

POLICY BRIEF

## A new pastoral code for Tunisia

### Reversing degradation across the country's critical rangelands

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In response to the severe economic, social, and environmental costs of degradation across Tunisia's rangelands, the International Center for Agricultural Research in the Dry Areas (ICARDA) has worked with the General Directorate of Forestry (Direction Générale des Forêts, DGF) to draw up a new pastoral code. This code could facilitate a more sustainable governance regime that also delivers for pastoral communities. Inclusive and practical, the code also offers a framework for other countries experiencing degradation in rangeland areas.

Rangelands are a critically important resource in Tunisia. These fragile marginal areas sustain pastoral systems and local economies, and act as a buffer against the spread of desertification. Estimates suggest that the goods and services they generate are equivalent to 1,062 million Tunisian Dinars (TND) every year – triple the amount generated by the country's forests and representing 1.5% of national GDP (Croitoru and Daly, 2015).<sup>1</sup>

Despite their strategic importance, rangelands have become seriously degraded in recent decades. From 2005 to 2012, some 600,000 hectares (ha) of productive rangeland were lost, at a rate of approximately 34,000 ha every year. The corresponding losses are estimated at 74 million TND every year – or 18% of the economic value of rangeland goods and services (Croitoru and Daly, 2015; Sarniguet and Makhlof, 1995).<sup>1,2</sup>

#### The complex causes driving degradation

The factors driving the degradation of Tunisia's rangelands are diverse: overgrazing is encouraged by the availability of government feed subsidies which lead to excessive herd

sizes; crop encroachment, particularly from barley and olive cultivation, has placed vast swathes of these fragile lands under enormous stress; and complex land tenure systems (collective, state-owned, and private) complicate the application of regulations and protections designed to reverse degradation.

Government efforts to reverse degradation are also held back by a lack of coordination between different institutions, limited human resource capacity, and inadequate access to relevant research and data to inform decision-making processes. Finally, rangelands increasingly have to contend with the adverse impacts of climate change – the North Africa region, for instance, is expected to become a 'hotspot' for prolonged drought, placing these marginal areas under additional strain (Orlowsky and Seneviratne, 2013).<sup>3</sup>

#### Reforming regulations related to rangelands

Legally, the protection of rangeland areas in Tunisia is inadequately covered by the country's forest code (République Tunisienne, Code Forestier, 2010).<sup>4</sup> Of

<sup>1</sup> Croitoru and Daly. 2015. Toward sustainable management of forest and rangeland ecosystems in Tunisia: Analysis of benefits and costs of the degradation of forests and rangelands. DGF/Ministry of Agriculture and the World Bank. Economic indicators. <http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD>.

<sup>2</sup> Sarniguet, J., V. Bruzon and A. Makhlof. 1995. Le développement des zones de parcours. Contribution à la stratégie nationale des parcours. Annexe III: Tunisie, pp 1–161. Une stratégie pour le développement des parcours en zones arides et semi-arides. Document de la banque Mondiale, Rapport N°14927 MNA.

<sup>3</sup> Orlowsky, B. and S. I. Seneviratne. 2013. Elusive drought: uncertainty in observed trends and short- and long-term CMIP5 projections. *Hydrology and Earth System Sciences* 17(5): 1765–1781.

<sup>4</sup> République Tunisienne. 2010. Code Forestier. <http://www.droit-afrique.com/upload/doc/tunisie/Tunisie-Code-2010-forestier.pdf>.

the code’s 232 articles, only six refer to pastoralism, necessitating the development of a separate code that specifically relates to pastoral activities. ICARDA – in collaboration with local authorities, the International Livestock Research Institute, the German Federal Ministry for Economic Cooperation and Development, and GIZ – launched an initiative to support this process.

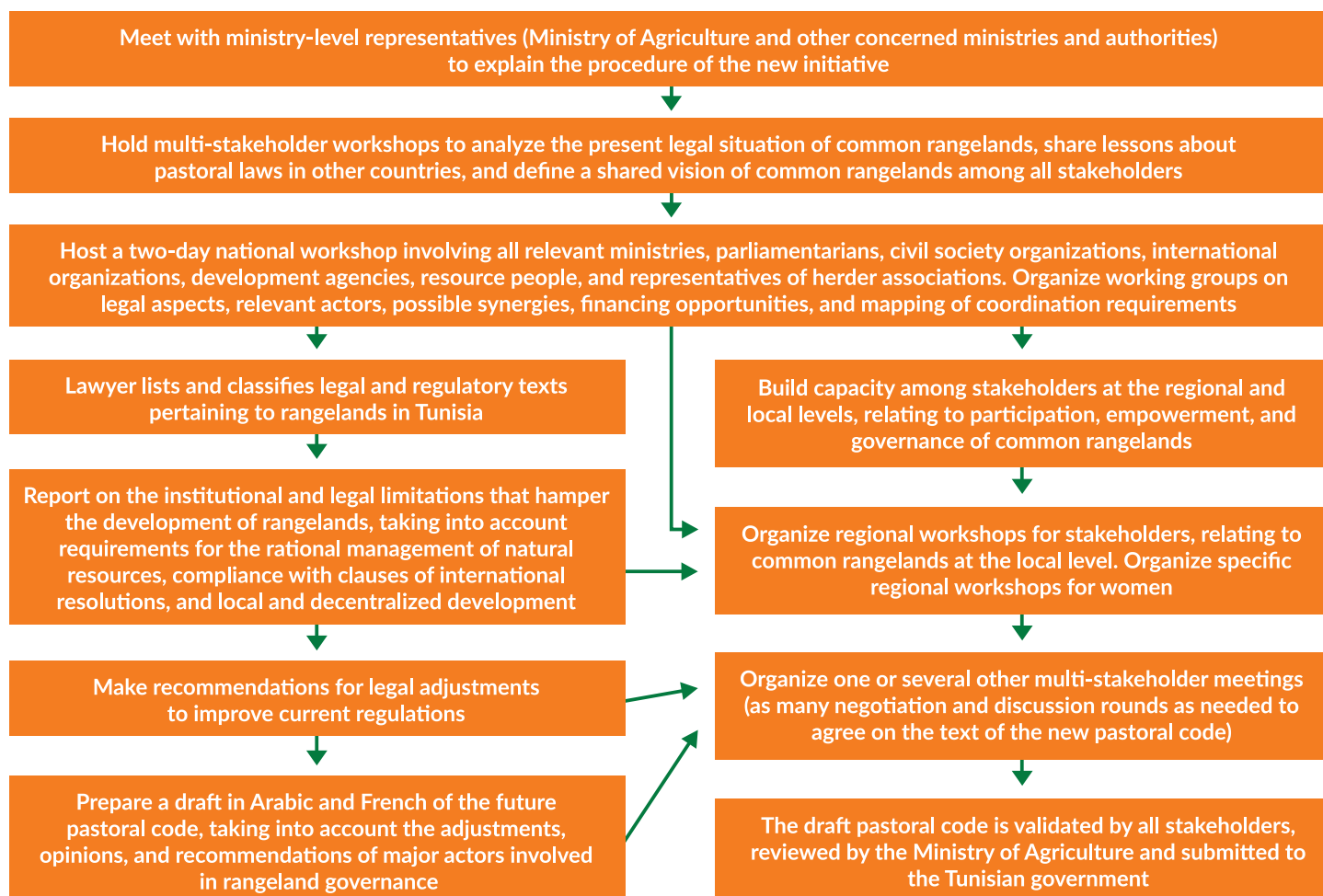
The planning, development, and implementation of a pastoral code followed four major stages (see Figure 1): 1) Listing and classifying laws and regulations relating to the management of rangelands in Tunisia; 2) Identifying the institutional and legal deficiencies hindering appropriate rangeland governance mechanisms; 3) Suggesting legal adjustments to improve current legislation and regulations on rangeland management and pastoralism; and 4) Drafting the pastoral code.

The initiative brought together multiple stakeholders and ministries in a series of participatory workshops to discuss solutions and contribute to the development of a legal text. These meetings included pastoral communities to ensure that any resulting regulations reflected their interests and needs. Crucially, the code is aligned with Tunisia’s new constitution: by delegating responsibilities to local and regional pastoral associations it is consistent with the constitution’s emphasis on decentralization and the empowerment of local communities.

### The pastoral code

The pastoral code is divided into 15 chapters that deal with a range of challenges affecting the country’s rangelands and their governance. The priority areas covered by the code include institutional governance, sustainable rangeland

Figure 1: Strategy for developing an effective pastoral code



management and land tenure, efforts to tackle the effects of climate change, management of herd mobility, and payments for environmental services.

### Institutional governance

The code specifies the creation of one central coordinating body to oversee rangeland governance – a response to the multitude of institutions that have previously dealt with rangelands. The National Commission for Rangelands and Pastoralism (NCRP) is empowered to make recommendations for the development of pastoralism and to advise the relevant minister in charge of rangelands on all issues relating to pastoralism, the conservation of rangelands, and the effects of climate change on natural resources.

The activities of the NCRP are supplemented by pastoral development groups (PDGs) which are responsible for organizing and promoting pastoral activities, and contributing to the protection of pastoral resources in accordance with previously established management plans. The PDGs offer a platform for facilitating dialogues between professionals and different stakeholder groups, and are supported by regional rangeland commissions which recommend to relevant authorities the sites most favorable for the initiation, development, and management of rangeland activities.

According to the pastoral code, the Directorate of Forestry will improve communication between the different ministries relevant to rangeland development which have agreed to coordinate their work more closely. At the state and local levels, authorities will provide material, technical and financial assistance to rangeland owners and users – aimed at improving the economic and social livelihoods of pastoralists.

### Sustainable rangeland management and land tenure reforms

The code states that decisions relating to rangeland governance should be participatory: the creation, development, and management of pastoral spaces are carried out in close agreement with rangeland owners, individual or collective. The interests and needs of marginal groups, including women, will also be prioritized.

A study of degradation across Tunisia's rangelands will be conducted, and a management plan initiated with pastoral

#### Priority areas of the pastoral code:

**Institutional governance:** a central coordinating body to oversee rangeland governance; improved coordination between government agencies; decentralization and delegation to municipal authorities and pastoralist associations at the local level.

**Sustainable rangeland management and land tenure reform:** participatory approaches that involve pastoralists and rural communities in management decisions; designated resting areas to rehabilitate degraded areas; a ban on the privatization of rangelands.

**Tackling the effects of climate change:** contributing to carbon sequestration and climate change mitigation; strengthening resilience against a backdrop of rising temperatures and water scarcity; preventing and reversing desertification.

**Managing herd mobility:** monitoring and regulating herd movements; monitoring animal health; controlling disease outbreaks.

**Payments for environmental services:** formal agreements between rangeland owners/users and government authorities; incentives to encourage the adoption of sustainable practices; payments dependent on the avoidance of unsustainable practices.

communities. Where degradation is severe, resting areas will be temporarily created to allow the regeneration and enhancement of pastoral resources for a fixed period – with a compensatory allowance provided to cover any losses.

To ensure that rangelands are managed sustainably, and to avoid losing control over these fragile resources, the new code will ban privatization, the decommissioning of state-owned land, and land usage for purposes other than pastoralism. Private rangelands, which benefit from state support, are also obliged to maintain their pastoral status. Banning the privatization of rangelands has another benefit: it can help to avoid conflicts since it prevents users from extending their own lands at the expense of others.

## Tackling the effects of climate change

The code also supports Tunisia's efforts to mitigate and adapt to climate change. By specifying the protection, conservation and rehabilitation of vegetation in rangeland areas, the code contributes to carbon sequestration. By promoting sustainable management, the code strengthens climate resilience and adaptation to the negative impacts of climate change, allowing pastoral communities to continue benefiting from the services, goods, and resources that rangelands produce and sustain. Crucially, healthy rangelands can provide an important buffer against encroaching desertification and degradation in less marginal areas. The resting of degraded areas, and payments for environmental services (see below), will contribute to the protection of these areas and enhance their desertification- and erosion-reducing potential.

## Managing herd mobility

The code states that pastoralists and their herds will remain free to roam rangeland areas – except in state-controlled land where pastoral activities are prohibited. In other pastoral areas where land is being rested, the movements of pastoralists will be monitored. Pastoralists have to specify to authorities where their animals will graze, and as a precautionary measure to control the outbreak of animal diseases and protect the livelihoods of pastoralists, the health of animals will also be closely monitored.

## Payments for environmental services

Payments for environmental services, such as water conservation and the planting of shrubs, are perceived as investments in the long-term sustainability of rangelands as they generate livelihood benefits for pastoralists and their families – not only as gains from pastoralism but also by facilitating additional economic activities such as eco-tourism and foraging for medicinal plants and other lucrative rangeland products. Payments for environmental services are ensured through formal agreements between rangeland owners and users and government authorities, and on private lands are used as an incentive to encourage

sustainable practices. Payment is dependent on the adoption of pre-agreed practices and the avoidance of unsustainable practices like cropping.

## Acceptance of the code

The pastoral code will be introduced to the Tunisian parliament where it is expected to be passed by legislators into law. The initiation, development, and drafting of the code has included Tunisian decision-makers at every stage. It has been reviewed and approved by decision-makers at the national level and will soon be introduced to delegates at regional meetings in South East Tunisia, South West Tunisia, Central West Tunisia and North West Tunisia, where its intended impacts will be discussed with regional authorities, civil society organizations, pastoralists, and regional representatives of the country's national assembly. These meetings will complete the process of negotiation before the final version of the code is submitted to the minister of agriculture, the head of government, and finally, to the national assembly.

### Development partners:

Ministry of Agriculture Fisheries and Water Resources through the General Directorate of Forestry (Direction Générale des Forêts), Directory of State Property and Land Affairs (Direction Générale des Affaires Juridiques et Foncières), Authority for Livestock and Rangelands (Office de l'Élevage et des Pâturages), General Directorate of Land Management and Conservation of Agricultural Lands (Direction Générale de l'Aménagement et de la Conservation des Terres Agricoles), Ministry of State Property (Ministère des Domaines de l'État), Court of Land Affairs (Tribunal des Affaires Foncières), Ministry of Environment and Sustainable Development (Ministère de l'Environnement et du Développement Durable), the Food and Agriculture Organization of the United Nations and the International Fund for Agricultural Development.

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