Session Biosphere: April 13th 11.00 hrs

1s6b A healthy soil as a basic enabling condition for the transition towards circular land management and land use

Circulair Terreinbeheer

Meier ATF, Sjauw En Wa ASF

1) Groene Verbinders B.V.

The Circular Terrain Management (CT) program is developed to promote high-value use of raw materials that are released during terrain and water management.

The real transition occurs in practice, which take a central position in the program. It is in practice where people learn how to apply circular principles. CT connects circular pilot projects, as such there is no need to reinvent the wheel, and the most important obstacles, opportunities and questions are identified. CT makes it possible that opportunities are shared throughout the network, the most important research questions are submitted to knowledge institutions and that obstacles are tackled together with the relevant ministries and environmental services.

The CT program started with the raw material flows of clippings and leaves, but now also includes soil and sediment and the so-called organic city flows. Soil improvement is an important application for many of these raw material flows. CT has shown that site managers, contractors and farmers who use the flows in practice often experience legal obstacles. Clearly Dutch policy and legislation are actually still linear and not designed for circularity. The Dutch ministries of I&W and LNV connected to CT, have indicated to be open for the development of new policy, yet first require answers to a number of scientific questions regarding the locally produced soil improvers. The Circular Terrain Management Knowledge Program has been set up for this purpose.

The aim of the CT Knowledge Program is to provide a number of substantive building blocks for new circular policy related to facilitating the reuse of clippings and leaves and local soil improvers made from them. At the end of 2020, this Knowledge Program was started by Wageningen Environmental Research, in collaboration with the Center for Soil Ecology (NIOO-KNAW and WUR). 60 pilots are connected through the CT program: their products and the soil to which they are applied are studied. Furthermore, the products are also used, for example, in controlled field trials and incubation trials.

The CT Knowledge Program focuses on the most important open knowledge questions from both policy and practice. Many questions focus on whether the local soil improvers are safe for people and the environment and on the agricultural and soil benefits of the application. In the research program the composition of the products themselves is assessed and safety is further examined by looking at possible long-term effects of

repeated use on the accumulation of potentially harmful substances (if present in the products). In addition, observations are also recorded in logbooks in 60 pilot projects throughout the Netherlands, so that information from practice can be included in the Knowledge Programme.

The ultimate goal is to make site management fully circular, as the new normal throughout the Netherlands.

Keywords: Circular agriculture, climate adaptation, soil improvement