

# CHAPTER 10

## TEEBAGRIFOOD AND THE SUSTAINABILITY LANDSCAPE: LINKING TO THE SDGS AND OTHER ENGAGEMENT STRATEGIES

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# SUMMARY

Chapter 10 applies TEEBAgriFood's Theory of Change to develop specific engagement strategies for TEEBAgriFood. Transformations of the eco-agri-food system depend on alliances for change. Therefore, the chapter situates TEEBAgriFood in the normative framework provided by the Right to Food and relates it to other valuation initiatives. The chapter emphasizes TEEBAgriFood's contribution to the integrated implementation of the 2030 Agenda. By identifying and mapping the positive and negative externalities of specific eco-agri-food system measures, TEEBAgriFood identifies synergies and trade-offs between the SDGs. Proceeding like this, TEEBAgriFood supports follow up and review of the 2030 Agenda. Overall, the chapter emphasizes the benefits

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# CHAPTER 10

## 10.0 KEY MESSAGES

- This chapter aims to illustrate how the diverse actors identified in TEEBAgriFood's theory of change may adopt the findings of TEEBAgriFood to promote the transition towards greater sustainability. To this end, the chapter places TEEBAgriFood in today's global sustainability governance context and suggests concrete engagement strategies for groups of actors.
- TEEBAgriFood is part of and adds value to several initiatives ranging from international science-policy interfaces to firm level accounting systems. It also supports the implementation of global agreements relevant to the eco-agri-food system. The Right to Food, the Aichi Target, and the SDGs provide political reference points for actors seeking transformations in the eco-agri-food system.
- Governments, businesses, and civil society should apply TEEBAgriFood as a vehicle for the implementation of the Sustainable Development Goals. It corresponds to key principles of the 2030 Agenda, it supports the follow up and review processes envisaged by it, and it can become a much-needed tool in overcoming fragmented approaches to sustainability transformations in the eco-agri-food system.
- Governments and businesses must become agents of the transition from financing agricultural production to food system finance. Food system finance encompasses the range of financial incentives and disincentives to support transformations in the eco-agri-food system; the Addis Ababa Action Agenda provides the political reference point for this purpose.
- There is also a need to create further ownership and accountability among businesses for transformations in the eco-agri-food system. By including governments and civil society to enhance accountability, TEEBAgriFood Business Platforms represent an important step in this regard.
- Empowered citizens are key to transforming the eco-agri-food system. To make informed decisions, citizens must be able to access relevant information. Tailored TEEBAgriFood communication tools are pivotal in this regard and represent an important strategy to engage the general public.
- The strategies developed in this chapter demonstrate how TEEBAgriFood could be used in achieving eco-agri-food system transformations: i) supporting a more encompassing understanding of the eco-agri-food system, ii) reaching out to a broad range of constituencies to support alliance building to increase the leverage of those interested in changes in the eco-agri-food system, and iii) offering a holistic analysis which supports identifying strategic interventions and setting priorities.
- Relevant as the proposed strategies may be, they do not aim to be comprehensive. Knowledge-based change depends on learning and iteration. Hence, the proposed engagement strategies aim to offer a first starting point for joint efforts to further apply TEEBAgriFood's Evaluation Framework and its findings.

# TEEBAGRIFOOD AND THE SUSTAINABILITY LANDSCAPE: LINKING TO THE SDGS AND OTHER ENGAGEMENT STRATEGIES

## 10.1 INTRODUCTION

The term ‘eco-agri-food systems’ refers to the vast and interacting complex of ecosystems, agricultural lands, pastures, inland fisheries, labour, infrastructure, technology, policies, culture, traditions, and institutions (including markets) that are variously involved in growing, processing, distributing and consuming food (TEEB 2015). TEEBAgriFood evaluates today’s eco-agri-food system by using a holistic Evaluation Framework to inform on economically visible and invisible stocks and flows related to eco-agri-food systems that include social, cultural and behavioural issues and resilience concerns in analyses; it considers both monetary and non-monetary values<sup>1</sup>. As explained in detail in Chapter 6, the Evaluation Framework has been refined to reflect the evolutionary nature, through time and space, of the system as a whole but also the interactions between its component parts. Due to its holistic approach, TEEBAgriFood can learn from the various existing valuation approaches and contribute to them.

TEEBAgriFood supports sustainability transformations of the eco-agri-food system by: i) contributing to a more encompassing understanding of the eco-agri-food system, ii) strengthening alliance building to increase the leverage of those interested in changes in the eco-agri-food system by reaching out to a broad range of constituencies, and iii) identifying strategic interventions and setting priorities.

TEEBAgriFood is highly relevant in today’s global sustainability governance context. The Sustainable Development Goals (SDGs) and the Nationally Determined Contributions (NDCs), despite being significant elements of the global sustainability governance landscape, are

also voluntary. The implementation of these voluntary agreements depends on encouraging diverse actors to participate, integrating different sources of knowledge and ensuring that cross-cutting issues are properly considered. TEEBAgriFood can help by providing information and knowledge through valuation. A precondition for this is tailored communication of TEEBAgriFood’s findings. Further, the holistic analysis offered by TEEBAgriFood supports identifying the actors affected by and relevant to changes in the eco-agri-food system. Hence, TEEBAgriFood can contribute to the inclusion of a range of actors of the eco-agri-food system according to their rights, capacities, and needs. TEEBAgriFood can therefore contribute to the successful implementation of global agreements, including the Sustainable Development Goals (SDGs), the Paris Climate Agreement and the Aichi Biodiversity Targets.

To achieve a transformation of the eco-agri-food system, engagement strategies need to act in concert. For example, progressively steering investment decisions towards sustainability depends on a range of components of the eco-agri-food system. It depends on better enforcement of a human rights framework, not least for large-scale investments in land; it depends on a strengthened regulatory framework, in which sustainable investment decisions are taken; it depends on empowered citizens holding their governments accountable in implementing this regulatory framework; and, to just give another example, it depends on well-informed and empowered consumers able to make informed decisions about the products they consume. To contribute to change, TEEBAgriFood’s engagement strategies need to live up to the complexity of the eco-agri-food system. This is not to say that transformations can only begin once enough resources are available to work on all of these engagement strategies simultaneously. Each of the engagement strategies addresses a specific aspect of the eco-agri-food system and can hence stand on its own.

This chapter showcases four such engagement strategies that illustrate how TEEBAgriFood’s findings

<sup>1</sup> The question of economic versus non-economic forms of valuation is touched upon but not fully developed in this chapter as this is this is a task for Chapter 6, which explains the elements of the TEEBAgriFood Framework.

can be used to support transformation processes in the eco-agri-food system. First, supporting the integrated implementation of the 2030 Agenda and the SDGs provides a unique opportunity to apply the findings of TEEBAgriFood. The 2030 Agenda is also linked to other global agendas such as health, biodiversity, climate and the right to food. Hence, TEEBAgriFood also contributes to informing other processes. Second, TEEBAgriFood's Evaluation Framework provides the basis to move from agricultural finance to funding sustainable food systems. In this context, the Addis Ababa Action Agenda (AAAA) becomes another relevant entry point for TEEBAgriFood. Third, businesses and industry are a further important target group of TEEBAgriFood. TEEBAgriFood showcases how sustainability can become profitable. Business platforms support knowledge exchange and create ownership of change strategies. Fourth, given its unique, comprehensive approach, TEEBAgriFood is well positioned to engage stakeholders and contribute to other initiatives. To this end, it is important to develop adapted communication strategies based on the application of the Evaluation Framework. Consumers are an important group to respond to the findings of TEEBAgriFood. This section therefore proposes an adapted communication tool to that end. The four intervention strategies described here are not exhaustive. They are examples of how the results of TEEBAgriFood can be used to support transformations in the eco-agri-food system.

This chapter illustrates how diverse actors in the eco-agri-food system may adopt the findings of TEEBAgriFood to promote the transition towards greater sustainability. The engagement strategies it proposes may serve as a source of inspiration for others how they can engage with or contribute to the TEEBAgriFood community.

## 10.2 TEEBAGRIFOOD: LEARNING FROM, AND CONTRIBUTING TO, EXISTING PROCESSES

As is now clear from Chapter 9 of this report, TEEBAgriFood's endeavour to strengthen the sustainability of eco-agri-food systems is not an isolated one. Many other initiatives have been working towards similar goals in the last years and even decades, each with its own approach and theory of change and its own target, depending on the actors involved and the context in which it has been implemented. Elaborating on Chapter 9, this section will present the processes through which a selected set of initiatives – ranging from international processes to national accounting systems and firm-level

initiatives – are being implemented to identify where and how TEEBAgriFood could contribute to them. It will also place TEEBAgriFood in a broader normative context at the international level, showing how TEEBAgriFood can contribute in transformations of the eco-agri-food system.

### 10.2.1 A normative framework shaped by international processes

The need to increase the sustainability of eco-agri-food systems is longstanding. Many of the undesirable impacts on health, people livings and ecosystems (amongst other issues) have been highlighted over the past several decades (see Chapter 4 and Chapter 5). Most of those impacts have, in turn, been recognized by the international community, which has in response adopted a wide variety of multilateral agreements and international treaties (see Section 9.4). Those treaties are now part of a very dense international institutional framework (for an analysis of the consequences of such density, see Orsini *et al.* 2013). The adoption of the 2030 Agenda and its Sustainable Development Goals, in September 2015, was seen as a key cornerstone to unify and give coherence to the many objectives set up by previous treaties in the field of sustainable development – though the SDGs are not binding commitments. This 2030 Agenda is thus considered as a strategic entry point for TEEBAgriFood. Other international agreements also deserve further attention, namely the Strategic Plan for Biodiversity 2011-2020 (and its associated Aichi Targets) and the Right to Food (though the latter cannot be considered as an international agreement *per se*). Both are of utmost importance for TEEBAgriFood, though for different reasons. Aichi Targets are, on the one hand, more specific than the 2030 Agenda regarding biodiversity, and given the normative anchor of TEEBAgriFood – namely biodiversity conservation – this level of detail is necessary. On the other hand, and as we will show below, the right to food is a cornerstone of international debates on food and goes beyond the sole focus on food security.

#### *Implications of the Aichi targets for eco-agri-food systems and TEEBAgriFood's contribution to their attainment*

The Aichi Targets were adopted in 2010 by Parties to the Convention of Biological Diversity, along with a more general Strategic Plan for Biodiversity 2011-2020. They consist of five broad strategic goals and 20 targets, out of which a good number relate, directly or indirectly, to the functioning of eco-agri-food systems. As part of a more general endeavour centred on biodiversity conservation (namely TEEB), TEEBAgriFood's potential contribution to the attainment of Aichi Targets needs to be assessed carefully.

First and foremost, TEEBAgriFood should contribute to the achievement of Strategic Goal A for all aspects related to eco-agri-food systems. The goal reads as

follows: “Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.” It is comprised by 4 targets that are all relevant to TEEBAgriFood: make people aware of the values of biodiversity (related to eco-agri-food systems); integrate biodiversity values into poverty reduction strategies and national accounting; eliminate incentives – including subsidies – that are harmful to biodiversity; and implement plans for sustainable consumption and production. The TEEBAgriFood Evaluation Framework can contribute to the attainment of such targets, providing that two conditions are met: i) that TEEBAgriFood results are widely disseminated (for targets 1 and 2); and that ii) the assessments carried out at different scales uncover the underlying drivers of eco-agri-food systems functioning that have negative impacts on biodiversity.

TEEBAgriFood should also contribute to achieve other strategic goals, especially goal B (reduce direct pressures on biodiversity), by shedding light on the many links that exist between diet / consumption patterns, the functioning of food value chains and the destruction of certain ecosystems. This holds particularly true for targets 5 on halving deforestation by 2020, 6 on reaching a sustainable management of all fisheries and marine living resources and 7 on the sustainable management of areas under agriculture, aquaculture and forestry. Taking the case of deforestation, there is overwhelming evidence that the drive for new agricultural land was the main reason for deforestation of tropical forests between 1980 and 2000. Changes towards meat-based diets are a core reason for this (Gibbs *et al.* 2010; Meyfroidt *et al.* 2014). The same goes for the highly subsidized sector of deep sea fisheries, whose impacts on marine resources has long been documented (Morato *et al.* 2006; Benn *et al.* 2010; Sumaila *et al.* 2010), but for which legislative advances, for example at the level of the European Union, have been actively combated by industry lobbyists (Salomon *et al.* 2014). Here, the added value of TEEBAgriFood will not be to provide new information, as both topics (taken here as examples) have been widely covered by scientists. Neither will it be *only* to bridge the gap between policy makers and scientists, as several advocacy organisations have already raised awareness and knowledge of policy makers over the last decades. As indicated above, by offering a universal language for different valuation endeavours, TEEBAgriFood could contribute to broadening the alliance of actors working for change.

#### **The role of TEEBAgriFood in the progressive realization of the Right to Food**

Food security is a central concern. While the world food system produces enough food to feed the world, the number of undernourished or malnourished people has remained high. After a decade of decline, world hunger is on the rise again, to an estimated 815 million

of undernourished people (FAO *et al.* 2017). To face the challenge of food insecurity, the international community has agreed upon a rights-based approach, through the adoption in 2004 of the Voluntary Guidelines to support the Progressive Realization of the Right to Food (FAO 2004). As pointed out by Mechlem (2004, p. 648), however, a rights-based approach should not be seen as a mean to achieve food security only, but rather as an end in itself that complements food security by dimensions of dignity, accountability and empowerment. However, the Right to Food has, to date, not yet systematically influenced state behaviour, nor have the structural reasons for food insecurity been overcome (Lambek 2015).

Contrary to general belief, the right to food does not only consist of the obligation made to states to ensure no one goes hungry and to provide food to those in need. The right to food entails two other state obligations, namely the obligation to respect and the obligation to protect. As phrased by Mechlem (2004, p. 639), the obligation to respect requires that “States refrain from interfering directly or indirectly with the enjoyment of the rights.” The obligation to protect requires States to “take measures to ensure that third parties such as individuals, groups, corporations or any entities do not interfere in any ways with the enjoyment of the right.”

The Right to Food could both benefit from the application of TEEBAgriFood and provide a human rights reference point for its application. An enhanced understanding of externalities could support States in uncovering the structural causes of food insecurity. This, in turn, helps States to protect the right to food of those communities by better addressing the structural causes behind the problem.

At this point, a specific point needs to be made regarding the “valuation language” TEEBAgriFood uses. If TEEBAgriFood is to assess the structural causes of food insecurity and the role of States in it, other forms of valuation beyond strict quantification and monetization will be needed. This is a matter of debate often raised by CSOs and academics. Critics of monetary valuation approaches suggest that valuation contributes to the economization of nature and hence supports alienating communities from the resources they rely on. Critics further remark that relying on economic valuation alone does not allow for fully accounting for the complexity of reality – especially on a topic such as the right to food (Vatn and Bromley 1994; Norgaard 2010). Therefore, particular attention needs to be paid to the unintended side effects of the valuation language adopted by TEEBAgriFood.

## 10.2.2 A field of action structured by numerous initiatives

As stated above, actors willing to make use of TEEBAgriFood operate in a field already structured by other initiatives. Maximizing complementarities between them is the purpose of this sub-section. It looks at four main types of initiatives launched and led by various institutions: international expert assessments, regional processes, national accounting systems, and firm level accounting systems. For each of them, a short presentation of their main intent, their structure and their functioning will be followed by an identification of the potential overlapping themes with TEEBAgriFood as well as an analysis of possible ways that TEEB can engage with them.

### *International processes and science-policy interfaces*

Three main science-policy interfaces (SPI) are considered here: the Intergovernmental Panel on Climate Change (IPCC), the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) and the High-Level Panel of Expert (HLPE) of the Committee on World Food Security (CFS).

The IPCC was created in 1988 and is often presented as the “model” for most SPIs subsequently created – including the two other SPIs reviewed here. It assesses the current knowledge of climate issues and what is known about future trajectories, including the impacts of climate change and the options of adaptation, as well as the options for mitigation. Given the many relationships between agriculture, food security and climate change, the IPCC is clearly a key interlocutor for TEEBAgriFood. As of today, nearly 30 per cent of total anthropogenic emissions can be attributed to eco-agri-food systems (with some sources claiming as high as 50 per cent (Molla 2014), while many of the 570 millions of farms across the world are likely to be slightly to severely affected by climate change and thus will need to adapt – at least to increase their resilience to change (Vermeulen *et al.* 2012). Reports produced by IPCC working groups II on adaptation, and III on mitigation, are key sources of data for TEEBAgriFood. TEEBAgriFood can contribute by identifying economic and institutional levers that could help in reducing greenhouse gas emissions related to agricultural and food systems, as well means for adapting these systems to the impacts of climate change. The IPCC’s Sixth Assessment Report (AR6) process, the “Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems” (forthcoming), could be an interesting opportunity to interface with TEEBAgriFood. The findings of TEEBAgriFood could also constitute an input to the future report of IPCC’s Working Group II on climate change impacts and adaptation options, as well as to the future report by Working Group III on mitigation

options. More generally, TEEBAgriFood could assess all eco-agri-food-related actions included in the Nationally Determined Contributions (NDCs) and foster a dialogue as to how to concretely implement these actions and the transformations they require in agricultural and food systems. Proceeding like this, TEEBAgriFood could provide important inputs to discussions on how to implement the Paris Agreement on climate (UNFCCC).

The IPBES was launched in 2011 after a bit more than five years of intense discussions. It aims to provide governments, civil society and the private sector with scientifically credible and independent up-to-date assessments of available knowledge regarding biodiversity and ecosystem services. In this respect, it relates to a large extent to food and agricultural issues, as eco-agri-food systems functioning has been one of the major drivers of biodiversity loss over the last several decades. This subject arose in the thematic assessment released by the IPBES (2016) on pollinators, pollination and food production, which aimed to “assess animal pollination as a regulating ecosystem service underpinning food production in the context of its contribution to nature’s gifts to people and supporting a good quality of life.” The report identified the transformation of agricultural systems as a major recommendation for improving the state of pollinator biodiversity worldwide. However, the assessment does not fully address the available means, such as phasing out harmful agricultural subsidies, which could help enact such a transformation of eco-agri-food systems (see Rankovic *et al.* 2016). Inputs from TEEBAgriFood could be helpful in future IPBES assessments that aim to work towards achievement of international commitments to stop biodiversity loss, especially in the framework of the Convention on Biological Diversity (CBD), such as Aichi target 3 on eliminating subsidies harmful for ecosystems and the environment by 2020. By such contributions to IPBES, and/or by direct interactions with the CBD, TEEBAgriFood could be helpful in supporting the implementation of current commitments and in building CBD’s next strategic plan (post-2020).

Finally, the HLPE was created in 2010 as part of the reform of the UN Committee on World Food Security (CFS). It aims to make visible the links between food security, agricultural development and the functioning of eco-agri-food systems. It has three main functions: i) to assess the current state of food insecurity; ii) to provide scientific advice on specific policy relevant issues; iii) to identify emerging issues and help CFS members to prioritize future actions. Since its inception, it has published numerous reports that have been widely disseminated and commented by all actors advocating for more sustainable eco-agri-food systems, covering such various issue areas as land tenure and responsible agricultural investments, food security and price

volatility, food security and social protection, sustainable agricultural development for food security and nutrition (including the role of livestock). TEEBAgriFood could positively engage with the HLPE and, more broadly, with the Committee on World Food Security, to contribute to future assessments of the expert body.

Each of these three science policy interfaces (SPIs) relies on multiple sources of data, including economic and non-economic, and communicate it through different channels. They perform three main functions. First, an informational function: assessments produced by SPIs can inform international negotiations and national and local debates (Riousset *et al.* 2017). SPIs show the state of knowledge concerning environmental changes, the risks that are entailed and what can be done, and by whom, to mitigate them. Reports produced by these institutions usually benefit from strong media coverage, which helps further raise awareness on environmental issues. Second, SPIs stimulate learning and capacity building: diverse actors are involved in the functioning of these institutions and they are places of intense exchanges on the multiple dimensions of environmental issues, creating an international community of people that is able to navigate within the technicalities of environmental science and policy. Finally, they also have an important legitimizing role for the actors and institutions focused on environmental concerns. By providing a well-structured, extensive and international state of the art analysis on a given environmental issue, they can help solve controversies and thus reinforce environmental policies against the strategic use of uncertainty by their opponents, especially at national levels (Chabason *et al.* 2016). For these reasons, linking TEEBAgriFood to the work of the SPIs is a strategic necessity.

A major point of controversy common to the three SPI under scrutiny relates to the use of economic valuation, which might explain why the assessments produced by such SPIs combine economic and non-economic approaches. While some participants contend that monetization would be a major step towards the adoption of adequate policies to enhance the sustainability of our eco-agri-food system, others indeed suggest it is better not to define economic values for every single issue (Seppelt *et al.* 2012). As a valuation approach, TEEB has also responded to these challenges (Sukhdev *et al.* 2014), but TEEBAgriFood needs to respond more specifically through further development of its methodologies. TEEBAgriFood can learn from SPIs on how to combine economic and non-economic valuations, and look to SPIs regarding mechanisms to ensure inclusive participation, the systematic release of updated reports, and their linkages to international intergovernmental processes.

### **National accounting approaches going beyond GDP**

Two national accounting approaches are considered here: The System of Environmental-Economic Accounting (SEEA)<sup>2</sup> and the Inclusive Wealth Report (IWR). Both emerged following the need for development indicators that account for more than “just” economic growth. The idea of the SEEA was launched right after the first Rio convention to complement the existing United Nations System of National Accounts (SNA) created in 1953 (and revised twice since then). The latter was indeed unable to account for most of the natural capital. To overcome these limits, the SEEA was designed to take into account environmental assets in biophysical as well as monetary terms, considering seven main categories of resources: mineral and energy, land, soil, timber, aquatic resources, water, and other. As such, it does include all environmental assets that do not have direct economic value – with the explicit aim of valuing them in economic terms through the calculation of their net present value. Since its issuance in 2012, the SEEA central framework has been used in 15 developed and developing countries through the Wealth Accounting and Valuation of Ecosystem Services project (WAVES), carried out by the World Bank. The key objective of the project is to contribute to a wide implementation of the SEEA and hence to help develop an agreed methodology for measuring ecosystem services. The overall aim is to better link policy with natural capital accounts by providing decision makers with the “right” indicators.

The WAVES project, as well as the academic and practitioner community that has formed around the SEEA central framework, are important interlocutors for TEEBAgriFood. Methodologies and data can be shared between both initiatives; and it is hoped that methodological developments in TEEBAgriFood regarding the valuation of ecosystem services at each “stage” of the food chain could positively contribute to the advancement of the SEEA in national accounting systems. Last but not least, TEEBAgriFood can constructively engage with the of the SEEA-Agriculture, which intends to “enable the description and analysis of the relationship between the environment and the economic activities of agriculture, forestry and fisheries.”

Importantly, TEEBAgriFood intends to go beyond the scope of the SEEA by including health issues in its valuation. As such, it could also benefit from the experience cumulated as part of the Inclusive Wealth Report (IWR) project, started in 2010. The framework used

<sup>2</sup> It must be noted that the SEEA experimental ecosystem accounting (SEEA-EEA) is perhaps even more relevant for TEEBAgriFood than the SEEA-central framework (as well as the SEE for agriculture, forestry and fisheries). However, contrary to the SEEA central framework, these experimental frameworks have not been applied so extensively so far and are not very well known. It will be important to continuously follow and monitor the further application of these frameworks.

as part of the 2014 report is indeed quite comprehensive and includes, at national level, the valuation of three sorts of capital: natural, human and produced (see **Figure 10.1** and UNU-IHDP and UNEP 2014). This allows the authors of the report to assert that: “GDP is an inadequate measure for assessing long-term prosperity, and [that] education, health, and the environment [are] investments that will truly unleash the potential of young and interconnected populations around the world for development” (UNU-IHDP and UNEP 2014, p. 8).

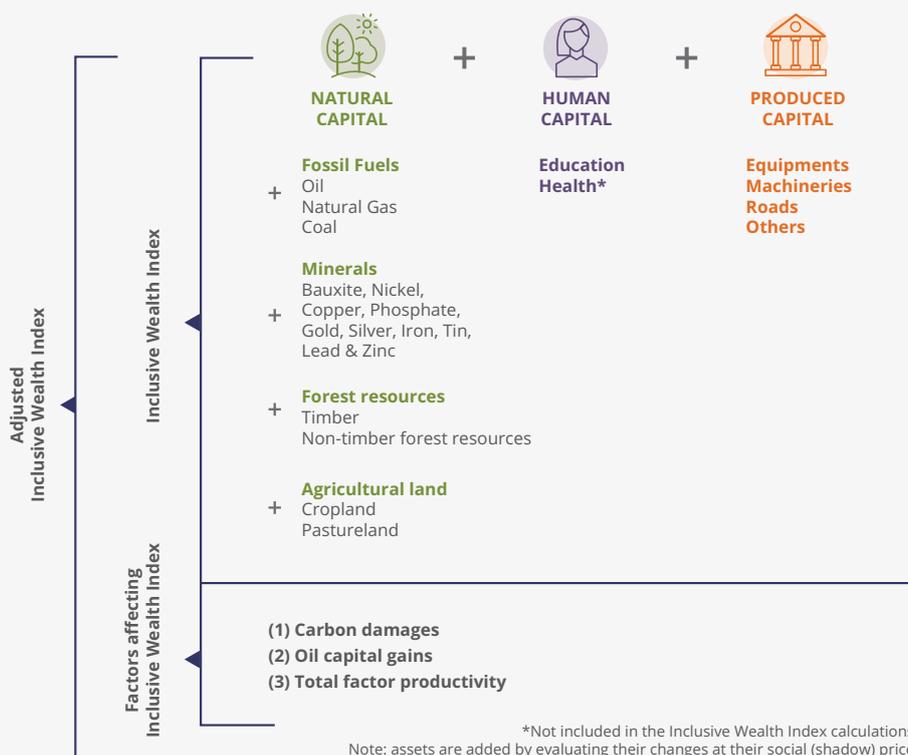
TEEBAgriFood expands the range of capitals under consideration even further. Human capital considers the capacities of an individual, intrinsic to that person. Health and education are important examples in this regard. Yet, humans do not live in isolation – nor do they acquire their human capital independently of relations with fellow human beings. This web of social relations in which an individual is embedded is social capital (Portes 1998). Considering the four types of capital, TEEBAgriFood proposes a comprehensive Evaluation Framework for the analysis of the eco-agri-food system.

**Firm level accounting / reporting approaches**

Several accounting approaches aiming at uncovering the sustainability impact of firms have been developed over the last two decades. One can cite, inter alia, the Global

Reporting Initiative ( encompassing all sustainability dimensions), the Carbon Disclosure Project (focusing on firms’ impact on carbon emission), the Natural Capital Project (working for example on global sourcing strategy for Unilever), and the Natural and Social Capital Protocols (hereafter NCP and SCP), put forth by the Natural Capital Coalition (NCC). The two latest protocols are reviewed here as examples. Their basic idea is to provide businesses with a tool that will “enable [them] to assess and better manage their direct and indirect interactions with natural [and social] capital” (FAO 2015). The NCC was launched in 2016 in order to develop the use of an accounting framework at the company level, supported by around 50 companies from diverse sectors, out of which 15 transnational companies for the agri-food sector. It gathers a broad range of stakeholders from different private companies, the World Business Council for Sustainable Development (WBCSD), the Food and Agriculture Organization of the United Nations (FAO), the International Union for the Conservation of Nature (IUCN), consultancies and major NGOs operating in the field of sustainable development (see Section 9.4.3). As tools that aim at helping companies to better manage their impacts on social and natural capital, the NCP and SCP start from the definition of the company’s objective(s) and end with the choice of a (series) of actions and processes to be operationalized in the company in order to achieve the objective(s).

**Figure 10.1** Schematic representation of the Inclusive Wealth Index and the Adjusted Wealth Index (Source: adapted from UNU-IHDP and UNEP 2014)



### **Regional processes**

In between international processes and national and firm level accounting frameworks, regional processes deserve specific attention. Two of them are considered here: the African Ministerial Conference on the Environment (AMCEN) and the Asia-Pacific Economic Cooperation (APEC). The former was established in 1985 with the prime objective of halting and reversing the degradation of the African environment. So far, it has been in charge of several projects and missions related to biodiversity conservation, sustainable land management, the coordination of African countries for climate change negotiations or for the establishment of the 2030 Agenda. Similarly, the APEC gathers 21 countries from the Asia Pacific Region (including China, Russia, the United States of America and Indonesia) in a forum for economic cooperation. Since 2010, it has taken over the issue of food security as a major axis of cooperation, which has resulted in the issuance of the 2013 Food Security Road Map towards 2020.

What makes those regional processes interesting for TEEBAgriFood is the fact they can offer mid-range, well-structured political processes, in which TEEBAgriFood results could be used in order to accompany the formulation or the evaluation of specific public policies. In line with the third engagement strategy identified for TEEBAgriFood (see Section 10.3), the APEC process could also offer good entry points to establish contacts with businesses of the region through the intermediary of the APEC business advisory council.

This review of other initiatives is cursory at best. Yet it demonstrates that TEEBAgriFood is embedded in a field already structured by other initiatives. It can learn from them and contribute to them. Given their number and their variety, ranging from international science-policy interfaces to firm level accounting systems, a key issue for TEEBAgriFood practitioners will be to define clear and strategic ways on how to engage with stakeholders revolving around eco-agri-food systems' governance. Section 10.3 will deal with this question in more details and offer options in this regard.

## **10.3 FOUR SPECIFIC ENGAGEMENT STRATEGIES FOR TEEBAGRIFOOD: APPLYING THE THEORY OF CHANGE OF TEEBAGRIFOOD**

Chapter 9 of this report highlights the need to develop targeted outreach strategies geared towards particular actors that can use the outcomes of TEEBAgriFood to make decisions that transform eco-agri-food systems. Against this backdrop, this chapter proposes four engagement strategies that emphasize how TEEBAgriFood can be used to address different target groups, and outlines next steps in the application of TEEBAgriFood including: i) supporting a more encompassing understanding of the eco-agri-food system, ii) increasing the leverage of those interested in changes in the eco-agri-food system through alliance building, and iii) offering a holistic analysis which supports identifying strategic interventions and setting priorities.

### **10.3.1 Supporting the integrated implementation of the 2030 Agenda**

On 25 September 2015, the 193 Member States of the United Nations adopted the 2030 Agenda for Sustainable Development along with 17 Sustainable Development Goals (SDGs) and 169 targets (UN 2016). Devised by countries after arguably the most intensive multi-stakeholder consultation in UN history, the 2030 Agenda with its SDGs and targets are perhaps the most comprehensive framework to date that aims to shift development patterns towards more sustainable pathways. Staying true to the essence of the sustainable development concept popularized at the first United Nations Conference on Environment and Development in Rio de Janeiro (1992), the SDGs and the 2030 Agenda call for the integration of the social, economic, and environmental dimensions of development. The 2030 Agenda represents a holistic and systemic vision to adequately address challenges to sustainable development. Member states adopted the principle of "leaving no one behind" as one of the guiding principles for SDG implementation. The principle of "leaving no one behind" responds to the growing evidence that all over the world, in countries rich and poor, groups of people are consistently being left out of development progress because of deeply entrenched and intersecting inequalities (Kabeer 2010). Last but not least, the SDGs are universal in nature, which makes them applicable to rich and poor countries alike. This holds the potential for blurring traditional North-South dynamics that have framed development practice for decades and for promoting South-South and South-North cooperation and mutual learning in various areas covered by the SDGs.

Analyses of the level of interdependency between the different SDGs have outlined interlinkages between all the goals (Waage *et al.* 2015; Le Blanc 2015). This certainly applies to SDG2 on zero hunger, which is linked with all other SDGs at goal level (Nilsson *et al.* 2016; Nilsson *et al.* 2017). If all the direct and indirect interlinkages between natural, human, social, and produced capital were to be considered, the eco-agri-food system is probably of relevance to all the SDGs and their targets.

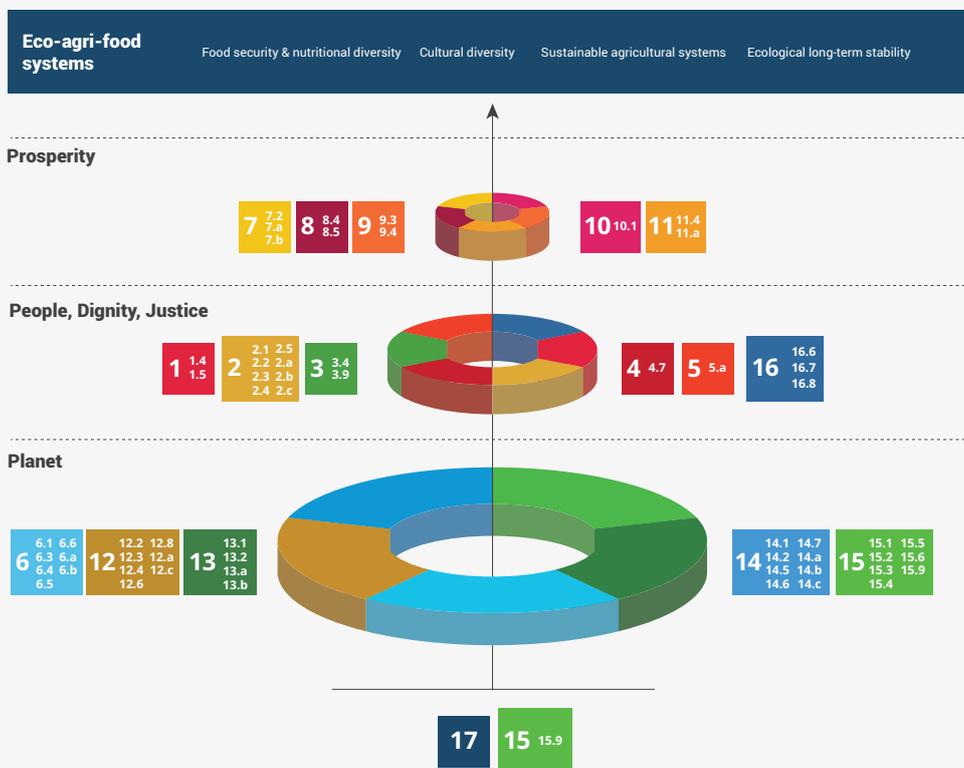
**Figure 10.2** illustrates that interlinkages can be identified between eco-agri-food systems and all the SDGs. We do not aim to create an exhaustive list of the SDGs, targets and indicators that relate to eco-agri-food systems, just several examples.

With more than 800 million people suffering from hunger worldwide, ensuring that the world provides enough food that is safe, affordable and nutritious (SDG2) is one of the biggest challenges facing the 2030 Agenda (TEEB 2015). Agriculture and food production has a major impact on the environment as the main driver of land use change, the biggest consumer of freshwater and a major contributor of greenhouse gas emissions. TEEBAgriFood is further highly relevant for targets under SDG1 on ending poverty,

SDG3 on health, SDG5 on Gender, SDG6 on water, SDG7 on energy, SDG13 on climate change and 15 on life on land (Nilsson *et al.* 2017). In addition, eco-agri-food systems are closely linked with SDG10 on reducing inequalities, as demonstrated by the fact that the majority of the global poor continue to be smallholder farmers.

This illustration emphasizes that these interlinkages can appear in the form of synergies and trade-offs between the goals. In terms of TEEBAgriFood, these interlinkages represent the very externalities that are at the centre of TEEBAgriFood’s approach. Given the complexity of the agenda and in order to support its integrated implementation, there is a need for tools that help identify measures that create synergies (positive externalities) and reduce trade-offs (negative externalities). TEEBAgriFood can contribute to the implementation of the SDGs as an indivisible set by mapping the linkages (externalities) between the different goals.

**Figure 10.2** SDG’s three-tiered structure and links to eco-agri-food systems (Source: authors, adapted from EAT 2016)



The TEEBAgriFood Framework is guided by three principles: universality, whereby the Framework is applicable to any geographical, ecological or social context; comprehensiveness, which means that any significant impacts of the food system, or any material dependencies, are considered no matter whether they be economically visible or invisible; and inclusion also of qualitative, physical, or non-monetary terms that support multiple approaches to assessment. These principles fall in line with the principles guiding the implementation of the SDGs. In short, the interdependent nature of the 2030 Agenda and the characteristics of TEEBAgriFood make TEEBAgriFood a natural candidate to support the integrated implementation of the SDGs.

One important avenue for TEEBAgriFood to support the integrated implementation of the 2030 Agenda is by supporting follow up and review processes at the national and global level. At the Rio+20 Conference, Member States agreed to set up an intergovernmental High-level Political Forum (HLPF) to coordinate and oversee implementation of the 2030 Agenda. Today, the High Level Political Forum is tasked with providing political leadership, guidance and recommendations for the implementation, follow-up and review processes of sustainable development commitments. It is responsible for strengthening the integration of the three dimensions of sustainable development in a holistic and cross-sectoral manner.

The issue of how to track progress against the SDG goals at the national and global level has generated a lively debate between governments, non-state actors and the UN. The definition of a 230-global indicator framework to monitor progress on the 17 SDGs and its 169 targets has raised questions on whether a monitoring framework that is divided among goals and targets can adequately report on an indivisible agenda. There are also concerns regarding the level of integration achieved in the “Voluntary National Reviews” by UN Member States and within the global progress assessments, the so-called “Thematic Reviews.” The experience with thematic reviews so far suggests that this tool requires further strengthening. In 2017, the HLPF reviewed SDG 2 on food security alongside other relevant SDGs for the eradication of hunger, such as poverty and gender. The review was not, however, conducted in an integrated way. Any discussion on linkages at the global level was missing (Müller and Lobos Alva 2017). The same holds true for the “Voluntary National Reviews” (VNRs). An analysis of the VNRs submitted in 2017 revealed a lack of integration in the reporting, if not in the implementation of the 2030 Agenda within countries. TEEBAgriFood can assume an important role in strengthening these national and global-level reporting instruments. If TEEBAgriFood empowers voices often neglected in decision-making as planned, its relevance for the successful implementation of the 2030 Agenda will only increase.

In sum, the 2030 Agenda offers a strategic window of opportunity since it is accompanied by high-level political commitment. Further, TEEBAgriFood is a natural candidate to address the challenges integrated implementation of the 2030 Agenda by identifying and mapping the positive and negative externalities of specific measures with regard to achieving different SDGs. In this context, the follow up and review mechanisms of the 2030 Agenda offer a concrete entry point for TEEBAgriFood and are in the need of strengthening by the type of insights offered by TEEBAgriFood.

### 10.3.2 TEEBAgriFood and the Addis Ababa Action Agenda: charting the way towards food system finance

The previous section underlines the importance of the 2030 Agenda as it provides the political backing for the integrated transformation of the eco-agri-food system. TEEBAgriFood also has immediate relevance to another part of the 2030 Agenda: the discussion on financing sustainable development.

Paragraph 39 of the 2030 Agenda emphasizes the role of a renewed Global Partnership to generate the necessary resources (“means of implementation”) to finance sustainability transformation. UN Member States agreed on the structure and principles of this Global Partnership at the Third International Conference on Financing for Development in Addis Ababa in July 2015. The outcome document of this conference, the Addis Ababa Action Agenda (UN 2015), was subsequently endorsed by the UN General Assembly and forms an integral part of the 2030 Agenda.

TEEBAgriFood can contribute to the Addis Ababa Action Agenda (AAAA) in no small part because it offers a holistic evaluation of the food system (Sukhdev *et al.* 2016). This applies to the interlinkages between the components of the eco-agri-food system, as well as to the evaluation of strategies by which to intervene in the system. That is, changes must go beyond agricultural production. In terms of financing, this implies moving beyond a focus on financing agricultural production to a broader focus on food system finance. Food system finance encompasses all financial incentives and disincentives that could be used to steer the eco-agri-food systems towards sustainability. Food system finance hence blends the discussion on financing agricultural production with the discussion on appropriate economic instruments for assessing environmental and health policy.

There is an urgent need to increase investments to eradicate hunger and malnutrition globally and to redirect investments within the eco-agri-food system towards sustainable practices. Chapter 3, Chapter 4 and Chapter 5 of this report describe the magnitude of the challenge at

hand. Estimates arrive at a financing volume of up to 400 billion USD per year in land and agriculture alone (UN 2014). Against the backdrop of these financing requirements, the AAAA (UN 2015) highlights the importance of broadening the financial base of sustainability transformations. This implies, for example, going beyond the public sector, as well as, regarding developing countries, to move beyond Official Development Assistance (ODA). At the most general level, the AAAA emphasizes the need of all actors to act in concert to finance the urgently needed sustainability transformation of the eco-agri-food system.

For Food System Finance to function it must move beyond publicly funded agricultural production financing. Goedde *et al.* (2015) estimate the value of food and agribusiness to be USD 5 trillion. Therefore, changing investment decisions by private actors in food and agribusiness represents a significant funding source for a sustainable food system (Section 10.3.3 elaborates on this point). Pollution taxes are one way to internalize externalities by taxing the polluters (“make the right people pay”) (TEEB 2011). Take the example of non-point source water pollution: in high-income countries and emerging economies agriculture is a larger polluter of inland and coastal waters than human settlements (FAO and IWMI 2017). In the world’s groundwater aquifers, nitrate is the most common chemical contaminant (*ibid.*). In the UK alone, the overall costs of agricultural water pollution are estimated at 500 million pounds Sterling for 2003/04 (Parris 2011). Ambient taxes - taxes to be paid by all potential polluters in a given region - and input taxes (fertilizer taxes) are economic instruments to address this problem (Xepapadeas 2011). An evaluation of all the externalities of the food system is a pre-condition to the design and implementation of these instruments.

As a holistic Evaluative Framework, TEEBAgriFood supports: i) a more encompassing understanding of the eco-agri-food system, ii) alliance building to increase the leverage of those interested in changes in the eco-agri-food system, and iii) the identification of strategic interventions and setting priorities through holistic analysis.

This section provides examples of each of these uses of the Framework regarding Food System Finance. (A comprehensive treatment of Food System Finance is beyond the scope of this section.)

- **Using the TEEBAgriFood Framework to identify strategic interventions and to set priorities: Taxing environmentally harmful and unhealthy practices to generate resources for sustainability transformations.** Chapter 4 describes the obesity crisis generated by the current eco-agri-food system. As the world is becoming increasingly urban, obesity increasingly affects the poorer populations and the lower-middle classes in large cities due to the

increasing consumption of ultra-processed food with high sugar, fat, and salt content. At the same time, resources spent on ultra-processed food do not support local food production. Beyond negative health impacts, these processed foods undermine the development of a sustainable urban food system. The High-level Expert Committee to the Leading Group on Innovative Financing for Agriculture, Food Security and Nutrition (2012) proposes taxing fat and sugar products as an innovative funding source for the implementation of food security and nutrition policies. In this context, the TEEBAgriFood framework can be used to identify food security and nutrition interventions that create systemic benefits and tax harmful activities. To spin the example of the urban eco-agri-food system further: there is now increasing evidence that urban agriculture does not only enhance food security and improve the nutritional status of urban poor (Masvaure 2016; Ayerakwa 2017; Omondi *et al.* 2017), urban agriculture also contributes to women’s empowerment (Olivier *et al.* 2017), and has environmental benefits (Aubry *et al.* 2012). Urban agriculture is not only important in developing countries, but also in poor neighbourhoods in high-income countries (Parece *et al.* 2017). Yet those practicing urban agriculture need to cope with lack of access to finance (Cabannes 2012). Linking a tax on products with high sugar, fat, and salt content with support to urban gardening represents one example of a systemic intervention in the eco-agri-food system. This example showcases the type of analysis – at a very coarse scale – that is supported or enabled by applying the TEEBAgriFood Framework to help with decisions on investment priorities and possible funding sources.

- **Using the TEEBAgriFood Framework to obtain a more encompassing understanding of the eco-agri-food system: Approaching future externalities and their financial implications.** Since 2011, environmental risks have featured prominently in the World Economic Forum’s Global Risk Report, both in terms of likelihood of entry and in terms of impact. Externalities of the eco-agri-food system will influence payments to be made by the insurance sector, within agriculture (e.g. crop failure) and beyond it (e.g. damage to infrastructure because of a landscape’s reduced water holding capacity). An enhanced understanding of externalities allows for a more encompassing conversation on the role of the insurance sector within the eco-agri-food system. The insurance sector matters both as an investor (e.g. UNEP (2017) estimates the managed assets to be worth USD 31 trillion) and as an actor setting incentives for its clients to pursue sustainable practices. Take the example of land degradation: healthy soils make for a more resilient agricultural landscape that can store water and make plants less

prone to the effects of drought. The Economics of Land Degradation Initiative shows that investments in land across different production systems are less costly than bearing the costs of inaction (Nkonya *et al.* 2016). Yet sustainable land management often requires upfront investments, which only yield returns later on (see, for example, Meinzen-Dick and Di Gregorio 2004). In instances such as these, investments by the insurance industry and financial incentives in the form of reduced insurance fees might support necessary changes in agricultural practices.

- **Using the TEEBAgriFood Framework to support alliance building across different constituencies: Redirecting agricultural subsidies.** According to OECD (2017), financial support to individual farmers in 2014 - 2016 was on average USD 519 billion per year (for the 52 countries covered by the report). Taking the example of agriculture in the European Union, these subsidies contribute to environmentally harmful practices. Redirecting these subsidies could have major impact on sustainability transformations. Regarding the reform of the European Union's Common Agricultural Policy, proposals call for tying direct payments to farmers more strongly to sustainability criteria. In essence, these proposals claim that subsidies should be available only for agricultural production that generates positive externalities ("Public money for public services") (Lischka 2016). Payments for ecosystem (PES) services offer a source of revenue for sustainable agricultural practices (Engel *et al.* 2008). Yet markets for ecosystem services are only slowly emerging and require a strengthened enabling framework. Redirecting agricultural subsidies could support creating this enabling framework for PES schemes. Changing the allocation of subsidies requires broad political alliances to create the necessary leverage. As TEEBAgriFood reaches out to the environmental and health communities it goes beyond the "usual suspects" in environment and agriculture and thereby broadens alliances for change.

There is tremendous financing needed to feed the future's 9 billion people in a sustainable way. The global framework for financing the 2030 Agenda, the Addis Ababa Action Agenda (UN 2015), requires tools such as TEEBAgriFood to support countries in designing their financing strategies for the eco-agri-food system, tailored to the complexities of the eco-agri-food system.

### 10.3.3 Establishing TEEBAgriFood Business Platforms

Chapter 9 of this report on TEEBAgriFood's theory of change identifies business and industry as one major

actor group for which strategies of engagement need to be specially tailored. This section explores business platforms as one promising area for TEEBAgriFood to engage with leaders and key actors in the business sector. First we review the current state of the debate on multi-stakeholder platforms processes in order to elucidate their role in global environmental governance and the lessons learned from setting them up in different contexts. Potential rationales for establishing such platforms specifically for the business sector will also be explored. Finally, and in order to draw conclusions, this section will present some of the most current and relevant examples of business-specific initiatives and their unifying characteristics to show which promising features should be considered by TEEBAgriFood Business Platforms.

TEEBAgriFood business platforms enter a very crowded landscape of initiatives, which increases the need to clearly define their added value. TEEBAgriFood business platforms' added value could be: a) informing businesses to recognize, and where appropriate, capture hidden flows of the eco-agri-food systems complex in their decision-making, b) going beyond the focus on natural capital alone (as in other initiatives) and include all relevant physical, economic and non-economic (capital) stocks and (physical) flows, allowing for entry points and applications for measuring value addition, and/or c) systematically addressing both ecosystem health and human health impacts and dependencies of eco-agri-food systems. This section also warns of the need to ensure TEEBAgriFood Business Platforms take measures to avoid pitfalls: such as assuming all stakeholders enter the dialogues with an equal decision-making power or have the same stake in the discussions, assuming multi-stakeholder platforms are "naturally" inclusive and democratic, or failing to acknowledge and properly ensure sufficient resources for participation.

A precondition to arriving at any conclusion regarding the potential of TEEBAgriFood Business Platforms is an understanding of the current state of the wider debate on multi-stakeholder platforms or partnerships. Multi-stakeholder processes emerged in the landscape of approaches to international policy making at the UN Earth Summit, held in Rio in 1992 (Murphy and Coleman 2000). Hemmati (2002, p.2) provides the following definition:

*"The term multi-stakeholder processes describes processes which aim to bring together all major stakeholders in a new form of communication, decision-finding (and possibly decision-making) on a particular issue. They are also based on recognition of the importance of achieving equity and accountability in communication between stakeholders, involving equitable representation of three or more stakeholder groups and their views. They are based on democratic principles of transparency and participation, and aim to develop partnerships and strengthened networks*

among stakeholders. MSPs cover a wide spectrum of structures and levels of engagement. They can comprise dialogues on policy or grow to include consensus-building, decision-making and implementation of practical solutions. The exact nature of any such process will depend on the issues, its objectives, participants, scope and timelines, among other factors.”

Multi-stakeholder platforms or partnerships are becoming a thriving and recognizable instrument of global environmental governance. They are usually expected to offer suitable conditions for collective decision-making, the space to acknowledge the increasing role of non-state actors, and the necessary flexibility to break through deadlocked multilateral negotiations. Empirical experience shows that multi-stakeholder platforms are proliferating as a tool to exchange knowledge, contribute to creating ownership for change strategies and to increase accountability (also of the business sector). Their role, relevance and capacity to meet these expectations is now a widely studied phenomenon (Parkins and Mitchell 2005; Martens 2007; Andonova 2010; Bexell *et al.* 2010; Fuchs *et al.* 2011; Pattberg *et al.* 2012; Biermann *et al.* 2012; Weiss and Wilkinson 2014; Beisheim and Liese 2014; Chan *et al.* 2015). The main concerns regarding their effectiveness focus, for instance, on their potential to increase the already overwhelming decision-making power of private actors in international political priorities (Martens 2007), the politics of membership and decision-making, as well as the weakening of government responsibility (Nasiritousi *et al.* 2015). TEEBAgriFood business platforms need to carefully consider specific countering strategies, for instance by ensuring they are not “business-only” and exclusive, by ensuring sufficient resources for wider participation, and by adopting democratic decision-making structures.

Multi-stakeholder platforms can ideally: i) create a space for exchange of different perspectives and knowledge in a more flexible setting, ii) ensure accountability for the actions of the actors involved and ultimately, iii) support decision making and the development of strategies that can later support and influence more official and binding discussions, when needed. At the same time, one needs to remain realistic about the potential of multi-stakeholder platforms. Imbalances in power relations, lack of accountability and strong reporting mechanisms, as well as the lack of a strong commitment to support the active participation of social and peasant movements and small businesses could all threaten the actual contribution of such platforms.

But what would be the purpose or rationale for establishing such platforms, specifically for business and focusing on eco-agri-food systems? First of all, the TEEBAgriFood Framework sheds light on the range of actors involved in the eco-agri-food system. The need for collaborations and multi-stakeholder approaches in the

food and agriculture sectors emerges from the magnitude of the needed transformation in order to make our food systems sustainable. Therefore, many efforts would need to converge, and the existence of such platforms would aim at harnessing the transformative power of these actors to ensure coherent actions. But there are several other related arguments that are rooted in the business case for sustainability, on normative questions and on the potential key leadership of business actors. A common unifying paradigm, which has gained traction over the past two decades (Haanaes *et al.* 2013), and can drive TEEBAgriFood business platforms forward, involves the motivation to make sustainability profitable. BSDC (2017) states that a global food and agriculture system in line with the SDGs would deliver nutritious, affordable food for a growing world population, generate higher incomes – especially for the world’s 1.5 billion smallholders – and help restore forests, freshwater resources and vital ecosystems. It further sets the economic value of this transformation to sustainability at “more than US\$2 trillion by 2030” (*ibid.*, p.8). Given TEEBAgriFood’s valuation approach, business actors are a natural target group. Companies make decisions based on various risks and opportunities (operational, regulatory, reputational, market and product, and financing), and accounting for value additions in supply chains can allow for companies to identify these, and take appropriate action (TEEB 2012). Next to the business case for sustainability, business platforms could be shaped and informed by the normative responsibility of this sector to change towards more sustainable and socially responsible practices. From this perspective, the focus is on the growing recognition of the need to address intrinsic inequalities in the way food is produced and distributed. As the producers, manufacturers and retailers of most of the world’s food (and non-food agricultural products), business has a responsibility to help achieve transformation. The potential leadership of business actors for sustainable development has been highlighted in the framework of the 2030 Agenda, where business leaders committed to support the achievement of the SDGs. This was further demonstrated by the appointment of the CEO of Unilever as one of seventeen advocates for the SDGs.

Before the purpose, aim and focus of TEEBAgriFood business platforms can be determined, it is imperative to put their role and added value in perspective, especially compared to other platforms that aim to bring business actors together. Visser *et al.* (2015) provide a good overview in their CSR International Research Compendium, with a focus on environment. Aubert (2017) identifies the emergence of at least a dozen multi-stakeholder initiatives in the field of food and nutrition security and agricultural development between 2008 and 2016, and remarks that all of them involve companies from different segments of food chains, most of them being large and often transnational corporations. Section 10.2 of this chapter outlines that TEEBAgriFood can - and should -

learn from related initiatives and complement them; there are several examples of business-focused or business-led initiatives that would be relevant in the establishment of TEEBAgriFood business platforms. These initiatives seem to present certain unifying characteristics to different degrees: they aim to produce new information or tools, they focus on increasing collaboration and on the joint development of strategies, they are created by the self-initiative of business actors and at times, they go beyond the business sector to include different actors. In terms of platforms focused on producing new information to inform decision-making, the global multi-stakeholder collaboration “Natural Capital Coalition” (NCC) - formerly the TEEB for Business Coalition - was formed in 2014 in order to harmonize approaches to natural capital, promote a shift in behaviour that enhances natural capital and support the evolution of an enabling environment that both aids natural capital thinking and integrates it into other initiatives (NCC 2015). The protocol does not, however, explicitly list or recommend tools or methodologies and focuses instead on informing internal decision-making.

Evolving examples of platforms with a focus on the joint development of targets, strategies and their implementation include the Global AgriBusiness Alliance (GAA) and the Food and Land Use Coalition (FOLU). GAA is an international, private sector alliance launched in 2016 and led by the CEOs of forty-one major companies from the agri-business sector. GAA has the aim to “tackle environmental, social and sustainability challenges to improve the resilience of farmers across the world” (GAA 2016). The alliance also focuses on supporting the achievement of SDG 2: “end hunger, achieve food security and improved nutrition and promote sustainable agriculture”. Within the GAA, private sector companies across the entire value chain of food and non-food crops are gathered to focus on sustainability and development challenges in the sector. As the companies operating closest to ‘farmgate’, GAA members aim to make advances in tackling the seemingly intractable challenges facing supply chains. A more recent example is the establishment of the FOLU by the Business and Sustainable Development Commission and the New Climate Economy leadership. FOLU is a self-governing coalition that has evolved from a few organisations reaching out to each other to try and address the complexity of the food and land use systems. FOLU has a set of three strategically linked work programmes: i) developing global and national targets and pathways towards sustainable land-use and food systems, ii) identifying and supporting business solutions, and iii) implementing national and local solutions. Results of the work will be compiled into a global synthesis report to be launched during the World Economic Forum in Davos in 2019 (EAT 2017; Schmidt-Traub 2017).

Both GAA and FOLU are examples of platforms that were created by business leaders as an initiative coming from within the sector. There are also platforms that go beyond the business sector to include science and civil society. The NCC, for instance, purposely goes beyond the business sector and engages organizations, for instance, from government, science and civil society. FOLU also goes beyond the business sector. With over 30 members, it includes businesses, policy makers, foundations, investors, academics, international organisations and members of civil society.

There are several aspects that TEEBAgriFood business platforms could learn from and contribute to as regards the initiatives presented above, namely, the aim to jointly develop new information and strategies, the targeted support of global sustainable development agendas, the need to ensure accountability and reporting mechanisms and the inclusion of stakeholders beyond the business sector, as well as from small businesses. Similar to the NCC, TEEBAgriFood business platforms could help inform businesses, and where appropriate, capture hidden flows of the eco-agri-food systems complex in their decision-making. TEEBAgriFood efforts would, however, go beyond the focus on natural capital alone and rather include all relevant physical, economic and non-economic (capital) stocks and (physical) flows, allowing for entry points and applications for measuring value addition. TEEBAgriFood Business Platforms could also, for instance, address the lack of proposed tools or methodologies by the NCC with the TEEBAgriFood Evaluation Framework (presented earlier in this report) and disseminate it so that it can be used by a wide range of stakeholders and applied towards changes in the eco-agri-food system. In line with the engagement strategy put forward in Section 10.3.1 of this chapter on “supporting the integrated implementation of the 2030 Agenda”, an explicit focus by TEEBAgriFood business platforms on their potential contribution to global sustainable development agendas, such as the 2030 Agenda, would be desirable. This type of analysis needs to go beyond one single SDG to recognize the potential effects and interlinkages to other themes covered by the SDGs and their links to different parts of eco-agri-food Systems<sup>3</sup>. An analysis for TEEBAgriFood and its link to the SDGs is provided in Section 10.3.1 of this chapter. In addition, according to the definition of multi-stakeholder processes and the empirical experiences with this type of platform presented earlier in this section, it would be highly advisable for TEEBAgriFood business platforms to go beyond the business sector and engage organizations, for instance, from government, science and civil society. This would be a promising approach in order to mitigate the risk of becoming overly exclusive and to allow for different perspectives to be taken into account. Equally, TEEBAgriFood business platforms should acknowledge

<sup>3</sup> For more on the SDGs as a network and a system please see: Waage et al. 2015; Le Blanc 2015; Nilsson et al. 2016; Nilsson et al. 2017.

the power imbalances that arise when multinational corporations, States, civil society groups and smaller companies enter a multi-stakeholder process (Aubert 2017). This issue can only begin to be addressed through the inclusion of participatory formats and strong reporting mechanisms to increase accountability, especially of large companies and States.

TEEBAgriFood Business Platforms need to provide business-specific strategies and entry points for the sustainable transformation of eco-agri-food systems. Nonetheless, they ought to acknowledge that these strategies and entry points cannot be identified and developed by business alone, as other key actors provide knowledge that could avoid future conflicts and the lack of consideration of important potential negative impacts of certain strategies. In particular, a participatory multi-stakeholder approaches to TEEBAgriFood business platforms should aim to increase the accountability of business actors as their increasing power and influence in decision making has been intensely criticised in the framework of multi-stakeholder processes (Parkins and Mitchell 2005; Martens 2007; Andonova 2010; Bexell *et al.* 2010; Fuchs *et al.* 2011; Pattberg *et al.* 2012; Biermann *et al.* 2012; Weiss and Wilkinson 2014; Beisheim and Liese 2014; Nasiritousi *et al.* 2015; Chan *et al.* 2015). Finally, there are several aspects of eco-agri-food systems on which TEEBAgriFood Business Platforms can contribute and on which they can collaborate with the other existing initiatives. TEEBAgriFood business platforms should share information on: the valuation of health impacts arising from unhealthy diets, or arising from agricultural impacts on air and water quality and vector-borne diseases, on impacts of GHG emissions, and on food waste, as areas of key transformation potential.

Given the burgeoning landscape of business-specific or business led initiatives, it will be of utmost importance for TEEBAgriFood Business Platforms to clearly delimit their added value and contribution. In this regard, and as highlighted earlier, the focus of TEEBAgriFood on addressing both ecosystem health and human health impacts and dependencies of eco-agri-food systems adds a specific perspective to the current landscape. No other initiative is highlighting these important dimensions in a systematic way and this could be a unique selling point of a, for instance, “TEEB Global Food and Health Partnership”. It will be crucial, though, to engage in early dialogues with potential members of TEEBAgriFood business platforms to assess the different options for their aims, structures and added value. This would highly increase their potential for success.

### 10.3.4 Publishing a Food Atlas

TEEBAgriFood’s theory of change allocates an important role to the consumers in the effort to attain

transformations in the eco-agri-food system. Hence, targeted engagement with consumers is needed and specific communication strategies will contribute to this. Bolton (2017) emphasizes the need to “turn problems into issues” when seeking change. While big problems (an unsustainable eco-agri-food system) garner attention, they might appear too big to be addressed. According to Bolton, breaking down problems into “solvable issues” is what makes the difference. Developing adapted communication strategies on selected findings of TEEBAgriFood targeting consumers represents another promising engagement strategy.

A communications tool that has proved to be successful in reaching out to the public has been the production of a series of “Atlases”. More specifically, the Meat Atlas (Heinrich Böll Foundation and Friends of the Earth Europe 2014), the Soil Atlas (Heinrich Böll Foundation and the Institute for Advanced Sustainability Studies 2015) and the Ocean Atlas (Heinrich Böll Foundation and the University of Kiel’s Future Ocean Cluster of Excellence 2017) cover topics related to these issues in a concise, easy to read and easy to understand language, and include targeted infographics for highest comprehensibility impact. The Meat Atlas also includes a “hotspots” feature, highlighting issues in specific geographic areas. The aim of these atlases is to provide information on which people can base decisions affecting their behaviour towards these resources. For example, the Soil Atlas focuses on raising public awareness on the critical – and underappreciated – role of soils in people’s daily lives, including on food production and wider ecosystem services. The Ocean Atlas also aims to stimulate a broader social and political discussion about the meaning of the ocean as an important system and the possibilities for protecting it. All three atlases have met with strong public attention and led to high media interest - currently, the Soil Atlas is in its third edition and the Meat Atlas is in its sixth edition. Building on the successful publication of the Meat Atlas, the Soil Atlas and the Ocean Atlas, a Food Atlas will illustrate easy to understand information, highlighting key points on food and food production as it relates to impacts on the different capitals that are part of the eco-agri-food systems.

Publishing a Food Atlas capitalizes on the momentum afforded by growing consumers’ awareness of the impact of food on human health and on the environment. As consumers are increasingly becoming mindful of what they eat, where it comes from and how it is produced, they have a critical role in the transformation of the eco-agri-food system, because they can be drivers of change. Consumer preferences can influence decisions taken along the length of the food value chain; hence the more knowledge consumers are armed with, the more leverage they can exert. Based upon the TEEBAgriFood Evaluation Framework, and using the successful Meat, Soil and Ocean Atlases as models, the publication of a Food Atlas would

provide consumers with information about the eco-agri-food complex by addressing selected aspects of these systems making use of high-impact infographics and other communication tools to explain the eco-agri-food system in an easily comprehensible way, using language targeted to the broader public. It will provide an overview of the main issues, the global interconnectedness of production models, the nexus between different capitals (social, economic, environmental) and how these can be reflected in true costing of produce and products at the farm gate. The atlas will convey the strong message that the choices made by consumers in their everyday life matter for one's health and for the health of the planet.

## **10.4 NEXT STEPS: DEVELOPMENT OF FURTHER ENGAGEMENT STRATEGIES FOR THE SUSTAINABILITY TRANSFORMATION OF THE ECO-AGRI-FOOD SYSTEM**

TEEBAgriFood was not designed to be a static, stand-alone initiative. It connects to existing processes, engages with partners, builds upon sound science and evolves in pace with advances in knowledge. TEEBAgriFood seeks practical application of its results with wide array of relevant stakeholders. The purpose is to support multi-stakeholder processes aimed at a transformation of the eco-agri-food system. This chapter makes the case for the need for the innovative approach of TEEBAgriFood to find its way into the core of the current landscape of initiatives aiming towards more sustainable eco-agri-food systems. It also acknowledges that key actors and decision-makers will not automatically reach out and engage with or use the TEEBAgriFood Framework or its outcomes. This implies the need to clearly spell out the uses and benefits of TEEBAgriFood and proactively engage with other actors. TEEBAgriFood's Evaluation Framework adds to existing knowledge by recognizing agriculture as a supplier of food and raw materials but also as a supplier of employment, as a central determinant of the well-being of rural poor, and as a cultural activity embedded in everyday life. It thereby provides a more holistic understanding of eco-agri-food systems. It also establishes the linkages to human health, thereby providing a link to another range of actors and processes to support change in the eco-agri-food system. TEEBAgriFood also helps to reach out to a broad range of constituencies and supports identifying strategic interventions and setting priorities. Actors

aiming to engage with and use TEEBAgriFood products are not starting from scratch. There are myriad international agreements, initiatives, platforms and projects that TEEBAgriFood can contribute to and learn from. There is also an increasing recognition that "business as usual" in agricultural production and agricultural production systems is no longer ecologically, socio-culturally or economically sustainable.

To transform learning into action, interlinkages and synergies between varied initiatives and processes outlined here need to be put in practice and exercised in a more active and systematic way. For this, the chapter outlines four engagement strategies according to its theory of change and tailored to the needs of different actors in the previous sections: supporting the integrated implementation of Agenda 2030; financing sustainable food systems; establishing business platforms; and publishing a Food Atlas. To begin with, the 2030 Agenda offers a strategic window of opportunity since the transformation implied by the SDGs is very much in line with TEEBAgriFood's foci. The 2030 Agenda can act as a strategic entry point, as an internationally agreed reference that all actors can use to call for more ambition in changing our eco-agri-food systems. At the same time, if eco-agri-food systems are sustainably governed, they would be contributing to the achievement of a substantial number of targets and goals, thus emphasizing the pivotal role of eco-agri-food systems to sustainable development in general. Financing of such an integrated agenda needs to go beyond financing agricultural production only. The Addis Ababa Action Agenda provides the relevant framework for the design of more relevant financing tools. Countries designing their financing strategies for sustainable development benefit from TEEBAgriFood, as it supports priority setting in the design of financing schemes. Business-centred multi-stakeholder platforms will contribute to similar, existing activities by systematically sharing information emerging from TEEBAgriFood's products; in addition, they will provide a space for cooperation and create opportunities for business actors to personify the change towards sustainable eco-agri-food systems. In this sense, an early dialogue with potential members of such Business Platforms to assess the different options for their aims, structures and added value, and is highly recommended. Finally, a Food Atlas will illustrate easy to understand information, highlighting key points, on food and food production as it relates to/impacts on the different capitals that are part of the eco-agri-food systems.

The four strategies presented in this chapter are non-exhaustive and are intended to be examples of how the results of TEEBAgriFood can be used to support transformations in the eco-agri-food system. These strategies aim to increase the applicability of the TEEBAgriFood Framework and outcomes and the likelihood of involvement by key actors. TEEBAgriFood's

learning process is not linear and should be iterative. Therefore, it is important to develop new and adapt existing strategies further to apply the TEEBAgriFood theory of change to the specific stakeholders/processes. Equally, it is of crucial importance to begin implementing and supporting all or a combination of these strategies in order to increase TEEBAgriFood's contribution towards sustainable eco-agri-food systems.

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