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Country: Switzerland

Institution: United Nations Environment Programme (UNEP)

Topic: The Global Soil Crisis

*“The Greatest Threat To Our Planet Is The Belief That Someone Else Will Save It”*

-Robert Swan

Soil plays a major role in any ecosystem. From providing shelter to various living beings to serving as a base for our agricultural activities, it ensures life on earth. With an alarming loss of soil and vegetation cover over the years, The UN has taken several steps to preserve the remaining amount of this precious resource. The United Nations Soil Conservation Plan (2003-2014) set rules for the mitigation of land degradation and desertification, revegetation of eroded land and attaining sustainable land use. It was put into action in several countries, achieving most success in Iceland. The parliament of Iceland launched a comprehensive programme, giving the Soil Conservation Service of Iceland an operational framework for the period 2003-2014. This programme sets goals for mitigating land degradation and desertification, revegetation of eroded land, and attaining sustainable land use. The main tools for the programme's achievements were described, and financing improved substantially, mainly for halting desertification, extending farmer involvement in healing the land, and establishing a new land care incentives programme that was mainly intended for projects at the communal or cooperative level.

Switzerland’s soil cover is currently at risk of erosion and degradation. Up to 40% of the country’s arable land is affected by water erosion. The soil on slopes with little vegetation cover is particularly at risk of erosion. Increasing lead and mercury levels in the soil are causing a degradation in the quality of the country’s vegetation cover. In response, the government has introduced a ban on lead in petrol. Switzerland's built environment continues to grow. The amended [Spatial Planning Act](https://www.bafu.admin.ch/bafu/en/home/404.html), which was approved by Swiss voters in March 2013, therefore has two main goals: to promote inward urban development, i.e. better use of available land and re-zoning to contain urban sprawl. This is an effective way of slowing the spread of urban settlement and limiting its impact on unspoilt landscapes. Furthermore, in May 2020 the Federal Council adopted the Swiss Soil Strategy, which aims to achieve zero net soil loss by 2050.

In conclusion, the delegate of Switzerland proposes that countries try to decrease erosion and degradation levels. This can be made possible by maintaining a healthy, perennial plant cover and planting cover crops such as winter rye. This includes annual grasses, small grains, legumes and other types of vegetation planted to provide a temporary vegetative cover. Cover crops are often tilled under serving also as a “green manure” crop. Using other erosion controls that include the use of geotextile materials or other methods such as sodding or hydroseeding that result in the establishment of permanent cover.  These methods work well on steep slopes and heavy traffic areas.

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