Unequal Commoners and Uncommon Equity

Property and Community Among Smallholder Farmers

by the sheetenes

Robert McC. Netting

Common property regimes are often held to be examples of "primitive communism" where all commoners share and share alike. Critics of the commons rightly point out that this view is misleading: inequality is in fact a feature of many commons regimes. Nonetheless, even when inequalities are pronounced, the governance and administration of common property regimes ensures a rough equity through broadly representative, democratic decision-making.

Privatizing or enclosing the commons, however, undermines this uncommon equity and entrenches inequalities.

Common property rights appear as part of recurrent institutions, widely distributed through space and time, governing local access to resources such as marginal grazing areas, swidden fallows, inshore fisheries and irrigation water. Falling somewhere between private property and state territorial control, common property rights are often viewed as an anomaly. They are applied to resources or facilities subject to individual use but not to individual possession. Controlling the access of potential users to such resources is difficult and costly to enforce. In addition, each user has the capacity to appropriate individually resource units which are thereby subtracted from the goods available to others. The rate at which individuals appropriate from the common pool affects the rate at which the resource can produce or replenish its supply.

Advocates of common property institutions tend to assume that such institutions are unrelated to inequalities of wealth, rank and power, or that they somehow rectify such inequalities. Common property is taken to be a "good thing" because it somehow promotes equality and is based on the voluntary sharing of resources, an attractive proof that not all economically efficient social institutions have to be based on selfish maximizing.

But do people in fact share common property equitably? Are commoners who hold defined rights in examunity grazing grounds, forests or irrigation waters economic and political equals of one another?

The stentorian voices from political economy and neo-marxist theory claim that they are not — there are necessarily rich and poor farmers, classes of land owners or kulaks, and smallholders declining into a rural proletariat. Real equality, joint use and genuine sharing, according to Karl Marx and Frederick Engels, may once have existed in pre-capitalist societies, but, they argue, unequal wealth and power arising from the market and the state mean that some individuals have greater access both to private property and communal resources. An egalitarian ethos, they claim, is thus false consciousness or a pernicious delusion.

Such a grand evolutionary trajectory is simplistic. Far from

being historical relics, commons regimes are an everyday reality for millions of smallholders around the world, including many who live in modern societies. Inequalities of wealth and status certainly exist within commons regimes — and typically become increasingly pronounced where resources are scarce. Nonetheless, such inequalities are rarely permanent. Moreover, even when inequalities are pronounced, the governance and administration of the commons continues to ensure a rough equity through broadly representative, democratic decision-making. Entrenched inequalities and inequity result, however, where common property rights are terminated, either by members agreeing to privatize their joint holdings, or by an external authority.

Unequal Holdings

To cast commons regimes involving smallholders (and I make no claims for commons regimes other than those involving smallholders) as "primitive communism", where everyone is equal and all share and share alike, is certainly misleading. Among intensive cultivators, the social unit that occupies the smallholding, providing labour and management, using the produce for subsistence and sale, and administering and transmitting rights, is typically a family household (itself the site of inequalities).6 The very nature of the household enterprise means that, at any point in time, there will be larger and smaller farms, depending on the balance of workers and dependants, the stage in the household developmental cycle, the inheritance or acquisition of property, and the successful management of the farm, as well as on the vagaries of climate and the market. At the same time, there is considerable mobility up and down the ladder of wealth over the life course.7 In the Swiss alpine village where I undertook research, only four per cent of the variation in a son's wealth could be explained by a difference in the father's wealth, and despite the presence of equal, partible inheritance, there was no consistent relationship between the achieved wealth of siblings.8

As agricultural resources become increasingly scarce — the result, for example, of market demand or population pressure — both private property and common property tend to become

Robert McC. Netting was an anthropologist and director of the Institute for Advanced Study at Indiana University. He submitted this article to *The Ecologist* but, sadly, died before the article was scheduled. Therefore only minor editorial changes and cuts have been made.

more institutionally elaborated and jurally defined. Land-short intensive cultivators compete to obtain scarce farm property, and thus there may be marked inequality in their holdings. whether they are self-sufficient and politically independent or whether they are involved in the commercial economy and the state. Permanently-tilled land, cattle and buildings are never, to the best of my knowledge, regularly reallocated and shared equally among households in the community.

There is, however, proportionately much less private property in systems of shifting cultivation where an abundance of common land in the territory of a descent group or a village can be readily portioned out in usufruct plots. On settlement frontiers, a labour force of subordinates is often built up by a "big man" - a lineage elder or chief, for instance, who maintains his rank by defending his turf. A sort of floating tenure prevails in the flood recession regimes of the Senegal River valley, for instance, whereby privileged groups control a portfolio of lands that they dole out widely to others after a good inundation or keep to themselves in dry periods.9 Chaotic flooding and wildly fluctuating agrarian resources stimulate and reinforce stratificaion. However, where smallholders have reliably productive, permanent real estate in addition to their rights in the commons, priority of access to the common property is seldom a consideraion, and inequality is less hierarchical and intransigent.

Moreover, just as there are inequalities in private property ioldings within commons regimes, so the sharing of benefits rom the commons is by no means always equal - despite commoners having joint control of the resource. For scarce esources, such as firewood, which are needed by every houseiold in a certain minimal quantity, allocations might be careully equalized. 10 In the Swiss alpine forests, the elected village ouncil marked equivalent shares of standing timber for cutting, nd community members drew lots for these shares. Severe unishments were specified for anyone who took wood not dead. r down, although there were always some who "by hook or by rook" surreptitiously took more than they were entitled to. lights to put cows on the communal alp for the summer, owever, depended on an over-wintering rule: cattle owners ould send only as many beasts as they could feed from their wn supply of hay. Thus the total number of animals was kept

oughly in line with the fodder pointial of all village irrigated meadws, but individual owners of larger ay lands had the right to graze tore cows on the commons." Ined, a wealth of case studies suport Meg McKean's contention that:

"in common property systems everywhere . . . entitlement to products of the commons was almost always based on private holdings and thus reproduced the inequality in private wealth."12

abour in the Commons

deed, numerous studies point to the esence of inequality among smalllders, particularly with regard to eir transferable and heritable ivate property. Such inequality

also frequently extends to access to another common property resource — the coordinated labour time of corporate group members.13

Common pasture, water or woods only have worth for the smallholder if there is skilled, reliable labour to build the infrastructure and carry on the regular maintenance that makes individual appropriation of the resource possible. Moreover, work in common may not be confined to the physical commons. The Swiss community charter that defined the rules of the Torbel alp in way back in the year 1483 also decreed that every householder had to help in putting up a villager's new log house.

The Kofyar farmers I knew in Nigeria quickly privatized land they had occupied on a settlement frontier, although they allow. free-range grazing once the crops are harvested. Part of their special genius for increasing the production of market crops has been the organization of traditional communal labour to work on individual farms. 14 Though some of this takes place in small clubs of eight to ten individuals who exchange work-time equally, there are also community-wide work parties. A host farmer, for instance, announces to neighbourhood officials when he will brew millet beer, every household sends workers in proportion to its number of productive members, and then the 40 to 80 people who assemble with their hoes make ridges or yam heaps, the same number of which is marked out for each individual, before enjoying the gallon or more of beer per person that gives the occasion its festive air. If a household does not provide its mandatory labour quota without good excuse, the assembled drinkers raise the issue and fine the miscreant (in jars of beer); if the fine is refused, they ultimately ostracize the offender which means not only that common labour will be denied in the future to that household but also that social contact is dramatically interrupted.15 The sanctioned party is left sitting at home and (most severely) no one will drink with them again. The price of community is common, institutionalized labour; the withdrawal of community for one of its "mutually vulnerable members" is social death. 16 Even in a society where individual households are economically self sufficient, a defector can be penalized with certainty and speed.

But again, although all commoners must participate in communal labour, do the resulting benefits make some smallholders

July 23rd - 27th 1997

Near Warminster, Wilts

HEALING, WORKSHOPS, GREEN POLITICS, EARTH MYSTERIES, CRAFTS, CHILDREN'S AREA, STALLS, **MUSIC & ENTERTAINMENT**

Powered by the find and the Sun

> Five-day tickets including camping: £40 Children aged 5 - 13 £5; aged 14 - 18 £10

> > Sorry no dogs

PO Box 123, Salisbury, Wilts SP2 0YA = 01747 870667

more equal than others? Brian Juan-O'Neill has demonstrated that labour exchange in a Portuguese rural hamlet benefits the rich disproportionately. The work parties assembled to thresh rye work for each cultivator in turn, but the owner of a large field receives more hours of labour from fellow villagers than they devote to their much smaller harvests. The balance is not rectified by the greater quantities of food in the festive meals provided by the wealthy.

For irrigation maintenance, the household of a proprietor with four days of water sends one person to clean the ditches for an equal amount of time as the poorer household with only a few hours of water rights. The hamlet council — on which each household is equally represented — also calls out labour teams for repair of community property such as meadows, public walls and roads, the cemetery and the water mill.¹⁸

O'Neill vehemently denies that this small, isolated mountain community is egalitarian in social structure. He does point, however, to a toleration of asymmetric labour reciprocity and an expressed belief in cooperation and mutual assistance at particular moments of the agricultural cycle which crystallize ideals of social equality. ¹⁹ Collective obligations temporarily suspend the disparities between rich and poor households in the interests of getting a large task done. ²⁰ Inequality and internal conflict, based on substantial differences in private property, are always present, but both governance and labour on common property resources emphasize equality, and strong cultural values support the non-hierarchical interdependence of households in meeting peak labour demands on their private holdings.

Preliminary analysis of Kofyar labour groups suggests that people expect that each household may be able to call on work parties of neighbours once or twice in a-year but seldom more than that. ²¹ Household size is a rough proxy for total agricultural production and wealth, which implies that the rich do not regularly exploit the common labour of their peers at a higher rate than the poor do. To acquire more hands and thereby accumulate a surplus, the larger cash-croppers have to hire labour.

Equity and Decision-Making

If the benefits to commoners from common property (including labour) are unequal, and these benefits reinforce obvious differences in smallholder private property, is it possible to insist that uncommon equity still exists in the local system? I submit that equality of participation by members in governance, rule-making and monitoring is a requisite of a viable common property institution. Human beings involved with common property characteristically talk about what is happening to their jointly-held grassland or forest or stream; they regulate its use by defining clear boundaries, setting up shares for members, legislating rules for use, monitoring appropriation, and sanctioning free-riders and thieves.

Elinor Ostrom has focused attention on the assembly as a body that creates a constitution, modifies and enforces operational rules, appoints officers, monitors the state of resources. allocates benefits in terms of changing environmental conditions, defends the commons from encroachment by outsiders, officially represents itself as a corporate body in dealing with governmental and juridical entities, and finally decides on the disposition of common property.²² If this sounds bureaucratic and formal, however, one has just to watch a local assembly or

one of its task groups in operation. Ruth Behar describes the assembly or concejo of a village in northern Spain, which met at the church portal after mass, as noisy, raucous, even blasphemous, with violent, ad hominem attacks on neighbours echoing fights and slights could go back three generations. But the members do reach consensus, the results of their deliberations are formally inscribed as laws, even if the process of doing so is far from decorous and orderly, and their officers of these institutions do not exert consistent hierarchical authority.

The commoners I know often discuss their "common" problems with the aid (or the hindrance) of social drinking, whether grouped around a pot of millet beer, as with the Kofyar farmers I knew in Nigeria, or, as in Switzerland, partaking of wine from the communal vineyard. Whether such yoking of business with pleasure leads to higher transaction costs or to in vino veritas is a matter of opinion, but the ostensible procedure is neither an exemplification of Roberts' Rules of Order nor of some harmonious peasant moral economy in operation. With the catcalls, loud interjections and table thumping, such an assembly sounds for all the world like the House of Commons. Local commons governance may be as messy as any other democracy, but the incentives for cooperation are generally sufficient to produce workable rules and concerted action in the long run. Because the members of a commons need to continue to derive benefits from the resource for their own future welfare and that of their offspring, they have a vital interest in sustainability. A measure of security for all is patently preferable to short-term maximization for any single user. As the Swiss say, stubborn peasants only cooperate when they have to - but they have to most of the time.

Even societies like those on the Indonesian island of Bali that tend to mute public conflict or to channel it into such symbolic rivalries as the cockfight have crafted common property institutions with egalitarian governance. The irrigation subak that Clifford Geertz calls a "wet village" brings together cultivators whose fields form a geographic unit served by a canal.24 Members may come from different, politically independent communities; they may own a scrap of rice terrace or a princely holding of more than one hectare. But they are all voting members of the subak, bound by the rules of its constitution inscribed on a palm leaf, and all have equal voice in the deliberation of its council of the whole.25 The council elects a chief and other officials who oversee work groups of members; it fines people for infractions, collects taxes and disburses money for improvements, and appoints priests to conduct the shrine rituals that schedule the all-important distribution of water.26 In a kingdom state society with gradations of status expressed in religious ceremony and linguistic markers, the serious business of irrigation among owners of extremely valuable (and variable) private property is conducted by an assembly of peers with one vote each.

Bargaining Power and Equity

Is this still a romantic ideal of self-determination? Where are the bosses, the demagogues, the country squires and the affluent landlords who manipulate and intimidate the ordinary peasants? Referring to medieval Europe, Richard Hoffman contends that:

"the common-field system... was not simply egalitarian. Communal control of limited resources rested not in the hands of all inhabitants nor, with exceptions, even in those of all heads of households. The assembly of cultivators was

everywhere dominated, if not monopolized, by the better off peasants."27

William Roseberry, too, cautions against romanticizing the community of unequals with its free tenants, villeins and cotters:

"Decisions made in the name of community could be taken by privileged individuals who served as community and manorial officers. It is to be expected that they looked out for private interests to the extent that this was possible". 18

Nonetheless, there are good structural and functional reasons for a local commons to be run by its members. If common property rests as much on exclusion of nonmembers as on rights, the corporate body must explicitly include members. ²⁹ Everybody is needed — all the available folk knowledge of the environment and every pair of informed, spying eyes has to be employed in monitoring the physical state of the resource and in countering the threats of pilferers and free-riders. The richest member with the largest potential returns carries the greatest risk if his or her less

wealthy fellows are not convinced that all their interests in the commons must be equally defended. ³⁰ A single individual has to rely on the support of the whole group, whether massing with spears to defend the common border from trespass, mending the irrigation dam washed out by a flood, or paying the lawyers in some interminable litigation over a patch of prime forest.

Meanwhile, against the legal depredations of a city or central government, poorer commoners may have to rely on their own well-connected and literate estate owner or mandarin. The wealthy are expected to provide a higher level of administrative services and cash levies than ordinary folk. I Alienating any members, rich or poor, from the fellowship of the commons may be harmful to the health of that body politic that is, in actuality, a little commonwealth. Although this view emphasizes consensus, a conflict-oriented analysis reaches similar conclusions:

"The equality which generally prevails in the commons ... does not grow out of any ideal or romantic preconceived notion of communitas any more than out of allegiance to the modern notion that people have 'equal rights'. Rather, it emerges as a by-product of the inability of a small community's elite to eliminate entirely the bargaining power of any one of its members, the limited amount of goods any one group can make away with under the others' gaze, and the calculated jockeying for position of any individuals who know each other and share an interest both in minimizing their own risks and in not letting any one of their number become too powerful."

Enclosure and Polarization

If aspects of common property regimes distribute access to resources and level differences in political power, what changes would lead to greater inequality, polarization and stratification?

The familiar threats to the commons — privatization and government intervention which institutionalizes state or public land — contribute directly to inequality and prevent permanently the more equitable outcomes of local communal control



People involved with common property have a vested interest in talking with each other about what is happening to their jointly-held grassland or forest or stream and regulating its use by defining clear boundaries, setting up shares for members, legislating rules for use, monitoring appropriation and sanctioning free-loaders and thieves. They may only cooperate when they have to — but they have to most of the time.

from occurring. Exclusion which impoverishes community members and limits their legitimate role in decision-making is a true "tragedy of the commoners".³³

Perhaps the most exhaustively analysed attack on the commons is that of enclosure, especially in historic England, but also in other European and Latin American countries. Because resources of arable land are limited, rural populations press against them, particularly as they grow in numbers or as the resources are taken away, and conflict increases; in doing so, property inequities tend to be translated into diminished rights in the commons. In England, the densest rural populations gave rise to cottagers with holdings below the subsistence level, craft and cottage industry specialists, and landless agricultural wage labourers.34 These second-class citizens, often in-migrants, were more vulnerable to dispossession and, at the same time, more dependent on the commons to cut firewood (the woodcutter of fairy tales), make charcoal, gather rushes for thatching or fibres to make baskets, collect nuts, hunt small game, and fish. For such foragers, the common marshes, forests and rough grazing were social safety nets.35

In India, the land-poor could also take the jobs of shepherds, field guards and communal irrigators that paid too little to hire yeoman farmers. ³⁶ Cleaning up harvested fields was a refuge for women and the elderly, people who often had few alternate means of support.

Enclosure was not, however, solely a reallocation of resources driven by high food prices, low wages and population pressure. It represented conscious strategies of accumulation by the well-to-do, often changing land use in the direction of a single, profitable crop (wool, for instance, in England) and away from the more diversified, intensive production of subsistence food crops. James Fernandez notes that in Andalucia, southern Spain:

"the medieval and early modern rights of the poor and subtenant classes to rent and cultivate common arable lands, to pasture on common pastures, and to gather on and otherwise exploit the wastes were gradually withdrawn Jeremy Hartley/Panos Pictures

from them by connivance between the nobility and prosperous farmers. The use of these lands, along with the right to pasture animals on the stubble of private croplands... were rights basic to the well-being of the power strata. Their loss because of various kinds of enclosure was a primary factor leading to the rural poverty of Andalucia in the 19th century and the conflict-ridden crisis that has continued to plague this area of Spain."³⁷

While opportunities for subsistence supplements from the commons in "merrie England" shrunk, charity and meagre support of mechanisms such as the Elizabethan poor law could not pick up the slack. One can just imagine comfortable farmers and squires muttering "no new taxes".

Reallocating individually-held strips from the open field and consolidating larger plots could be worked out in part by swaps and exchanges among owners. But the simultaneous loss of communal grazing privileges after the har-

vest and the proportionately high costs to smallholders of survey, hedging or ditching the new field, and paying off remaining dues or tithes on land pushed poor farmers to the edge of ruin or indeed, into the abyss. Falling crop prices or occasional bad years could force them into bankruptcy and off the land. As in contemporary attempts at land reform, richer neighbours are always willing to snap up the minifundia that come up for emergency sale.

Even with such an economic logic, however, it must have been difficult to sweep away a host of law-like local customs, rooted deeply in the past of a community, and reaffirmed by generations of practice and dispute resolution. Indeed, in eighteenth century England, it required the full legal power of the state in a multitude of separate, locally specific, laws to abrogate the commons. Even so, vestiges survive to the point where present-day environmentalists and corporations which have taken to harvesting peat moss dispute about fen land as common property. In the Swiss village I studied, a single case of tapping a spring on private land for a household drinking-water source went to the national Supreme Court because the water had once served a public watering trough.

I suspect that enclosure and similar breaches of common property institutions contribute to growing inequality, not because they represent privatization alone, but because they are conducted under the dominance of a national state and its sovereign legal apparatus. The local assembly of informed, economically-interested peers with their own brand of "common" sense and unique understanding of a particular environment is by-passed by standardized statutes, rigid codes and a judicial system designed to ignore geographical and political variations. Those with the qualifications of literacy, cash for court costs and bribes, and friends in high places can ensure, even guarantee, an unequal distribution of the benefits of enclosure. Outsiders, absentee landlords and urban entrepreneurs are not subject to the social controls of village life, and they can ignore restrictions on resource exploitation and shortterm maximization. If one can purchase or otherwise acquire rights in the commons without local kin ties, residence, formal admission to the community, fulfilment of labour and official service obligations, and participation in the assembly, then membership is shorn of its responsibilities and its constraints. Common property is not a joint stock company with limited liability. Membership of a commons has its obligations as well as its privileges.

Conclusion-

"Membership of a commons

has its obligations as well

as its privileges"

So are commoners equal or not? Do they have the same duties and obligations but different rights? Elinor Ostrom points out that "common-property institutions are as diverse as private-property institutions and no clear assertion can be empirically supported regarding distributional effects of all such institutions".³⁹

In the more limited case of smallholder intensive agriculturalists, however, some regularities can be discerned. Common property institutions closely tied to local resource use will be defined and developed in parallel and symbiotically with pri-

vate property. Households with more private property will derive greater benefit from some productive uses of the commons, but household necessities will often be equally allocated. Work can also be considered as common property. Obligatory labour on both

communal projects and individual farms is often drawn equally from all member households, but this may disproportionately benefit large cultivators.

Governance, however, tends to be provided by assemblies of members with procedures of one-person-one-vote and democratic decision-making. Defence of the commons against outsiders, investment of labour and money in the resources, and monitoring against excessive use and free-riding require a responsible corporate group of interdependent rich and poor members. ⁴⁰ Privatizing or enclosing the commons, either by agreement of the commoners or by external force, tends to widen existing economic and political inequality among smallholders and to impede the solution of collective action problems.

Notes and References

- Oakerson, R.J., "A Model for the Analysis of Common Property Problems" in Proceedings of the Conference on Common Property Resource Management, National Research Council, Washington, National Academy Press, 1986, p.13.
- Ostrom, E., Governing the Commons: The Evolution of Institutions for Collective Action. New York, Cambridge University Press, 1990.
- Oakerson, R.J., "Analyzing the Commons: A Framework", (manuscript) undated, p.2.
- 4. Karl Marx, for instance, believed that "in most primitive communities work is carried out in common, and the common product, apart from that portion set aside for reproduction, is shared out according to current needs". Cited in Meillassoux, C., "From Reproduction to Production: A Marxist Approach to Economic Anthropology", Economy and Society, Vol. 1, 1972, p.145. Some European peasants, according to Frederick Engels, still reflected a transitional state where woodlands, pasture and wasteland remained common land, whereas cultivable soil was held as private property. See Engels, F., The Origin of the Family, Private Property, and the State, International Publishers, New York, 1972 (first published 1884).
- 5. Such a grand evolutionary trajectory is simplistic. Common property among smallholders is not a precursor to private property, but nor is it functionally unconnected. Indeed, as use of scarce land and water is intensified, so resources from the commons become more vital and increasingly subject to regulation. The institutionalization of secure private and communal claims to resources was thus coordinate and interdependent. As Meg McKean points out, "more systematic use of the commons increased the need to manage it well, define eligible users and uses, and exclude ineligible users. Sound resource management required cooperation by all villagers, and became the impetus to solidarity (and occasionally democratic) self government by village units." In the classic three-field system of medieval Europe, for example, scattered arable strips, which produced winter wheat in successive years and the summer crops of oats, peas, beans and barley, were managed and inherited by individual households, whether of freeholders, tenants or serfs. During the third-year fallow and when stubble was available, the unfenced strips were opened for common grazing. The oscillation from private arable land to communal pasturage had to be carefully scheduled and enforced by the community so that standing crops were not damaged, grain fields were manured, and the largest possible number of cattle and sheep were fed. See

McKean, M.A., "Defining and Dividing Property Rights in the Commons: Today's Lessons from the Japanese Past", paper presented at the Annual Meeting of the International Association for the Study of Common Property (IASCP), 26-29 September 1991. University of Manitoba, Winnipeg; Hoffman. R.C., "Medieval Origins of the common Fields" in Parker, W.N. and Jones, E.L., (eds.) European Peasants and Their Markets: Essays in Agrarian Economic History, Princeton University Press, New Jersey, 1973, p.25.

- 6. Any generalized, functionalist model of the relationships between smallholder agricultural production and household organization tends to attribute an idealized, ahistoric stability to the smallholder household. Feminist critics have pointed out the lack of neat congruence of production, consumption and reproduction within the household's co-residential domestic group. Those who focus uncritically on the household tend to presume sharing and "joint utility functions" within a household where there may, in fact, be great inequality, patriarchal dominance, and exploitation of women and the young. A highly integrated and complementary division of labour, implicit contracts that provide for long-term reciprocities in care for children and the elderly, and enduring relations to crucial productive property do not guarantee a spirit of harmony. As economist Nancy Folbre points out in her criticism of the neoclassical economists' concern with household behaviour as motivated by efficiency, i) altruism in the family coexists with conflicts of interests over the distribution of goods and leisure time, ii) individual shares of family income are determined in part by individuals' bargaining power within the household; and iii) the relative bargaining power of men. women and children changes in the course of economic development. See Netting, R. McC., Smallholders. Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture, Stanford University Press, Stanford, 1993, pp.80-81; Folbre, N., "Household Production in the Philippines: A Non-Neoclassical Approach", Economic Development and Cultural Change, 32, 1984, pp.303-30. .
- Ibid., pp.197-207.
 McGuire, R. and Netting, R. McC., "Levelling Peasants? The Maintenance of Equality in a Swiss Alpine Community", American Ethnologist, Vol 9, 1982, pp.269-290;

Park, T.K., "Early Trends Toward Class Stratification: Chaos, Common
 Property and Flood Recession Agriculture", American Anthropologist, Vol. 94, 1992, pp.90-117.

- 10. Meg McKean lists several methods such as limited open periods, rotating access by households, limiting harvesters and reallocating bundles of harvested material by lot that Japanese villages used to distribute fuel, thatching grass and fodder from the commons. Egalitarian rules of distribution were applied to commons resources for which all households had approximately equal requirements. See McKean, M.A., "Success on the Commons: A Comparative Examination of Institutions for Common Property Resource Management", Journal of Theoretical Politics, Vol. 4, 1992, pp.256, 268.
- Netting, R.McC., Balancing on an Alp: Ecological Change and Continuity in a Swiss Mountain Community, Cambridge University Press, Cambridge, 1981.
- 12. McKean, M.A., op. cit. 10, p.262.
- Hunt, R.C., "Common Property: Irrigation in Mexico", paper presented at the IASCP Annual Meeting, 26-29 September 1991, University of Manitoba, Winnipeg.
- Stone, G.D., Netting, R.McC. and Stone, M.P., "Seasonality Labor Scheduling and Agricultural Intensification in the Nigerian Savannah", American Anthropologist, Vol. 92, 1990, pp.7-23.
- 15. See Ostrom, E., op. cit. 2, p.98.
- Singleton, S. and Taylor, M., "Common Property, Collective Action and Community", Journal of Theoretical Politics, Vol. 4, 1992, p.311.
- O'Neill, B.J., Social Inequality in a Portuguese Hamlet: Land, Late Marriage and Bastardy, 1870-1978, Cambridge University Press, Cambridge, 1987, pp.171-172.
- 18. Ibid., p. 136.
- 19. Ibid., pp.172,11.
- 20. Ibid., p.143.
- 21. Personal communication with Glenn Stone.
- 22. Ostrom, E., op. cit. 2,1990, pp.93-102.
- Behar, R., Santa Maria del Monte: The Presence of the Past in a Spanish Village, Princeton University Press, Princeton, 1986.
- Geertz, C., "The Wet and The Dry: Traditional Irrigation in Bali and Morocco", Human Ecology, Vol. 1, 1972, pp.23-40.
- 25. Ibid., p.29.
- Lansing, S.J., Priests and Programmers: Technologies of Power in the Engineered Landscape of Bali, Princeton University Press, Princeton, 1991.
- 27. Hoffman, R.C., op. cit. 5, p.62.
- 28. Roseberry, W., "Potatoes, Sacks and Enclosures in Early Modern England" in O'Brien, J. and Roseberry W., (eds.) Golden Ages, Dark Ages: Imagining the Past in Anthropology and History, University of California Press, Berkeley, 1991, p.22. See also McKean, M., op. cit. 10, p.267; Glaser, C., "Common Property Regimes in Swiss Alpine Meadows", paper presented at the Conference on Comparative Institutional Analysis at the Inter-University Center of Postgraduate Studies, Dubrovnik, Yugoslavia, 19-23 October 1987.
- Malayang, B.S.. "Tenure Rights and Exclusion in the Philippines", Nature and Resources, Vol. 27, No. 4, 1991, pp.18-23.
- io. Local population growth may mean that some new households are deprived of

rights in the commons, as they were in some seventeenth century English villages. See Spufford, M., Contrasting Communities: English Villagers in the Sixteenth and Seventeenth Centuries, Cambridge University Press, Cambridge 1974, pp.21,133.

Meg McKean points out that "In Japan, when the disenfranchised are sufficiently numerous, they can pose a serious threat to the commons simply by invading it, yet without assurance of a long-term share, they have no motivation to be disciplined in their use of it. Thus there comes a point when it is in the interest of the senior household to award right to the commons to junior households in order to. buy' their cooperation with the rules for using the commons". See McKean, M. op. cit. 10, p.264.

- 31. McKean, M., op., cit. 10, p.263.
- The Ecologist, "The Commons: Where the Community Has Authority", The Ecologist, Vol. 22, No. 4, 1992. pp.123-130.
- 33. Ciriacy-Wantrup, S.V., and Bishop, R.C., "Common Property' as a Concept in Natural Resources Policy", Natural Resources Journal, Vol. 15, 1975, pp.713-727: McCay, B.J. and Acheson, J.M., (eds.) The Question of the Commons: The Culture and Ecology of Communal Resources, University of Arizona Press, Tucson, Arizona, 1987, p.25.
- 34. Levine, D., Family Formation in an Age of Nascent Capitalism. Academic, New York, 1977; Hoskins, W.G., The Midland Peasant, Macmillan, London, 1957; Skipp, V., Crisis and Development: An Ecological Case Study of the Forest of Arden, 1570-1674. Cambridge University Press, Cambridge, 1978.
- 35. Thirsk, J., English Peasant Farming, Routledge and Kegan Paul, London, 1957: Spufford, M., op. cit. 30; McKean, M.A., op. cit. 10, citing Jodha, N.S., "Rural Common Property Resources: Contributions and Crisis", paper presented at the IASCP Annual Meeting, 27-30 September 1990, Duke University, Durham, North Carolina.
- Wade. R., Village Republics: Economic Conditions for Collective Action in South India. Cambridge University Press, Cambridge, 1988.
- Fernandez, J.W., "The Call to the Commons: Decline and Recommitment in Asturias, Spain" in McCay, B.J. and Acheson, J.M., (eds.) op. cit. 33, p.268.
- 38. Turner, M., Enclosures in Britain, 1750-1830, Macmillan, London, 1984, p.74.
- 39. Ostrom, E., op. cit. 2, p.244.
- 40. Partial exclusion of members or abrogation of their rights denies their common interest and turns them into enemies who shirk their obligation and refuse to conserve the common pool of resources. Great inequality of income, wealth or class weakens the community necessary for viable common property institutions. See Singleton, S. and Taylor, M., op. cit. 26.

	Salar Salar
Hal X. Rothman Editor	Fac. 2 48" "-1
Environmental History is an international fournied desitated to an	fortug the history of human taten
with the neveral world. Copublished by the American Society for	
History Society, it to the successor to the tree organizations' highly	
History Review and Forest & Conservation History; Police to bear	
	circum and bibliographic and are
never in each larger	
	WEST THE TAXABLE PROPERTY.
	awaka.
Articles include	
The Trouble with Wildernam: or, Cotting Back to the Wrong Natur	• • • • • • • • • • • • • • • • • • • •
William Cronon	· · · · · · · ·
S C - de C - H &	No. of Continues o
Coming in from the Cold: Regulating the U.S. Department of Ener Terrence R. Februar and F. G. Costing	28 a transference Locateriene 1342-1380
terrence in results and r. o. october,	
The Treal Smolter Dispute, 1927-1941	
John D. Wirth	
When Is a River not a River? or, Reclaiming Natural Disorder in	Luz a Hassin
David Igler	
Manufacture of the control of the co	STATE OF THE STATE
	d Change in South Clune. 1550-
Robert B. Maris.	
Coming to Terms with Pollution: The Language of Environmental	Reform; 1865-1915
Adam Rome	
ene dus transfe della de la comi di	
	The State of
Please value my one-year sobsemption (4 tempos) to Environmental History.	
THE PROPERTY OF THE PROPERTY O	35 SSS some ASBUFHS municipal
THE RESERVE OF THE PROPERTY OF THE PROPERTY OF THE	
I was to som: American Society for Environmental Hentary Indirecture:	1759 ZS IONE ASBUFINS INVINCES
wast to place	1759 ZS IONE ASBUFINS INVINCES
I wast to see: Americal Score) for Greenwanning Newsy National Laborator 1 National	1759 ZS IONE ASBUFINS INVINCES
I wall to sac:	17.59 SS your ASBURHS mumbershi
work to pace Americal Score/ for Greenwanning Nature Manufactic 1	17.59 SS your ASBURHS mumbershi
I week to some	17.59 S25 yank ASBNFHS mandarah 45
Tough to pain: American Society for Grundenbase Natury Labradustic:	17:50 S25 your ASBVPPS mandacate 45
Tough to paint	17:50 S25 your ASBVPPS manbacan d5 con;)
I wast to sour	17:50 S25 your ASBVPPS manbacan d5 con;)
Tough to paint	17:50 S25 your ASBVPPS manbacan d5 con;)
Tough to paint	17.59 SS your ASBURHS mumbershi
Toward to place	17:50 S25 your ASBVPPS manbacan d5 con;)