

The added value of Nature-based Solutions in greening agrifood value chains

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What are Nature-based Solutions?

Defined by IUCN (International Union for Conservation of Nature) as "actions to

- Protect
- Sustainably manage and
- Restore

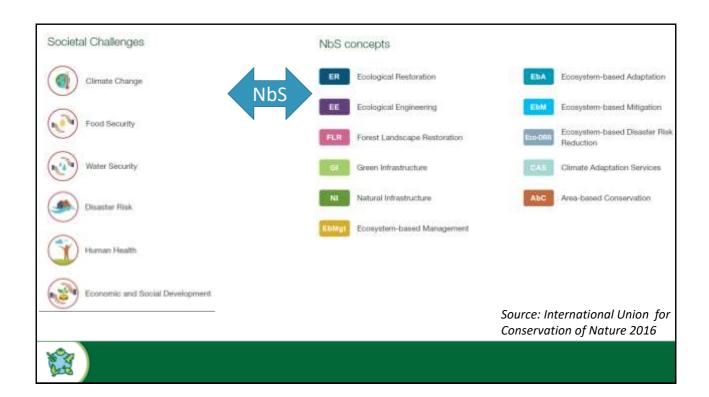
natural or modified ecosystems that address societal challenges, simultaneously providing human well-being and biodiversity benefits."

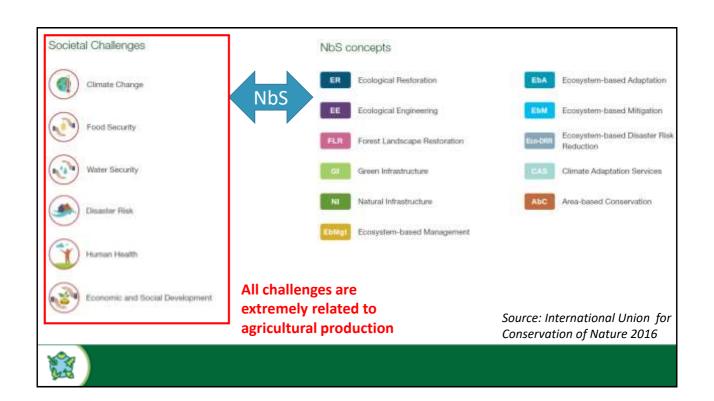
Novel concept derived from urban planning and environmental engineering.



Figure 6. NbS as an umbrella term for ecosystem-related approaches







Nature-based Solutions in agriculture

The three main pillars are:

- **Protect** natural ecosystems from the expansion of agriculture
- Sustainably manage existing food production systems
- Restore and rehabilitate degraded food production systems

Since food production takes place within ecosystems, NbS in agriculture con have a regenerative effect on the environment and the ecosystem functioning.

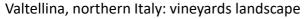
Solutions that exploit ecosystem services in order to enhance the overall ecosystem functioning.





Nature-based Solutions: dry-stone walling









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Assisi-Spoleto GIAHS, central Italy: olive groves landscape



Nature-based Solutions: animals in farming



Assisi-Spoleto GIAHS, Italy: sheep among olive groves



Nature-based Solutions: animals in farming



Malaga GIAHS, Spain: mules among vineyards



Nature-based Solutions: benefits

Dry-stone walling

- Soil erosion prevention
- Soil creation (more surface available)
- •Increased water infiltration
 - Support productivity
- New ecological niches
 - Support biodiversity
- Create unique landscapes for tourism

UNESCO World Intangible Heritage List 2018

Animals in farming

- Less GHG emissions compared to machineries
- Higher energy efficiency compared to machineries
- Prevent soil compaction compared to machineries
- Provide extra manure
- Weed and pest control
- Fire risk management



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Most importantly: they support rural communities in reaching sustainability in all dimensions (economic, social, environmental)



Nature-based Solutions: future developments in marketing?

NbS in agriculture support the sustainability of food systems and farmers' livelihoods; they are key elements in the greening of the value chains.

Is it possible to incorporate these positive externalities in the products marketing? How?





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- Through a **new "nature-positive" labelling**?





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- Through a new "nature-positive" labelling?
- Enhancing GIAHS labelling?



Globally Important



