



Task Group on catalysing science-based policy action on SCP

Overview the value chain approach adopted by the task group.

At its 3rd meeting, the task group adopted a value chain approach as an interface between the data of the International Resource Panel and the actions of the One Planet network to strengthen science-based actions. This approach was then adopted as the basis for the current analysis on food and construction, as well as textiles.

At its 5th meeting, the task group decided that the report to UNEA5 should include the following sections:

1. Overview of the value chain approach – as the interface between the work of the International Resource Panel and the work of the One Planet network
2. The value chain approach in practice: applying it to Food Systems, Textiles, Construction value chains.
3. Natural Resource Management and Agenda 2030; including data needs and gaps to be addressed for an effective science-policy interface

The purpose of this note is to provide an overview of the methodology utilised for the value chain approach in the three prioritised sectors. It can serve as reference for the prioritised value chain, as well as for futures ones that may be undertaken. This note will be the basis for section 1 of the UNEA report.

Value Chains – an interface between science on natural resources and action on sustainable consumption and production

The value chain approach considers the entire value chain of economic activities, by understanding what is happening at different stages of the value chain as well as how the value chain operates as part of a system. Adopting a value chain approach helps to identify strategic intervention points and shape corresponding actions that improve natural resource management and achieve multiple sustainability objectives simultaneously. By being specific (type of resource, type of impact, stage of the life cycle) and by engaging all stakeholders, this approach also generates solutions that are actionable by different stakeholders. As such, the value chain approach provides a practical interface between the science and data on natural resource use and environmental impacts, and the actions that stakeholders can take towards sustainable consumption and production and Agenda 2030.

Whereas no standard or formal methodology currently exists for this approach, extensive knowledge material and guidance is available from a variety of source and in particular from UNEP and the Life-Cycle Initiative. These enable an overall framing of the value chain approach, while ensuring the needed flexibility to cater for the complexity of the sectors addressed by the task group and the overall request of the Resolution to provide insights on natural resource management in the context of Agenda 2030.

The value chain approach: a methodology to organise information and data to shape impactful action

The value chain approach aims to identify hotspots and shape corresponding actions built on existing knowledge and available data. It provides a framework applicable to different sectors, products and geographical scales. As an action-oriented approach, its key outcome is to identify where the greatest opportunity for improvement occurs, rather than communicating a precisely quantified current impact.

In the context of the work of this task group on catalysing science-policy action, the source of data and information are primarily the International Resource Panel and the One Planet network. This information is analysed and discussed under three key steps: 1) Understanding the value chain and identifying the key hotspots, 2) consolidating existing action and identifying opportunities to address the identified hotspots, 3) Reaching a common agenda and prioritising action to address identified gaps. The table provides an overview of the different steps to be undertaken in applying this methodology.

Step	Description	Source of information
1. Understand the value chain and identify key hotspots		
a. Define the value chain, its key stages and key actors	<p>The value chain covers all stages in a product's life, from supply of raw materials through to disposal after use, and encompasses the activities linked to value creation such as business models, investments and regulation. In addition, the value chain is also comprised of the actors undertaking the activities and the stakeholders that can influence the activities. The value chain thus incorporates not only the physical processes, such as farms and factories, but also the business models and the way products are designed, promoted and offered to consumers.</p> <p>The value chain will typically include the following stages: natural resource extraction, production, processing/manufacturing, packaging, distribution, marketing, sale (retail & other), consumption, waste management and disposal. However, there may be important variations between a sector and another, or between a sector, a product and a geographical location. It is therefore key for the next steps of this approach to ensure that the key stages of the value chain and their actors are captured. For the purpose and scope of the review of global value chains, simplification and generalisation on the stages of the value chain is necessary while acknowledging that these may vary between and within countries and region.</p>	<i>multiple</i>
b. Map data on natural resource use and impacts to the stages of the value chain	<p style="text-align: center;"><i>This identifies what is happening.</i></p> <p>The mapping of available data and information to key stages of the value chain allows to filter and distil large volume of information to identify where the greatest opportunity for improvement occurs. The mapping focused mainly on natural resources and raw material use, as well as environmental impacts and known socio-economic impacts.</p>	<i>IRP data; other data as needed</i>



	<p><i>Natural resources and materials</i> - The mapping of data and information included the following natural resources and raw materials:</p> <p>Natural resources: Land, soils, landscapes, Water, Biodiversity and ecosystems, Genetic resources; Minerals; Nutrients; Fossil fuels. Materials: Concrete, Steel, Aluminium, Timber, Glass</p> <p><i>Environmental impacts</i> - Data and information on the following environmental impacts were mapped: Deforestation, Biodiversity loss, Water: reduced availability and pollution, Soil: degradation and pollution, Air pollution, GHG emissions</p> <p><i>Known socio-economic impacts</i> - When available, socio-economic impacts have also been mapped to the different stages of the value chain. These were mostly based on the results of social Life-cycle analysis, where applicable and available</p>	
<p>c. Apply a systems analysis to the value chain to map feedback loops and interconnections</p>	<p><i>This identifies why it is happening.</i></p> <p>While the mapping of resource use and impact along the value chain shows “what” is happening at different stages of the value chain, applying a systems analysis to it shows “why” it is happening. By integrating an understanding of the systemic barriers and drivers in the analysis, it is then possible to understand how to change the “what is happening”. For instance, the mapping of data will have identified stages of the value chain where the majority of the natural resource use and impacts occur, however it does not automatically follow that the solutions are only to be found at those stages of the value chain.</p> <p>It is necessary to apply a systems lens to the analysis of a sector to move beyond a siloed and disconnected analysis, and toward understanding how different drivers of a given sector - such as institutions, regulation, demographics and economic factors - shape the operations of along the value chain. The drivers and the structure of the value chain determine the level of influence and power of certain actors, and thus their ability to contribute to the solutions. Each of the drivers contribute to shaping the sector and influencing the behaviour of the actors along the value chain and determining what options are available to them. Equally, each of these drivers are all possible points of intervention to positively shape the way the sector works and the behaviour of actors along the value chain.</p>	<p><i>IRP data; other data as needed</i></p>
<p>d. Identify key hotspots of natural resource use and environmental impacts</p>	<p><i>This identifies where to act.</i></p> <p>The mapping natural resource use and environmental impacts along the value chain and application of a systems lens in step 2 and 3 provides an overview in a given sector of what is happening and why it is happening. This forms the evidence-basis to pose the question “Where to act?” thereby identifying key intervention points or hotspots along the value chain. A hotspot is regarded as a component of the system that directly or indirectly contributes to natural resource use its associated impacts either as a driver of unsustainable practices or a barrier to sustainable practices, and that can be acted upon to mitigate it (UNEP, 2020).</p> <p>The question “Where to act?”, in the context of natural resource management, can be split in: What resources are being used and/or causing impact? Where are they being used? (which stage</p>	<p><i>IRP data; other data as needed</i></p>



	<p>of the value chain, which location, or which actors) How are they being used? Why are they being used?</p> <p>The overview in a given sector of data and information on the value chain and system may also highlight key information gaps, that are equally important to take into account in the formulation of priority actions.</p>	
<p>2. Consolidate existing action and define opportunities to address the identified hotspots</p>		
<p>a. Map initiatives from all actors of the value chain in relation to identified hotspots</p>	<p><i>This identifies who is acting on what.</i></p> <p>Different initiatives by different actors along the value chain are taking place in any given sector. The mapping is undertaken of available information on existing action of all actors along the stages of the value chain and in relation to the identified hotspots; these may include changes in practices, tools or resources, and initiatives. It will also include a mapping of the existing policies, in relation to their implications for key stages and actors of the value chain in relation to the identified hotspots.</p>	<p><i>One Planet network data; consultations</i></p>
<p>b. Analyse mapping to uncover gaps and opportunities</p>	<p>The mapping of initiatives (policies, activities, resources) from all actors of the value chain addressing key hotspots provides a basis to identify a) what initiatives are already addressing key hotspots and that can be leveraged and further coordinated for greater impact, and b) major gaps in addressing or understanding key hotspots and trade-offs that deserve particular attention.</p>	<p><i>One Planet network data; consultations</i></p>
<p>3. Reach a common agenda and prioritise action to address gaps</p>		
<p>a. Define a common agenda that enables alignment of all actors.</p>	<p>The common agenda aligns all actors to a shared vision for change, that includes a common understanding of the problem and a joint approach to solving it. This will be undertaken through a participatory process engaging different stakeholders across the value chain.</p>	<p><i>consultations</i></p>
<p>b. Identify priority actions for value chain actors based on the hotspots, opportunities, gaps and trade-offs identified,</p>	<p>Based on key hotspots which require further attention, multi-stakeholder consultations with actors across the value chain will enable the formulation of recommendations and priority actions for value chain actors to implement. The value chain approach will allow those recommendations to be aware of trade-offs and avoid burden shifting. While co-creation of a common agenda and common solutions is encouraged; key priority actions will also be specific to a stakeholder group or a stage of the value chain whereby co-creation may not always be possible or advisable.</p>	<p><i>consultations</i></p>