging young people at an

early stage into the processes, they can learn from experts and do better when they are in leading roles.

Experts from Hamburg and Dar es Salaam agreed in the session that there can be no one-size-fits-all policy for every city, but experiences can be exchanged and adapted to the respective circumstances.

Outlook

Looking to the future, the city partnership between Hamburg and Dar es Salaam will emerge stronger from this conference and will continue to expand its relationship. The experts benefited from their interdisciplinary exchange before and during the session. Hamburg will use the findings of the conference and of this paper for an ongoing discussion on conflicting goals on local level with local stakeholders. Also, for the ongoing process of a sustainability strategy for Hamburg the results will build a fertile ground for further efforts. This paper should also be seen as an impetus to (1) discuss conflicting objectives at local level and their solutions in greater depth from the perspective of the local administration and (2) enter into a direct dialogue with science, civil society and economy.