

Biocultural Landscapes

Cumulative Impacts and Alpine Grasslands

10.1 INTRODUCTION

Barren pastures overcrowded with cattle – perhaps no environmental problem has a more classic status.¹ But its contemporary manifestation is more complex than just too many cattle eating grass. The deterioration of many of Europe’s mountain grasslands stems from the cumulative effects of not just overuse, but nonuse – the abandonment of traditional grazing practices. These effects combine to threaten not only ecosystems but also the cultural bedrock of these “hotspots of biological and cultural diversity.”²

Take the Autonomous Province of Bozen/Bolzano-South Tyrol (“South Tyrol”), Italy’s northernmost province (see Figure 1.2). More than just an economic resource, its Alpine grassland landscapes are a core ingredient in the identity of German-speaking ethnic populations. They have grazed Alpine grasslands for centuries or millennia, creating habitat for what are now some of Europe’s most threatened bird and butterfly species. Addressing cumulative threats to South Tyrol’s grassland biocultural landscapes engages diverse regulatory interventions directed to both controlling development and maintaining traditional uses. This set of interventions, in turn, engages the need to coordinate a dizzying array of formal rules applied across multiple levels of government and usually siloed legal areas: nature, development, agriculture, landscape, and governance. This chapter analyzes how this mix of regulatory interventions and key “vertical” coordination mechanisms combine to

¹ Garrett Hardin, “The Tragedy of the Commons” (1968) 162 *Science* 1243–1248, 1244.

² Leonith Hinojosa and others, “Geographical Heterogeneity in Mountain Grasslands Dynamics in the Austrian-Italian Tyrol Region” (2019) 106 *Applied Geography* 50–59, 50.

address, apparently with relative success, the cumulative biocultural problem of grassland degradation. The chapter builds on existing regulatory research that focuses on cross-border coordination and examines single or a small number of instruments related to Alpine grasslands.³

Section 10.2 provides context, describing how development and abandonment threaten South Tyrol's Alpine grasslands, and setting out key challenges related to regulatory intervention and coordination in managing these cumulative impacts. Section 10.3 reviews key regulatory jurisdictions and their areas of legal competence. Section 10.4 combines analysis of two of this book's CIRCle Framework of four regulatory functions required to address cumulative environmental problems – regulatory intervention and coordination. It first examines how interventions across governance levels can comprehensively address different key threats to grasslands. It then analyzes their diverse regulatory strategies and approaches. This supports the argument in Chapter 6 that having a diverse mix of regulatory interventions helps to influence the activities of the diverse contributors to cumulative environmental problems.⁴ Finally, it focuses on design features for coordination among governments and stakeholders through linked laws and arrangements for implementation, coordination institutions, and conflict resolution mechanisms. Section 10.5 summarizes key insights and draws out lessons for other contexts.

10.2 CONTEXT AND CHALLENGES

10.2.1 *Key Threats to Alpine Grasslands: Abandonment and Development*

Across Europe, the conservation status of grasslands is deteriorating, and grasslands that depend on traditional agriculture fare worse than natural grasslands.⁵ This deterioration most impacts pollinator species, butterflies,

³ E.g., Maria Carla Lostrangio and Marie Clotteau, "A Review of Policy Frameworks Supporting Mountain Grasslands in Europe" (2021) 51 *Palaeoctic Grasslands* 17–22; Anne Katrin Heinrichs, Yann Kohler and Aurelia Ullrich, *Implementing a Pan-Alpine Ecological Network: A Compilation of Major Approaches, Tools and Activities* (Federal Agency for Nature Conservation, Germany 2010) www.cipra.org/en/publications/4447, archived at <https://perma.cc/T9NQ-WNZC>; CIPRA, *Relevant Instruments in the Field of Ecological Networks in the Alpine Region: A Background Report* (CIPRA 2010) www.cipra.org/en/publications/2553, archived at <https://perma.cc/ZW6D-738M>.

⁴ See Section 6.4.2.

⁵ European Environment Agency, *State of Nature in the EU: Results from Reporting under the Nature Directives 2013–2018 (EEA Report No 10/2020)* (2020) 41, 53, 129–130, www.eea.europa.eu/en/analysis/publications/state-of-nature-in-the-eu-2020/state-of-nature-in-the-eu-2020/@@download/file, archived at <https://perma.cc/SUGN-6TCB>.

and farmland birds.⁶ It also impairs cultural heritage and cultural ecosystem services.⁷ This is salient for South Tyrol's German-speaking minority, and in the context of Italy's long-established focus on culture and aesthetics in protected conservation areas.⁸

Key threats to these grasslands come in two forms. The first is development, notably agricultural intensification, including intensive grazing and application of fertilizers.⁹ Other development pressures arise from transport infrastructure, tourism accommodation and infrastructure, renewable energy projects, and urban expansion competing for flat land.¹⁰ In contrast to past decades, small- rather than large-scale development is most concerning for its "subtle," "continuous," and cumulatively serious negative impacts on biodiversity and landscape.¹¹

The second key threat is farmers abandoning summer pasturing and hay cutting in meadows¹² due to the high costs of traditional practices, and the older farming generation not being replaced.¹³ Naturally spreading forests then replace grasslands, reducing biodiversity.¹⁴ Abandonment has been the primary driver of Italy losing almost half its grasslands since the 1860s.¹⁵ Measures to

⁶ Ibid 70, 131, 133.

⁷ Hinojosa and others, "Geographical Heterogeneity in Mountain Grasslands Dynamics," 51, 56.

⁸ Francesca Ferranti, Raoul Beunen and Maria Speranza, "Natura 2000 Network: A Comparison of the Italian and Dutch Implementation Experiences" (2010) 12 *Journal of Environmental Policy and Planning* 293–314, 301.

⁹ Guy Pe'Er and others, "How Can the European Common Agricultural Policy Help Halt Biodiversity Loss? Recommendations by over 300 Experts" (2022) 15:e12901 *Conservation Letters* 1–12, 7.

¹⁰ Academy for Territorial Development in the Leibniz Association, *Safeguarding Open Spaces in the Alpine Region* (2022) 4, www.arl-net.de/system/files/media-shop/pdf/pospapier/pospapier_133.pdf, archived at <https://perma.cc/N45W-FAVH>.

¹¹ Marco Onida, "The Protection of Biodiversity and Ecological Connectivity in the Alpine Convention" in Mariachiara Alberton (ed), *Toward the Protection of Biodiversity and Ecological Connectivity in Multi-Layered Systems* (Nomos 2013) 57–79, 58.

¹² European Environment Agency, *State of Nature in the EU*, 72–74, 131. See generally, Lubos Halada and others, "Which Habitats of European Importance Depend on Agricultural Practices?" (2011) 20 *Biodiversity and Conservation* 2365–2378.

¹³ Thomas Streifeneder, Clare Giuliani and Christian Hoffmann, "A Transnational Analysis of the Policies for Alpine Pasture Farming" in Tobias Chilla and Franziska Sielker (eds), *Cross-Border Spatial Development in Bavaria: Dynamics in Cooperation – Potentials of Integration* (Academy for Territorial Development in the Leibniz Association 2022) 44–54, 53, www.arl-net.de/system/files/media-shop/pdf/ab_034/ab_034_gesamt.pdf.

¹⁴ Hinojosa and others, "Geographical Heterogeneity in Mountain Grasslands Dynamics," 50–51.

¹⁵ Csaba Centeri and others, "Wooded Grasslands as Part of the European Agricultural Heritage," in Mauro Agnoletti and Francesca Emanuelli (eds), *Biocultural Diversity in Europe* (Springer 2016) 75–103, 89.

address these threats include avoiding converting grasslands for construction and infrastructure; continuing or reinstating extensive grazing or adapted mowing and grazing activities, and measures to “slow, stop, or reverse” natural afforestation.¹⁶ In the language of the regulatory strategies introduced in Chapter 6, this equates to “reducing harm” and “restoring.”¹⁷

Among European countries, Italy now reports the highest share of conservation improvements in grasslands.¹⁸ Around two-thirds of South Tyrol’s agricultural areas are grasslands,¹⁹ and farm numbers have declined little. Commentators point to a strong tourism sector, good off-farm employment, and relatively high farm incomes as deterring abandonment,²⁰ and European Union (“EU”) subsidies under the Common Agricultural Policy (“CAP”) enabling Alpine grassland restoration.²¹ This chapter analyzes how a broad, complex mix of regulatory mechanisms combines to support addressing these threats in South Tyrol.

10.2.2 *Challenges: Intervention and Coordination*

As a cumulative environmental problem, protecting Alpine grasslands looks different from many others, and its differences pose challenges for regulatory intervention using traditional Western environmental law. Land abandonment challenges a typical legal focus on prohibiting or restricting activities to prevent environmental harm rather than encouraging or compelling action. But restrictions alone cannot preserve the rural landscape.²² Combating natural forest spread requires continuous action rather than “single, short-time efforts.”²³ Interventions must be diverse to deal with both development and farm abandonment, as well as farmers with diverse characteristics: almost 2,200 agricultural companies of diverse farm sizes, from less

¹⁶ European Environment Agency, *State of Nature in the EU*, 92–94.

¹⁷ Section 6.2.1.

¹⁸ European Environment Agency, *State of Nature in the EU*, 63–64. For up-to-date reporting on the conservation status of Alpine grasslands in Italy, see European Environment Information and Observation Network, “Article 17 Web Tool” (n.d.) (for the period 2013–2018) <https://nature-art17.eionet.europa.eu/article17/habitat/report/?period=5&group=Grasslands&country=IT®ion=ALP>, last accessed March 22, 2025.

¹⁹ Matteo Anderle and others, “The Contribution of Landscape Features, Climate and Topography in Shaping Taxonomical and Functional Diversity of Avian Communities in a Heterogeneous Alpine Region” (2022) 199 *Oecologia* 499–512, 500.

²⁰ Streifeneder, Giuliani and Hoffmann, “A Transnational Analysis of the Policies for Alpine Pasture Farming,” 64–65; Concetta Cardillo and Orlando Cimino, “Small Farms in Italy: What Is Their Impact on the Sustainability of Rural Areas?” (2022) 11:2142 *Land* 1–25, 13, 14.

²¹ Anderle and others, “Contribution of Landscape Features,” 509.

²² Mauro Agnoletti and Antonio Santoro, “The Italian National Register of Historical Rural Landscapes” in Józef Hernik and others (eds), *Cultural Heritage – Possibilities for Land-Centered Societal Development* (Springer 2022) 15–34, 18.

²³ Centeri and others, “Wooded Grasslands,” 98.

than 1 to 30 hectares,²⁴ undertake farming in South Tyrol's EU-recognized Natura 2000 sites, a significant portion of which cover grasslands.²⁵ Finally, the significant historical loss of grasslands raises the question of restoration,²⁶ a less common but increasingly important task for environmental laws.²⁷

Coordination between governments and across laws²⁸ arises as a prominent issue in addressing grassland loss because interventions engage several legal areas – laws for nature; development and impact assessment; agriculture; landscape; and governance arrangements in general. Each of these areas comprises multiple laws among the international, EU, national, provincial, district, and municipal levels. Since the Italian Parliament lacks a Senate that represents territorial subunits, it relies on a system of intergovernmental bodies that link not just the regions and autonomous provinces with the central State, but also municipalities, alongside a constitutional principle of “loyal cooperation” (*leale collaborazione*).²⁹

Legislative powers related to the environment are interlocking, with blurred boundaries between the responsibilities of the State and regions/autonomous provinces.³⁰ This demands negotiation and dispute resolution for implementation. Though Italian scholars point to challenges with multilevel coordination,³¹ globally, Italian approaches to coordinating and achieving coherence among multiple levels of government and with civil society and nongovernmental organizations (NGOs) in the broad area of sustainable development are held up as instructive examples of good practice.³²

²⁴ Luigi Servadei and others, *La Politica di Sviluppo Rurale per la Biodiversità, Natura 2000 e le Aree Protette*, vol. 1 (Rete Rurale Nazionale 2018) 159, 164, www.reterurale.it/RapportoNatura2000.

²⁵ Ibid 153, 154, 159, 163 (using the SAT indicator), 170 (grasslands in Alpine Natura 2000 sites, though not disaggregated to the province level). For a discussion of Natura 2000, see Section 10.4.2.3.

²⁶ European Environment Agency, *State of Nature in the EU*, 101.

²⁷ See generally, Afshin Akhtar-Khavari and Benjamin J. Richardson (eds), *Ecological Restoration Law: Concepts and Case Studies* (Routledge 2019).

²⁸ Coordination among governments and stakeholders lies outside the scope of this chapter, but note that the provincial agricultural association is relevant to grassland grazing, and is popular and powerful: Giovanni Poggeschi, “South Tyrol's Special Status in Private Law: The ‘Entailed Farm’ and the ‘Grundbuch’ Systems” in Jens Woelk, Joseph Marko and Francesco Palermo (eds), *Tolerance through Law: Self Governance and Group Rights in South Tyrol* (Brill Nijhoff 2007) 201–300, 294.

²⁹ See further Section 10.4.2.3.

³⁰ See further Section 10.3.2.

³¹ See nn 164 and 165 and accompanying text.

³² OECD, *Unleashing Policy Coherence to Achieve the SDGs: An Assessment of Governance Mechanisms* (OECD Publishing 2024) 15, 19, 20, www.oecd.org/content/dam/oecd/en/publications/reports/2024/07/unleashing-policy-coherence-to-achieve-the-sdgs_c9g6cdoc/a1c8dbf8-en.pdf.

By contrast, the two other regulatory functions under the CIRClE Framework – conceptualization and information – are relatively less problematic in the context of South Tyrol’s grasslands. An outside observer might assume that protecting Alpine grasslands is a niche or an obscure issue. Yet, Italian laws frequently conceptualize it as an important matter of concern. We see this across government levels, from national law that recognizes farmers as “environmental guardians” who protect mountain landscapes and combat biodiversity loss,³³ to municipal law that praises the beauty, ecology, and history of threatened mountain grasslands.³⁴ In other words, Alpine grasslands are an intentional legislative target, conceptualized as spanning ecological, agricultural, and cultural values, and therefore engaging these different areas of law. This attention also manifests as a focus on information. While criticism of grassland biodiversity monitoring under some EU instruments remains,³⁵ South Tyrol has a dedicated biodiversity monitoring program that emphasizes grasslands.³⁶ In relation to information, it likely also helps that grasslands are relatively small and sociopolitically salient in South Tyrol, reflected and reinforced by the multiple levels of laws discussed next.

10.3 FOUNDATIONS FOR COORDINATION: THE MULTILEVEL REGULATORY LANDSCAPE

Cumulative threats to South Tyrol’s grasslands involve economic sectors and areas of regulation that engage many levels of government across traditional legal silos. This section sets the scene for analyzing regulatory mechanisms for intervention and coordination related to Alpine grasslands. It explains how responsibility for relevant matters is distributed and sometimes shared between government levels. This also begins a discussion about coordination, integration, and overlap to which Section 10.4 returns.

³³ Legge 28 febbraio 2024, n. 24, Disposizioni per il riconoscimento della figura dell’agricoltore custode dell’ambiente e del territorio e per l’istituzione della Giornata nazionale dell’agricoltura [Law on provisions for the recognition of the figure of the farmer as custodian of the environment and the territory and for the establishment of the National Agriculture Day] (Italy) (“Italian Agricultural Recognition Law”), art. 1(1), 2(1).

³⁴ *Piano Paesaggistico del Comune di Senales: Relazione Illustrativa* (Autonomous Province of South Tyrol 2011) 7, 8.

³⁵ Ivon Cuadros-Casanova and others, “Opportunities and Challenges for Common Agricultural Policy Reform to Support the European Green Deal” (2023) 37:e14052 *Conservation Biology* 1–13, 4, 5 (citations omitted).

³⁶ See generally, Andreas Hilpold and others, *Handbook Biodiversity Monitoring South Tyrol* (Eurac Research 2023) <https://works.eurac.edu/Handbook-Biodiversity-Monitoring-South-Tyrol-2023.pdf>.

10.3.1 *International and Supranational*

It is, perhaps, counterintuitive for a discussion about regulating small grasslands in a northern Italian province to start with international law. Yet, there is a lot of it, addressing cumulative harm to Alpine grasslands through five legal areas – nature, impact assessment, agriculture, landscape, and governance – in a way that Italian national and subnational law mirrors. Italy is bound by several relevant international biodiversity treaties and EU instruments on biodiversity, impact assessment, agriculture, and product labeling.³⁷ The EU shares competence in environmental policy with member states.³⁸ Its directives provide for protecting habitats and birds (Habitats and Birds Directives, together the “Nature Directives”),³⁹ and its impact assessment directives apply environmental impact assessment (“EIA”) and strategic environmental assessment (“SEA”) requirements to development projects and plans. The EU Common Agricultural Policy directly addresses the agriculture–environment interface, which also arises indirectly in EU product labeling rules. Finally, the broader idea of “landscape” is the focus of the European Landscape Convention⁴⁰ and a special multilateral environmental agreement for the Alps, the Alpine Convention, a key driver of which was addressing the cumulative impacts of small- and medium-scale developments.⁴¹ (For completeness, grasslands are indirectly protected by listings under international heritage treaties for sites in the Dolomites,⁴² which span South Tyrol and neighboring provinces; and the practice of transhumance, i.e., seasonal

³⁷ For discussion of these, see Section 10.4.

³⁸ See Josephine van Zeben, “Subsidiarity in European Environmental Law: A Competence Allocation Approach” (2014) 38 *Harvard Environmental Law Review* 414–464, 424–430.

³⁹ Council Directive 92/43/EEC of May 21, 1992 on the conservation of natural habitats and of wild fauna and flora [1992] OJ L206/7 (as amended) (“Habitats Directive”); Directive 2009/147/EC of the European Parliament and of the Council of November 30, 2009, conservation of wild birds [2010] OJ L20/7, as amended (“Birds Directive”).

⁴⁰ Council of Europe Landscape Convention, adopted October 20, 2000, in force March 1, 2004 [2000] E.T.S. 176 (“European Landscape Convention”).

⁴¹ Convention on the Protection of the Alps, Salzburg, adopted November 7, 1991, in force March 6, 1995, [1996] OJ L61/32 (“Alpine Convention”); Onida, “The Protection of Biodiversity and Ecological Connectivity,” 58.

⁴² The Dolomites is inscribed with reference to natural values of “exceptional natural beauty” and geomorphic importance: World Heritage Committee, Report of Decisions, WHC-09/33. COM/20, July 20, 2009, 33 COM 8B.6. Its management plan makes only passing reference to meadows: Marcella Morandini and others, *The Dolomites: Overall Management Strategy [+ Tourism Strategy]* (Fondazione Dolomiti Dolomiten Dolomites Dolomitis UNESCO, 2015) 46, <https://whc.unesco.org/document/207280>.

droving of livestock.)⁴³ These international and supranational instruments rely on laws at the national and subnational levels for implementation,⁴⁴ discussed next.

10.3.2 *Italian Multilevel Government, Environment, Landscape, and Culture*

Multilevel governance in Italy involves multiple subnational governments (20 regions, 110 provinces, including 2 autonomous provinces that assume the substantive powers of a region, 15 “metropolitan cities” and 7,960 municipalities).⁴⁵ Multilevel governance in Italy is asymmetric – different units at the same level have varying degrees of autonomy – with the autonomous province of South Tyrol having, and exercising, a high degree of autonomy⁴⁶ within a “shell” region that lacks significant power. Autonomy arrangements are central to distributing legislative competency relevant to grasslands, and appreciating the context of South Tyrol’s “consociational” governance⁴⁷ based on ethnic power-sharing.

Alpine grasslands, conceived as biocultural landscapes, cross the exclusive and shared competencies of the Italian State and the regions/provinces. Under the Constitution, the Italian State generally has exclusive competence over protection of the environment, ecosystems, and cultural heritage. Meanwhile, the regions have concurrent powers (subject to fundamental principles set by the State) over land use planning, enhancement of cultural and environmental properties, and matters not specified.⁴⁸ However, the Constitution expressly allows the regions and autonomous provinces to implement EU arrangements

⁴³ Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage (“ICSICH”), LHE/23/18.COM/Decisions, January 5, 2024, DECISION 18.COM 8.b.14; ICSICH, LHE/19/14.COM/Decisions, January 29, 2020, DECISION 14.COM 10.b.2.

⁴⁴ The two inscriptions under the World Heritage Convention and Intangible Cultural Heritage Convention are implemented by Legge Provinciale 18 luglio 2023, n. 13, Gestione coordinata dei siti ed elementi oggetto di riconoscimenti UNESCO in provincia di Bolzano [Provincial law on coordinated management of UNESCO-recognized sites and elements in the province of Bolzano] (South Tyrol). This is not discussed further.

⁴⁵ “Division of Powers: Italy – Systems of Multilevel Governance” (n.d.) <https://portal.cor.europa.eu/divisionpowers/Pages/Italy-Systems-of-multilevel-governance.aspx>, last accessed March 22, 2025, archived at <https://perma.cc/M874-BV4K>.

⁴⁶ See generally, Elisabeth Alber and Carolin Zwillig, *A Primer on the Autonomy of South Tyrol: History, Law, Politics* (Autonomy Arrangements in the World, 2nd edn, Eurac Research 2022) www.world-autonomies.info/territorial-autonomies/south-tyrol.

⁴⁷ Ibid 16–17.

⁴⁸ Costituzione della Repubblica Italiana [Constitution of the Italian Republic] 1947, as amended, arts. 117(2)(s) and third paragraph.

and special arrangements increase the powers of the autonomous provinces.⁴⁹ Pursuant to a treaty between Italy and Austria, South Tyrol's autonomy statute supports self-determination through an ethnically divided governance system, which is aimed at protecting its German-speaking minority in the context of postwar fascist efforts to forcibly "Italianize" the population.⁵⁰

The autonomy statute grants South Tyrol primary legislative competence over some important matters for Alpine grasslands. These include spatial planning, landscape protection, "closed farms" (also translated as "entailed farms," discussed further later), nature parks, agriculture, and EIA.⁵¹ The autonomy arrangements are adjustable using a procedure of agreed "enactment decrees."⁵²

Legislative responsibilities under this system are not always clear-cut, and many disputes have engaged Italy's Constitutional Court. The Court has established that the autonomy statute does not support a "general competence on environmental issues"; rather, the matters not expressly mentioned remain with the State, including minimum standards of environmental protection.⁵³ The matters specifically mentioned "are compressed to the minimum."⁵⁴ Accordingly, the task of environmental protection (broadly understood) is shared, and the legitimacy of provincial rules is evaluated "case-by-case."⁵⁵ Where an issue engages overlapping legislative competences, the "prevalent" power determines the level of government with power to legislate.⁵⁶ This engages the Constitutional Court's "extremely wide margin of interpretive freedom" and its centralizing tendencies.⁵⁷ The Court has, however, confirmed the autonomous provinces' power (under the autonomy statute) in

⁴⁹ Ibid, arts. 116(1) and 117(5).

⁵⁰ Alber and Zwilling, *Primer on the Autonomy of South Tyrol*, 5–8, 16–23.

⁵¹ Decreto del Presidente della Repubblica 31 agosto 1972, n. 670, Approvazione del testo unico delle leggi costituzionali concernenti lo statuto speciale per il Trentino-Alto Adige [Presidential decree on the approval of the consolidated text of the constitutional laws concerning the special statute for Trentino-Alto Adige], as amended, art. 8(5), (6), (8), (16), (21), art. 13(1). Under art. 99, South Tyrol's laws are published in both German and Italian; I provide citations in Italian, as I used the Italian versions as the basis for research.

⁵² Elisabeth Alber, "South Tyrol's Model of Conflict Resolution: Territorial Autonomy and Power-Sharing" in Soeren Keil and Allison McCulloch (eds), *Power-Sharing in Europe: Past Practice, Present Cases, and Future Directions* (Palgrave Macmillan 2021) 171–199, 179–180.

⁵³ Mariachiara Alberton, "The Swing of Intergovernmental Relations Concerning Environmental Matters through the (Un)Balanced Doctrines of the Constitutional Courts in Spain and in Italy" (2021) *Revista d'Estudis Autonòmics i Federals – Journal of Self-Government* 1–43, 28, 32.

⁵⁴ Ibid 37.

⁵⁵ Ibid 28, 36.

⁵⁶ Vittoria Barsotti and others, *Italian Constitutional Justice in Global Context* (OUP 2015) 194.

⁵⁷ Ibid.

relation to landscape and nature parks and their entitlement to implement the Nature Directives.⁵⁸ EIA is undertaken by both levels, with responsibility allocated depending on the nature of the project.⁵⁹ In intersecting areas, the constitutional principle of loyal cooperation and intergovernmental institutions provide for coordination, discussed further in Section 10.4.

The province also hosts multiple levels of government. South Tyrol has 118 mostly small municipalities (*comuni/Gemeinden*, averaging 4,500 inhabitants), many of which face challenges in resourcing the services that help to stem depopulation, especially in remote areas.⁶⁰ Seven mid-tier “district” governments (*Comunità comprensoriali/Bezirksgemeinschaften*) undertake tasks delegated by the province or the municipalities, which sometimes include environment-related activities,⁶¹ though they appear only tangentially related to grasslands.

This complicated governance picture adds up to this: On each of the usually small, ecologically and culturally fragile Alpine grasslands of Italy’s northernmost territory sits tremendous, multilayered governance machinery. Nature, impact assessment, agriculture, landscape, and governance laws sit at different and sometimes multiple layers: local, provincial, national, EU, and international. These are the foundations for regulatory interventions to address cumulative harm to the grasslands, to which we now turn.

⁵⁸ Alberton, “Swing of Intergovernmental Relations,” 33; Walter Obwexer and Esther Happacher, *Parere Legale: Sviluppi e Mutamenti dell’Autonomia dell’Alto Adige a Partire dalla Dichiarazione di Chiusura della Vertenza 1992* (in Italian and German) (University of Innsbruck 2015), 233–234, citing Constitutional Court judgment n. 226/2009, dealing with Decreto Legislativo 22 gennaio 2004, n. 42, Codice dei beni culturali e del paesaggio, ai sensi dell’articolo 10 della legge 6 luglio 2002, n. 137 [Legislative decree on cultural heritage and landscape code, pursuant to article 10 of Law n. 137 of July 6, 2002] (Italy) (“Italian Cultural Heritage and Landscape Code”) www.osservatorioappalti.unitn.it/viewFile.do?id=1511601879728&dataId=9751&filename=Testo.pdf, archived at <https://perma.cc/Z74W-BWK8>.

⁵⁹ “Projects Subject to Environmental Impact Assessment (EIA) or Verification of Eligibility (Screening) (in Italian)” (2017) <https://ambiente.provincia.bz.it/it/valutazioni-ambientali/valutazione-impatto-ambientale-via>, archived at <https://perma.cc/HL6V-ZF4J>.

⁶⁰ Theresia Morandell and Karl Kössler, “Inter-Municipal Cooperation Based on a Model Agreement: A Top-Down Approach in South Tyrol” in Karl Kössler and Theresia Morandell (eds), *Local Government in Italy: Responses to Urban-Rural Challenges* (Institute for Comparative Federalism, Eurac Research 2021) 63–69, 63, www.logov-rise.eu/country-map/italy/.

⁶¹ Thomas Ohnwein, Elisabeth Parteli and Carmen Kollmann (eds), *Manuale dell’Alto Adige con lo Statuto di Autonomia* (Provincial Council of Bolzano 2024) 250 https://news.provincia.bz.it/it/pubblicazioni/manuale_dell_alto_adige_con_lo_statuto_di_autonomi, archived at <https://perma.cc/H6BM-AXW3>.

10.4 COORDINATED REGULATORY INTERVENTION TO PROTECT ALPINE GRASSLANDS

Amid the many laws relevant to South Tyrol's Alpine grasslands emerge design features that Chapters 6 and 7 on regulatory intervention and coordination advanced as important to addressing cumulative environmental problems. First, these laws make available a mix of regulatory interventions that combines diverse regulatory strategies and approaches to influence diverse contributors to a cumulative problem. Second, they span legal levels and areas to comprehensively address all important categories of impacts. And third, they do so in a consistent way, to avoid mutual undermining. Section 10.4.1 first analyzes comprehensiveness in the sense of addressing a full spectrum of types of harms and contributors to harm. It examines the degree to which interventions across multiple legal levels and areas target action at the three broad types of harm that accumulate to cause the problem: development, contemporary abandonment of traditional pastoral practices, and historical abandonment (i.e., providing for restoration). It also analyzes the regulatory strategies and approaches used to influence different contributors to impacts: farmers, consumers, would-be developers, and governments. Section 10.4.2 then points to the coordinating links associated with these interventions using Chapter 7's distinction between rules and institutions for coordination, including those for dispute resolution, using the example of Natura 2000.

Recall Chapter 6 (Intervention)

Key design features of regulatory mechanisms for intervention to address cumulative environmental problems include: intervening *comprehensively* across impact types and activities, and using a *diverse toolbox* of regulatory approaches and strategies. **Regulatory approaches** include *sticks* that mandate or prohibit the carrying out of an activity; *carrots* that apply to an activity in the absence of a mandate (e.g., a monetary incentive or tax); *sermons*, which influence the activity using information; and *state rescue*, involving direct government action to address the problem. **Regulatory strategies** are *harm reducing*, meaning changing an activity so that it causes less harm; *harm offsetting*, meaning undertaking a second beneficial activity to counteract the negative effects of a first activity; *restoring*, meaning undertaking a beneficial activity to counteract legacy harms that may have been caused by others; and *coping*, meaning facilitating the matter of concern (here, Alpine grasslands) adapting to impacts so that harm decreases.

10.4.1 Regulatory Interventions: Comprehensiveness and Diversity

Available regulatory interventions use diverse tools to address three important categories of harm to Alpine grasslands, which are used to structure this section (noting that comprehensive coverage *within* a category of threat is a separate issue).⁶² First, laws address – directly and indirectly – “development” that would convert grasslands to another land use. Second, they encourage continuing, rather than abandoning, low-profit extensive grazing of grasslands. Third, they provide for restoring already abandoned grasslands. In doing so, they use varied regulatory strategies and approaches. Table 10.1 summarizes measures used in key laws relevant⁶³ to Alpine grasslands, using the broad categories of legal focus introduced in Chapter 3: the matter of concern (here, Alpine grasslands), impacts, activities, and indirect influences.⁶⁴

Overall, each of the legal areas (Table 10.1(a) to (e)) includes multiple laws, and many laws include mechanisms that adopt different approaches, strategies, or both. It is relatively rare for a law to adopt a single approach, or a single strategy. The overall diversity aligns with the argument in Chapter 6 that cumulative environmental problems will typically need a mix of interventions to account for the many and diverse contributors to a cumulative problem, and the multiple types of impacts involved. Together, the interventions here span several distinct areas of law, influencing more actors than a narrower approach would allow. Laws dealing with nature, agriculture, impact assessment, and landscapes affect how farmers and landowners manage their land; agricultural product labeling and farmer recognition laws aim to influence consumers and the general public; and further governance laws bring in direct action by governments to protect grasslands.

⁶² I describe these as “available” interventions because empirical analysis of implementation lies outside the present scope. For a discussion touching on comprehensiveness of intervention in relation to threats within a category, see nn. 128 to 131 and accompanying text.

⁶³ This table and the accompanying discussion exclude laws that restrict narrow kinds of development (as opposed to changes in land use in general), e.g., restrictions on tourism developments. They also exclude laws that provide for general governance arrangements (e.g., foundational EU treaties), EU sustainability disclosures in a large corporate context, like the EU “Taxonomy,” which does not cover agriculture generally (see Saga Eriksson, “The Centrality of Law for EU Sustainable Finance Markets: Outlining a Research Agenda” (2024) 33 *Review of European, Comparative and International Environmental Law* 57–69); instruments that provide general economic support to local governments (but it includes economic supports directed expressly to Alpine grasslands); and that provide for general rules about local food products (but it includes specific rules related to mountain products).

⁶⁴ See Figure 3.1.

TABLE 10.1 *Regulatory interventions at international (INT), European (EU), Italian national (IT), and Autonomous Province of Bolzano-South Tyrol (ST) levels related to Alpine grasslands, and their regulatory approaches and strategies*

		Regulatory approach				Regulatory strategy			
		Stick	Carrot	Sermon	State rescue	Harm-reducing	Harm-offsetting	Restoring	Coping
Level	Law and legal mechanisms								
(a) Nature laws (focus is on grasslands as the matter of concern)									
INT	Biodiversity Convention: general and in situ conservation, sustainable use of biodiversity, impact assessment, public awareness, incentive measures ⁱ	✓	✓	✓		✓		✓	
INT	Bern Wildlife Convention: conservation policies, habitat and species protections, education measures, reintroductions ⁱⁱ	✓		✓		✓		✓	
EU	Habitats Directive: conservation measures, impact assessment, compensatory measures, protected areas, protection measures ⁱⁱⁱ	✓	✓			✓	✓	✓	
EU	Birds Directive: conservation measures, protected areas, protection measures ^{iv}	✓				✓		✓	
EU	Nature Restoration Law: restoration measures, targets, national plans ^v		✓			✓	✓	✓	✓
IT	Framework Law on Protected Areas: payments for conservation and restoration, activity restrictions, incentives for pastoralism and restoration ^{vi}	✓	✓	✓	✓	✓		✓	
ST	Nature Law: harm prohibition, protected areas, protection measures, impact assessment, compensatory measures, and awareness-raising measures ^{vii}	✓	✓	✓		✓	✓	✓	

TABLE 10.1 (continued)

		Regulatory approach				Regulatory strategy			
Level	Law and legal mechanisms	Stick	Carrot	Sermon	State rescue	Harm-reducing	Harm-offsetting	Restoring	Coping
(b) Impact assessment laws, EIA, and SEA (focus is impacts)									
EU	EIA Directive: harm-reducing and -offsetting measures as conditions ^{viii}	✓				✓	✓		
EU	SEA Directive: harm-reducing and -offsetting measures ^{ix}		Not specified				✓	✓	
IT	Environment Code: SEA for plans and EIA for projects under IT jurisdiction, inc. harm-reducing and -offsetting measures ^x	✓				✓	✓		
ST	EIA and SEA law: SEA and EIA for projects under ST jurisdiction, including harm-reducing and -offsetting measures, provincial authorization ^{xi}	✓				✓	✓		
(c) Agriculture laws (focus spans matter of concern and activities)									
EU	CAP Regulation: direct payments (eco-schemes enhanced conditionality), environment–rural development measures ^{xii}		✓	✓		✓		✓	✓
EU	Geographical Indications Regulation: mountain product labeling ^{xiii}		✓	✓			Not specified		
IT	Green Economy Law: ecosystem services payments ^{xiv}		✓			✓			
IT	Mountain Products Decree: mountain product labeling ^{xv}		✓	✓			Not specified		
IT	Agricultural Recognition Law: incentives and technical assistance, awareness-raising and merit awards for environmentally compatible farmers ^{xiv}		✓	✓		✓			
ST	Agricultural Incentive Law: incentives for landscape protection and environmental improvement ^{xvii}		✓	✓		✓		✓	
ST	Closed Farm Law: restricted disposal, subdivision and inheritance ^{xviii}	✓					Not specified		

TABLE 10.1 (continued)

		Regulatory approach				Regulatory strategy			
		Stick	Carrot	Sermon	State rescue	Harm-reducing	Harm-offsetting	Restoring	Coping
Level	Law and legal mechanisms								
(d) Landscape laws (focus is matter of concern)									
INT	Alpine Convention: objectives to protect, conserve, and rehabilitate the environment ^{xix}		Not specified			✓		✓	
INT	↳ Mountain Farming Protocol: incentives to encourage mountain farming to conserve and maintain nature, conserve and restore pastures, training and technical assistance ^{xx}		✓	✓		✓		✓	
INT	↳ Nature Protection Protocol: landscape planning, agriculture incentives, protected areas, harm prohibition, offsetting unavoidable impairment, renaturalization, and reintroductions ^{xxi}	✓	✓			✓	✓	✓	
EU	European Landscape Convention: awareness raising, training and education, “instruments” for planning and management ^{xxii}			✓		✓		✓	
IT	Cultural Heritage and Landscape Code (applies to landscape in ST at the level of principles) ^{xxiii}		Primary competency lies with ST						
ST	Landscape Law: grassland protections; public interventions for conservation, restoration; contributions to landowners; Landscape Fund; public purchase for conservation; restrictions on land consumption; landscape alteration authorizations, including offsetting ^{xxiv}	✓	✓	✓	✓	✓	✓	✓	

TABLE 10.1 (continued)

		Regulatory approach				Regulatory strategy			
		Stick	Carrot	Sermon	State rescue	Harm-reducing	Harm-offsetting	Restoring	Coping
Level	Law and legal mechanisms								
(e) Governance laws (focus is indirect influence)									
IT	Constitutional protection for ecosystems and landscapes ^{xxv}		Not specified			✓			
IT	Constitutional provision for mountains ^{xxvi}		Not specified				Not specified		
IT	Law for Small Municipalities: fund for public action, including to restore mountain pastures, acquire land to prevent biodiversity loss and restore environment on agricultural land ^{xxvii}				✓	✓		✓	
IT	Law for Mountain Development ^{xxviii}				✓	✓		✓	

NB: CAP, Common Agricultural Policy; EIA, environmental impact assessment; SEA, strategic environmental assessment.

References and provisions related to regulatory strategies and approaches

Parenthetical information gives information relevant to strategies and approaches given above, introduced in Chapter 6 and reviewed in the text box preceding Section 10.4.1. Note that references to “conservation” and “protection” are interpreted as a harm-reducing strategy, and references to prohibiting, regulating, authorizing, or licensing activities (or similar) are taken to amount to a regulatory stick. General words like ‘policies’ or ‘measures’ are not construed as a specific regulatory approach. Short names are used in references, will full references in the footnotes to the main body of the text either preceding or following this table.

i Biodiversity Convention arts. 6 (general measures for conservation), 8 (in situ conservation, including to promote recovery of species, i.e., restoration, and regulating activities), 10 (sustainable use of biodiversity, including remedial action, i.e., restoring), 11 (incentive measures), 13 (public awareness, i.e., a sermon), 14 (impact assessment, minimizing adverse impacts), 20 (financial incentives).

ii Bern Wildlife Convention arts. 3 (conservation policies and education, i.e., a sermon), 4 (conservation measures), 5 (measures to protect flora, harm prohibition), 6 (measures to protect fauna, harm prohibition), 11 (encouragement of reintroductions).

TABLE 10.1 (continued)

- iii Habitats Directive** arts. 6 (conservation measures, avoid deterioration, impact assessment, compensatory measures), 8 (EU co-financing of measures), 12 and 13 (harm prohibition), 14 (regulating access to property, regulating and licensing take of specimens), 16 (derogations, e.g., for imperative reasons of public interest), 22(a) (re-introducing species).
- iv Birds Directive** arts. 2 (conservation measures), 3 (protected areas and reestablishing biotopes), 4 (protected areas), 5 (harm prohibitions), 8 (prohibitions on nonselective capture).
- v Nature Restoration Law** art. 4 (member state habitat restoration measures to meet restoration targets, no significant deterioration requirement), 11 (restoration of agricultural ecosystems), 14–15 (national restoration plans, including promoting “the deployment of private or public support schemes,” financing “support to stakeholders,” and compensatory measures), ann. VII(9), (18), (20), (22) (examples of restoration measures including establishing meadows and pastures, reducing grazing intensity, stopping grassland plowing, assisting migration where needed due to climate change). Note that beyond brief reference to regulatory carrots, there is little discussion of the regulatory approach from the perspective of contributors to harm, most provisions being framed simply as “restoration measures.”
- vi Italian Framework Law on Protected Areas**, e.g., for “national protected natural areas”: arts. 1(3)(a), (b) (conservation and restoration objectives), 7 (payments to municipalities and provinces to undertake state rescue, and to individuals, to undertake environmental conservation and restoration), 11 (harm prohibition), 13 (authorizations), 14 (incentives to individuals; facilitating or promoting traditional pastoral activities and environmental restoration, or promoting local products i.e., carrot and sermon).
- vii South Tyrol Nature Law** arts. 7 (harm prohibition re plants); 9 (plants protected in protected areas); 14 (habitat protection and restoration); 20 (establishment of protected areas); 21 (compensatory measures); 26 (incentive and awareness-raising measures); 27 (contractual measures to services, including re meadows).
- viii EIA Directive** arts. 5(1)(c), 8a(1)(b)(4) and annex IV(7) (measures to prevent, reduce, offset adverse effects; development consent to incorporate such measures).
- ix SEA Directive** arts. 3, 5(1), annex I point (g), II (environmental report to be “taken into account” in decision-making about plan or program, i.e., not specifying a regulatory approach; relevant information includes measures to prevent, reduce and offset adverse effects).
- x Italian Environment Code** pt II and associated annexes (SEA and EIA for certain projects within Natura 2000 sites, includes measures to prevent, reduce, and offset adverse effects, including via authorization requirements): art. 26 (link to project authorization), pt II - ann. V point (g), ann. VII point 7).
- xi South Tyrol EIA/SEA Law** title II (SEA) (SEA to be “taken into account” in decision-making about plan, i.e., not specifying a regulatory approach) and III (EIA) (applies to annex A listed projects under the jurisdiction of South Tyrol; requires conditions to avoid or prevent negative impacts; measures to avoid, reduce, etc. and offset impacts; requirement for provincial authorization).

TABLE 10.1 (continued)

- xii CAP Regulation** arts. 6(d), (f) (objectives include climate change adaptation, i.e., coping, “halting and reversing biodiversity loss, enhance ecosystem services and preserve habitats and landscapes”, i.e., harm-reducing and restoring); 12–13 (reducing harm through conditionality for direct payments re compliance with statutory management requirements (SMRs) and “good agricultural and environmental condition” (GAEC) standards); 15 (farm advisory services, i.e., a sermon); 31 (eco-schemes, including payments to protect biodiversity and restore habitats); 70 (payments for agri–environment–climate commitments that help achieve art. 6 objectives); 71 (payments for natural and area-specific constraints, including mountain areas); 72 (payments for area-specific disadvantages from mandatory requirements, including Natura 2000); 73 (support for investments in agricultural restoration and climate adaptation as an art. 6 objective); annex III (GAEC 1 re maintenance of permanent grassland, GAEC 9 re ban on plowing environmentally sensitive permanent grassland in Natura 2000 sites, SMR 3 re obligations under Birds Directive, SMR 4 re obligations under Habitats Directive). Note that prohibitions drawn from the Nature Directives are not classified as sticks here to avoid double counting.
- xiii Geographical Indications Regulation** art. 82 (“mountain product” as optional quality term). Note that this functions as a combined regulatory carrot and sermon – carrot from the perspective of the farmers who adopt the quality term, and sermon from the perspective of consumers. The instrument is silent as to regulatory strategy, since it requires merely a mountain location, and no specific environmental practices.
- xiv Italian Green Economy Law** art. 70(d), (f) (payment system for ecosystem services, including principles to safeguard biodiversity and landscape quality, i.e., harm reducing, and remunerating farmers to do so), 79 (applies in South Tyrol).
- xv Italian Mountain Products Decree** art. 2(2) (application of “mountain product quality” to animal products, including from transhumance pastures) (see also note xiii above for Geographical Indications Regulation).
- xvi Italian Agricultural Recognition Law** art. 2 (farmers who combat agricultural abandonment and biodiversity loss, i.e., harm reducing); 3 (projects, agreements and MoUs with farmers to combat abandonment and biodiversity loss and enhance the social role of farmers); 4 (preferential contracts for the promotion of agriculture that protects biodiversity and cultural heritage); 5 (list of farmers to be recognized); 6–10 (National Agriculture Day, award of merit for agriculturalists)
- xvii South Tyrol Agricultural Incentive Law** arts. 1 (purpose to promote agriculture in protecting cultural aspects of landscape, considering ecological aspects and with reference to mountain areas), 3, 4(1)(f), 5 (incentives and technical assistance for landscape protection and environmental improvement, i.e., harm reducing and restoring, either by the province alone, or jointly with the Italian State or the EU)
- xviii South Tyrol Closed Farms Law** art. 4–9 (limitations on disposal of registered closed farm); 5 (restrictions on detaching plots of land from the closed farm); 11 (farm indivisible in the context of inheritance, must be single heir); 14 (criteria for inheritance if multiple potential heirs, and they do not agree). Categorized as “not specified” in relation to regulatory strategy since there is no express reference to an environmental change, as opposed to an ownership change.

TABLE 10.1 (*continued*)

- xix Alpine Convention** art. 2 (preserving and protecting the Alps, conserving and rehabilitating natural habitats, preserving and promoting environmentally compatible farming).
- xx Mountain Farming Protocol** arts. 3 (encouraging environmentally compatible mountain farming; taking action against abandonment), 7 (providing compensation for mountain farming's contribution to conserving and maintaining nature and countryside), 8(3) (ensure conservation and restoration of traditional components of countryside, inc. Alpine pastures), 17–18 (training and technical assistance)
- xxi Nature Protection Protocol** arts. 8 (preserve species and habitats through landscape planning), 9 (offset unavoidable impairments), 10 (reduce impacts on nature and restore; use incentives to support agriculture), 11 (preserve, manage, extend protected areas and avoid and reduce impairments), 13 (preservation of biotopes, re-naturalization of impaired habitats, i.e., restoring), 14 (preserve species and habitats), 15 (prohibit harm), 16 (promote reintroductions).
- xxii European Landscape Convention** arts. 1(d), (e), (f) (conserve, maintain, restore landscape), 6(A) (awareness raising), (B) (training and education), (E) (instruments aimed at protecting, managing and/or planning the landscape), 11 (Landscape award of the Council of Europe).
- xxiii Italian Cultural Heritage and Landscape Code.** Note that under the Second Autonomy Statute, as modified by legislative decree, South Tyrol has responsibility for landscape-related laws, including landscape authorizations: Decreto Legislativo 26 settembre 2023, n. 143, Norme di attuazione dello Statuto speciale per la Regione Trentino-Alto Adige/Südtirol recanti modifiche al decreto del Presidente della Repubblica 22 marzo 1974, n. 381, in materia di urbanistica e di tutela del paesaggio [Legislative decree on implementation provisions of the Special Statute for the Trentino-Alto Adige/Südtirol Region containing amendments to the Presidential Decree of March 22, 1974, no. 381, on urban planning and landscape protection]. This Code applies at the level of principles.
- xxiv South Tyrol Landscape Law** arts. 14 (state interventions for conservation and restoration in place of owners/occupiers); 15, 16 (contributions to landowners and “Landscape Fund” for conserving and restoring natural and cultural landscapes, purchase of land by public bodies, awareness raising, i.e., a sermon), 17 (restrictions on land consumption by construction outside developed areas); 65 (landscape authorizations, may be subject to compensatory conditions).
- xxv, xxvi Constitution of the Italian Republic**, art. 9 (the Republic protects landscapes, the environment, biodiversity, ecosystems), 44 (the law makes provision for mountain areas).
- xxvii Italian Small Municipalities Law** arts. 3(3)(h), 5(1)(a) (fund for development, including for restoring mountain pastures and to combat land abandonment by acquiring properties to prevent biodiversity loss and to restore the environment on agricultural land).
- xxviii Italian Mountain Development Law** art. 9 (power to acquire, rent, or expropriate where necessary for the protection of the environment, abandoned mountain land for meadows and pastures).

10.4.1.1 Regulatory Mechanisms to Control Development

Laws that control development are perhaps the most familiar to environmental lawyers. Impact assessment laws apply the typical recipe. First, require the proponent of a plan or project to assess whether it would have a significant impact on the environment. Then, require a decision-maker to take account of that assessment in considering the plan or determining whether to allow the project, and the conditions to apply to it. EU Directives provide for EIA and SEA,⁶⁵ and are implemented by Italian national law or South Tyrol law,⁶⁶ depending on the kind of plan or project. They require cumulative impacts to be considered in SEA, at the project “screening” stage (determining whether EIA is required), and in the project EIA study itself.⁶⁷ Under these laws, environmental impacts include not just impacts on biodiversity but also impacts on “landscape.”⁶⁸ They aim to reduce, avoid, and offset harm from these impacts using regulatory sticks, for example, by influencing whether a decision-maker issues a permit for development and its binding environmental conditions (Table 10.1(b)).

Nature laws (Table 10.1(a)) also use a familiar recipe of designating important areas, then limiting the activities that can happen inside them using regulatory sticks. The Convention on Biological Diversity and the Bern Convention both provide for this approach,⁶⁹ as do the EU “Nature

⁶⁵ Directive 2011/92/EU of the European Parliament and of the Council of December 13, 2011, on the assessment of the effects of certain public and private projects on the environment [2012] OJ L26/1, as amended (“EIA Directive”); Directive 2001/42/EC of the European Parliament and of the Council of June 27, 2001, on the assessment of the effects of certain plans and programmes on the environment [2001] OJ L197/30, as amended (“SEA Directive”).

⁶⁶ Decreto Legislativo 3 aprile 2006, n. 152, Norme in materia ambientale [Legislative Decree on rules on environmental matters] (Italy) (“Italian Environment Code”); Legge Provinciale 13 ottobre 2017, n. 17, Valutazione ambientale per piani, programmi e progetti [Environmental assessment for plans, programs and projects] (South Tyrol) (“South Tyrol EIA/SEA Law”).

⁶⁷ E.g., EIA Directive arts. 4(3), 5(1), ann. III points 1(b), (3)(g); SEA Directive, arts. 3, 5(1), ann. I note i, ann. II point (2); Italian Environment Code, in relation to SEA: arts. 12, 13, pt II - ann. I point (2), ann. VI point (f), and in relation to EIA: arts. 19, 22, pt II - ann. V point (b), ann. VII point (5)(e); South Tyrol EIA/SEA Law, arts. 7(1), 10(3), 15, 17 (applying same criteria as corresponding national law).

⁶⁸ EIA Directive arts. 1(2)(a), 3(1)(d), 4(2), 5(1), ann. II point 1(b), IV point (4); SEA Directive arts. 3, 5(1), ann. I point (f), ann. II point (2); Italian Environment Code pt II - ann. I point 2, ann. V point (2)(b), (c8), ann. VI point (f), ann. VII point (4), (5)(b), (d), (8); South Tyrol EIA/SEA Law, arts. 10(3), 17(1) (applying EU and national provisions).

⁶⁹ Convention on Biological Diversity, June 5, 1992, Rio de Janeiro, in force December 29, 1993, 1760 U.N.T.S. 79, 143 (“Biodiversity Convention”), art. 8(c); Convention on the Conservation of European Wildlife and Natural Habitats, September 19, 1979, Bern, in force June 6, 1982, E.T.S. 104 (“Bern Wildlife Convention”), art. 4

Directives.”⁷⁰ However, these sticks are carefully targeted: Italy’s protected areas law expressly foresees that protected areas will allow and indeed value traditional pastoral activities and other activities that are characteristic of local community identity.⁷¹ South Tyrol’s law provides for Natura 2000 sites that protect grasslands and imposes accompanying special impact assessment requirements termed “appropriate assessments.”⁷² Restrictions do not apply to agricultural uses and laws expressly promote traditional, extensive agriculture.⁷³ While the EU CAP requires all farmers to comply with the Nature Directives,⁷⁴ farmers who receive direct payments must also observe a blanket ban on plowing or converting environmentally sensitive permanent grasslands in Natura 2000 sites and a broader 5 percent limit on the decrease in permanent grasslands compared to 2018 levels (termed “enhanced conditionality”).⁷⁵

Development-limiting landscape laws (Table 10.1(d)) in South Tyrol further protect Alpine grasslands, both directly and indirectly, using regulatory sticks. South Tyrol’s Landscape Law requires a permit to alter the landscape in protected areas, in mountain areas over 1,600 m,⁷⁶ and in other areas set out in landscape plans (with exceptions for restoring degraded areas⁷⁷). These include sites protected for ecological and agricultural reasons, including Alpine meadows and pastures.⁷⁸ Provincial and municipal planning instruments implement these provisions.⁷⁹ For example, a municipal plan for Schnalstal/Senales, a mountain municipality on the Austrian border, prohibits construction on Alpine grasslands, except for certain agricultural purposes, provided that conditions about minimum animal pasturage or hay cutting are met.⁸⁰

⁷⁰ Habitats Directive, art. 6(1), (2), 12, 13; Birds Directive, arts. 3, 4.

⁷¹ Legge 6 Dicembre 1991, n. 394, Legge quadro sulle aree protette [Framework law on protected areas], as amended (Italy) (“Italian Framework Law on Protected Areas”), arts. 11(2) (b), 2-bis, 12(2)(c) (all in relation to national parks).

⁷² E.g., Legge Provinciale 12 maggio 2010, n. 6, Legge di tutela della natura e altre disposizioni [Provincial law on nature conservation and other provisions], as amended (South Tyrol) (“South Tyrol Nature Law”), arts. 20, 22, ann. D.

⁷³ E.g., *ibid* arts. 10, 21(8)(b).

⁷⁴ Regulation 2021/2115 of the European Parliament and of the Council of December 2, 2021, on Common Agricultural Policy Strategic Plans [2021] OJ L435/1 (CAP Regulation), annex III (SMR 3, SMR 4).

⁷⁵ *Ibid* annex III (GAEC 1, GAEC 9).

⁷⁶ Legge provinciale 10 luglio 2018, n. 9, Territorio e paesaggio [Provincial law on territory and landscape] (South Tyrol) (“South Tyrol Landscape Law”), arts. 12, 14.

⁷⁷ *Ibid* arts. 11, 13(2), 47(1)(f).

⁷⁸ *Ibid* arts. 11(c)-(e), 13(2)(c), (d), 14(1).

⁷⁹ *Ibid* art. 41.

⁸⁰ *Piano Paesaggistico del Comune di Senales: Prescrizioni di Tutela e d’Uso* [Landscape Plan of the Municipality of Senales: Rules on Protection and Use] (Autonomous Province of South Tyrol 2011, as codified 2020), art. 13.

Indirect limits on developing Alpine grasslands have a unique vehicle: provincial inheritance law, which reflects centuries-old local norms related to agriculture (Table 10.1(c)). South Tyrol's Closed Farm Law imposes limitations on the owner of a registered "closed farm" selling or subdividing the farm, and makes it indivisible in the context of inheritance: Only one person may inherit the farm. In a contemporary twist that preserves the law's constitutionality,⁸¹ the heir need not be the first-born son, but the person who demonstrates the highest capability to manage the farm, based on statutory criteria.⁸² South Tyrol's Landscape Law applies even stricter limitations on construction ("land consumption") on closed farms than other farms.⁸³ Interestingly, South Tyrol's Closed Farm Law is the only one of numerous agriculture laws to provide for a regulatory stick, the others all use carrots and sermons (Table 10.1(c)) – a point to which we return later.

10.4.1.2 Regulatory Mechanisms to Promote Extensive Grazing

Laws also encourage traditional extensive grazing on Alpine grasslands using regulatory carrots and sermons aimed at farmers, community associations, and consumers. Agriculture laws are key here (Table 10.1(c)). The Province delivers direct to farmers under its own Agricultural Incentive Law⁸⁴ as well as the EU's CAP. CAP "eco-schemes" reward farmers who go beyond minimum environmental requirements,⁸⁵ and farmers in mountain areas and Natura 2000 sites are eligible for additional payments.⁸⁶ Strikingly, this is the only context in which we see coping mechanisms: Climate change adaptation is among the objectives of payments under eco-schemes and warrants extra payments for farmers in mountain areas and Natura 2000 sites.⁸⁷ Italy's national Green Economy law provides for further ecosystem services payments to farmers.⁸⁸

⁸¹ Stefania Baroncelli, "A Fluid Implementation of the Special Statute of Autonomy of Trentino Alto Adige/South Tyrol? The Influence of the Court of Justice of the EU, the Council of Europe and the Italian Constitutional Court" (2022) 79 *Europa Ethnica* 69–80, 77–78.

⁸² Legge Provinciale 28 novembre 2001, n. 17, Legge sui masi chiusi [Provincial law on closed farms], as amended (South Tyrol) ("South Tyrol Closed Farm Law"), arts. 11, 14.

⁸³ E.g., South Tyrol Landscape Law, art. 17(5), (5-bis).

⁸⁴ Legge provinciale 14 dicembre 1998, n. 11, Disposizioni relative all'incentivazione in agricoltura [Provincial law relating to incentives in agriculture], as amended (South Tyrol) ("South Tyrol Agricultural Incentive Law").

⁸⁵ CAP Regulation, art. 31.

⁸⁶ Ibid arts. 71, 72.

⁸⁷ Ibid arts. 6(1)(d), 70–72.

⁸⁸ Legge 28 dicembre 2015, n. 221, Disposizioni in materia ambientale per promuovere misure di green economy e per il contenimento dell'uso eccessivo di risorse naturali [Law on

Funding is also available to local areas to support community-led initiatives and investments to preserve landscapes under the EU CAP.⁸⁹ South Tyrol's Nature Protection Law provides for subsidizing nature protection associations and paying landowners to conserve meadows.⁹⁰ These measures align with the Alpine Convention's Mountain Farming Protocol, which encourages mountain farming, compensating mountain farmers for conserving nature and not abandoning mountain pastures;⁹¹ under its Nature Protection Protocol, parties agree to use incentives to support agriculture.⁹²

Regulatory sermons aim to recognize and valorize traditional farmers, indirectly incentivizing them to continue traditional enterprises. The European Landscape Convention provides for awareness-raising measures about the value of landscapes, and training and education.⁹³ Italy's 2024 Agricultural Recognition Law provides for a list of agricultural–environmental guardians, a National Agriculture Day, merit awards, potentially lower provincial taxes, and other valorization activities for farmers.⁹⁴ EU and Italian laws support a labeling scheme for accredited “mountain products,” which steers consumers toward supporting Alpine agriculture.⁹⁵

environmental provisions to promote green economy measures and to contain the excessive use of natural resources] (Italy) (“Italian Green Economy Law”), art. 70(f).

⁸⁹ CAP Regulation, art. 73.

⁹⁰ South Tyrol Nature Law, arts. 26, 27.

⁹¹ Protocol on the Implementation of the 1991 Alpine Convention in the Field of Mountain Farming, December 20, 1994, Chambéry, in force December 18, 2002, [2006] OJ L 271/63, arts. 3, 7, 8.

⁹² Protocol on the Implementation of the Alpine Convention of 1991 Relating to Nature Protection and Landscape Conservation, December 20, 1994, Chambéry, in force December 18, 2002, art. 10.

⁹³ European Landscape Convention, arts. 6(A), (B).

⁹⁴ Italian Agricultural Recognition Law, arts. 3–10.

⁹⁵ Regulation (EU) 1151/2012 of the European Parliament and of the Council of November 21, 2012 on quality schemes for agricultural products and foodstuffs [2012] OJ 343/1, now replaced by another regulation that continues the “mountain product” optional quality designation in art. 82: Regulation (EU) 2024/1143 of the European Parliament and of the Council of 11 April 2024 on geographical indications for wine, spirit drinks and agricultural products, as well as traditional specialities guaranteed and optional quality terms for agricultural products, amending Regulations (EU) No 1308/2013, (EU) 2019/787 and (EU) 2019/1753 and repealing Regulation (EU) No 1151/2012 [2024] OJ L 2024/1143 (“Geographical Indications Regulation”), art. 82; Decreto Ministeriale 26 luglio 2017, n. 57167, Disposizioni nazionali per l’attuazione del regolamento (UE) n. 1151/2012 e del regolamento delegato (UE) n. 665/2014 sulle condizioni di utilizzo dell’indicazione facoltativa di qualità ‘prodotto di montagna’ [Ministerial Decree 57167 on national provisions for the implementation of Regulation (EU) No. 1151/2012 and Delegated Regulation (EU) No. 665/2014 on the conditions of use of the optional quality indication “mountain product”] (Italy) (“Italian Mountain Products Decree”), as amended.

10.4.1.3 Regulatory Mechanisms to Support Restoring Grasslands

Regulatory measures for restoring degraded grasslands engage municipalities, community associations, and landowners using legal powers to undertake “state rescue” and offer incentives – strikingly, but not unsurprisingly, not applying regulatory sticks to reverse legacy harm. Relevant laws relate to nature, agriculture, landscape, and governance in general (Table 10.1(a), (c), (d), (e)). Italy’s law for small municipalities provides for a fund and national plan for redeveloping small municipalities that includes restoring mountain pastures among its priorities.⁹⁶ National laws for both small and mountain municipalities empower them to acquire abandoned mountain grasslands to restore them and combat loss of biodiversity, and even to expropriate them where necessary for environmental protection.⁹⁷ The EU CAP and South Tyrol’s Agricultural Incentive Law provide incentives for restoring mountain zones and grasslands.⁹⁸ South Tyrol’s nature law expressly promotes restoring semi-natural habitats like grasslands and extensive agriculture and provides for grants to relevant associations and organizations and contracts with landowners to undertake relevant works.⁹⁹ Most recently, Europe’s 2024 Nature Restoration Law requires member states to meet binding nature restoration targets, with specific mention of agricultural and grazing-dependent ecosystems.¹⁰⁰

It is apparent, then, that not only are the available regulatory mechanisms comprehensive in terms of actors and impacts; the diversity of actors and rules makes for a complex, multilevel regulatory landscape. Each level has mechanisms in multiple areas. In this context, coordination is vital.

10.4.2 Coordination

Amid all the individual regulatory intervention pieces of the large puzzle described, it will already be evident that there are coordinating “rules” in

⁹⁶ Legge 6 ottobre 2017, n. 158, Misure per il sostegno e la valorizzazione dei piccoli comuni, nonché disposizioni per la riqualificazione e il recupero dei centri storici dei medesimi comuni [Law on measures for the support and enhancement of small municipalities, as well as provisions for the redevelopment and recovery of the historic centers of the same municipalities], as amended (Italy) (“Italian Small Municipalities Law”), art. 3(3)(h).

⁹⁷ Legge 3 dicembre 1971, n. 1102, Nuove norme per lo sviluppo della montagna [Law on new rules for mountain development], as amended (Italy) (“Italian Mountain Development Law”), art. 9; Italian Small Municipalities Law, art. 5(1).

⁹⁸ CAP Regulation, arts. 6(1)(f), 70(2), 71(1); South Tyrol Agricultural Incentive Law, art. 4(1)(f).

⁹⁹ South Tyrol Nature Law, arts. 21(8)(b), (c), 26, 27.

¹⁰⁰ Regulation (EU) 2024/1991 of the European Parliament and of the Council of June 24, 2024, on nature restoration and amending Regulation (EU) 2022/869, OJ L 2024/1991, arts. 4, 11, annex VII(18), (20).

the form of provisions in a law that connect it to another law in a different area. This section first observes how subsidiarity (as a high-level principle for coordination between levels) emerges in this complex regulatory mix, notably as increasingly restrictive interventions at lower levels of government. It then analyzes two forms of coordination introduced in Chapter 7 and depicted in Figure 10.1: rule-based links between laws, which reinforce regulatory interventions; and coordinating institutions and dispute resolution mechanisms as illustrated by Natura 2000 arrangements.

10.4.2.1 Multilevel Regulation, Regulatory Diversity, and Subsidiarity

At first glance, the fact that multiple levels of government operate in each area of law, often using the same regulatory approach (as shown in Table 10.1), seems to suggest problematic overlap and inefficiency. However, on closer analysis, overlap is reduced by differentiating regulatory tasks in a way that reflects subsidiarity – a principle of EU law and Italy’s Constitution – that central authority should only perform tasks that a local level cannot adequately undertake.¹⁰¹

A nuanced view of subsidiarity differentiates between setting and implementing regulatory norms.¹⁰² Here, we see differentiation between legal levels specifying regulatory strategies (approximating norms) versus approaches (approximating implementation). In the current context, treaties, EU Directives, and constitutional provisions in areas of shared competence usually set out norms and frameworks that lower-level laws implement.¹⁰³ Sometimes a treaty or EU directive specifies a regulatory strategy (i.e., the norm) and allows the party to the treaty or member state to determine the regulatory approach to deliver it, expressed as relevant “measures”, “plans” or “instruments”¹⁰⁴ (i.e., implementation). This is also evidenced by the higher-level instruments that leave their regulatory approach unspecified (Table 10.1). The EU CAP Regulation offers member states less discretion

¹⁰¹ Constitution of the Italian Republic, art. 118; Barsotti and others, *Italian Constitutional Justice*, 199–202; Erika Arban, “Re-Centralizing Subsidiarity: Interpretations by the Italian Constitutional Court” (2015) 25 *Regional and Federal Studies* 129–144, 134–137; van Zeven, “Subsidiarity,” 417–419.

¹⁰² van Zeven, “Subsidiarity,” 416, 434–435.

¹⁰³ Ibid. See Section 10.2. Italy’s constitutional amendment to include environmental protection as a fundamental principle (note Table 10.1, note xxv) prompted the appointment in late 2023 of a commission of experts to revise the national environment code, but no reforms had been introduced at the time of writing.

¹⁰⁴ Bern Wildlife Convention, art. 4(1); Biodiversity Convention, art. 8(f); European Landscape Convention, art. 6(E).

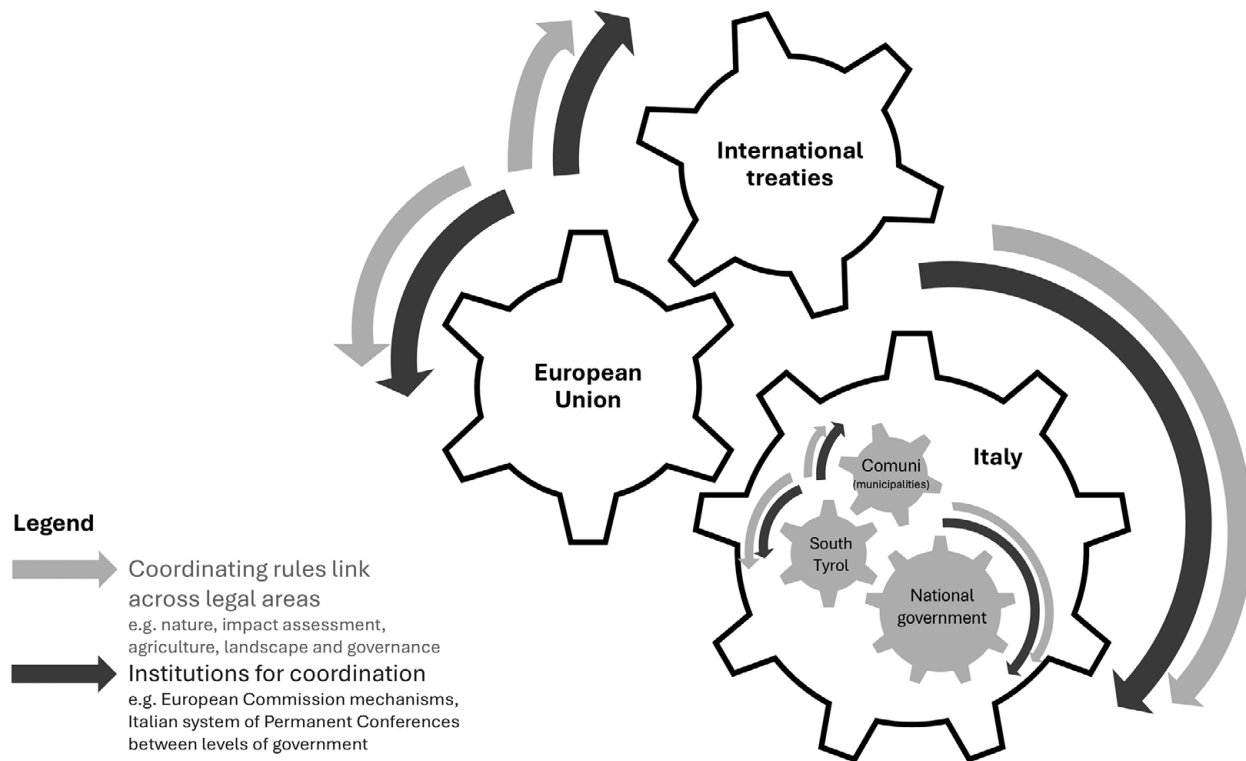


FIGURE 10.1 Coordination for protecting and restoring Alpine grasslands in South Tyrol: key government actors and mechanisms for interaction

compared to directives,¹⁰⁵ but still relies on member states implementing it using a strategic plan to set objectives, allocate resources, and select voluntary measures. In particular, higher-level restoration provisions rarely specify a regulatory approach, implicitly or explicitly¹⁰⁶ allowing local governments to choose their approach, which is frequently a regulatory carrot.¹⁰⁷

For agriculture and landscape laws, regulatory approaches tend to differ at different levels (Table 10.1(c) and (d)). Regulatory sticks generally only appear at the lowest, provincial level, while higher-level international, EU, and national laws tend to refer expressly only to carrots, sermons, and state rescue.¹⁰⁸ Provincial laws themselves provide for even more local decision-making where regulatory sticks are concerned: Municipalities designate Alpine grasslands for protection under planning instruments,¹⁰⁹ and municipality-scale commissions register and issue authorizations related to closed farms.¹¹⁰ These are powerful development-limiting tools. Their hyper-local nature tends to suggest that it is at this level of decision-making that strong mandates have the greatest palatability and legitimacy. In the case of closed farms, these arrangements are the product of South Tyrol repeatedly defending its legislative powers against erosion by the State through constitutional litigation over decades.¹¹¹

By contrast, in the nature and impact assessment areas, different levels of law specify and use the same regulatory approach, but lower-level mechanisms apply restrictions more widely. This further supports the hypothesis that locally imposed restrictions are most palatable or legitimate, consistent with subsidiarity. Take nature laws: the Bern Convention and EU Nature Directives prohibit harming species (a regulatory mandate applied narrowly), but allow for vaguer “appropriate measures” to protect habitats (not specifying a regulatory approach

¹⁰⁵ See van Zeben, “Subsidiarity,” 425.

¹⁰⁶ E.g., Biodiversity Convention, art. 8(f), 10(d) (supporting local populations to restore degraded areas, without specifying approach); EU Nature Restoration Law (see note v to Table 10.1).

¹⁰⁷ E.g., CAP Regulation, arts. 31, 70, 71; South Tyrol Agricultural Incentive Law, art. 4(1)(f); South Tyrol Nature Law, arts. 26, 27.

¹⁰⁸ The use of regulatory sticks (mandates) in nature and impact assessment laws does not greatly disturb this observation, since mandates under these laws are framed in narrow and often discretionary ways. Note that the mandate under the EU CAP replicates the requirements of the EU Nature Directives, rather than representing a new mandate: CAP Regulation, art. 12, annex III (SMRs).

¹⁰⁹ South Tyrol Landscape Law, arts. 13(2), 14, 65 (protecting entails obtaining an authorization for certain activities).

¹¹⁰ South Tyrol Closed Farm Law, arts. 3(1) (e.g., to establish a closed farm), 7 (e.g. authorization and conditions for aggregating closed farms), 39, 42.

¹¹¹ Poggeschi, “South Tyrol’s Special Status in Private Law,” 295–298.

for this wider subject matter).¹¹² On the other hand, South Tyrol's Nature Law, which implements the EU Nature Directives, prohibits harm to both species and natural habitats in Natura 2000 sites, and also imposes outright prohibitions on specific uses such as quarries and wind farms.¹¹³ Accordingly, we see a nuanced version of subsidiarity at work across this complex network of interventions, despite the initial appearance of duplication.

10.4.2.2 Mutually Reinforcing Legal Links

Express regulatory links between areas of law reinforce grassland protection mechanisms and allow one area of law to “borrow” a regulatory approach used in another. Thus, impact assessment laws support the protection of habitats protected under nature and landscape laws.¹¹⁴ Nature laws allow complementary agricultural activities in protected areas,¹¹⁵ and expressly seek synergies between nature and agricultural law interventions.¹¹⁶ Agriculture laws reward nature-promoting practices and compensate for nature-related restrictions that apply in protected areas.¹¹⁷ At the EU level, the CAP expressly emphasizes the need for complementarity across CAP mechanisms, other EU interventions, and member states' other relevant instruments.¹¹⁸

Sometimes these reinforcing links correct a previous problem, where one law undermined another. This occurred in 2013, when, to address criticisms that the CAP had encouraged environmental damage,¹¹⁹ a revised EU CAP first imposed a plowing ban and 5 percent limit on grassland loss for

¹¹² Bern Wildlife Convention, arts. 4(1), 5; Habitats Directive, arts. 6(1), 12, 13.

¹¹³ South Tyrol Nature Law, art. 21(3), 4(c), (d).

¹¹⁴ E.g., EIA Directive, arts. 3(b), 4(3), ann. III(2)(c)(v), (viii).

¹¹⁵ See 71 and 73.

¹¹⁶ E.g., EU Nature Restoration Law, art. 14(10) (member state nature restoration plans “shall identify synergies with agriculture and forestry . . . including CAP interventions, that contribute to the objectives of this Regulation”); 15(3)(c) (expressly drawing out measures intended for Natura 2000 sites in national restoration plans), 15(5) (national restoration plan to describe “the interplay between the measures included in the national restoration plan and the national CAP strategic plan”).

¹¹⁷ E.g., CAP Regulation, arts. 31, 70–72; Italian Agricultural Recognition Law, arts. 2–10; South Tyrol Agricultural Incentive Law, arts. 1, 4(1)(f).

¹¹⁸ CAP Regulation arts. 118(2) (re approval of CAP Strategic Plan), 139(3)(b) (coherence with other instruments). See also preambular notes (101) and (102) in the CAP Regulation as originally passed.

¹¹⁹ Cuadros-Casanova and others, “Opportunities and Challenges for Common Agricultural Policy Reform,” 3, 7; European Environment Agency, *State of Nature in the EU*, 126 (EU 2020 Biodiversity Strategy target 3A), 132; Brian Jack, “Ecosystem Services: European Agricultural Law and Rural Development” in Massimo Monteduro and others (eds), *Law and Agroecology: A Transdisciplinary Dialogue* (Springer 2015) 127–150, 131, 137.

subsidized farmers.¹²⁰ Concerns remain, however, that few grasslands are deemed “sensitive” and attract protections¹²¹ – that is (to use the language of Chapter 6), interventions are insufficiently comprehensive due to gaps by omission.¹²²

These integrating links between laws in different areas reinforce or bring in more regulatory approaches to support nature objectives than nature laws alone provide. Carrots under agriculture laws support and reinforce the same approach under EU nature laws (Table 10.1(a), (c)). Funded state rescue powers under governance laws assist nature laws that generally lack this regulatory approach (Table 10.1(a), (e)). This borrowing of regulatory approaches between legal areas is only possible because, whether by luck or design, laws in different areas express coherent regulatory strategies: Nature laws and impact assessment laws focus on conserving, protecting, minimizing disturbing, and so on, nature, biodiversity, or grassland species and habitats;¹²³ so do agriculture laws¹²⁴ and governance and landscape laws.¹²⁵ It is important to note, though, that this picture of relative harmony does not account for other laws beyond the present scope that may incentivize developments and activities, such as tourism, with the potential for conflicting outcomes; nor does it compare the economic rewards of industrialized agriculture to subsidies for traditional grazing.

In some cases, regulatory approaches are duplicated across government levels, as has also been observed for some aspects of climate change policy in South Tyrol.¹²⁶ In this case, redundancy has usefully insured against regulatory changes at one level, promoting regulatory stability through a different government (here, the Province) acting as a “norm sustainer.”¹²⁷

¹²⁰ See n 75 and accompanying text.

¹²¹ Cuadros-Casanova and others, “Opportunities and Challenges for Common Agricultural Policy Reform,” 4 (citations omitted).

¹²² See Section 6.5.2.1.

¹²³ E.g., Biodiversity Convention, arts. 6(a), 8(a), 14(1)(a); Bern Wildlife Convention, arts. 4(1), 5; Habitats Directive, art. 6(1), (2), annexes I (“semi-natural dry grasslands”), II; South Tyrol Nature Law, arts. 14, 21(3); SEA Directive, arts 3, 5(1), ann. I point (d), (f); South Tyrol EIA/SEA Law, arts. 10(3), 17(1) (drawing on EU and national laws).

¹²⁴ CAP Regulation, art. 6(1)(f); Italian Agricultural Recognition Law, art. 2(1)(a), (f); South Tyrol Agricultural Incentive Law, art. 4(1)(f) (environmental improvement generally). See also Table 7.3 and accompanying text.

¹²⁵ E.g., Alpine Convention, art. 2(2)(b), (f); Nature Protection Protocol, arts. 10(1), 11; Italian Small Municipalities Law, art. 3(3)(h), South Tyrol Landscape Law, arts. 13(2)(c), (d).

¹²⁶ Federica Cittadino and others, “Which Factors Influence Climate Policy Integration?” in Federica Cittadino and others (eds), *Climate Change Integration in the Multilevel Governance of Italy and Austria: Shaping Subnational Policies in the Transport, Energy, and Spatial Planning Sectors* (Brill Nijhoff 2023) 251–279, 260.

¹²⁷ See Section 2.2.4.1.

After months of farmers' protests, in April 2024, the European Parliament – with Italy's Prime Minister a key supporter – weakened environmental aspects of the EU CAP.¹²⁸ The amendments exempt farms of up to ten hectares from enhanced conditionality requirements, so that exempt farmers can receive payments even if they plow sensitive grasslands or breach the 5 percent loss limit.¹²⁹ This would exempt, at minimum, around 40 percent of South Tyrol's farms.¹³⁰ By any measure, this exemption significantly reduces the comprehensiveness of the CAP intervention by expanding "gaps by exemptions," a key risk for cumulative environmental problems.¹³¹ Yet, South Tyrol's provincial incentives, municipally driven landscape laws and Closed Farm law remain, continuing to disincentivize and control grassland destruction.

10.4.2.3 Coordinating through Institutions and to Resolve Conflict: The Example of Natura 2000

Multilevel institutions that operate between the European and Italian levels and between the Italian State and the regions and autonomous provinces are also key to coordinating the implementation of regulatory mechanisms relevant to South Tyrol's grasslands. This is illustrated by the context of Natura 2000 sites, which are widely used in protecting Italy's Alpine grasslands.¹³² Protected areas have been a prominent and somewhat fraught issue in the relationship between the Italian State and autonomous provinces, sitting in the "gray zone" of interlocking legislative powers.¹³³ The much-litigated Italian constitutional principle of loyal cooperation provides for the involvement of each level in the decision-making of the other "in order to prevent unilateral intervention into the sphere of competence of the other side, respectively."¹³⁴ As discussed further later, the *intesa* (multilevel coordinating

¹²⁸ See generally, Nikolina Šajn, "Regulation Amending CAP Strategic Plans Regulation and CAP Horizontal Regulation" (*European Parliament*, May 2024) www.europarl.europa.eu/legislative-train/theme-a-european-green-deal/file-targeted-amendments-of-cap-regulations, archived at <https://perma.cc/5DUT-YHZE>.

¹²⁹ Ibid.

¹³⁰ Servadei and others, *La Politica di Sviluppo Rurale*, 164.

¹³¹ See Section 6.5.2.2.

¹³² See n 25 and accompanying text.

¹³³ See Section 10.3.2.

¹³⁴ Constitution of the Republic of Italy, 1947, as amended, art. 120(2); Jens Woelk, "Loyal Cooperation: Systemic Principle of Italy's Regionalism?" in Erika Arban, Giuseppe Martinico and Francesco Palermo (eds), *Federalism and Constitutional Law: The Italian Contribution to Comparative Regionalism* (Routledge 2021) 170–188, 173.

agreement) and coordinating institutions are key ways of operationalizing the principle,¹³⁵ though the *intesa* appears to be used less where the primary legislative competence lies with the State (e.g., in environmental protection) than with the province (e.g., nature parks).¹³⁶

Natura 2000 sites are discussed here using the example of a major grassland area in South Tyrol, the Texelgruppe Nature Park (“Texelgruppe”), which accounts for two of South Tyrol’s forty-four Natura 2000 sites.¹³⁷ Texelgruppe supports ibex, golden eagles, pygmy owls, rare herbs, and some of the highest-altitude settlements in the Alps, and has been grazed for centuries.¹³⁸

Texelgruppe’s journey to becoming a Natura 2000 site illustrates the challenges of vertical coordination in Italy’s implementation of the Habitats Directive. Problems arose early, when Italy’s national protected area law failed to meet requirements to transpose the Habitats Directive. This triggered a European Commission warning and ultimately a new national transposing law.¹³⁹

The designation, management, and assessment of proposed impacts on Natura 2000 sites also struck difficulties that coordination mechanisms have largely resolved. Under the Habitats Directive, member states designate Natura 2000 sites in a multistage process that involves interacting with the Commission and meeting regulatory deadlines.¹⁴⁰ In Italy, it also involves a multilevel exercise that varies by region. Italy’s national protected areas law sets out principles and requires agreement with an autonomous province in relation to designating nationally and internationally important protected areas, while the province itself designates areas of regional and local

¹³⁵ Ibid 177, 181–182; for an overview of coordinating institutions (standing conferences, joint commissions), see: Niccolò Bertuzzi, Peter Bußjäger and Alice Meier, “Coordination and Leadership” in Federica Cittadino and others (eds), *Climate Change Integration in the Multilevel Governance of Italy and Austria: Shaping Subnational Policies in the Transport, Energy, and Spatial Planning Sectors* (Brill Nijhoff 2023) 165–192, 167–170.

¹³⁶ Obwexer and Happacher, *Parere Legale*, 239.

¹³⁷ Autonomous Province of South Tyrol, “Siti Natura 2000 in Alto Adige” (n.d.) <https://natura-territorio.provincia.bz.it/it/siti-natura-2000-in-alto-adige>, last accessed March 23, 2025, archived at <https://perma.cc/SG64-VL6U>.

¹³⁸ European Environment Agency, “Val di Fosse nel Parco Naturale Gruppo di Tessa: IT3110011” (March 12, 2024) <https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=IT3110011>, archived at <https://perma.cc/XZW9-RSLW>.

¹³⁹ Decreto del Presidente della Repubblica 8 settembre 1997, n. 357, Regolamento recante attuazione della direttiva 92/43/CEE relativa alla conservazione degli habitat naturali e seminaturali, nonché della flora e della fauna selvatiche [Presidential Decree on regulations implementing Directive 92/43/EEC on the conservation of natural and semi-natural habitats and of wild fauna and flora].

¹⁴⁰ Habitats Directive, art. 4.

interest.¹⁴¹ The designation of the Texelgruppe sites was initiated by South Tyrol in 1995 after it entered an agreement with the Italian State to join an EU-funded and NGO-supported project to propose sites.¹⁴² The designation process for Texelgruppe was only completed in 2016, after much delay.¹⁴³ In the meantime, in 2003, the province approved a municipality's request to alter the park's boundaries to exclude an area of proposed infrastructure for a ski area, snow-making system, and hydroelectric plant.¹⁴⁴ This boundary change effectively reconceptualized a core dimension of the matter of concern to avoid development constraints – a risk to which an earlier chapter adverted.¹⁴⁵

Delay in fully designating sites produced two formal infringement proceedings against Italy, neither of which is fully resolved¹⁴⁶ (South Tyrol still has four incomplete designations). Nonetheless, these proceedings, and the larger enforcement policy that they advance, illustrate useful points from the perspective of intervention and coordination to address cumulative environmental problems. Formal infringement proceedings involve institutional coordination through escalating interactions between the Commission and a member state, which ultimately ends in the European Court of Justice.¹⁴⁷ In choosing when to bring proceedings, the Commission's strategic approach implicitly targets cumulative impacts of noncompliance: It focuses on the general interest, many individual "misapplications" and

¹⁴¹ Italian Framework Law on Protected Areas, art. 2(6), (8). See also n 51 and accompanying text.

¹⁴² Ferranti, Beunen and Speranza, "Natura 2000 Network," 302; Autonomous Province of South Tyrol, *Misure per la Conservazione e la Valorizzazione della Zona Speciale di Conservazione (ZSC) Val di Fosse nel Parco Naturale Gruppo di Tessa* (undated) 3–4, <https://natur-raum.provinz.bz.it/siti/natura-2000-in-alto-adige>, last accessed March 23, 2025, archived at <https://perma.cc/PTJ6-SNAL>.

¹⁴³ European Environment Agency, "Val di Fosse nel Parco Naturale Gruppo di Tessa: IT3110011"; European Environment Agency, "Lacines – Catena del Monteneve nel Parco Naturale Gruppo di Tessa: IT3110012" (March 12, 2024) <https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=IT3110012>, archived at <https://perma.cc/V4PL-3KQV>.

¹⁴⁴ *Natura 2000 Piano di Gestione: Parco Naturale Gruppo di Tessa* (Provincia Autonoma di Bolzano – Alto Adige undated) 6, <https://static.provinz.bz.it/natur-raum/managementplaene/Piano%20di%20gestione%20Parco%20naturale%20Gruppo%20di%20Tessa.pdf>, archived at <https://perma.cc/BXR2-NAHE>.

¹⁴⁵ See Section 4.3.2.

¹⁴⁶ INFR(2015)2163 and INFR(2021)2028; status as of June 2024, available at European Commission, "Environmental Infringements Map and Dashboard" (n.d.) https://environment.ec.europa.eu/law-and-governance/environmental-implementation-review_en#environmental-infringements-map-and-dashboard (select search > country as "Italy," infringement status as "active," topic as "nature").

¹⁴⁷ See European Commission, "Enforcement: Frequently Asked Questions" (November 28, 2022) https://ec.europa.eu/commission/presscorner/detail/en/MEMO_12_12, archived at <https://perma.cc/9K8Q-8LLE>.

“systemic shortcomings” rather than single instances of noncompliance or individual redress.¹⁴⁸

Ongoing administration of designated Natura 2000 sites also involves coordination in relation to management and impact assessment. The management committee for Texelgruppe includes representatives of the province, municipalities, scientific experts, and farmers’ associations.¹⁴⁹ National guidelines apply to ongoing site management,¹⁵⁰ but regions/provinces formulate conservation objectives and management plans for individual sites. South Tyrol’s formal conservation objectives for Texelgruppe recognize intensive agriculture, farm abandonment, and sporting and recreational activities as key threats.¹⁵¹ The management plan prescribes measures including incentives for extensive grazing, controlling forest spread, restoring abandoned meadows through resuming grazing or mowing, and measures for sustainable tourism,¹⁵² addressing each of the key drivers of grassland degradation discussed earlier.

Assessing how proposed projects will affect Italy’s Natura 2000 sites has also proven controversial, and illustrates rules and institutions for dispute resolution among the EU, Italian, and subnational levels.¹⁵³ Triggered by complaints from environmental NGOs that Italy used inappropriate impact assessment processes (or none at all), the Commission commenced a pre-infringement “Pilot” process in 2014.¹⁵⁴ This process involves the Commission and a member state informally interacting to resolve a complaint about inadequacies in implementing EU law.¹⁵⁵ In 2019, another informal

¹⁴⁸ European Commission, Enforcing EU Law for a Europe That Delivers, COM(2022) 518 (2022) 20, <https://eur-lex.europa.eu/legal-content/EN/TEXT/?uri=celex:52022DC0518>.

¹⁴⁹ Autonomous Province of South Tyrol, “Parco naturale Gruppo di Tessa” (n. d.) <https://parchi-naturali.provincia.bz.it/it/parco-naturale-gruppo-di-tessa>, last accessed May 23, 2025, archived at <https://perma.cc/5LQ8-8J3M>.

¹⁵⁰ Decreto Ministeriale (Ministro dell’Ambiente e della Tutela del Territorio) 3 settembre 2002, “Linee guida per la gestione dei siti Natura 2000” [Ministerial decree of the Ministry of the Environment and Protection of the Territory, Guidelines for the management of Natura 2000 sites], www.ecology.unibo.it/baiona/pg/Linee%20guida%20per%20la%20gestione%20dei%20siti%20Natura%202000.pdf, archived at <https://perma.cc/5QX9-A69V>.

¹⁵¹ Autonomous Province of South Tyrol, *Misure per la Conservazione ... Val di Fosse*, 5.

¹⁵² *Ibid* 7–8.

¹⁵³ Formal proceedings were also instituted in relation to Italy’s designation of Natura 2000 sites: see note 146 and accompanying text.

¹⁵⁴ Gruppo Intervento Giuridico, “La Commissione Europea Insiste nella sua Indagine sulla Cattiva Applicazione della Valutazione di Incidenza Ambientale in Italia” (May 17, 2015) <https://gruppodinterventogiuridicoweb.com/2015/05/17/la-commissione-europea-insiste-nella-sua-indagine-sulla-cattiva-applicazione-della-valutazione-di-incidenza-ambientale-in-italia/>, archived at <https://perma.cc/WNY5-4V73>.

¹⁵⁵ See David Hadroušek, “Speeding up Infringement Procedures: Recent Developments Designed to Make Infringement Procedures More Effective” (2012) 9 *Journal for European Environmental and Planning Law* 235–256, 245–247, 251–252. The subject proceeding was EU PILOT 6730/14/ENVI.

arrangement – the Commission’s biannual assessment of how effectively member states implement EU environmental laws – recommended that Italy prioritize adopting and implementing new national guidelines for assessing impacts on Natura 2000 sites.¹⁵⁶ Concerns about coordination influenced both the establishment of this assessment process in general¹⁵⁷ and the Commission’s recommendations to Italy.¹⁵⁸

These interactions ultimately led to new Italian implementation guidelines following a multilevel *intesa* process. This agreement between the Italian national and subnational governments was negotiated over thirteen meetings held over three years¹⁵⁹ under the auspices of Italy’s peak intergovernmental coordination institution, the Standing Conference for the Relations between the State, the Regions, and the Autonomous Provinces of Trento and Bolzano (“Standing Conference”).¹⁶⁰ In environmental matters, the Standing Conference is advised by multi-ministry, multilevel technical working groups, which also include NGOs.¹⁶¹ The new guidelines consider cumulative impacts at multiple stages¹⁶² and expressly recognize that assessing cumulative impacts requires coordination.¹⁶³

Scholars lament the slowness and feebleness of the Standing Conference¹⁶⁴ and the weak incentives for environmental cooperation produced by the

¹⁵⁶ Directorate-General for Environment (European Commission), The EU Environmental Implementation Review 2019 Country Report – Italy, SWD/2019/123 final/2 (Commission Staff Working Document) (2019) 14, [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52019SC0123R\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52019SC0123R(01)).

¹⁵⁷ European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions: Delivering the Benefits of EU Environmental Policies through a Regular Environmental Implementation Review, COM(2016) 316 (2016) 3, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:316:FIN>.

¹⁵⁸ Elisa Cardarelli and others, “Italy” in Graham Tucker (ed), *Nature Conservation in Europe: Approaches and Lessons* (CUP 2023) 415–433, 424.

¹⁵⁹ Conferenza Permanente per i rapporti tra lo Stato, le Regioni e le Province Autonome di Trento e Bolzano [Standing Conference for the Relations between the State, the Regions and the Autonomous Provinces of Trento and Bolzano] (“Standing Conference”), *Intesa* 28 novembre 2019, *Gazzetta Ufficiale* n. 303 of December 28, 2019, 22–130 (“Agreement of November 28, 2019”).

¹⁶⁰ *Ibid* 24.

¹⁶¹ Cardarelli and others, *Italy*, 417–418.

¹⁶² Standing Conference, *Agreement of November 28, 2019*, 40, 43, 57, 59.

¹⁶³ *Ibid* 21.

¹⁶⁴ Cardarelli and others, *Italy*, 430; Eleonora Ceccherini, “Intergovernmental Relationships in Italy: A Feeble but Useful Model” in Erika Arban, Giuseppe Martinico and Francesco Palermo (eds), *Federalism and Constitutional Law: The Italian Contribution to Comparative Regionalism* (Routledge 2021) 65–81, 69–72, 76–80.

Constitutional Court's centralizing tendencies.¹⁶⁵ In this case, though, combined with informal EU nudges, the Standing Conference succeeded. And while the use of multilevel agreements may be cumbersome, it secures a good degree of transparency. Whether all regions will adopt the guidelines, as agreed,¹⁶⁶ and whether this improves assessments and outcomes for Natura 2000 sites, remains to be seen.

10.5 CONCLUSION

At the intersection of natural and cultural landscapes, many legal layers provide for diverse interventions to protect and restore South Tyrol's Alpine grasslands, across legal areas focused on nature, impact assessment, agriculture, landscape, and governance. Their intervention mechanisms adopt different regulatory approaches aimed at diverse contributors to the cumulative environmental problem: subsidizing farmers to maintain grasslands, restricting landowners and developers from converting grassland to other uses, restricting owners of "closed farms" from subdividing and modifying agricultural practices and farm structures, funding municipalities to restore grasslands, and enabling consumers to support mountain farmers.

There are substantial synergies among these multilevel regulations. They coherently point in the same direction: maintain grasslands. They do not do so with uniform strength, though. Compared to mechanisms that advance a harm-reducing strategy, those with a restoration focus rely on weaker voluntary regulatory approaches – though the implementation of the June 2024 EU Nature Restoration Law may change this in the future. However, express integrating links between areas of law bring in regulatory reinforcements and allow for "borrowing" of different regulatory approaches to pursue the same objectives. The practice of multilevel regulation results in lower-level laws being comparatively more restrictive than higher-level laws in the areas of agriculture and landscape. This perhaps reflects the greater political sensitivity of direct farm- and land use-related mandates, requiring local government acceptance.

A theme of coordination runs through these links between laws, and the multilevel institutions and enforcement processes they engage, illustrated by Natura 2000 arrangements. We see formal and informal multilevel dispute

¹⁶⁵ Alberton, "Swing of Intergovernmental Relations," 38.

¹⁶⁶ See generally, Mario Castorina and others, "La Valutazione di Incidenza Ambientale (VINCA) nella Normativa Regionale Italiana (Seconda Ricognizione)" (*Association of Environmental Analysts, LIPU, WWF*, October 17, 2022) www.analistiambientali.org/vinca-report-associazioni-normativa-regionale/, archived at <https://perma.cc/9GRR-Y7EN>.

resolution mechanisms, general and special-purpose ongoing committees and working groups, and a process of formal agreement-making, all against a backdrop of contestation and litigation about legal competences between the autonomous province and the Italian State. But it seems that it is exactly this contestation, produced by blurred constitutional boundaries, that has produced such a rich range of coordinating rules and institutions.

Emerging issues beyond the scope of this chapter further highlight the need for coordination to address potential conflicts that could pose problems of inconsistency between interventions. These include restoration efforts that may require modifying Italy's forestry laws, which generally protect all forests;¹⁶⁷ and rewilding initiatives to reintroduce large carnivores, which are perceived to disincentivize traditional grazing, despite provisions to mitigate livestock losses.¹⁶⁸

South Tyrol's grasslands fare comparatively well, but the precise contribution of this supporting regulatory system to that outcome is uncertain. South Tyrol's unique circumstances – comparative wealth, autonomy and greater political power, and foundational cultural norms – likely support implementing these laws as well as providing capacity and independent motivation to protect grasslands. Nonetheless, the experience in South Tyrol offers insights to other areas that face challenges of deeply multilevel governance, a biocultural matter of concern (take New Mexico's acequias,¹⁶⁹ or traditional savanna burning by Australia's First Nations¹⁷⁰), or one that requires active management or restoration to address a cumulative environmental problem. It also underscores the potential strategic benefits of addressing cumulative environmental problems through mechanisms that span natural and cultural spheres, harnessing a wider and more diverse range of intervention mechanisms.

¹⁶⁷ Mauro Agnoletti and others, "Monitoring Traditional Rural Landscapes: The Case of Italy" (2019) 11:6107 *Sustainability* 1–19, 3.

¹⁶⁸ Cristina Stuffer and Urban Perkmann, "Il Futuro dell'Alpicoltura in Alto Adige: Sfide e Opportunità dal Punto di Vista delle Aziende Alpicole" (*Camera di Commercio, Industria, Artigianato e Agricoltura di Bolzano*, 2023) 8, www.wifo.bz.it/it/temi/studi-e-analisi/155-il-futuro-dell-alpicoltura-in-alto-adige-sfide-e-opportunita-dal-punto-di-vista-delle-aziende-alpicole.html, archived at <https://perma.cc/FBQ4-PS4J>.

¹⁶⁹ See generally, Enrique R. Lamadrid and José A. Rivera (eds), *Water for the People: The Acequia Heritage of New Mexico in a Global Context* (University of New Mexico Press 2023).

¹⁷⁰ Peter J. Whitehead, *Indigenous Livelihoods: Background Paper* (NAILSMA Knowledge Series, North Australian Indigenous Land and Sea Management Alliance 2012) 57–59, <https://nailsma.org.au/uploads/resources/KS-011-Indigenous-Livelihoods-background-paper-Whitehead.pdf>, archived at <https://perma.cc/9YSR-5Y9R>.