

Ecosystems Approach to Disaster Risk Reduction



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Disaster risk reduction is an important but often unrecognised and undervalued service provided by healthy ecosystems.



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Healthy or fully-functioning ecosystems can buffer the impacts of natural hazards, while providing livelihood benefits and products to local populations.



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For example, mangroves, sand dunes, coral reefs and other coastal ecosystems create physical barriers between communities and coastal hazards such as storm surges.



Forests and other vegetation cover on slopes reduce the risk of landslides and avalanches.



**Wetlands function as natural sponges
and mitigate flooding.**



Ecosystems can be managed to reduce the effects of drought and desertification through shelterbelts, greenbelts and other types of living fences.



Controlled burning in dry landscapes reduces the risk of large-scale wildfires.



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Natural protective systems are often less expensive to install and maintain than physical engineering structures, such as dykes or concrete walls.



**Ecosystem degradation is a key
underlying driver of disaster risk.**



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Deforested slopes are more susceptible to landslides.



Coastal areas where vegetation is degraded or has been removed are more exposed to destructive storm surges.



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**Wetland reclamation and re-channelling
of rivers increase risk of flash floods.**



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Ecosystem management should be an integral component of disaster risk reduction strategies.



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