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Integrated and decentralised protection and development of mountain landscapes.

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ABSTRACT This article discusses how new trends for decentralised and integrated protection and local development of mountain landscapes have appeared in recent management practice, and how decentralised protection and management models could contribute to integrated and dynamic local development practice. Case studies performed on two larger protected areas and two regional parks based on local initiatives and agreements, show that the two trends are quite visible in Norwegian mountain landscape management, but only to a certain extent. Our suggestions for promoting these trends are to consider: 1) revising the protected area regulations managed by the nature protections authorities to also include local development as a specific purpose; 2) transferring the protected area responsibility to the land use planning authorities; and 3) using regional parks as a framework for integrated and decentralised development within the existing restrictions and possibilities.

KEY WORDS: land-use planning; nature protection; landscape resources; local development; integrated nature management

Introduction

Over the last few decades, we have seen a significant change in management attitudes to protected areas. Two distinct trends can be identified, even though to some extent they are difficult to separate from each other. Firstly, there has been a general change from exclusively national to a certain degree of local responsibility in protected area management. In a Norwegian context, one prominent example is the recent model for the management of larger protected areas introduced in 2009, by which the management responsibility was delegated to an inter-municipal board of representatives from the involved municipal and county councils. Though the management model is still hierarchical and centrally governed, management functions performs at local and regional level and include elements of networks and partnerships. Secondly, we find a significant trend towards a more dynamic approach to combining conservation and development. The conservation approach is no longer purely

biological. A much broader social-ecological perspective, which also includes economic development, is now being applied (Gambino & Peano, 2015). In this respect, the so-called “mountain text” about integrated use and protection adding value to a designated area, represents the corresponding Norwegian national policy vision (St.prp. nr. 65 (2002–2003), Fedreheim, 2013). Another interesting initiative responding to both these trends is the emergence of a variety of *regional nature and culture parks* for cooperation and partnership to promote sustainable regional development on a landscape and territorial basis, and which may include areas protected for nature. In Norway, there are currently five formally established regional parks, and another 10 projects are in progress. Unlike Regional Nature Parks in central European countries like France, Switzerland and Germany (Mehnen et al., 2013), the Norwegian parks has no formal status in any legislation.

Our approach here is to illuminate the two international trends in a Norwegian context. The major issue is to what extent local management authorities are able to combine protection of nature with ambitions of rural development. The two research questions are as follows:

- How do the two described new trends appear in recent management practice in mountain landscapes?
- How can decentralised protection and management models contribute to integrated and dynamic local development practice in mountain landscapes?

The nature protection and the land use planning authorities underpin the two trends. In a community and landscape context these authorities provide different arenas of planning and negotiation. A major challenge is how these arenas gain legitimacy among stakeholders in the ongoing processes of management and value-adding development initiatives.

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Trends and theories in recent nature protection management

The decentralising trend

In our research, we have found an increasing trend to involve local actors in decisions concerning the societies where they live. Decentralisation of nature management from national to local level takes place to combine different types of knowledge, to secure participation and influence from affected actors and to strengthen effectiveness, ownership and legitimacy in management processes (Agrawal & Ribot, 1999; Eckerberg & Joas, 2004; Ribot, 2004; Mose, ed., 2007; Falleth & Hovik, 2009; Zachrisson, 2009, Hongslo et.al., 2016). According to Agrawal and Ribot (1999), a central dimension of decentralisation is which way accountability is directed. Political decentralisation requires that power is transferred to elected local authorities so that empowered local actors are downwardly

accountable. Legitimacy is a key concept in the study of management models and has three dimensions that all have to be fulfilled (Terry, 1995). Legitimacy presupposes *legality* and accordance with both intention and letter of current legislation, *efficiency* and effectiveness of public organisational and managerial systems, and *institutionalism* implying agreement of values. Decentralisation principles are ratified in Agenda 21 and the UN Convention on biological diversity as well as in the European Landscape Convention. Local involvement is particularly important for many mountain regions as they are usually peripheral to political and economic centres, and “*are often controlled by external forces that use the regions’ resources and influence their political decision-making processes...*” (Messerli & Messerli, 2007: 27).

The integration trend

We also find strong indicators of an emerging attention being paid to combining nature protection and regional development in a dynamic approach. Protected areas are increasingly considered to have the potential to act as instruments for regional development (Mose, ed., 2007). This is also reflected in a diversification of new types of protected areas, such as biosphere reserves, regional nature parks and the new national parks in Scotland (McCarthy et al., 2002; Hammer & Siegrist, 2015, Feyeh, 2016). Mose and Weixlbaumer (2007) label this new way of thinking as the “dynamic-innovation” paradigm, which contrasts the traditional “static-preservation” approach. The dynamic-innovation paradigm focuses on territorial integration of protection and use, both within the protected areas and between protected areas and adjacent zones. This integration opposes the static-preservation approach, which is based on the separation of man and nature, segregating functions as well as areas. This paradigm shift has its origin in the change from management of single species and small designated areas based on biological criteria, to ecosystem based management, considering that protected areas also are influenced by their surroundings, and the fact that humans are part of the ecosystem (Selman & Knight, 2006; Plieninger & Bieling, eds., 2012).

Consequently, it is now more commonly recognised that a zoning practice separating protected areas from other areas of use is not adequate in the end. Humans and nature need to be in the centre to both use and protect (Hammer, 2007: 22–23). This is in essence a question of establishing a common arena of negotiation, on which sectoral interests must accept the need to meet as peers. The landscape perspective, according to the European Landscape Convention (ELC) (Council of Europe 2000) can be applied here, as it helps to understand the interconnected properties and functions that result in the dynamics in social-ecological systems (Stenseke et al., 2012, NOU, 2013:10). The introduction of regional nature and culture parks in Norway, inspired by European models, especially UK National Parks, Areas of Outstanding Natural Beauty, as well as French Parcs Naturels Régionaux. Also the regional nature parks in Switzerland, introduced in 2007 (Hammer & Siegrist, 2016), indicates such a trend. Strategies for integrated planning, management and value creation are embedded in territorial and ecosystem-based contexts, rather than administrative boundaries. Regulations in existing legal plans are not challenged; it is more a question of revealing the innovative potential for nature and place-based value creation that is at stake.

Methods and case areas

Case studies

The data basis for the project is drawn from case studies in four Norwegian mountain areas. Seventy per cent of protected areas in Norway are located in mountain municipalities, although these municipalities cover just 39% of the country's total land area. Furthermore, several mountain municipalities have protected more than 50% of their constituent areas. Arnesen et al. (2010) defined the mountain areas in Norway on the basis of the methodology of a similar analysis of Europe, including Norway (Nordregio, 2004). Put simply, one criterion was that mountain areas lie above the line for productive forests, estimated at 700 (in southern Norway) and 600 (in northern Norway) m.a.s.l. Thus, 89 municipalities with more than 50% of their total area characterised as mountains were identified.

Two of the cases, *Setesdal Vesthei/Ryfylkeheiane Protected Landscapes (SVR)* and *Dovrefjell/Sunndalsfjella National Park*, are larger protected areas designated under the Nature Diversity Act (NDA). The two other areas, *Valdres Nature and Culture Park* and *Nærøfjorden World Heritage Park*, are regional parks comprising both protected areas according to the NDA and areas managed by the Planning and Building Act (PBA) with no explicit nature protection restrictions. The case areas comprise in total 30 municipalities; all of them, except five of the southernmost municipalities in SVR, are defined as mountain municipalities, cf. Arnesen et al., 2010. Apart from being characterised as mountain areas, the cases are quite diverse, both between the two groups and within each group. Thus, statistical generalisation is not possible. Rather, the cases were chosen to illustrate variations in approaches to management challenges and provide a basis for analytical generalisation and theory development.

Our empirical data includes personal interviews with a total of 40 persons evenly divided between the four case areas. We have interviewed what we consider to be the key players: leading politicians, administrators in the municipalities, protected area managers and industrial actors in nature-based tourism. The interviews were conducted after a semi structured guide, most of them in the first half 2013. Each interview lasted 1 to 1 ½ hour with two or three researchers present. We have also examined relevant documents in the case areas such as protected-area plans and regulations, management plans and dossiers from the protected-area boards' proceedings.



Figure 1. Localisation and delineation of the case areas. Map by Yngve Frøyen, NTNU. (Source: The Norwegian Mapping Authority).

Table 1. Characteristics of the four case areas.

	Protected areas		Regional parks	
	Dovrefjell-Sunnalsfjella National Park	Setesdal Vesthei Ryfylkeheiane Protected Landscapes	Valdres Nature and Culture Park	Nærøyfjorden World Heritage Park
Initiative	New governmental model for management of protected areas	New governmental model for management of protected areas	Local politicians	Farmers, businesses and local organisations
Purpose	Local management of protected areas	Local management of protected areas	Value added and vitality through branding of nature and culture values and local management	Promote sustainable nature- and culture-based development based on world heritage status
Established	2010 (2002) ^a	2010 (2001) ^a	2007	2008
Public participants	Nine municipalities and three counties	Eleven municipalities and three counties	The six Valdres municipalities	Four municipalities and two counties
Organisation (number of members)	Protected Area Board (13) Advisory Committee (37) Administrative Contact Committee (13) Protected area managers (2)	Protected Area Board (14) Advisory Committee (8) Administrative Contact Committee (14) Protected area managers (3)	Valdres Council (24) Board (8) Branding Board (4) Region Board (8) Rural Development Board (9) Staff (8)	Board (9) Staff (4)
Authority	Management of the National Park and 10 other protected areas according to the NDA	Management of eight different protected areas according to the NDA	A 10-year agreement, 2007–2017, to promote local development in Valdres through Valdres Nature and Culture Park, approved by the six municipal councils	A foundation to promote social and economic development based on local assets and world heritage values through a park agreement and partnership agreements between representatives from agriculture, industry, NGOs and public management

^a Experiment with local management of protected areas.

Case areas

Table 1 shows some characteristics of the case areas. The local management approach has different points of departure. The two protected area cases, Dovrefjell-Sunnalsfjella National Park and Setesdal Vesthei/Ryfylkeheiane Protected Landscapes, emerged from political aims, both on local and national levels, which sought to strengthen the managerial powers of the local authority. Both were among the four experiments in the delegation of administrative

responsibility from 2001, as mentioned previously. In spite of the fact that the current model has not been in place for long, the experiments have provided the municipalities with substantial experience of local management. This was of major importance for our research project.

The first Norwegian regional park, Valdres Nature and Culture Park, was an initiative to promote bottom-up local and regional development in a broad perspective; the aim was to combine both agriculture and tourism, and the project was based on decades of practical experience of cooperation between the six municipalities of the Valdres region. The initiative was also inspired by a long-running project on sustaining mountain livestock farming, which is still a significant feature of regional identity. Responding to management of protected areas in the region was not on the agenda. In the Nærøyfjorden World Heritage Park a major challenge was to promote local development and management in an area with different types of protective restrictions. In many ways, the creation of the World Heritage Park was triggered by the fact that there is no tradition in Norway for management based on zoning in protected areas, allowing settlement and economic activities in certain areas. The regional park bridged the division of the territory in areas with many different restrictions and management based on both the NDA and PBA.

Management authorities and models

In this chapter, we describe the main Norwegian management authorities in mountain areas and the latest developments of organisational models in the four case areas, based on document studies and interviews.

Legal basis and management structure in mountain landscapes

In Norway the two main legislative acts with corresponding management authorities regulating different kinds of land use in mountain areas, are the PBA and the NDA. These two acts differ not only in their purpose and the spatial categories they cover, but also in their management structures. Since 1965 the PBA has applied to the whole country, not just built-up areas. A new type of municipal land-use plan was introduced, designed to cover the full extent of municipal areas and designated for different usage. All these plans were supposed to have been produced and approved at the municipal level, but ultimately the Ministry had to confirm them. A revision of the PBA in 1985 changed this protocol to a certain extent. The municipalities now have the mandate to approve land-use plans themselves, provided the authorities at county or national level have no objections owing to major regional or national interests. In case of objections, the plan is sent to the Ministry for approval. Thus, a municipality cannot in practice approve land use that the national government has disapproved; it is the national government that has “the last word” (Bugge, 2011, p. 181).

The PBA is the legal basis for land use in all built-up areas (almost 2% of the total land area in Norway (SSB, 2013a)). The PBA also regulates—with some exceptions such as protected areas—land use in no-build agricultural, nature and outdoor recreations areas. The PBA has comprehensive regulations regarding organisation of planning processes. There are

long traditions of close cooperation at the local level between different actors and public management, as well as active participation from individuals and organisations.

The NDA designates lands for protection, mainly as national parks, protected landscapes and nature reserves. The total extension of protected areas has increased considerably over the last few decades, from 6% of the total land area in 1992 to nearly 18% in 2013 (SSB, 2013 b). Protected areas management in Norway—with its hierarchical structure and authority mainly residing in national bodies such as the Ministry, directorates and the county governors—has to some extent changed in recent years. Four experiments in the management of larger protected areas designated by the NDA began in 2001, with the delegation of power from the county governor to different models of local management. The Directorate for Nature Management (Norwegian Environment Agency from 2014) disapproved of all the tested models for local management and proposed a continuation of a centrally governed model with a secretary still employed by the county governor (though localised to one of the affected municipalities, and preferably alongside other professionals engaged in the protected areas such as the Norwegian Nature Inspectorate, the National Park Centre, individual nature guides and mountain boards). The government followed the advice from the Directorate to a certain extent, but also introduced an inter-municipal board of politicians from the relevant municipalities, county councils, and also, where applicable, the Sámi Parliament; it was intended that these boards would be responsible for the management.

Both the PBA and the NDA are to a large degree enabling acts. It is the assessment of politicians and the government administration that happens to be in power that will decide how different interests are balanced and prioritised at any given time (Bugge, 2011). There are considerable differences between the two acts concerning the procedures for approving, managing and revising plans (see Table 2).

Table 2. The two main management authorities in protected and adjacent areas.

Legal basis	Defining goals	Approving plans	Managing plans	Revising plans
The Planning and Building Act (2008): Built-up areas and ANRR areas	Central Government	Municipal Council ^a	Municipal Council/Municipality	To be considered every four years
The Nature Diversity Act (2009): Protected areas	Central Government	Central Government	Inter-Municipal Board/County Governor	No revision routines

^a Provided that affected central government or regional bodies have not made objections based on issues that are of national or significant regional importance (Section 5-4).

Dovrefjell-Sunndalsfjella National Park

Dovrefjell National Park was established in 1974. In 2002 the protection was considerably extended by enlargement of the Park and 10 other adjacent protected areas. The main purpose

was to protect a large, continuous, and to a great extent, untouched mountain area as an important part of the habitat of wild reindeer.

In 2003 the authority to manage the National Park was delegated to the Dovrefjell Inter-Municipal Board, comprising one political and one administrative nominated representative from each of the affected municipalities and counties. Simultaneously, each of the municipalities was delegated the authority to manage the other protected areas inside their borders with the newly created Board as an advisory body. One permanent secretary assists the Board. An evaluation of the experiment concluded that the administrative functions have generally been performed in accordance with the original intentions. The local authorities have accepted protection. The opposition to protection in the local communities has not been studied in detail, but tensions between different groups related to prioritising between protection and industrial development were registered (Asplan Viak, 2008, p. v).

The new, permanent management model of 2010 delegates authority to a similar inter-municipal protected area board, but now one with just political representatives from the affected municipalities and counties. The secretary is located in one of the municipalities, co-located with the Norwegian Wild Reindeer Centre North, at Hjerkin. While the Dovrefjell Inter-Municipal Board also had the responsibility to coordinate community planning according to the PBA and community and industrial development in protected and adjacent areas, the new Protected Area Board just has the authority to manage the protected areas according to the NDA and the protected area regulations.

Setesdal Vesthei/Ryfylkeheiane Protected Landscapes (SVR)

The protection process for SVR has been very long and marked by conflicts; both the extent and the level of restrictions have been intensely discussed for decades. Dual protection as national park and protected landscape have been considered, as well as protection managed by the PBA. The ultimate conclusion of these debates was to establish six larger protected landscapes in addition to two smaller habitat management areas in 2000. The main purposes of this are to protect the habitat of the southernmost stock of wild reindeer in Europe and safeguard a distinctive landscape.

In 2001 each of the eight municipalities involved in SVR were delegated the authority to manage the protected areas inside their borders. The municipalities also got the responsibility for dealing with complaints/appeals to decisions. An inter-municipal advisory coordination body with its own secretary was established. The Board was composed of the mayors in the municipalities. A network forum for the municipal administrations and a reference group with landowners and affected authorities as members was also put in place. An evaluation of the experiment concluded that the strongest point of the scheme was the work in the inter-municipal secretariat which worked actively and inclusively on policy making and role clarification. One of the weaker points was the municipalities' ability to meet the standards required of an administrative authority to balance use and protection (Falleth & Hovik, 2006, pp. 13–14).

The new, permanent management model of 2010 delegates the authority to an inter-municipal protected area board of political representatives from the affected municipalities and counties. The secretaryship is divided between three protected area managers, located in three different municipalities and employed by three different county governors. While the

municipalities in the trial project for local management were proactive and strongly rooted in local democracy and their responsibilities for a wide range of administrative tasks (ibid.), the main concern for the new Inter-Municipal Board is nature conservation according to the NDA and the protected areas regulations. The Inter-Municipal Protection Areas Board has contributed to a more common practice than in the trial project where each municipality had the authority. Thus, the management model is more a regional, than a local, model. The three managers have, of course, lesser local knowledge than municipal employees do, but they are nevertheless closer to the local communities than the county governor. The sheer size of the area makes it a challenge to achieve effective cooperation at the local level; even something as straightforward as arranging board meetings can be very time-consuming because of the vast distances involved. The regulations and management plans for protected areas are still the same, even if the management model has been changed: as before, allowing industrial activity whilst combining protection and use remains a problem.

Valdres Nature and Culture Park

Valdres has a long and renowned tradition of inter-municipal cooperation related to regional planning and decentralised administration of state grants for rural development in Oppland County. In 2007, the municipal councils signed a 10-year binding agreement to promote value-adding and innovative development, based on regional identity and resources. Formally, the regional park organisation came about through a conversion of the Valdres Region Board, adding representatives from regional businesses and the county council. Management of protected areas was not an initial motivation for the regional park, although the creation of a new national park project in the region was in progress (Langsua National Park). When the county governor of Oppland initiated the process of extending an existing national park, the rural community (which would apparently have been subject to restrictions in their potential use of a vital summer farming area) reacted promptly. During the planning process the Valdres Nature and Culture Park was passive; the mayor of Øystre Slidre municipality justified this by claiming that the Park should not be directly involved in any political processes.

Nevertheless, the initiative was stimulated by a more general opposition to national and top-down decisions about the protection of areas, and the widespread desire to promote a local approach to taking care of the cultural landscape. Attention was more directed towards the cultural landscape, especially the summer farm pasture, and the need for better cooperation between agriculture and the tourism industry. From the beginning, branding Valdres was a major task, and in this respect, the previously mentioned regional parks in France were an important inspiration.

Nærøfjorden World Heritage Park

The origins of the Nærøfjorden World Heritage Park can be traced to the nature protection process initiated by the County governor in 1994 (Clemetsen, 1999). The engagement of both political and community interests instigated a parallel local discussion in Aurland concerning strategies for integrated landscape management and new business initiatives based on local resources and heritage values. When the world heritage status of the West Norwegian Fjord Landscape was obtained in 2005, the preparations for a regional park had already been going

on for a year (Clemetsen & Underdal, 2005). After more than 10 years of designating a multitude of protected areas and associated boundaries, one of the main arguments from the local communities was rooted in a strong urge to reclaim territorial coherence that was in line with people's perceptions and habitual practices. In essence, a regional park was a way of taking ownership of the area again. The initiative had ambitions to create a network among the actors in the area: municipalities, governmental bodies, NGOs business enterprises, community groups and others. The regional park was established in 2008 as a foundation by Sogn og Fjordane and Hordaland County Councils and four municipalities. More than 40 partners representing agriculture, businesses, tourism entrepreneurs, NGOs and public management among others have signed agreements with the regional park. The main strategic activities are restoration and revitalisation of old buildings and traditional cultural landscapes in the area, visitor management programmes including education of local hosts and guides, coordinating festivals and building capacity among local producers and place-based entrepreneurs. The regional park has also taken a position as facilitator and mediator for dialogue between stakeholders, government and large-scale tourism businesses.

Discussion

Decentralisation

Concerning the management of protected areas, we definitely observe a decentralisation of authority over the last couple of decades in the two protected areas considered here. While the county governors formerly managed these areas, the authority is now delegated to an inter-municipal board (albeit one formally appointed by the Ministry). The board secretary is still employed by the county governor, but is located in one or more of the affected municipalities. Nevertheless, the politicians are accountable primarily to the county governor and the state and to a lesser extent to their local electors. The extent of political decentralisation is considerably less than in the earlier experiments with local management, where the authority was delegated directly to the municipalities in the case of SVR, and to an inter-municipal board in the case Dovrefjell-Sundalsfjella; the secretaries were employed at inter-municipal level. The Office of the Auditor-General of Norway (Riksrevisjonen) has evaluated the new protected-area borders; the new model was found to provide a basis for more local participation and better cooperation at the local level in national park management. This change brings Norway more in line with the management practice of IUCN Category V areas throughout Europe (Mehnen et al., 2013). However, there are many actors involved at all three levels, the funding is divided and the management seems to have been rarely time- and cost-effective (Riksrevisjonen, 2014). Then the legitimacy is challenged both through low efficiency and weak conditions to develop local institutionalised solutions. If we go back to the situation before the protected areas were approved, the municipalities—through the PBA—managed these areas. It is, therefore, not decentralisation, but a considerable amount of centralisation of land use management, that we can observe.

Unlike in most European countries, the regional parks in Norway do not represent a formal decentralisation of authority, but rather a kind of local move to integrate the natural and cultural landscape and also protected areas in local development initiatives. The main

purpose is to facilitate and support cooperation and responsibility among different actors both geographically and between private and public sectors. Thus, the regional parks may contribute to strengthen the institutional legitimacy, though the legal legitimacy is lacking and the efficiency of clearly decentralised responsibility is challenged by establishing additional organisation models.

Integrating protection and development

Protected areas have only the protection plans, the regulations and the management plan as their formal authority. The protected area boards may engage in other activities, such as local and industrial development, but that will in some cases come as additions to their formal tasks and thus will require extra finances. Administratively speaking, the protected area secretaries are also normally located alongside other professionals engaged in nature management (for example the Norwegian Nature Inspectorate, the National Park Centre, individual nature guides and mountain boards) rather than with the municipal management. The static-preservation approach is still dominating. The legal frames leave small opportunities for combining protection and regional development. The regional parks, on the other hand, have local development based on nature and cultural landscapes as their main purpose. The challenge is that the regional parks has no legal authority in protected areas and thus limited opportunity to promote the dynamic-innovation approach. At the Ministry level, the regional parks are supported by the Ministry of Local Government and Modernisation, while protected areas are managed by the Ministry of Climate and Environment. There is little contact and cooperation between the ministries concerning these issues.

Future model for dynamic protection and management practice?

The chosen cases represent just some of the potentials for local management of protected and adjacent areas. In addition, the management models are still in the phase of becoming established. Therefore, the cases give a limited basis for general discussions about future possibilities. Nevertheless, by summarising our experiences in the light of the current trends of decentralisation and integration, we can at least say something about the possibilities.

None of our cases are really fully decentralised if we look to the lowest public management level – the municipalities. Authority is de facto placed on a regional level, including as it does several municipalities and often parts of several counties. It is clear that effective management demands the creation of new organisational models, because the borders of the actual areas do not correspond with any other regional units.

None of the cases considered in this paper have a comprehensive combination of protection and development. In a formal sense, the protected area boards have just the management of protected areas according to the NDA as their responsibility. Since the mayors in the boards normally represent the municipalities, they may have ambitions to extend their powers, but to achieve this would involve assuming additional responsibilities to their formal tasks. The regional park boards have no such existing responsibilities, and may not necessarily have any particular interest in the protected areas inside the parks (as is the case with the Valdres Nature and Culture Park). Moreover, the protected area regulations in the NDA are rather static, since they are not routinely revised. Of course, it should be

significant reasons for any such changes to be made to the regulations, but over the coming years, nature will probably change so much that revisions ought at least to be considered.

We see several possible ways to merge the two authorities and move towards a genuinely decentralised and integrative model for territorial nature and heritage management which also is able to balance the power relations in a multilevel system. From a landscape perspective, according to ELC, so-called local management should be more decentralised and attached to the territorial landscape as a common arena where the different involved actors can meet for negotiating protection and development. This could open the way for stronger integration of management in already existing political and administrative units. We will discuss three possible alternatives for integrated nature management and community development.

Revising the nature protection. This alternative means revising the protected area regulations in the NDA to include also regional development as a specific purpose in addition to protection, a change that would be more in line with practices in the UK and central Europe. It should then be possible to integrate protection and development in the protected areas, although it will still be a challenge to integrate management of the protected areas and the adjacent areas managed by the PBA. Real decentralisation and local management will be difficult to achieve because the authority will remain with national bodies. Even though the mayors are in charge of the management boards of protected areas, there is yet little empirical evidence of different management practices, which makes the local community reluctant to accept the boards' role as an integration actor. Then neither the legal, the efficiency nor the institutional legitimacy will be substantially improved.

Transferring the responsibility to the land use planning authorities. This alternative means transferring the protection area section from the NDA to the PBA under land-use purposes in the land-use element of the Municipal Master Plan. The changes would not be very dramatic because in practice it means going back to the situation before the areas were protected through the NDA (Skjeggedal, Overvåg & Riseth, 2015). This suggestion will contribute both to decentralising and integrating land-use planning. This is especially important in the buffer zones between protected and other areas. One major challenge will be to secure the protected areas a national and permanent status, and to coordinate management practice across the municipal borders. Thus, national interests may be ensured by participation in the planning processes and, if necessary, by that authorities on regional or national level use their right to make objections owing to major regional or national interests. Moreover, when national considerations so require, the King may decide that certain specified parts of the land-use element shall not be subject to alteration or revocation within a specified time frame (PBA section 11-18).

Establishing regional parks: the "Landscape perspective". This alternative presupposes no legal changes, but uses regional parks as a framework for integrated development within a territorial context, and within the various restrictions and opportunities offered by different authorities. Over the years, existing regional parks have achieved a basic institutional legitimacy in local communities resulting from various initiatives adding value both to the

social and cultural fabric as well as to small- and medium-scale local industries. Reciprocal, but not integrated, dialogue with nature protection authorities has been established. However, the national government has neither taken steps toward developing environmental quality standards for the regional parks nor integrated them into the NDA, in the way that, for example, Switzerland did in 2007. Thus, the regional parks lack legal legitimacy for their management activities.

Conclusions

Our four case studies show that the two trends of decentralising and integration are visible in Norwegian mountain landscape management, but only to a certain extent. The new inter-municipal model for protected area management is decentralised compared with the earlier model managed by the county governors, but the protected area managers are still employed by the county governors, and the protection plans and regulations and management plans are also the same. Therefore, the legal possibilities for integration of protection and local development have not increased, though the political ambitions of integration are higher. On the other hand, the emerging regional parks are a promising example of decentralisation and integration that has grown out of local initiatives and cooperation. Having said that, the parks have no legal legitimacy and do not necessarily have land use and landscape-based development on the agenda.

We have discussed three alternatives to increase decentralisation and integration of landscape management to promote both protection and local development. The alternatives proposed are not mutually exclusive and may be used in combination. The first alternative, which in our opinion is a necessary precondition, is to revise regulations for nature protection in the NDA also to include local development as an explicit purpose. Further promoting decentralised and integrated land use management, while also considering adjacent areas and transferring the responsibility for protected areas from the nature protection to the land use planning authorities, might be a promising alternative, but achieving this aim would undoubtedly be a challenge. The third alternative, which necessarily not presupposes legal changes, is to use regional parks as frameworks for integrated and decentralised development within the restrictions and options afforded by the authorities. Regional parks may be rooted just in cooperation, partnership and agreements, or they can be given legal legitimacy by incorporation in the NDA. Regional parks may well have the potential to engage the local community together with the decentralised protected area boards in place-based co-management.

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