



Collection of good practices towards Forest and Landscape Restoration in the Mediterranean area

Version 6 - 31 July 2020

This survey is a central part of the project *Mediterranean knowledge on Forest Landscape Restoration* funded by the MAVA Foundation under their MAVA Learning and Sharing Grant (2019-2020). The project is led by Al Shouf Cedar Society-ACS in partnership with Medforval¹ and Istituto Oikos. The survey itself is coordinated by Medforval/Oikos and carried out with the support of the M6 Network². The undertaking forms part of the preparation for the UN Decade on Ecosystem Restoration 2021-2030.³

The survey aims to **collect promising and good practices of initiatives contributing to Forest and Landscape Restoration (FLR) in the Mediterranean area**, even when restoration projects have been undertaken without an explicit intention to implement formal FLR processes. The survey is designed to assess the extent to which the restoration initiatives undertaken in the Mediterranean area fulfill the FLR principles. To this purpose, we rely on the FLR principles followed by the Shouf Biosphere Reserve in Lebanon (fig. below)⁴; further information on FLR can be obtained from the Global Partnership on Forest and Landscape Restoration.⁵ The survey is in line with *Good practices at FAO: Experience capitalization for continuous learning* (2013)⁶ and the related *Good Practices Template* (2016).

You can complete the survey on your own, or we can complete it together during a phone interview. You may be asked for further details at a later stage, to make sure we fully understand your restoration experience.

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¹ Medforval is the Network of Mediterranean forest landscapes and forests of high ecological value funded by the MAVA Foundation, see www.medforval.org

² M6 is the Network of Mediterranean mosaic landscapes funded by the MAVA Foundation, see <https://mava-foundation.org/wp-content/uploads/2017/11/M6mini-OAP-Board-Mars17-ENG.pdf>

³ www.decadeonrestoration.org

⁴ See *Forest and Landscape Restoration Guidelines* by the Shouf Biosphere Reserve. To download, request a link from <http://shoufcedar.org/front-page/publications-2-2-3/#1588849656776-0c936572-3a10>

⁵ www.forestlandscaperestoration.org

⁶ <http://www.fao.org/3/a-ap784e.pdf>

FLR principles followed by the Shouf Biosphere Reserve, Lebanon (adapted from pp. 25-26 of the Shouf's Forest and Landscape Restoration Guidelines).

I. FOCUSES ON THE ENTIRE LANDSCAPE

FLR entails balancing a mosaic of interdependent sustainable land uses and management practices, and ensures the maintenance of functional ecosystems and viable species populations over a large territory.

II. ADDRESSES THE ROOT-CAUSES OF LANDSCAPE DEGRADATION

Effective restoration actions and activities in the long term require a good understanding of the drivers (anthropogenic and climate change) of degradation and the implementation of reduction measures.

III. ENGAGES ALL CONCERNED ACTORS AND SUPPORTS PARTICIPATORY GOVERNANCE

FLR actively engages stakeholders at different scales, including vulnerable groups, in planning, decision making, and direct involvement in the implementation, monitoring and benefit sharing from restoration actions.

IV. RESTORES MULTIPLE FUNCTIONS FOR MULTIPLE BENEFITS

FLR actions and activities aim to restore multiple ecological, social and economic functions across the landscape, generate a range of ecosystem goods and services that benefit stakeholder groups, and help reconcile a wide range of interests, including biodiversity conservation.

V. INVESTS IN 360 DEGREE CAPACITY BUILDING AND KNOWLEDGE GENERATION

FLR supports knowledge generation incorporating scientific innovation and local know-how to adapt restoration to the local context, and supports continuous training to transfer cutting edge FLR knowledge to national and local learning platforms.

VI. CONSIDERS A WIDE RANGE OF IMPLEMENTATION OPTIONS WITH A COST-BENEFIT VIEW

FLR uses a variety of approaches that are adapted to local social, cultural, economic and ecological contexts and ensures short- to mid-term economic benefits: (i) policy improvement; (ii) protection measures; (iii) sustainable management of natural resources; and (iv) active restoration interventions.

VII. MAINTAINS AND ENHANCES NATURAL ECOSYSTEMS WITHIN THE LANDSCAPE

FLR enhances the conservation, recovery, and sustainable management of natural ecosystems and traditional management practices that are linked to the cultural identity of the landscape, following the "ecological restoration principles" – an intentional activity that initiates or accelerates the recovery of ecosystems with respect to their functions, structure, species composition and resilience to environmental risks.

VIII. MANAGES ADAPTIVELY FOR LONG-TERM RESILIENCE

FLR seeks to enhance the resilience of the landscape and its stakeholders over the long term. Restoration approaches should be flexible and responsive to social, economic and environmental changes over time. As restoration progresses, information from monitoring activities should be integrated into management plans and included in learning processes.



Name, title and contact details of respondent(s): _____

Name of interviewer (if applicable): _____

Date of completion by the respondent or date of the interview: _____

Item	Response
1.Name of restored landscape or site, region, country (please be as specific as possible)	
2.If applicable, title of project(s) supporting FLR or other restoration activities in the landscape or at the site	
3.Timeframe - start date and (foreseen) end date of the restoration project(s)	
4.Project(s) budget, funding sources and partners	
5.Landscape focus	What criteria were used to define the landscape boundaries? If the project does not operate at a landscape level, how were the impacts on, and links to, the surrounding areas taken into account to ensure the sustainability of the restoration activities?

	Briefly describe the landscape or site – physical and natural context, land uses, social, cultural and economic context, governance mechanisms
6.Size of the restored landscape or site (hectares)	
7.Nature Protection	Does the landscape or site include one or several protected areas? If so, please provide information (e.g., name, brief description, and protection status according to IUCN protected areas categories)
8.Type of natural and semi-natural ecosystem(s) needing restoration	<p><i>[Please respond to these questions selecting from the IUCN Global Ecosystem Typology found at the end of this survey]</i></p> <p>Natural habitats (including forests, pastures, shrublands, freshwater ecosystems): please list them, specifying conservation status and restoration needs</p> <p>Is the recovery of the populations of threatened species part of the restoration? Please, specify</p> <p>Semi-natural habitats and associated cultural practices (including different farmland types and associated farmland habitats, artificial tree plantations, artificial water points, etc): please, list them, specifying conservation status, management impacts, and restoration needs</p> <p>Is the recovery of threatened local crop types and genetic varieties/breeds part of the restoration? Please, specify</p>
9.Drivers of landscape degradation	<p>Have the drivers of degradation been identified?</p> <p>If so, what are or were they?</p> <p>Were the drivers of degradation addressed in the restoration objectives and activities? If so, please, specify.</p>
10.Stakeholders' engagement – involvement and participation	List the key stakeholders needed to achieve the FLR objectives

	<p>Were they <u>involved</u> in the restoration planning, implementation and monitoring? Please, specify who, at what stages of the process (e.g., scoping, planning, implementation, maintenance, monitoring) and in what way</p> <p>Were gender and age (in particular youth) inclusiveness addressed? In what way?</p> <p>How was <u>participation</u> foreseen and how effective was it? How was engagement of all key actors planned and achieved?</p> <p>Was there any conflict between stakeholders during the restoration planning, implementation and monitoring?</p> <p>If so, was this conflict resolved? How?</p>
11. Governance mechanism	<p>Did you establish any effective governance mechanism to support restoration or FLR implementation? If so, please, describe.</p>
12. Vision	<p>Is there an agreed vision for the landscape or site to be restored? If so, please provide it</p> <p>Please provide a brief description of the rationale (problems, restoration needs and project strategy) and the FLR objectives (for the duration of the project and in the longer term)</p>
13. Integration of ecological, social and economic objectives	<p>Were restoration actions and activities carried out according to ecological, social and economic objectives? Please, describe how and what.</p> <p>Ecological (e.g., improvement of ecosystem services provided by the restored natural/semi-natural ecosystems):</p> <p>Social (e.g., job creation, improvement of livelihoods as a result of specific restoration activities):</p> <p>Economic (e.g., business development around specific restoration activities):</p>

<p>14. Cost-benefit information per type of restoration activities</p> <p><i>(consider forest, water and agriculture)</i></p>	<p>1) Protection measures (e.g., use restrictions such as temporary enclosures; establishment of protected areas; greening of agricultural land; other): Please, describe why, what, how, who (roles and responsibilities), cost, expected economic and other benefits with a timeframe</p> <p>2) Management measures (e.g., biomass management, water management, conservation agriculture, pruning): Please, describe why, what, how, who, cost, expected economic and other benefits with a timeframe</p> <p>Have traditional management practices been incorporated into the restoration initiative? Which ones?</p> <p>3) Active field restoration measures (e.g., seed sowing, seedling planting, bio-engineering interventions/green infrastructures): Please, describe why, what, how, who, cost, expected economic and other benefits with a timeframe</p> <p>4) Governance measures (e.g., policy improvement and governance mechanisms for the sustainable natural resources management): Please, describe why, what, how, who, cost, expected economic and other benefits with a timeframe</p>
<p>15. Capacity development and knowledge transfer</p>	<p>What sort of training was provided? Who was it for?</p> <p>How was the knowledge and lessons learned from the project and from other experiences in the country and abroad shared with all relevant actors?</p>
<p>16. Awareness raising</p>	<p>Did the project undertake awareness raising actions to inform and gain the support of the general public? If so, describe what and how.</p> <p>Did the project undertake education actions to inform and gain the support of the younger generations? If so, describe what and how.</p>

Monitoring & Evaluation			
17. Is a Monitoring & Evaluation (M&E) plan available, to measure the effectiveness of FLR?			
18. What is the time span of your M&E plan?			
19. Who participates in the M&E, doing what and how?			
20. How are M&E costs covered?			
Results			
21. What is your M&E indicating so far, in terms of the results of your FLR efforts?	Survival rate (% of seeds and/or seedlings) after 5 years (or other timeframe)	Type of intervention 1:	Were dead seedlings replaced? Please explain
		Type of intervention 2:	Were dead seedlings replaced? Please explain
		Type of intervention 3:	Were dead seedlings replaced? Please explain
	Ecosystem functionality	The mosaic-like structure, species composition and connectivity between natural and semi-natural habitats in the restored landscape	0 = no success, 1 = limited success, 2 = some success, 3 = full success
			Rate:
			Explain:
	Ecosystem services	Specify which services are concerned and estimate the extent to which they were restored	0 = no success, 1 = limited success, 2 = some success, 3 = full success
			Rate:
			Explain:
	Landscape resilience	The reduction of climate risks, such as forest fire risk, water runoff/erosion risk, forest	0 = no success, 1 = limited success, 2 = some success, 3 = full success

		dieback, water stress due to soil water evaporation and lack of storage/infiltration, other.	Rate:
			Explain:
	Social improvement	Improved social conditions for local people, with special focus on gender, youth and vulnerability, including: (i) professionals trained in jobs related to FLR; (ii) creation of employment related to FLR; (iii) improvement and diversification of livelihoods; (iv) reduction of pollution and improvement of health conditions; (v) other.	0 = no success, 1 = limited success, 2 = some success, 3 = full success
			Rate:
			Please explain, and specify whether the results involved a special focus on gender, youth and vulnerability:
	Economic improvement	Improved economic conditions for local people, with special focus on gender, youth and vulnerability, including: (i) increased revenues for land users from FLR business-related activities; (ii) increased presence of small-medium enterprises on FLR production and marketing; (iii) increased access to national and/or international markets for FLR-related products; (iv) other.	0 = no success, 1 = limited success, 2 = some success, 3 = full success
			Rate:
			Explain:
	Cultural improvement	Improved cultural conditions, with special focus on gender, youth and vulnerability: (i) the project helped restore and revitalize viable cultural heritage connected to agriculture, livestock management and NTFPs with a gender and youth focus; (ii) the project contributed to increasing the visibility of the landscape's cultural identity, promoting it and giving it value through education and tourism; (iii) other.	0 = no success, 1 = limited success, 2 = some success, 3 = full success
			Rate:
			Explain:
22.Validation	Have the results been validated by, or with, the participants? How?		

23.Transfer of knowhow	<p>1) Upscaling (policy) Have successful restoration results contributed to the improvement of policy and the governance mechanism? If so, please explain.</p> <p>2) Outscaling (replication beyond intervention areas) Have successful restoration results (e.g., innovation in technologies used, capacity development and participatory processes) been adopted by others outside the landscape/site in the region, country or abroad? If so, please explain.</p> <p>3) Deepscaling (knowledge generation) Have successful restoration results been published or shared with practitioners, policy-makers and the general public through information hubs, clearing house mechanisms or other? If so, please explain.</p>
24.Long-term sustainability	<p>1) Costs Have restoration costs been estimated? If so, how much? How much per ha?</p> <p>2) Benefits Have benefits been estimated? If so, how much? How much per ha?</p> <p>3) Cost-benefit analysis Can costs be compensated by benefits? How many years after restoration interventions?</p> <p>4) Long-term sustainability Has the project calculated the cost of completing FLR objectives beyond the lifetime of the project and taken any steps to plan cost coverage and cost recovery? If so, how?</p>
25.Which pearls of wisdom would you like to pass on to others? (lessons learned)	
26.Is there anything else you would like to tell us?	

Ecosystem types found in the Mediterranean area

Adapted from pp. 41-43 of version 1.01 of the IUCN Global Ecosystem Typology (February 2020)⁷

Realm	Biome	Ecosystem Functional Group (EFG) Please choose from these groups when filling in question 8 of the survey ↓
Terrestrial	T2 Temperate-boreal forests & woodlands	T2.1 Boreal and temperate montane forests and woodlands
Terrestrial	T2 Temperate-boreal forests & woodlands	T2.2 Temperate deciduous forests and shrublands
Terrestrial	T2 Temperate-boreal forests & woodlands	T2.6 Temperate pyric sclerophyll forests and woodlands
Terrestrial	T3 Shrublands & shrubby woodlands	T3.2 Seasonally dry temperate heaths and shrublands
Terrestrial	T3 Shrublands & shrubby woodlands	T3.4 Rocky pavements, scree and lava flows
Terrestrial	T4 Savannas and grasslands	T4.4 Temperate wooded savannas (temperate woodlands)
Terrestrial	T4 Savannas and grasslands	T4.5 Temperate (sub-humid) grasslands
Terrestrial	T5 Deserts and semi-deserts	T5.1 Semi-desert steppes
Terrestrial	T5 Deserts and semi-deserts	T5.4 Cool temperate deserts
Terrestrial	T6 Polar-alpine	T6.2 Polar-alpine rocky outcrops
Terrestrial	T6 Polar-alpine	T6.4 Temperate alpine meadows and shrublands
Terrestrial	T7 Intensive land-use systems	T7.1 Croplands
Terrestrial	T7 Intensive land-use systems	T7.2 Sown pastures and old fields
Terrestrial	T7 Intensive land-use systems	T7.3 Plantations
Terrestrial	T7 Intensive land-use systems	T7.4 Urban and infrastructure lands
Subterranean	S1 Subterranean lithic systems	S1.1 Aerobic caves

⁷ https://iucnrl.org/static/media/uploads/references/research-development/keith_etal_iucnglobalecosystemtypology_v1.01.pdf

Subterranean-Freshwater Subterranean-Freshwater	SF1 Subterranean freshwaters SF1 Subterranean freshwaters	SF1.1 Underground streams and pools SF1.2 Groundwater ecosystems
Freshwater-Terrestrial Freshwater-Terrestrial Freshwater-Terrestrial Freshwater-Terrestrial	TF1 Palustrine wetlands TF1 Palustrine wetlands TF1 Palustrine wetlands TF1 Palustrine wetlands	TF1.2 Subtropical/temperate forested wetlands TF1.3 Permanent marshes TF1.4 Seasonal floodplain marshes TF1.5 Episodic arid floodplains
Freshwater Freshwater Freshwater Freshwater	F1 Rivers and streams F1 Rivers and streams F1 Rivers and streams F1 Rivers and streams	F1.1 Permanent upland streams F1.2 Permanent lowland rivers F1.3 Freeze-thaw rivers and streams F1.6 Episodic arid rivers
Freshwater Freshwater Freshwater Freshwater Freshwater Freshwater Freshwater Freshwater	F2 Lakes F2 Lakes F2 Lakes F2 Lakes F2 Lakes F2 Lakes F2 Lakes F2 Lakes	F2.1 Large permanent freshwater lakes F2.2 Small permanent freshwater lakes F2.3 Seasonal freshwater lakes F2.4 Freeze-thaw freshwater lakes F2.5 Ephemeral freshwater lakes F2.6 Permanent inland salt lakes F2.7 Ephemeral salt lakes F2.8 Artesian springs and oases
Freshwater Freshwater Freshwater Freshwater	F3 Artificial fresh waters F3 Artificial fresh waters F3 Artificial fresh waters F3 Artificial fresh waters	F3.1 Large reservoirs F3.2 Constructed lacustrine wetlands F3.3 Rice paddies F3.5 Canals and storm water drains
Freshwater-Marine Freshwater-Marine	FM1 Transitional waters FM1 Transitional waters	FM1.1 Deepwater coastal inlets FM1.3 Intermittently closed coastal lagoons