

Societal impact through knowledge utilisation

NWO promotes world-class scientific research with scientific and societal impact. Knowledge utilisation increases the chance of societal impact of research and is therefore an important part of the NWO strategy 2019-2022. Through its knowledge utilisation policy, NWO promotes the possible contribution from research to societal issues by stimulating productive interactions with societal - public and private - stakeholders. Both during the development and implementation of the research, in a way that it fits with the objectives of a financing instrument.



Societal impact

Society faces increasingly complex challenges for which solutions must be found. Consider the energy transition, the manageability of healthcare, or climate change. New knowledge and insights from scientific research can make an important contribution to solutions for the societal challenges of today and tomorrow. The opportunity to contribute to societal impact via research will be increased when users are involved who may wish to utilise the knowledge from research.

Societal impact has many aspects. For example, scientific quality is a condition for societal impact and societal impact is never exclusively the result of knowledge and insights from research. Moreover, societal impact is often realised many years after a research project has been completed.

The contribution of knowledge utilisation to societal impact

Knowledge utilisation is seen as an iterative process towards societal impact. Continuous coordination between researchers and potential knowledge usersfrom the start of the research formulation and during the execution of the research-increases the chance of productive interactions and knowledge utilisation. And with that, the chance of societal impact.

Definition societal impact
Cultural, economic, industrial,
ecological or social changes
that are entirely or in part the
consequence of knowledge
and expertise generated by
research

Definition knowledge utilisation
The utilisation of knowledge
through productive
interactions with targeted
stakeholders to create societal
- including economic - value

Sphere of Control Project consortium & core stakeholders Sphere of Influence Sphere of Interest Stakeholders Stakeholders Stakeholders Target groups Output Outcome

Productive interactions

- An 'interaction' is a contact between a researcher and an interested target group.
- An interaction is productive when interested target groups try to use the knowledge to fulfill societal goals.
- Interactions can be direct / personal, indirect, or financial.
- The number and quality of productive interactions are a measure of the chance of social impact.



Aiming at societal impact

By developing and implementing a Theory of Change and an associated Impact Pathway, a well-thought-out strategy towards the desired societal impact can be developed.

Output, outcome en impact

Under *output*, NWO counts the direct insights from a research project. By *outcome*, NWO means changes in behaviour, relationships, actions and activities of private and public stakeholders as a result of utilising output. By the ultimate intended societal *impact*, NWO means changes in society.

Theory of Change

A Theory of Change is a narrative that provides insight into how research is expected to bring about changes for an intended target group in a specific context. It shows in intermediate steps which activities contribute to the ultimate goal.

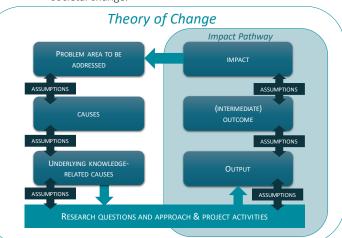
The starting point is a description of the problems to be solved. Next, the assumptions and underlying causes are analysed. In this way, knowledge-related causes and associated knowledge needs are identified.

The needs are translated into research outputs to be pursued. These outputs are used by different groups of users, who apply and adjust the knowledge and insights to tackle the causes of problems outlined.

The outcomes of the research lie in tackling the previously identified causes. This way the desired change, the impact, is realised.

Impact Pathways

The path from output via outcomes to possible societal impact is specified in specific impact pathways. An impact pathway is a schematic representation of the way in which generated knowledge and insights, via specified productive interactions, can contribute to the intended societal change.



Implementation of the NWO knowledge utilisation policy

Not every financing instrument focuses on increasing the chance of societal impact to the same extent. To do justice to the different expectations in terms of societal impact, NWO implements three impact approaches that promote knowledge utilisation proportionally. These approaches consist of the Impact Outlook, the Impact Plan, and the Impact Focus approach.

Impact Outlook approach

Research that always focusses on scientific impact, but not necessarily on a societal challenge

Approach aimed at stimulating (unforeseen) opportunities for societal impact after granting

Assessment criterium: combined scientific and/or societal impact

Impact Plan approach

Research that aims to contribute to addressing societal issues

Integrated strategy on productive interactions, Theory of Change and Impact Pathway, as well as concrete steps to develop these

Clustering if possible: an integrated strategy on call, program or mission level

Impact Focus approach

Concrete steps from knowledge to utilisation

Focussed and concrete steps towards utilisation of knowledge

Scientific impact is not part of the development

Pilots 2019 - 2020

NWO develops, evaluates and implements the above impact approaches through a number of pilots. These pilots take place within the following financing instruments:

Impact Outlook approach

- Open Competition NWO-Science
- Open Competition NWO-SSH 2020
- Investment Grant NWO-Large 2019/2020

Impact Plan approach

- Dutch Research Agenda (NWA)- ORC 2019
- Knowledge and Innovation Covenant (KIC) 2020 2023
- Merian Fund 2020

Measuring societal impact?

Achieving societal impact, and even outcomes, generally exceeds the duration of a research project. In addition, the contribution of research to social impact is often difficult to determine. NWO therefore does not assess research on

the achievement of societal impact, but on the efforts made and successes achieved in promoting the knowledge utilisation process.