

NBS land use interventions

This section included 1 factsheet diving into details of farming practices such as sustainable communal grazing

FARMING PRACTICES

CARDIMED	SUSTAINABLE COMMUNAL GRAZING
<i>Picture not available.</i> Synonyms: Sustainable grazing; Community-based grazing; Communal grazing. Description: Sustainable communal grazing is a collaborative approach to utilising communal pastures by multiple users, including sheep, goats, and cattle, for livestock grazing. It embodies principles of fairness, equity, and environmental stewardship within a community setting. Pastoralists work together to plan and implement rotational grazing systems, ensuring responsible and balanced use of pastures while allowing for adequate regeneration. It represents a holistic and integrated approach to land use management that promotes the well-being of both people and the environment.	
Main challenges targeted	Biodiversity & renaturalization, Societal benefits
Regulation and Maintenance Services	Reduce water withdrawals , Permeability restoration, Create or restore habitat, Restore degraded areas, Mitigate desertification, Create or restore fauna, Create or restore flora, Support pollination, Reduce harmful impacts to fauna & flora, Develop resilience of green spaces, Support free movement of species, Provide nesting and breeding habitat, Refuge for farm and wild animals, Restore natural forest fire regime, Reduce changes on soil characteristics, Stabilize soil / substrate, Improve soil fertility / biodiversity, Enhance and stabilize water retention, Improve carbon sequestration, Reduce risk of pest and diseases, Provide genetic resources
Cultural Services	Social relations, Health and Well-Being improvement, Increase aesthetic and patrimonial or cultural value, Preserve cultural and historic heritage, Reduce undesired behaviours, activities and vandalism, Support social cohesion and justice, Support environmental awareness, Increase stakeholder engagement, Promote mental health, Reconnect people with nature
Provisioning Services	Promote natural aquifer recharge / preserve groundwater supply, Promote natural surface water recharge / preserve surface water supply, Provide nutrition sources for birds and insects, Production of biomass, Produce energy / Reduce energy demand, Sustainable food production
Other Services	Contribute to local employment, Increase land/property monetary value, Contribute to new or existing business, Reduced costs in comparison with other solutions, Reduced water footprint
Replicability	★★★☆☆
Design & planning	This farming system utilises communal pasture land for cattle and small livestock (sheep and goats) grazing. A borehole for drinking by livestock is shared with other farmers. Increasingly, however, collective (community) action is recognized as a viable and promising method of managing natural resources. For effective management of community natural resources, it's imperative that both management and usage rights are entrusted to the

	community. Furthermore, the community needs to establish clear usage regulations and ensure strict enforcement of these rules.
Operation and maintenance	Operational activities: Planning and coordination among pasture users to ensure proper and equitable grazing rotation. Regular monitoring of pasture health, including soil quality and native vegetation, to identify any deterioration or need for intervention. Implementation of soil management practices, such as erosion prevention and soil compaction avoidance, to maintain pasture health. Surveillance and control of livestock diseases and parasites through preventive measures and veterinary treatments when necessary. Maintenance activities: repair of fences and livestock handling structures to ensure safety and proper livestock movement control. Others: Training to staff and volunteers responsible for the operation and maintenance. Regular documentation of maintenance activities, operational issues, and measurements. Safety protocols and training (to prevent accidents and ensure compliance with safety regulations). Track legal and regulatory compliance. Be prepared to adapt your operation and maintenance practices over time in response to changing environmental conditions, market dynamics, and other factor
Combinations with other NBS	Agroforestry (for promoting integrated and sustainable management of natural resources, enhancing the resilience of agricultural systems). Invasive alien species control (for grazing).
Supportive units & smart tech	GPS and GIS (to map pasture boundaries, track animal movements, and analyse grazing patterns, for optimising rotational grazing plans and monitoring pasture health). Remote sensing (satellite imagery and drones to assess vegetation cover, monitor pasture condition and identify areas vulnerable to degradation). Smart sensors and automation (to control species movement, create grazing zones, and safeguard sensitive areas, improving pasture management and conservation).
CAPEX	<i>Not available.</i> Main type of costs: Equipment and materials (fencing, yards, pens, loading ramps, GPS trackers, remote sensing devices and monitoring systems); Permits, fees and administrative (environmental assessments, regulatory compliance and engineering fees); Research and development (design restoration plans, feasibility studies, data analysis and technical expertise); Labour (construction of fencing, water sources, access roads, yards, pens, and loading ramps, and reseeded, erosion control, and riparian zone restoration).
OPEX	<i>Not available.</i> Main type of costs: Labour (veterinary care, monitoring, tracking animal movements, collecting data on grazing patterns and habitat health, regular maintenance and repair of fencing); Permits, fees and administrative (insurance coverage); Community engagement and educational programs (training programs and capacity-building initiatives for pastoralists and community members).
By-product(s):	Organic fertilisers (for agricultural uses)