

ANNEX A – THEORY OF CHANGE

The ambition of the Sustainable Blue Economy Partnership is to support impact-driven R&I projects and to create significant societal and environmental impacts, contributing also to the UN Decade of Ocean Science for Sustainable Development (2021-2030). In line with this perspective, it is requested from the applicants to include an Impact plan in their proposal. This Impact plan should describe what impact the research is expected to achieve in the long run and how it contributes to the overall impacts defined for the call:

- ▶ *the potential for impact beyond the academic world, such as in societal, technical, environmental, economic, policy-making, or behavioural realms.*
- ▶ *how quadruple-helix stakeholders can be involved in, and/or benefit from, the design and achievements of the R&I project.*
- ▶ *to what extent the project addresses the uptake of research findings and innovative outputs into decision-making processes and policymaking.*
- ▶ *how approaches for achieving impact are integrated into the R&I design and conducted by the consortium.*

To develop the Impact plan, it is recommended to rely on a methodology of theory of change including a so-called Impact Pathway. The Impact Pathway describes the route from scientific research towards impact, describing the logical links between well-specified outputs and outcomes. It is seen as a tool to help in the development of a strategy for societal impact of the research. The workshop [Working with an Impact plan](#) produced by the Dutch Research Council (NWO) also provides valuable explanation on how to build a theory of change for a research project.

Using a theory of change

A theory of change is comprehensive description and illustration of how and why foreseen changes are expected to happen in a particular context. It describes how the R&I process can contribute to

societal, economic, industrial and environmental changes, considering the context as well as all actors involved the co-creation, production and uptake of knowledge and expertise generated by research. A Theory of Change contains of two parts, a Problem Analysis and an Impact Pathway.

The Problem Analysis is a joint effort with researchers and all stakeholders which allows for making explicit which problem is being tackled, what are the causes of that problem, and identifying the lack of knowledge.

The Impact Pathway is the visualisation of the change process following research execution as described in the Theory of Change. It makes explicit how the research activities will lead to results (output) and how the exchange of knowledge and the uptake of research output will contribute to desired changes in behaviour, relationships, actions and activities of partners and stakeholders (outcome) that are considered essential to achieving the desired impact. Creating the Impact Pathways requires to first define clearly the desired long-term changes resulting from the projects, and then work back to identify all the conditions that must be in place for the goal to occur.

Any projections on expected change will be based on a myriad of *assumptions*, which can differ from person to person, between organizations or groups and even over time. Making assumptions explicit helps to create a shared vision and documenting these assumptions allows for reflection on whether and how expected pathways to impact remain adequate.

Given its construction based on logical-linked outputs and outcomes, a Theory of Change is also used as part of the monitoring, evaluation and learning trajectory.

An important element are productive interactions: Exchanges between researchers and stakeholders in which knowledge is produced and valued that is both scientifically robust and socially relevant. No change can be made without exchanging information and people acting on that information. Interactions can be direct/personal, indirect, or financial. The quantity as well as quality of the productive interactions forms an indicator for the potential for societal impact. Examples of productive interactions are:

- ▶ *Co-design: formulation of research questions and approaches jointly with potential end-users*

- ▶ *Co-creation: joint execution of research projects with stakeholders and interactive dialogue on research results*

A Strategic Activity Planning spells out how the proposed productive interactions contribute to achieving outcomes. Outputs do not automatically lead to outcomes; thus, strategies are needed of the research consortium to plan and monitor how their efforts will enhance the potential for outcomes. This planning should include specific activities for:

- ▶ *Stakeholder engagement: Who are the relevant stakeholders to engage with according to context analysis, how and when are the productive interactions organised?; Communication strategy: How are engagement dialogues organised and results exchanged and translated, and whose responsibility is it?;*
- ▶ *Monitoring, Evaluation and Learning: How are results of activities monitored and evaluated, such that assumptions can be tested and activities adjusted accordingly and whose responsibility is it?*
- ▶ *Capacity strengthening: How are required capacities (of consortium partners and stakeholders) strengthened to achieve the outcomes, how is this organised and whose responsibility is it?*
- ▶ *A Risk assessment entails a description of potential risks for the successful execution of your project and options for handling or mitigating these risks.*

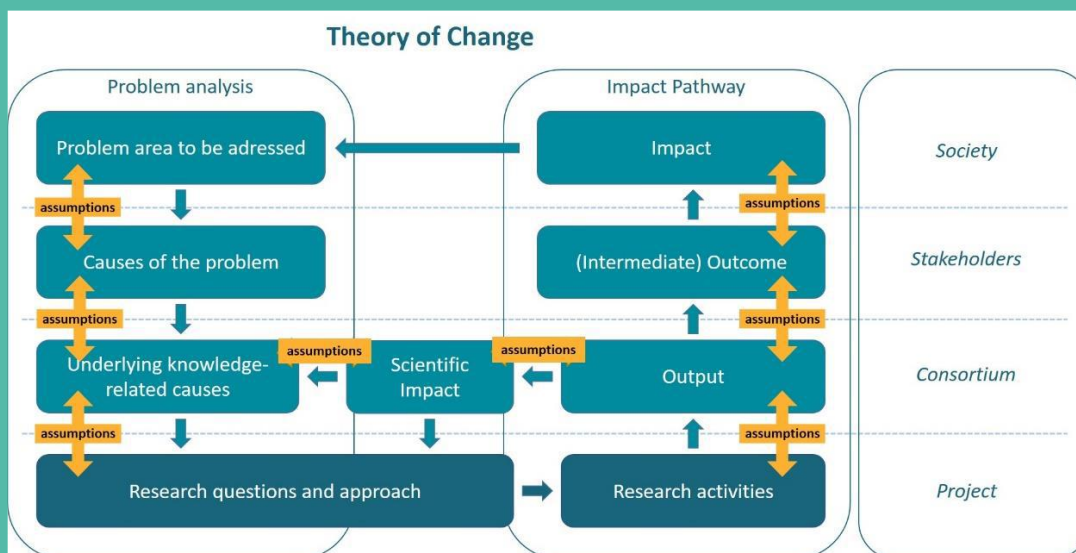
Box 1: Defining output, outcome and impact and illustrations of the theory of change.

Outputs relate to the direct and immediate insights obtained by a research project or programme.

Outcomes relate to the changes in behaviour, relationships, actions, or activities of stakeholders because of sharing and uptake of research. These processes start during the project but continues after the end of the project.

Impact is defined as changes in economic, industrial, environmental, and social conditions that a project or programme is aiming at. The actual impact is often long after the project ends.

Graphical representation of the theory of change – from Working with an Impact plan (NWO): The path toward impact at society level at large is made of the Problem analysis as a first step and of the Impact Pathway. Assumptions between step are made explicit.



Circles of influence - from Working with an Impact plan (NWO): Spheres of Control, of Influence, of Interest. The Sphere of Control goes slightly further the co-creation of outputs by the Consortium and key stakeholders, toward the outcomes.

