

**Exploring the Relationship between Common Property,  
Natural Resources and Rural Development:  
The Case of Crofting Common Grazings**

by

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**Aberdeen Discussion Paper Series: People,  
Environment and Development.**

Editor: Ayele Gelan

Series Coordinator: Clive Spash

**2004**

ISSN 1743-9965

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## Abstract

*A resurgence of interest in common property regimes for natural resource management can be observed in both policy and practice in Scotland, principally in terms of its potential for facilitating rural development. This is a remarkable circumstance, not least in its opposition to the historical trend in Western Europe, which has seen common property regimes by and large supplanted by the assertion of private property. However, there has been little systematic research exploring the relationship between common property and rural development in a Scottish context. To begin to address this shortcoming, this paper outlines the preliminary findings of a recent survey of common grazings use and governance. The findings indicated an overall decline in levels of involvement and investment in common grazings and associated institutions, but one that is shown by a small counter-trend to be neither universal nor inevitable. Attention was also drawn to a number of possible explanatory factors related principally to the shifting configuration of values attached to common grazings. Further exploration of these factors is necessary but requires the researcher to go beyond mainstream common property theory, underpinned heavily by New Institutional Economics, due to the crucial ways in which common grazings scenarios differ from those assumed in dominant commons models. Indeed, if CPR theory is to have broader applicability, issues of values and the circumstances and mechanisms of their (re)production as they relate to the outcomes of managing common resources need further problematisation and unpacking.*

## THE REVALORISATION OF COMMON PROPERTY REGIMES

### Historical Marginalisation and Survival of the Commons

Preceding centuries have witnessed the dissolution of the vast majority of common property regimes<sup>1</sup> in Western Europe and their replacement with forms of private property. In the UK most land under communal land tenure was replaced by private property between the 17<sup>th</sup> and 19<sup>th</sup> centuries contemporaneous with increasing industrialisation, population growth, urbanisation, expansion of the market economy, and supported by specific legislation (Devine, 1994). Nevertheless, historical common property regimes have by no means been eradicated from the landscapes of the developed world. In Scotland, as elsewhere in Western Europe, vestiges of common land have survived to the present day, typically in upland or marginal areas, although the circumstances of their survival and their legal histories vary. Crofting common grazings constitute the most prevalent examples of historically enduring land-based common property regimes in Scotland, covering 7% of its total land area.

### Theoretical Marginalisation and Revalorisation of Common Property

Underpinning much of the historical drive to dismantle common property regimes was a professed belief in the ultimate superiority of private property regimes for economic development and/or the avoidance of environmental degradation; an idea that continued to dominate theoretical resource use debates for many years (see Demsetz, 1967; Hardin, 1968; North & Thomas, 1973; Lloyd, 1833, cited in Baland & Platteau, 1996; Dahlman, 1980). Such thinking went largely unchallenged until the 1980s and 1990s when common-pool resource (CPR) scholars drew attention to numerous empirical cases where common property institutions have been successfully organised to aid sustainable local-level management of resources held in common (McCay & Acheson, 1987; Ostrom, 1990; McKean, 1992) and where they are not necessarily less efficient than private property (Stevenson, 1991).

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<sup>1</sup>Most scholars agree that a common property regime is a type of management arrangement in which a well-defined group of people jointly hold exclusive rights (not necessarily co-equally) to the use of a defined resource unit, in which individual members have rights and duties with respect to use rates, and resource maintenance and improvement (Bromley, 1991; Stevenson, 1991; Baland & Platteau, 1996).

## Empirical and Political Revalorisation of Common Property in Scotland

Scotland has recently witnessed a revived interest in common property regimes in both policy and practice. The preceding decade has seen a proliferation of local-level community groups taking ownership of natural resources, particularly in the Highlands and Islands, in order to facilitate rural development. Furthermore, the central position of the community right-to-buy in the Land Reform (Scotland) Act 2003 illustrates the official endorsement given to the notion that common property regimes provide a vehicle for rural development. This move towards the revalorisation of common property regimes is of particular note because it runs contrary to the aforementioned historical trends of privatisation, and to property rights theory with its prediction of a unidirectional shift from common property towards private property in the pursuit of greater economic efficiency (Alchian & Demsetz, 1973; Barzel, 1989).

## Rural Change

It has been recognised in the UK and elsewhere that the socio-economic character of rural areas is undergoing fundamental change driven by a simultaneous decline in the social and economic significance of primary rural industries and increasing demand for a new set of rural goods and services. (Ilbery & Bowler, 1998). On one hand, the general decline in both agricultural employment and the relative importance of food production has been coupled by the challenges to the industry of both structural changes and the crises of BSE<sup>2</sup> and Foot and Mouth disease. On the other hand, increased affluence, mobility, changing cultural and environmental values, as well as an ageing population, have generated an expanding interest in visiting and living in the countryside, with particular 'demands' in terms of landscape, conservation, heritage, leisure and recreation. In short, rural areas are increasingly becoming spaces of consumption, as well as production, resulting in new patterns of diversity and differentiation (Marsden *et al*, 1993; Winter, 1996; Curry & Owen, 1996; Marsden, 1999).

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<sup>2</sup>Bovine Spongiform Encephalopathy or 'Mad Cow Disease'.

## Pertinent Issues Requiring Investigation

The expansion in the number of common property regimes in Scotland, running counter to historical trends, coupled with the enshrinement of common property regimes in Scottish legislation raises a number of questions, not least regarding the precise ways in which common property regimes relate to the forces of rural change outlined above. Yet there has been no systematic research to address them. For example, despite the renewed regard with which common property is held in policy circles, there has been no coherent study of how such institutional arrangements work, and with what effect, in a Scottish context to back up the presumption that common property regimes are good vehicles for rural development. So far, all the UK-related analysis of common property regimes has focussed on commons in England and Wales (Wilson, 1993; 1997; Short & Winter, 1999; Short, 2000; Edwards & Steins, 1998; 1999).

With the belief that this is an opportunity missed to deepen our understanding of common property - both in a Scottish context and more generally - this paper begins to address this shortcoming by outlining a preliminary investigation of crofting common grazings. The intention is that by shedding light on the workings of existing common property regimes in Scotland and how they relate to rural development outcomes, guidance can be provided for the creation and maintenance of new common property regimes, as well as for the development of policy for common grazings themselves, which cover a not insignificant area of rural Scotland. In the endeavour to find a theoretical basis with which greater insight into common grazings can be achieved, a consideration of the burgeoning common property literature is a useful first step. Thus, the paper encompasses two main aims:

- I. To identify the key issues pertaining to common grazings; and
- II. To gauge the relevance and explanatory power of dominant common property theory for gaining a richer understanding of these key issues.

## THEORISING COMMON PROPERTY ISSUES

A primary concern of the common property literature is how to manage resources that are both subtractable and difficult to exclude others from (called common-pool resources or CPRs) in view of the possibility that individuals who benefit from the use of a resource may not contribute to its long-term sustainability (Ostrom, 1999).

The 1960s produced two major stimuli to the development of contemporary common property theory: Olson's book 'The Logic of Collective Action' in 1965; and Hardin's brief paper propounding the 'Tragedy of the Commons' model in 1968. Both these authors used a rational choice framework to propound a pessimistic view that the joint use of resources would always tend towards failure due to the inherent conflict between individual and common interests. Olson (1965) explained this in terms of the tendency for self-interested individuals to behave opportunistically and "free-ride" on other group members, asserting that they will not act to achieve group interests without some kind of coercive device. Hardin (1968) presented the problem as an imminent tragedy of overexploitation and resource degradation, where the rational individual would always have an incentive to extract an additional resource unit, as all the benefit of it would be theirs alone while the costs would be spread amongst all the users.

These and other proponents of what is referred to as the 'property rights school' perceived the problem of the commons as one of incomplete or non-existent property rights, and held that, without well-defined and exclusive property rights, the market would fail to work efficiently to bring about the harmonisation of individual and collective rationales. More specifically, the central thrust of their argument was that *private* property is the most appropriate way to maximise efficiency in the use of resources, as it creates greater incentives for the internalisation of externalities and thus promotes economic growth (Demsetz, 1967). The principal objection to common property rights, even when well-defined, related to the particular costs associated with collective action (Olson, 1965), such as those incurred by the provision and operation of mechanisms for consensual decision-making, as well as those caused by opportunistic tendencies to violate or circumvent collective rules (Baland & Platteau, 1998).

Since the 1960s, many researchers have set out to critique, refine and present alternatives to these models. Most begin with the basic objection that the 'tragedy' thesis does not acknowledge or explain the plethora of empirical examples that demonstrate well functioning and historically enduring CPR management (Ostrom, 1990; McKean, 1992; Bromley 1992, McCay & Acheson, 1987). The generalisability of the former approach was challenged as it failed to explain situations where users create and sustain arrangements to avoid overappropriation, and to predict how privatisation would improve outcomes (Ostrom, 1999). The question thus begged was: why do some collectives manage to maintain effective common property regimes for sustainable, resource management and others do not? In the growing endeavour to address this question, two main approaches can be identified: New Institutional Economics (NIE) and post-institutionalism.

The NIE approach, like the 'Property Rights' School, is grounded in a rational choice framework, with the central argument being that co-operation for resource management *can* be economically rational, but depends on the incentive structure faced by the individual when making their cost-benefit calculus in CPR-related decision-making (Ostrom, 1990; 1992). Furthermore, if for some reason the incentive structure is not conducive to co-operation (i.e. fails to bring about the simultaneous production of individually and collectively rational outcomes), it can be changed, for example, through the creation or adaptation of institutions, to encourage actions that are simultaneously in the interests of both the individual and the group. From this perspective, most effort has been channelled into the identification of generalisable 'principles' or conditions under which successful co-operation is most likely to occur (Wade, 1988; Ostrom, 1990; Tang, 1992; Baland & Platteau, 1996, Agrawal, 2001). These focus primarily on the institutional arrangements, as well as attributes of the resource and the user-group, for example, clearly defined resource and user boundaries, conflict resolution mechanisms, and implementation of rules with monitoring, enforcement and sanctions.

**Table 1: Ostrom's Design Principles**

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| <ol style="list-style-type: none"><li>1. Clearly defined boundaries</li><li>2. Congruence between and provision rules and local conditions</li><li>3. Collective-choice arrangements</li><li>4. Monitoring</li><li>5. Graduated sanctions</li><li>6. Conflict resolution mechanisms</li><li>7. Minimal recognition of rights to organise</li><li>8. Nested Enterprises</li></ol> |
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Source: Ostrom E (1990) *Governing the Commons*, CUP, Cambridge, p.90.

One of the most influential contributors to this literature is Ostrom (1990) who has developed a set of 'design principles' highlighting the factors deemed most important to successful collective action for CPR management (see Table 1), which focus largely on 'internal' institutional factors. The design principles are not intended to act as a blueprint for creating successful institutions or to determine an institution's effectiveness independent of a specific research context, but rather are proposed as a guide to research seeking to explain the variable 'success' of institutions. In her later work Ostrom (1999) has developed the idea of principles further, identifying a list of attributes of common-pool resources and of their users which many scholars agree are "conducive to an increased likelihood that self-governing associations will form" (p.3) (see Table 2). These still deal chiefly with 'internal' characteristics, but ones which can be deeply implicated in external factors, for example, levels of 'salience' would in many cases be linked to levels of market demand for CPR products.

The main strengths of the NIE approach have been: firstly, to draw attention to the many examples of successful common property regimes around the world; secondly, to identify some of the key factors that influence the initiation and sustainability of robust common property institutions; and thirdly, the clarity, simplicity and analytical closure of associated models. All of these elements have combined to persuade many policymakers and powerful institutions such as the World Bank not to automatically write off common property regimes as one model for the management of natural resources, and to re-evaluate many top-down, privatisation-oriented 'solutions' to problems of resource degradation.



**Table 2: Attributes Enhancing the Probability of Self-Organisation for CPR Management**

<b>Resource Attributes</b>	<b>User Attributes</b>
<p>1. Feasible improvement</p> <p>The resource should not be at a point of deterioration where it is beyond recovery; neither should it be so unutilised that there is no advantage to be gained from new organisation.</p>	<p>1. Salience (a high level of dependence)</p> <p>Users should be dependent on the resource for a major portion of their livelihoods or other variables of importance to them.</p>
<p>2. Indicators of resource condition are available</p> <p>Reliable and valid information about the condition of the resource should be available at reasonable cost.</p>	<p>2. Common understanding</p> <p>Users should have a shared image of the resource and how their actions face each other and their resource.</p>
<p>3. Predictability</p> <p>The output and availability of the resource is predictable.</p>	<p>3. Discount rate</p> <p>Users should have a sufficiently low discount rate so as to justify the future benefits from the resource.</p>
<p>4. Spatial extent</p> <p>The resource is small enough for users to have an accurate knowledge of external boundaries and internal micro-environments.</p>	<p>4. Distribution of interests (higher socio-economic groups must be affected by use of resource)</p> <p>Users with higher social and economic status should be similarly affected by the current use of the resource to those of low status.</p>
	<p>5. Trust</p> <p>Users should trust one another and relate to one another with reciprocity.</p>
	<p>6. Autonomy</p> <p>Users should be able to determine management rules without recourse to external authorities.</p>
	<p>7. Prior organisational experience</p> <p>Users should have learned at least minimal skills of participation in other local associations or be able to learn about ways in which other groups are organised.</p>

Source: Ostrom E (1999) Self Governance and Forest Resources, *CIFOR Occasional Paper No20*.

## INVESTIGATING CROFTING COMMON GRAZINGS: BACKGROUND, METHODS AND RESULTS

### Background of Empirical Example of Common Property Regimes

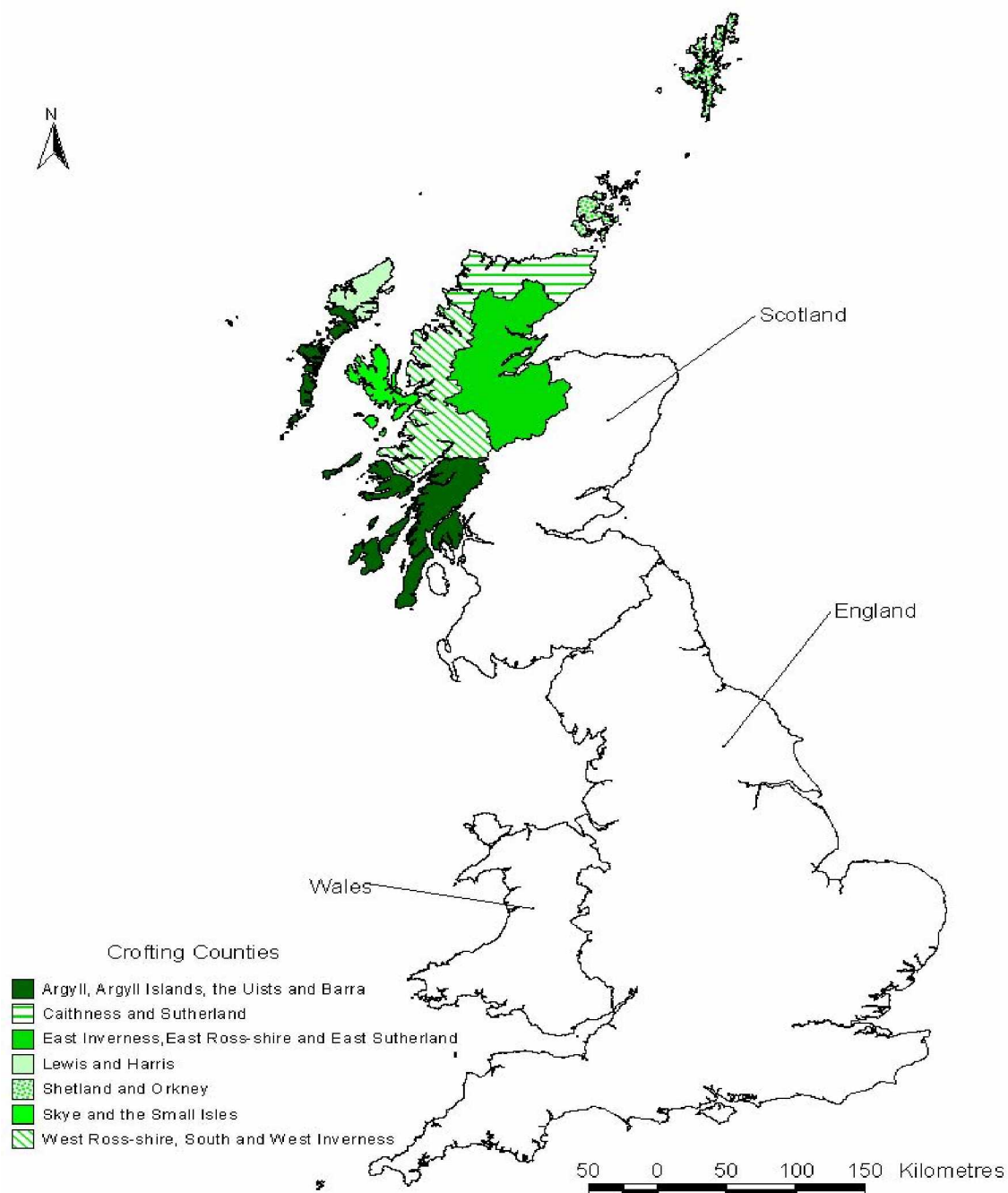
Crofting common grazings are found only in the Highlands and Islands of Scotland (see Figure 1) and represent the most widespread examples of historically enduring land-based common property regimes in Scotland. Crofting common grazings survived partially due to their inferior agricultural quality and remote location, but mainly due to the imposition of the Crofters Holdings (Scotland) Act in 1886 and the Crofters Common Grazings Regulation Act in 1891, which, for the most part, effectively 'fossilised' the basic pattern of land occupancy as it was at the end of the 19<sup>th</sup> century. This landmark legislation was passed as a response to the growing civil unrest caused by years of eviction, resettlement in poorer quality areas, emigration and famine, and conferred on crofters a set of rights unavailable to any other kind of tenant farmer in the UK, crucially including security of tenure and fair rent (Hunter, 1976; Devine, 1988). In effect, this Act created the crofting system: a unique form of land tenure, comprising small individually held agricultural plots and associated areas of common grazings, constituted in townships (villages).

Currently, there are over 800 distinct common grazings covering nearly 5,000 square kilometres, roughly 12% of the area of the Highlands and Islands (Crofters Commission, 1999). The land cover of common grazings is predominantly rough grazings consisting of heather and other forms of moorland. The average size of a common grazing is 617 ha, but can vary enormously from as little as 10 ha to as much as 10,550 ha. The principal land use is the grazing of livestock, and sheep in particular, but other typical activities include peat cutting for fuel, sport shooting and fishing, and recreational use, such as hill-walking and climbing.

In the basic crofting model there are three main user-groups that can be identified in relation to common grazings. First, there are the shareholders that hold rights to the common grazings in association with the tenancy of individually held crofts. These rights allow them to graze livestock, cut peat, and collect seaweed (and plant trees if consented by landlord and government agencies). Shareholders are also entitled to 50% of any development value coming from the common grazings, for example, from the resumption of land by the landlord for a house site. Second, there is the landlord

who has title to the land, and holds the sporting rights (which are often sub-let to clients) and mineral rights, as well as the right to the other 50% of any development value. In addition, the landlord has a veto on any forestry and development-related decisions. Third, there are leisure or recreational users who have recently secured a 'right of responsible access' through the Land Reform (Scotland) Act 2003.

**Figure 1: The Crofting Counties of Scotland**



The formal institutional arrangements for the regulation and management of the common grazings exist on a number of levels. At the constitutional level there are several Acts of Parliament<sup>3</sup> that serve as the fundamental framework for the crofting system, defining the legal rights and responsibilities, providing for a quasi-governmental body devoted solely to the development and regulation of crofting (the Crofters Commission), and substantiate locally set rules. At the operational level, there is an elected Grazings Clerk who, on a voluntary basis, is responsible for administrative duties, and also an elected Grazings Committee who have statutory powers and duties with respect to the management, maintenance and improvement of the resource (MacCuish & Flynn, 1990). Most grazings have a set of regulations dealing with aspects of stock management and resource maintenance, such as individual stock 'soumings' (quotas), which when endorsed by the Crofters Commission, become legally binding.

### Survey Methods

Little data have been collected to date for most aspects of crofting common grazings. Thus, it was necessary to undertake survey work to gather the information required to address the study issues. In particular information was sought on the attributes identified as important in CPR theory, as well as the issues that the informants themselves believed to be important. These included aspects of the crofting township of which the grazings are a part, the resource characteristics of the common grazings themselves, the nature and intensity of use, the attributes of the users, the institutional arrangements for the ownership and management of the grazings, and the degree and nature of collective engagement with public policy.

First, a scoping study was undertaken by conducting ten in-depth interviews with key informants from both formal and informal crofting-related institutions, which allowed the identification of some of the most pertinent issues. Second, a postal questionnaire survey of Grazings Clerks, the individuals responsible for the administration of the common grazings, was designed and piloted. A mixture of closed and open-ended questions were employed in order to obtain comparable quantitative data for core aspects of resource use and resource users, but also to

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<sup>3</sup>The Crofters (Scotland) Act 1993 is one of the principal pieces of current legislation, but a new Crofters Act is being developed as part of the Scottish Executive's Land Reform proposals.

acquire qualitative data that provided some understanding of underlying explanations meanings and motivations. A pilot survey of 20 Grazings Clerks with a return of 15 surveys provided the basis for a refined questionnaire that was subsequently sent out to the entire population (767) of registered and thus contactable Grazings Clerks. Usable responses were received from 376 out of the 767 Grazings Clerks, which constitutes a good return rate of 49%.

### Changing Importance of Common Grazings as a Source of Livelihood

The findings indicate a number of changes in the way in which common grazings are used, managed and valued in comparison with past years. In terms of shareholders' household income, reliance has shifted away from the common grazings to the better-quality, individually held inbye land and, even more so, to ancillary employment. The proportion of the shareholders' income that comes from land-based crofting activities in general has been decreasing. For example, Table 3 shows that on average only 8% of township income comes from the use of croft land, when at one time it could have been as much as 40-50%. Moreover, within this, the proportion of income that might be attributed to the common grazings has also been declining.

**Table 3: Sources of Township Shareholders' Income**

<b>Income Source</b>	<b>Average % of shareholders' household income</b>
Working away from home	45
Social payments	41
Home-based employment not using croft land	6
Traditional use of croft land <sup>4</sup>	5
Non-traditional use of croft land <sup>5</sup>	3

According to respondents, this decline is due in part to the encouragement by subsidy of less hardy sheep breeds, such as Cheviots, that cannot survive as well on the grazings, and in part to the age of many crofters, but is increasingly due to the comparative financial advantage of off-croft employment in relation to livestock

<sup>4</sup>'Traditional' refers to all the activities referred to in the original crofting legislation, such as livestock grazing and peat cutting.

farming. This often imposes time constraints necessitating a reduction in stock or a greater focus on inbye land, which enables easier stock management. In either case, the consequence is usually a reduction or abandonment of use of the common grazings, particularly in cases where access from the crofts to the common resource is poor, either in terms of distance or quality of paths, roads and gates.

### Changing Patterns of Land Use

Most of the respondents confirmed that the common grazings shares were formerly very much in demand, and that it was rare to have unused shares or non-using shareholders. Currently, however, the results show that on average 76% of grazing shares are actually used, and that the average proportion of shareholders that use the commons is 50%. Furthermore, the current average number of users is only 78% of the number of shareholders using the resource 10 years ago. Nor is it just use for grazing that is in decline; peat-cutting, once a feature of virtually all common grazings, now only takes place in 40% of cases.

Nevertheless, the extent and rate of decline vary greatly between individual cases. 9% of common grazings are in a situation of *de facto* privatisation with only one active shareholder; 12% of common grazings are tending towards *de facto* privatisation, with only two active shareholders; and 7% of common grazings have effectively been abandoned completely, with no shareholders grazing stock at all. Thus, at least 28% of common grazings are in a state of critical decline. Furthermore, many of the common grazings that still have higher levels of use and active users are in a fragile position, where most of the users are very old and will soon be unable to play an active role in commons management. Consequently, it is likely that over the next 5-10 years, the percentage of common grazings that are in a critical state of decline will increase. The key reasons for declining use and importance of common grazings as given by rightsholders are displayed in Table 4.

Despite the marked overall decline in what would be considered as 'traditional' use of common grazings by shareholders (i.e. livestock grazing), there has also been a trend towards an increasing diversity of uses. These include diversification into a number of alternative activities such as new sport and recreational uses (e.g. football,

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<sup>5</sup>For example, use for boarding kennels, growing soft fruit in polytunnels, or holiday cottages.

athletics and pony trekking), tourism (e.g. nature trails), power generation, conservation management, and forestry. Forestry in particular has proliferated in the last decade, largely as a response to a change in the law clarifying the rights to timber from common grazings, and also due to more favourable national and EU grants for planting and regeneration. To a certain extent, this increasingly heterogeneous range of uses reflects a general broadening of the kinds of values attached to common grazings, for example, conservation, environment, amenity, landscape, symbolic and socio-cultural value.

**Table 4: Stated Reasons for the Decreasing Use of Common Grazings**

<b>Rank</b>	<b>Reason</b>
1	rising age of shareholders
2	decreasing returns from agriculture
3	less time/flexibility due to off-croft work
4	increased concentration of effort on inbye
5	increased individualism
6	decrease in the number of active shareholders
7	greater imbalance in croft enterprise sizes
8	more use of contractors

### Changing Patterns of Management and Governance

In terms of management, there is evidence for a decline in co-operative ways of working on common grazings (see Tables 5 and 6). Daily or weekly co-operation was widespread 20-30 years ago, particularly for stock gathering and management, but now only occurs on 18% of common grazings.

**Table 5: Regularity of Co-operation on Common Grazings**

<b>Regularity of Co-operation</b>	<b>Mean Percentage of Cases</b>
Every day	3%
Every few weeks	15%
Every few months	37%
Once or twice a year	27%
Never	18%

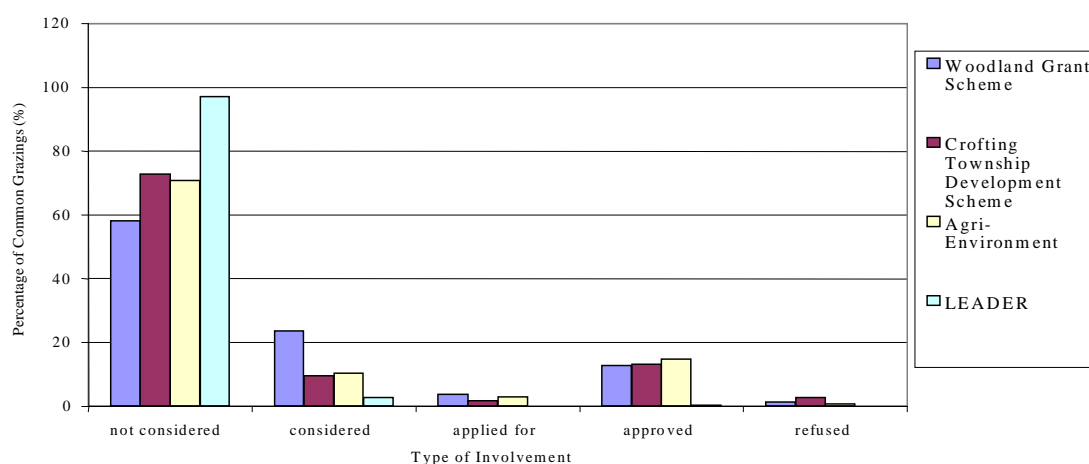
The core problem is having enough active shareholders willing and available to carry out related tasks. Even though small numbers can make consensus on action easier to reach, it also tends to leave the arrangement more vulnerable to future reductions in available labour.

**Table 6: Co-operative Activities on Common Grazings**

Collective Activity	Stock Gathering	Stock Management (e.g. sheep dipping)	Resource Maintenance (e.g. fencing repairs)	Resource Improvement (e.g. reseeding)	Stock Club <sup>6</sup>
Percentage of common grazings units on which activity occurs	68%	49%	63%	24%	7%

In terms of governance, there has been a decline in the current practical importance of many rules and regulations. Currently, in many townships the grazings regulations (e.g. the soumings or stock quotas) are not adhered to, or enforced, as the relative lack of demand for the resource units has diminished their relevance. This perhaps reflects a general shift in the role demanded of the Grazings Clerks and Committees, where management is tending to be less about regulating access to and appropriation of resource ‘units’ and more about assuming an entrepreneurial role to identify and capture a range of alternative benefit streams, usually from projects requiring competitive bidding for funding.

**Figure 2: Common Grazings-related Engagement with Development Schemes**

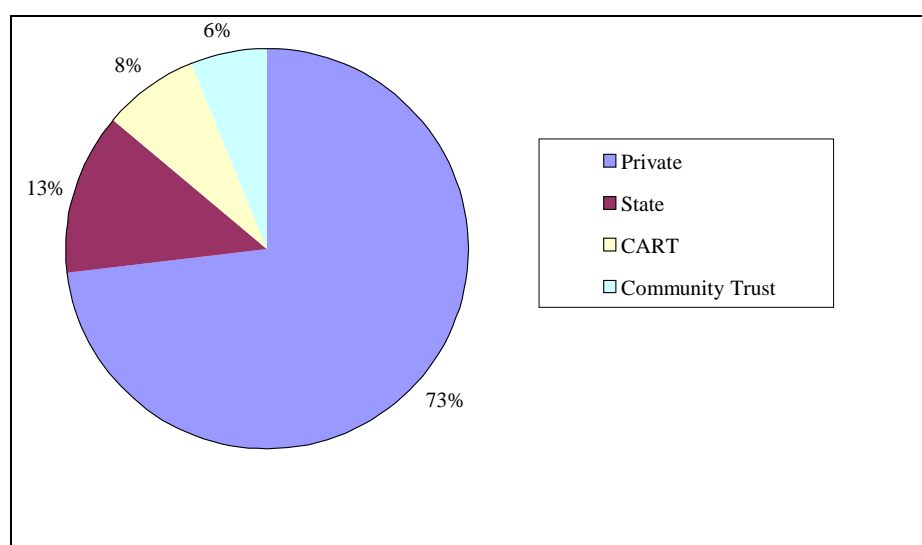




This new role demanded constitutes a challenge that the majority of those responsible for common grazings have not yet been willing or able to meet. For example, over 55% of common grazings have not considered entry into one of the main schemes available, and less than 20% have had a proposal approved (see Figure 2).

There has also been greater pressure to engage with an increasing diversity of stakeholders with an interest in common grazings, such as conservation non-governmental organisations (NGOs), government agencies, forestry companies, and energy companies, as well as the wider ‘community’ from a local to national level. The rise in prominence and power of environmental and conservation interests is one the most pervasive forces perceived by crofters. They increasingly face indirect pressure from policy changes (e.g. designation of land for conservation purposes), but also direct pressure from increased Conservation, Amenity & Recreational Trust (CART) ownership of land (see Figure 3), which now applies to 8% of common grazings. Conversely, the state, or more specifically SEERAD, is considered by crofters to be a benign landlord, neither particularly helping nor hindering.

**Figure 3: Ownership of Common Grazings**



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<sup>6</sup>In a stock club a livestock herd is administrated and managed wholly as one unit in order to produce an annual dividend for shareholders.

## Counter Trends

Although the picture illustrated here indicates a general decline in commons use, not all common grazings were suffering decreasing use and importance. Indeed, a minority of cases (8%) bucked the general trend and demonstrated many signs of dynamism, such as high rates of use and users, high rates of co-operation and the successful initiation and completion of commons-related schemes and projects. This counter trend is a crucial finding as it precludes any general judgements positing common grazings decline as inevitable, by illustrating concrete cases where it has been avoided or even reversed. Indeed, it is this differential dynamism that requires explanation.

## CHANGING CONFIGURATIONS OF VALUES ATTACHED TO COMMON GRAZINGS

### Identification of the Pertinent Issues

The survey findings portray an overall, but not universal, decline in the use and governance of crofting common grazings. Although many common grazings are seen as a potential community asset, only a small minority cases feel this to be realised. The key issues concerning common grazings, thus, involve ascertaining why there is declining involvement and investment in common grazings and associated institutions, and moreover, why it is neither universal nor inevitable. Notably, the pertinent common grazings issues do not generally include the tendency to overuse. Unlike typical commons models, the temptation to overappropriate resource units and invite 'tragedy' appears not to be the primary issue in most common grazings.

### Possible Explanatory Factors

The results suggest the main reason for these observations to be the changing configuration of values attached to common grazings. Clearly there is a diminishing reliance on common grazings for making a (partial) livelihood related to the decreasing pecuniary value captured from the resource. Yet this does not explain why a minority of common grazings continue to enjoy high levels of resource use and involvement in governing institutions. Thus, any explanation is likely to engender

more than pecuniary values alone. Indeed a number of possible explanatory factors came to light in the survey and include the following.

Firstly, an overall contraction in opportunities to generate pecuniary values from common grazings has occurred because values articulated through markets for agricultural livestock production (particularly ovine) have declined, both in absolute terms and relative to other methods of maintaining a livelihood. The contribution of livestock subsidies has failed to halt a reduction in stock keeping in most cases.

Secondly, the subsistence value of common grazings has declined overall. For example, the growth in convenience and relative affordability of oil-fired central heating has in many cases precluded the former necessity of cutting peat for fuel, and the widespread availability of milk through retail outlets means that keeping a house cow' to provide households' dairy products is no longer essential.

Third, many values now attached to common grazings are less tangible and, thus, it may be difficult, impossible, or inappropriate to reduce them to pecuniary values. For example the symbolic or conservation value of common grazings can be more difficult to translate into livelihood-related outcomes, but this should not obscure the fact that many people feel them to be important anyway. Additionally, where less tangible values can be captured as pecuniary values, the currently available mechanisms, such as crofter forestry or agri-environment schemes, often require collective action and competitive bidding.

Last, common grazings are valued in an increasing diversity of ways by an increasing diversity of people, who are not necessarily crofters or even locally resident. Hence, there is greater scope for contestation over precisely whose values are to be supported and articulated through common grazings use and governance. For example, current opportunities for generating net pecuniary benefits presented by market and policy diversification mechanisms are not always seen as opportunities for gaining net benefit by shareholders due to conflicting cultural values.

However, the survey did not provide sufficiently fine resolution data to allow us to understand how these key factors relate to each other, and to other potentially important factors not yet identified, and ultimately how they lead to different outcomes.

## Implications for Policy and Further Research

It is an interesting paradox that the creation of common property regimes is being encouraged by policy in Scotland when the majority of existing common property regimes are in decline. If this policy is to have the best chance of being effective, more understanding is required of why some common property regimes seem to be more conducive to rural development than others. That is some institutions have managed to interact with the forces of rural change in a way that levels of use of and investment in common grazings are maintained or even increased, and others have not. This differential response demands further investigation. However, further exploration of the pertinent issues surrounding common grazings requires further development and refinement of existing mainstream CPR theory, as it has a number of limitations for understanding these kinds of commons scenarios.

## IMPLICATIONS FOR THEORY

### Contribution of CPR Theory to Understanding Common Grazings

CPR theory was considered in the light of crofting common grazings and, although it has certain strengths for shedding light on the pertinent issues of their differential decline in involvement and investment, there are also a number of limitations for understanding such common property regimes.

On the positive side, there is a convergence between the empirical findings and CPR theory regarding the fundamental importance of the value of the resource to rightsholders. The survey indicates that the changing configuration of values attached to common grazings has had a profound effect on the operation and outcomes of the associated common property regimes. Similarly, several CPR theorists have identified value, sometimes labelled as salience or dependence, as of substantial importance in providing impetus to the creation and maintenance of effective CPR institutions.

For example, Ostrom (1999) posits '*salience*' as a key user attribute affecting the likelihood that self-organisation of resource management institutions will occur and persist (see Table 2 in Section 2). A resource is highly salient when "users are dependent on the resource for a major portion of their livelihood or other variables of importance to them" (ibid. p.4), which is purported to be an important factor because

“if users do not obtain a major part of their income from a resource ... the high costs of organising and maintaining a self-governing system may not be worth their effort” (ibid. p.5).

Likewise, Agrawal & Yadama (1997) drive at issues of value when they underline the importance of large-scale socio-economic forces such as market pressures in influencing the community-based management and condition of renewable resources<sup>7</sup>. Further, Vatn (2001) highlights the importance of relative value stating that “the bonds between the co-owners will certainly also be influenced by how important the common resource is compared with the resource which each co-owner individually controls” (p.668).

Gibson is particularly sensitive to the centrality of issues of value(s) for understanding CPRs. For example, Gibson & Koontz (1998) discuss how *values* of community members affect the functioning and outcomes of local communal resource management, and Gibson & Becker (2000) identify that the local community must *highly value* the commons in order to have an incentive to manage it sustainably.

Gibson (2001) even goes so far to imply that ‘*dependence*’, along with scarcity, is a prerequisite of self-organisation of resource management institutions, although there are difficulties with this conceptualisation that will be discussed later.

Given the weight attributed to this variable of value/salience/dependence, the changing values attached to common grazings perhaps explain the lack of alignment between the majority of common grazings institutions and the design principles identified by Ostrom (1990, see Table 1), particularly those concerning rules, monitoring, enforcement and sanctions (see Brown & Slee, 2001). This is a point for further investigation.

### Problematic Assumptions of CPR Theory Regarding Common Grazings

The models of the commons forming the basis for much NIE theorising are at variance with the typical characteristics and circumstances of common grazings to

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<sup>7</sup>The analysis of Agrawal & Yadama (1997) is only concerned with varying degrees of *articulation* with external markets, rather than the more general changes in the nature and magnitude of market forces that are crucial for cases such as common grazings, where market integration is long-established.

such a degree that they have limited applicability, and thus utility in deepening understanding of these types of common property regimes. For example, commons models tend to feature a single use type and homogenous users (and no broader stakeholders), whilst most common grazings are subject to multiple uses involving livestock grazing, sport shooting, and recreation, involving multiple user and stakeholder groups such as the landlord, the shareholders and the wider public, whom are often differentiated socio-economically, politically and culturally.

There are also problems with the common assumption (e.g. Ostrom, 1999) that institutional change is always intentional, conscious and purposive, when local common grazings institutions seem more often to change gradually and incrementally without much conscious, direct, explicit decision-making involved. The question of how we understand these less planned institutional changes is effectively skirted around.

Furthermore, assumptions are made about the nature and magnitude of values, objectives and problems common property rightsholders have with regard to the commons. Indeed, many CPR scholars avoid tackling the issue of value in any depth by assuming the salience or value of the commons to be high and uniform and neglect the processes through which it is produced. While this may enable a greater focus on more 'internal' institutional factors, it is of little use in illuminating common grazings issues where the condition of salience is often not fulfilled, at least not in any straightforward way.

Where issues of salience and value are dealt with (see above), assumptions are made about how shareholders perceive commons. This matters in as much as it affects whether common grazings are even thought of as a resource (a rather loaded term), and because it governs what is considered a resource problem in the first place. It is presumed in CPR theory that overappropriation of resource units is the only cause of declining environmental quality, when, for example, the threat to biodiversity from *decreasing* grazing pressure expressed by conservation bodies (see SCU & RSPB, 1992), and exemplified on many common grazings, demonstrates this not to be the case.

Arguably the most crucial shortcoming for understanding common grazings concerns the way NIE-dominated theory conceptualises issues of value, how it is produced and how it is incorporated into commons decision-making. This will be expanded in the following sub-section using Ostrom (1999) as a specific example.

#### Limitations of the Conceptualisation of Value

Fundamentally, the frequent conceptualisation of commons-related decision-making based on an individual-level cost-benefit calculus has serious limitations for understanding common grazings scenarios, due to its divergence from the way that many shareholders appear to think and act 'on the ground'. Empirical evidence from common grazings cases shows that many different kinds of values are important to shareholders, thus, the way we understand how they incorporate these various types of values into processes of decision-making is a central issue. Trying to reduce all types of values to a cost-benefit calculus can lead to problems relating to complexities in both the measurement and the weighing up of costs and benefits, and to the larger issue of whether such a utilitarian, calculus is a reasonable (and therefore useful) representation of how people actually make decisions (Paavola & Bromley, 2002).

There are many different types of values that can be held with respect to nature, as illustrated by De Groot et al (2003) who identify a wide range of social, economic and ecological values (see Table 7). The diverse range of values found to be attached to common grazings include: productive value for livestock production; amenity value from activities such as walking or stalking; symbolic value of holding rights to land fought for and worked by previous generations; value in terms of cultural identity and social interaction from carrying out traditional, collective tasks; and the potential value of having a community asset to take advantage of future opportunities.

**Table 7: Different Types of Values Associated with Natural Systems**

<b>Social Values</b>	<b>Economic Values</b>	<b>Ecological Values</b>
Physical & mental health	Productive use value	Naturalness/integrity
Amenity	Consumptive use value	Biodiversity
Heritage	Conservation value	Uniqueness/rarity
Spiritual value	Option value	Fragility/vulnerability
Existence value		Life support value

(adapted from De Groot et al, 2003)

Foster (1997) further emphasises the complex and slippery nature of the notion of value, stating that it “eludes our definitional grasp with a supple duplicity characteristic of the really important concepts in human experience” (p.3). To illustrate this, he highlights three main ways in which values are conceptualised. To begin with, there are the desires and inclinations of the individual that are encompassed in notions of economic value, which may in turn reflect the cultural values embodying the desires and inclinations of a cultural group. Moreover, these kinds of values can be questioned in terms of moral value, relating to things being ‘invaluable’.

However values are conceived and differentiated, it is possible to appreciate the difficulties faced for measuring and weighing them up, both for the individual and the collective. If one assumes that individuals make rational, non-arbitrary choices between options by weighing up costs and benefits, as Ostrom (1999) does, there is an accompanying assumption of “the existence of a single measuring rod of their benefits and costs”, often money (O’Neill, 1997, p.78). However, many of the values identified as important in common grazings scenarios, especially the environmental and socio-cultural values, are difficult if not impossible to reduce to money or any other common unit of measurement. This constitutes an irreducible pluralism of values (Martinez-Ali & O’Neill, 1998), which entails problems of value incommensurability and precludes any straightforward weighing up of common grazings values. As O’Neill (1997) explains, different types of evaluation invoke different institutional practices and perspectives, and appeal to different standards and criteria of appraisal. This has implications for dealing with issues of aggregation, trade-offs and substitutability, and theorising about decision-making in general.

Multiple claims upon finite resources demand that people must evaluate and compare values in practice, in order to make choices. Nonetheless, to assume as Ostrom (1999) has done that this evaluation and comparison takes the form of algorithmic calculus can be misleading. Ostrom (1999) subscribes to the notion that individuals make implicit economic evaluations of the non-economic in decision-making (see Mises, 1981, cited in O’Neill, 1997). However, O’Neill (1997) advocates



the rejection of the assumption “that every choice involves an implicit act of monetary evaluation” (p.79) since questions surrounding the possibility of arriving at outcomes should not be conflated with those concerning the method through which one arrives at them. Instead, he asserts, “we apply not mathematics, but practical judgement to the particular choices before us ... [utilising] ... the faculty of discerning what is required in particular cases with the specific mixes of values they involve – not on algorithms that require measures” (p.82).

As Chiesura & de Groot (2003) highlight “monetary values are but one aspect of value” (p.2) and as far as costs and benefits can be computed and evaluated, they are still often only a part of how many decisions are made. The economic realm is only one of the many realms of reason in which individuals situate their choices and acts, and across which a balance must be found (Paavola & Bromley, 2002). There are “discontinuities in how we perceive and approach different choice situations” (ibid. p.13), since, for example, we apply economic logic to some choices and acts, and moral logic to others. Furthermore, the boundaries of these decision-making realms can shift when the individual is under pressure. One realm may be decisive “until the personal consequences reach some threshold level that triggers a change in the way they frame the choice” (ibid. p.13), which seems to be the case with shareholders of common grazings who often prioritise the values associated with symbolism and cultural identity up to a certain point, after which the need to ‘put bread on the table’ takes precedence. Similarly, at a collective level it is clear that there is negotiation and contestation regarding the evaluative framework that should predominate in common grazings decisions, such as between the economic logic of diversifying into a more profitable activity and the moral logic of using the land in the ‘traditional’ way.

Taking another tack, Ostrom (1990) appreciates that perceived or expected rather than ‘actual’ costs and benefits influence behaviour, but does not greatly develop this element conceptually or follow up on its profound theoretical implications. If we are paying attention to the issue of perceptions, we need to open up and unpack the issue of values and of the social relations and interactions that affect perceptions of the resource, and opportunities for generating net benefits from its ‘use’. As Martinez-Ali & O’Neill (1998) point out, mathematical models cannot sufficiently deal

with reflexive properties, such as “the human dimensions of ecological change and the transformations of human perceptions along the way” (p. 281).

The changing ways in which common grazings are valued and the processes through which these values influence outcomes are central issues. However, NIE conceptions of common property regimes are rather static and individualistic, and pay insufficient attention to the dynamic, recursive and mutually constitutive relationship between society and nature and between individuals and social groups. Ostrom (1999) concedes that more work is needed to see how the key attributes interact to affect the cost benefit calculations, yet her theoretical framework does not provide scope for a proper exploration of these interactions since the processual aspects of how the attributes influence individuals' incentives to invest are played down. A social constructivist perspective would be more fruitful for examining how various values are produced, reproduced, negotiated and contested, than Ostrom's conception of a single coalition of net beneficiaries agreeing on a proposed institutional change, which neglects the situated, dynamic, power-saturated nature of commons situations.

To illustrate, when conceiving of a comparison between the perceived costs and benefits of different institutional arrangements Ostrom's framework pays insufficient attention to the situatedness and the reflexivity of values, and fail to acknowledge that values are not independent and stable across institutional contexts (Gibson & Koontz, 1998; Vatn, 2001). That values are always situated in a social context, and are therefore socially produced and context dependent, has implications for CPR theory. Values are constituted in a dynamic way whereby their (re)production and is affected by the institutional context, and institutions are products of values. In Ostrom's framework, the view of institutions as objective structures of rules constraining choices and behaviour obscures this recursive relationship.

Furthermore, as Vatn (2001) observes, “non-rivalry in environmental resources is rare” (p.671) and most resource issues, including those of common grazings, involve conflicts of values and interests where different users or stakeholders value the resource in different ways and to different degrees. In Ostrom's framework, however, there is a lack of reference to the power relations that underpin the negotiation and contestation of different values, and their associated appeals to legitimacy.

According to Mitchell (2000), the production of values is always the production of power geometries, but dominant values are not always visible as they are naturalised in the landscape as if they were given and inevitable – although this is no reason to analyse them as if they were given and inevitable. Rather, when analysts, such as Ostrom (1999) attempt such value neutrality, they still in effect support specific sets of values, “implying a form of implicit canonisation of those values and characterisations that fit the model” (Vatn, 2001, p.677). Given that powerful stakeholders in common grazings will prioritise use and institutional practices that promote the articulation and reproduction of their values, we can only gain a fuller understanding if we make these visible where they have been naturalised rather than assuming them away.

### Unpacking Values and their Role in Common Property Regimes

This paper conveys the preliminary findings from an empirical investigation of crofting common grazings, which found there is an overall, but not universal, decline in the use and governance of common grazings. The predominant trend is declining use of the resource, and not over-use, as is frequently (sometimes appropriately) the focus of commons debates. This is accompanied by an overall trend towards institutional decay, although the minority of cases maintaining high levels of use and co-operation demonstrate a differential institutional response to the challenges of contemporary rural change. Thus, the key issues to be addressed involve explaining why there is declining involvement and investment in common grazings and associated institutions, but also, why it is neither universal nor inevitable.

The survey findings drew attention to a number of possible explanatory factors requiring further investigation. These related principally to the shifting configuration of values attached to common grazings resulting from the changing socio-economic and political context in which they are situated. As a source of pecuniary value the common grazings have become increasingly subordinate to alternative (often non-croft related) forms of employment. Simultaneously, common grazings are valued in an increasing diversity of ways by an increasing diversity of local and extralocal stakeholders, drawing in a range of, often less tangible, values, that are difficult, impossible, or inappropriate for shareholders to reduce to pecuniary values.

The differential response of common grazings institutions to the challenges of rural change underlines the importance of developing a deeper understanding of common property regimes in a Scottish context, in order to inform land reform policy and guide the facilitation and funding of new common property initiatives. Thus, more research is required to understand how the changing nature and magnitude of values attached to common grazings influence their land use and management outcomes, and vice versa. However, this requires the researcher to go beyond mainstream common property theory, underpinned heavily by New Institutional Economics, due to the significant differences between typical common grazings scenarios and those commons scenarios to which NIE frameworks are most aligned.

The limitations for understanding common grazings scenarios centre on the way value is conceptualised and related to the operation of common property regimes. Factors and processes fundamental to the (re)production of values, and thus the impetus for commons use and management, are ignored, assumed away, or treated in a static and simplistic manner. There are particular problems with how the individual is assumed to perceive, measure and weigh up all the different, sometimes incommensurable and irreducible, values that are important to them and to how these relate to the values of other individuals to influence collective action.

In short, if mainstream CPR theory is to have broader application than for only a limited sub-set of commons situations, issues of values and the circumstances and mechanisms of their (re)production as they relate to access to and control over commons resources need further problematisation and unpacking. Particular attention must be paid to the nexus between economic values and other types of cultural values to avoid neglecting the “crucial constitutive relationships between humankind and the value(s) with which, through personal development and cultural processes, the natural world is invested” (Chiesura & de Groot, 2003, p.4).

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