

<b>Name:</b>	<b>3. THE PROTECTIVE CAPACITY OF FORESTS AGAINST SNOW AVALANCHES</b>		
<b>Region</b>	Europe	<b>Country</b>	Switzerland
<b>Ecosystem</b>	Mountain; Forest and woodland		
<b>Nature of approach</b>	Improvement in capacity, design and policy measures; Implementation of EBA measures		
<b>Description of approach</b>	<p><b>Objective/Expected outcomes</b>  For many years, Switzerland has recognised the protective function of the forests in reducing the risk to people from avalanches and landslides, and designs management practices to enhance the resilience of the forests. With the effects of climate change in the European Alps expected to include increased erosion, landslides, avalanches and flooding, the forests are expected to play an ongoing role in disaster prevention in the region.</p> <p><b>Actions</b>  The Swiss government recognised that over-exploitation of trees was leading to serious avalanches, landslides and flooding and introduced a rigorous system of protection and restoration. Legislation recognises the protective function of its forests, and private and public landowners are incentivized to manage forests to provide protection from natural hazards, rather than for commercial timber production. This includes managing stands to help protect against rock fall, landslides and avalanches and restoration of previously degraded areas.</p> <p><b>Results achieved</b>  17 per cent of Swiss forests in the Alpine region are managed mainly for their protective function. By emphasising the role of forests in disaster prevention within the Swiss forest policy at federal and local levels, the Government has prioritised certain ecosystem services at the expense of others (e.g. timber production).</p> <p><b>Lessons learned (particularly highlighting the benefits and challenges related with ecosystem-based approach)</b>  The economic benefits of ecosystem services are increasingly being quantified due to their impacts on hazard risk reduction. In Switzerland, for example, the benefits of protected forests are estimated between USD 2 to 3.5 billion per year.</p>		
<b>Type of organisation</b>	Government	<b>Name of organisation:</b>	Government of Switzerland
<b>Further information and contact details</b>	<a href="#">ProAct Network 2008. The Role of Environmental Management and eco-engineering in Disaster Risk Reduction and Climate Change Adaptation.</a> <a href="#">Dudley et al (2010); Natural Solutions: Protected areas helping people cope with climate change, IUCN, WCPA, TNC, UNDP, WCS, The World Bank and WWF, Gland, Switzerland, Washington DC and New York, USA</a>		