GENDER AND ENVIRONMENTAL HISTORY: FROM REPRESENTATIONS OF WOMEN AND NATURE TO GENDER ANALYSIS OF ECOLOGY AND POLITICS

Melissa LeachwithInstitute of Development StudiesUniversity of SussexBrighton BN1 4EJ

Cathy Green

INTRODUCTION¹

Writing on imperial and colonial history has been heavily criticised, initially for its complete ignorance of women as historical subjects and, more recently, for its gender-blind methodology and hence failure to envisage history as a gendered experience. A deluge of counter histories have been produced in response to these criticisms, some singularly focused on relocating women in history, and others which have examined women in relation to men in specific historical contexts and from diverse theoretical perspectives. Despite the rush to locate 'lost female worlds' (Nair 1994), however, gender issues have yet to receive serious attention in work on environmental history. Indeed the growing body of work on the causes and impacts of land use change, and their relationships with imperial and colonial policy and politics, has to date shown remarkably little interest in their gender dimensions.

Given this paucity of relevant, focused work, this paper makes no claims to provide a comprehensive review of literature on gender and environmental history. Providing a synthesis of key relationships between gender, imperialism, ecology and politics would - even were the data to exist - be an enormous undertaking. Furthermore, writing feminist history involves more than mere description; it must acknowledge the assorted ways in which different feminist theoretical perspectives shape the production of historical knowledge, and thus capture event histories and relationships differently in their interpretations (cf. Scott 1988). In this light, our aims here are much more limited. In part I, we briefly expose problems in 'conventional' environmental history which, in its apparent blindness to questions of gender can be argued to be actively anti-women, denying not only their agency but also their experience and interests. We then explore one set of responses, in contemporary ecofeminist and 'women, environment and development' (WED) work, which emphasises a 'special' relationship between women and the environment. These analyses make strong claims about colonial history, and provide a set of interpretative lenses for it. But their representations of history are, we suggest, also highly problematic. Their generalised accounts obscure rather than clarify linkages between changing gender relations, ecologies, and colonial science, ideology and policy, and they deploy history to suggest policies which could well prove detrimental to women.

1

Building on this critique, part II presents an alternative approach to environmental history grounded in gender analysis. It outlines elements of such an approach - emerging in a still small body of work by anthropologists and political ecologists, as well as feminist historians - and briefly illustrates their application in three cases. These gendered environmental histories provide very different interpretations of historical events from both conventional 'masculinist' historical accounts, and from ecofeminist/WED 'histories'; a re-writing which not only questions the very categories and assumptions underlying these two approaches, but which also carries different implications for contemporary debates and policy-making.

PART I

Women and nature: representations of history in contemporary policy debates

Gender bias in conventional environmental history

In much writing on imperialism, ecology and politics, women hardly figure. Examples of such work are commonplace, whether focusing on the history of local use of land and vegetation in the context of economic change, or on the policies of imperial and colonial governments and local responses to them. The silences in such accounts reproduce those in the written historical sources of the colonial period, in which, for the most part, administrators described their dealings with the men they perceived as heads of households, local political authorities and leaders of struggles against their regimes.

The problem with such accounts, from a feminist viewpoint, is not simply that they are ignorant about women; 'gender-blind' in the sense of conflating women's and men's experiences into a neutral whole. Instead, and as Scott (1988) emphasises in a more general context, they can be said to have distorted history and politics by assuming that the key actors were men. Their silences thus actively deny and exclude the very different activities which women may have been engaged in; the ways they valued and interacted with ecology; the ways they felt the impact of political and economic change, and their own responses and struggles. Likewise, denied are the ways that women felt and interpreted men's interactions with ecology and politics, in terms of changing relations between the genders. Feminist scholars recognise that the conflation of 'history' with masculine experience and agency can actively disadvantage women not only by projecting images of them as passive and powerless, but also by obscuring the regressive social and material effects on women of past policies and change, and hence of future policies which might draw from these experiences.

Responses from WED and ecofeminism

Among an array of possible responses to this gender bias in environmental history and policy, two linked approaches have recently acquired prominence among activists, scholars and development policy-makers: the so-called 'women, environment and development' (WED) approach, and ecofeminism. While both have been heavily criticised (for example, by Agarwal 1992, Jackson 1992, and Leach 1992), they are worthy of consideration here both because of their continued influence, and because of the particular ways that they have dominated the representation of environmental history.

The WED approach emerged in the 1980s mainly among development analysts and policy-makers, and draws heavily on the conceptual apparatus of the 'women in development' (WID) approach first popularised a decade earlier. In general, WED emphasises that far from being insignificant, women have a 'special' relationship with the environment, derived largely from their close daily interaction with it as a result of tasks allocated within the gender division of labour. Much emphasis is laid on women's involvement with 'reproductive' activities such as fuel and water provision, and food production and gathering. In the late 1980s, the accent of this approach swung from images of women as victims of environmental degradation to a stress on women's efficiency as environmental managers. Currently, a focus on women's roles is used to suggest an extensive accumulated knowledge and experience of natural resource management and this, in turn, has led to easy assumptions of women being the obvious constituency for programmes and policies concerned with environmental conservation, rehabilitation and management (Dankelman and Davidson 1988; Rodda 1991).

In upholding this 'special' relationship, WED has allied itself conceptually with ecofeminism. Ecofeminism views women as 'close to nature'² in a spiritual or conceptual sense, different from - yet able to be invoked in support of - WED's focus on women's material roles. Largely of Northern origin, ecofeminism nevertheless has an increasingly vocal international presence (for example through the work of Vandana Shiva, and discussions at UNCED in Rio, 1992), and an implicit influence on many development perceptions (cf. Braidotti et al 1994). Although ecofeminism is multi-stranded, many of the elements which have tended to filter into wider debates about women and the environment can be traced back to what has been termed 'cultural ecofeminism' such that 'Much populist ecological activism by women, while perhaps not explicitly ecofeminist, implicitly draws on and is motivated by the connection between women's reproductive biology (nature) and maledesigned technology (culture)' (Merchant 1992: 192). In 'patriarchal' thought, it is argued, nature is seen as inferior to culture, and hence women are seen as inferior to men. The domination and oppression of women and the domination and exploitation of nature have thus gone together. Such reasoning gives women a particular stake in ending the domination of nature. To scale up from individual to organisation, it is argued that the common objectives of feminist and environmental movements are conducive to a merging of perspectives and action.

To some ecofeminists, women's link with nature, within a nature/culture divide, is biologically inevitable (e.g. Salleh 1984; Starhawk 1990). Others see such connections as broad philosphical or ideological constructs associated with particular societies. Whether ecofeminists appeal to biology or to culture/philosophy as a response to silences about women in conventional environmental scholarship, their arguments appear to be trans-historical, even a-historical. Nevertheless ecofeminism is commonly accompanied by 'historical' analysis.

The Scientific Revolution, spanning the sixteenth and seventeenth centuries, is take by many ecofeminists as the time in western history when both women and nature were conceptually devalued (Merchant 1982; Plumwood 1986; Warren 1987). Organismic theory had predominated, in which the earth, viewed as a nurturing female, lay at the centre of a cosmology in which nature and society were dynamically interconnected. 'Modern science', it is claimed, replaced organismic theory with a mechanistic view of nature which upheld competition and domination as necessary to the pursuit of progress: 'The removal of animistic, organic assumptions about the cosmos constituted the death of nature...Because nature was now viewed as a system of dead, inert particles moved by external, rather than inherent forces, the mechanical framework itself could legitimate the manipulation of nature' (Merchant 1982: xvii). Ecofeminists see the 'death of nature' precipitating the subordination of nurturing female principles; ideological changes argued to have presaged an actual change in attitudes and behaviour towards nature and towards women at this point in western history (ibid: 2).

Some ecofeminist discourse thus examines how western post-enlightenment images have been imposed on 'indigenous' societies in Asia and Africa through scientific and development processes. Thus Mies and Shiva (1993) reasonably characterise imperialism and colonialism as bearers of a particular western, mechanistic science and rationality, but characterise this as patriarchal or 'masculinist', so 'doing violence' to women and nature. Such rationality undermined, it is argued, preexisting conceptions which were very different, viewing people and 'nature' as interdependent, and male-female relations as non-hierarchical (Shiva 1989). This conceptual subordination went hand-inhand with material subordination as patriarchy in colonialism and capital accumulation sanctioned new relations of property and power (Mies and Shiva 1993; Mies 1986). This provides the basis for a call for rejection of dominant development models and scientific paradigms, and the recovery of a localised 'subsistence perspective' centred on women's reproductive roles which will necessarily, it is argued, be respectful of 'nature' and women.

Ecofeminist perspectives are upheld - and gain credibility in policy - through more specific narratives concerning colonial environmental history. The most elaborate example is found in Shiva's (1988) account of women and forests in the Indian hills (cf. Philipose 1989). Shiva conjures up a pre-colonial 'golden age' when feminine, conservation and ecological principles predominated, when

4

women's subsistence livelihoods were analogous to nature 'renewing herself' (Shiva 1988: 4), when the satisfaction of basic needs was enough to ensure societal affluence, and when patriarchy was absent. The work of men and women during this period was complementary and life harmonious, and apparently casteless and classless. Shiva bolsters this imagery by drawing on ancient Hindu cosmology, claiming that 'nature is Prakriti, a living and creative process, the feminine principle from which all life arises' and - conflating symbolic representation with material reality - argues that women's interaction with nature has always taken place in the context of preserving the feminine principle (Shiva 1988: xviii). Moreover, she claims that:

Forests have always been central to Indian civilisation. They have been worshipped as Aranyani, the Goddess of the Forest, the primary source of life and fertility, and the forest as a community has been viewed as a model for societal and civilisational evolution (Shiva 1988: 55).

Reasonably again, Shiva considers the colonial period as a turning point in history where capitalism and the new, destructive, science and technology of environment, as represented by commercial and industrial forestry management principles, were transferred into Indian culture and society. She rightly points out the tendency of reductionist scientific discourse to overlook the importance of forest products in women's reproductive and subsistence roles. But the argument is forced further, to assert that the 'feminine principle' in indigenous forestry was thus suppressed, fundamentally undermining the status of linked women-and-nature. This conceptual subordination went hand in hand with new relations of property and power which allowed alienation of forest land and resources to commercial development, and this systematically undermined women's natural resource management roles and sources for 'staying alive' (Shiva 1988).

Shiva uses this 'history' to label contemporary environmental movements as 'feminine'. This has served for example to immortalise the Chipko (tree-hugging) movement as a 'feminist' environmental movement, providing a potent and widely-quoted image to justify a particular approach to women and natural resource management. The Chipko demonstrations first occurred in 1973 in Chamoli district, Uttar Pradesh, and have since been replicated in other parts of India such as Karnataka where the Appiko Movement has taken on the fight to save the forests of the Western Ghats region. Shiva argues that Chipko is a response by people, especially women, within Garhwal District to the invasion of commercial forestry. The conceptual link between this version of history and the current Chipko movement is the notion that women through their special affinity with nature, 'have **conserved** those categories of thought and action which make survival possible' (Shiva 1988, emphasis added). Women in Garhwal are thus represented as conceptually in a half-world somewhere between precolonial times and the present, their essential affinity with nature forcing them into a desperate fight against the vestiges of western-style progress, while glancing back at a dying golden age. Shiva builds up Chipko's image as a feminist movement since this reinforces her argument about women's agency in environmental protection: she claims that 'Chipko is a history of the visions and actions of

5

exceptionally courageous women', and that similar movements elsewhere 'have been fuelled by the ecological insights and political and moral strengths of women' (Shiva 1988: 67; cf. Omvedt 1984).³ The key feature of the ecofeminist 'histories' which lend strength to such claims, then, is the way that femininity is linked *a priori* both 'with nature' and 'with the past'.

In the African context, historical narratives concerning women, agriculture and environment provide a parallel example of the use of claims about history to uphold WED and ecofeminist concerns. The arguments here turn on the image of ecologically-harmonious, female subsistence farming systems, and their rupture through colonial commercial crop development. Boserup's (1970) influential analysis of the effects of colonialism and 'capital penetration' on subsistence agriculture, while an important scholarly landmark in some respects and central in establishing the dominant framework for work on 'women in development',⁴ nevertheless produces arguments which resonate with Shiva's. These are open to invocation in ecofeminist/WED histories whether concerning particular societies, or 'African women' more generally.

In these historical narratives, female farming is portrayed as an 'original' form: Boserup (1970: 16) argued that 'Africa is the region of female farming par excellence', where productive labour is carried out largely by women - perhaps assisted by men's tree-felling or land preparation. These female roles, it is commonly argued, were centrally valued within relatively gender-egalitarian societies. As Guyer (1991) has pointed out, women's farming roles are often portrayed as naturally arising from and attuned to their reproductive functions, especially child care. They have also been portrayed as inherently 'co-operative' with the productivity of soil and vegetation processes viewed as inherently female: for instance in images of the earth as a mother (cf. Mies 1986). Pre-colonial agriculture is viewed as subsistence-focused, isolated from commercial forces, and harmoniously integrated with environmental use by ecologically-attuned women, such that 'nature' is minimally modified. In the forest zone, for instance, such images draw on Baumann's classic view that an association of forest ecology, dominance of root crops over cereals, minimal cultivation of the soil and female farming have persisted 'in the African primeval forest....from time immemorial' (1928: 294; cf. Guyer 1991).

This primordial harmony is portrayed as breaking down under the effects of male-biased colonial export crop and labour policies. As Boserup (1970) argued, men engaged in growing high-value export crops, introducing new gender inequalities associated with private property and women's unpaid 'family labour' on men's holdings. Women's food farming was relegated to an increasingly underresourced and devalued subsistence sector, in which 'nature' was simultaneously devalued:

When commodity production as the prime economic activity is introduced as development, it destroys the potential of nature and women to produce life and goods and services for basic needs...Women are devalued, first, because their work co-operates with nature's processes, and second, because work that satisfies needs and ensures sustenance is devalued in general...Nature's economy - through which environmental regeneration takes place - and the

people's subsistence economy - within which women produce the sustenance for society through 'invisible' unpaid work...are being systematically destroyed to create growth in the market economy (Mies and Shiva 1993: 75).

'Environmental degradation', it is argued, arose both because export crops and products themselves were environmentally damaging, and because women in devalued subsistence production were forced to mine soils, fell trees and so on in order to survive. Environmental degradation and the degradation of women's status thus went hand-in-hand. But women have, it is argued, retained subsistence-focused regenerative energies which now need to be harnessed in restoring the environment; a process which, it is argued, will simultaneously restore their power and status (Monimart 1989; Maathai 1988).

Clearly, these representations of history serve a purpose, supporting a particular policy and political agenda; in essence, forging a new and positive identity for women in a 'Green' era. In common, they suggest that women have, and maintain, a closeness to nature and subsistence concern - as demonstrated in feminine environmental movements and persistent female roles - which make them the obvious agents for environmental conservation and rehabilitation, and for the local, subsistence-focused development necessary for this. And they suggest that this will simultaneously be good for women, their communities and 'nature'.

Challenging ecofeminist and WED 'histories'

These representations of history and their ecofeminist tenets sit very uneasily with other areas of scholarship about gender and rural change by anthropologists, historians and others, whether or not concerned explicitly with 'environment'. The implicit criticism presented by such work converges with explicit, and vociferous, critiques of the conceptual framework of ecofeminism. It is worth summarising central elements of these critiques which, in challenging the concepts and assumptions structuring ecofeminist 'histories', suggest that they fundamentally misrepresent crucial relationships between gender, ecology and colonial politics.

First, the notion of universal links between women and 'nature' in ecofeminist accounts has been strongly criticised. Anthropological studies show up wide cross-cultural and historical variability in the meanings attributed to 'female' and 'male', and the ways they are linked with concepts relevant to environment (MacCormack and Strathern 1980; Moore 1988). A woman's procreative roles are by no means necessarily seen to place her closer to a universally-conceived nature, and to exclude men from this relationship. Thus for example, Shiva (1989) succumbs to unwarranted extension of principles she associates with Hinduism when she suggests that all pre-colonial societies 'were based on an ontology of the feminine as the living principle' (Shiva 1989: 42). Yet Agarwal (1992), for example, argues that the imagery of Prakriti varies in its connotations and relevance even among Hindu groups

in India, as well as being of comparatively little importance among non-Hindu people. Furthermore, in non-western thought 'nature' may not be categorically distinguished from a separate 'society'. As a generalised category, 'nature' certainly fails to capture complex ideas about the physical and non-physical attributes of different micro-environments and ecological processes (cf. Croll and Parkin 1992, Fairhead and Leach 1996). Ecofeminist formulations fail to consider how different environmental categories are differently linked with ideas about gender. They obscure these cultural and historical particularities by, in effect, offering only a single, inverted alternative to supposed western female:male::nature:culture hierarchies, falling into the same dichotomous trap as western thought (Molyneux and Steinberg 1995). Furthermore, this raises central doubts about the political project of ecofeminism: Can 're-casting as a virtue' women-nature links that people do not perceive, be an adequate basis for political action? (cf. Braidotti *et al* 1994).

A second, related critique concerns the portrayal of women as a homogeneous category in their relation to the environment. Shiva's analysis of the women-nature link is, for example, intended to apply to all 'third world women'. But this fails to address the conceptual and material factors which distinguish individual or groups of women from each other, whether by age, class, caste, ethnic group, or local ecology (cf. Leach 1994). That some women become involved in environmental action does not mean that this represents all women's interest and agency (Jackson 1993).

Third, men remain largely invisible in many of these accounts, except as the other side of a dichotomy. Indeed that women's relationship with the environment appears 'special' in WED work can be at least partly because men's does not appear (Leach 1992). In Shiva's analysis, for example, rural men's ecological work, knowledge and so on are subsumed under a genderless 'peasant' or 'tribal' categorisation, while the male:female, destroyer:protector dichotomy is sustained by an allusion to the dominance of women and nature by western industrial man.

Furthermore, the tendency to treat women and men as dichotomously separate obscures the relations between them. Gender analysis perspectives, focusing on gender relations and roles as socially and historically constructed, have posed the greatest critical challenge to ecofeminism and WED. In drawing attention to the ways that gender relations structure (and are structured through) environmental use and management, as mediated by divisions and relations of labour, responsibility, property, power and knowledge, they undermine common WED policy images and assumptions. They would suggest, for instance, that if certain women are 'closely involved' with natural resources, this reflects gender-divided roles and possibly a lack of other opportunities, rather than any inherent caring relationship (e.g. Agarwal 1992). They would suggest that women's labour involvement with the environment may obscure gendered relations of property and power which deny women control over and benefit from their activities. And they suggest the possibility of conflicts between environmental and women's gender interests; for example that allocating women responsibility for

'saving the environment' could increase their workloads or reinforce regressive gender roles, rather than representing progressive change or enhanced gender equity (Jackson 1993; Leach 1992).

Ecofeminist histories reduce the material aspects of people's changing gender and environmental relations to a dichotomy between a harmonious, timeless pre-colonial golden age and the destructive effects of capitalism and colonialism; in effect, to the endless reproduction of glorious 'tradition' until the arrival of 'capitalist modernity'. However this is to obscure the evidently important dynamics of gender, social stratification and environmental change in pre-colonial history;⁵ dynamics often influenced by trade and commerce in ways which strongly deny images of subsistence isolation. While all scholars agree that colonialism and capitalism have profoundly restructured - and continue to restructure - economies, societies and their gender relations, the accumulated evidence from a large number of historical analyses shows the complex and varied forms of this articulation (e.g. Etienne and Leacock 1980; Moore 1988). That colonial and capitalist economic relations have often serviced to encourage ecologically-destructive practices, while supported by some evidence, also cannot be generalised *a priori;* this is to obscure the specific policies and politics of colonialism, their interactions with local land-use practices, and the ecologically-specific responses of land to use in particular contexts (cf. Leach and Fairhead 1995).

Finally, the effects of colonial science and ideology on 'indigenous knowledge' and ecological concepts are treated in similarly sweeping, and misleading, terms in these ecofeminist/WED histories. There is an assumption that pre-colonial, organic, sacralised views of 'nature' went hand-in-hand with harmonious environmental practices and egalitarian gender relations. Yet this cannot be upheld. Indigenous 'organic' conceptions can evidently encompass struggle and conflict between people and certain ecological processes as well as harmony (Croll and Parkin 1992). That certain ecological processes are 'socialised' in local thought, and certain resources culturally valued, does not translate into an all-encompassing respect for nature (Persoon 1989), and often speaks to local power relations (Fairhead and Leach f1996). Indeed, as Jackson (1995) points out, there is plenty of evidence linking organic conceptions of society and ecology with oppressive social institutions: the territorial cults which managed land and fertility concerns in late nineteenth century southern Africa have, for example, been associated with the aristocratic domination and lethal taxation of commoners, as well as the subordination of women (Schoffeleers 1979; Maxwell 1994; cf. Fairhead 1992). Recent anthropological analyses of ecological knowledge and gender ideology, in contrast, locate the ways in which certain ideas are produced and debated within social and political processes, and in relation to particular groups and institutions.

Equally, the image of western thought and colonial science as monolithically wiping out other views and knowledge's (leaving perhaps a shadowy residual of the old feminised order) is problematic. This obscures the complex content and political-economic relations of production of colonial and modern scientific discourses, and the processes through which they articulate with rural people's own. While ecofeminism is valuable in drawing critical attention to the constituents of scientific epistemology and their operation through colonialism, and in raising questions about links between science and oppressive social relations, such a critique needs to be developed through engagement with the highly diverse and contradictory theories and practices of which science is constituted (Molyneux and Steinberg 1995: 92).

These critical perspectives would not necessarily deny the events which ecofeminism interprets; women's involvement in some environmental movements or in conserving soil or planting trees for instance. But they would interpret these as particular to certain times, places and social relations, and interrogate the power relations which may produce them. As Guyer emphasises, in as much as 'female farming' is evident, it needs to be taken as a 'variable product of society and history', rather than a fixed starting point of agricultural evolution (Guyer 1991: 259). And women's involvement in Chipko can be represented quite differently: not as evidence of women's closeness to nature but as a struggle for material resources in the context of gender-ascribed natural resource dependence, and women's limited opportunities to out-migrate as compared with men (Jain 1984; Peritore 1992).⁶ The movement can be alternatively interpreted not as feminist, but as a peasant movement which emerged at a particular historical juncture (Guha 1989), and in which women's participation was actually conservative of their subordinate position (Jain 1984).⁷

PART II

Towards gender analysis of history, ecology and politics

An alternative response both to gender bias in conventional environmental history, and to the problems in ecofeminist/WED accounts, takes inspiration from gender analysis and gives more attention to the specific details of changing relationships between gender, ecology and politics. We now go on to outline and exemplify elements of this alternative historical genre, remarkably little-represented in focused work on colonial environmental history. Elements of a gender analysis of history, ecology and politics emerge from work with other emphases. These include works analysing gender and agrarian history (e.g. Berry 1975, 1988, 1993, Martin 1988), and studies of gender and rural change by social anthropologists and others which reflect on history and environment, but which do not produce environmental history as such (e.g. Guyer 1984, 1988; Leach 1994; Linares 1992; Sharma 1980). A third, emerging area of work has specifically focused on gender relations and processes of social and environmental change, albeit examining these from the present (e.g. Jackson 1983; Joekes *et al* 1995), and variously categorising themselves as feminist environmentalism (e.g. Agarwal 1992), feminist political ecology (e.g. Rocheleau 1995; Thomas-Slayter 1992; Mackenzie 1991), or in a more applied sense as gender, environment and development.

From these perspectives, first, gender is interrogated as socially and historically constructed, and as grounded in relations of power. Second, rather than assume complementarity in gender roles, there is an emphasis on analysing changing relations between the genders and conflicts and processes of contestation which may characterise claims over resources, authority and status in this context. Such an approach clearly implies greater specificity in the account of intersections between gender and politics, than in the generalised narratives of ecofeminism or WED. But importantly, in the best work, specificity around gender relations is coupled with attention to ecological specificity, including attention to diversity in the resources available; to the ways that soils and vegetation respond to particular uses, and in how aspects of environment are socially valued and symbolically represented. Attention to what has been termed a 'micro-political economy of gendered resource use' (Leach 1991) in interaction with specific ecologies and politics can reveal specific gendered practices of environmental significance, which are as important in structuring the event histories of actual environments as they are in differentiating women's and men's experiences. And as Agarwal (1992) points out, symbolic representations of gender, of aspects of ecology and of their interrelationship may be seen as (interactively) part of this structuring.

Such an approach obviously poses important methodological challenges, which this paper cannot cover. Suffice to say that historical research in this genre is bringing insights from feminist research

methodologies to a careful use of documentary, as well as oral sources (cf. Moore and Vaughan 1994). Here we simply and briefly illustrate a gender relations approach to environmental history, by focusing on three of the few cases which have been well-documented. The selected illustrations, again, relate to 'female farming' in Africa, and to women and forests in India. These brief summaries are directed towards highlighting some of the key relationships between gender, ecology and politics as they unfolded during the imperial and colonial periods, and which emerge from a gender analysis. The summaries also reveal some very different interpretations of situations treated in ecofeminist/WED histories, revealing, again, the claims of the latter to be at best partial, and at worst highly misleading.⁸

1. Gender, ecology and agricultural change in the Northern Province of Zambia

Moore and Vaughan's important (1994) study 'Cutting down trees' brings gender analysis to an account of *citemene*, the shifting cultivation system practised by Bemba-speaking people in Zambia's Northern Province, over the last century. They document the ways successive colonial administrators and scientists from a range of disciplines represented and attempted to intervene in *citemene*; the gendered nature of these discourses, and how colonial politics intersected with the gender politics of production, food consumption and marriage among the Province's farmers.⁹

Early attempts at establishing control over Bemba chiefly territories from the 1890s centred on the activities of the British South Africa Company and of Catholic missions. This skeletal administration's first attempts to intervene in *citemene* were in the context of tax collection and labour recruitment for porterage; activities inhibited by the dispersed, seasonally-mobile settlement pattern which *citemene* was seen to encourage. The administration tried to abolish dispersed residence and seasonal farm huts. In the ensuing political struggles, chiefs suggested that *citemene* was 'traditionally' integral to a ritually-sanctioned, 'Bemba' chiefly power system on one hand, and to masculine identity on the other, the latter through an association between male warriorhood and the felling of trees. Moore and Vaughan argue that these images, which rested on a particular representation of pre-colonial history, allowed *citemene* to become an important symbol of male and ethnic autonomy. Yet they present evidence to suggest that these images also played down the probably far more contested nature of nineteenth century chief-commoner relations, and that Bemba women had probably exercised a considerable ritual authority over productive and fertility processes in the ecology of *citemene*; forms of knowledge which subsequently became suppressed. This example brings out the extent to which links between gender identity and ecology, as well as gender differences in expressions of ecological knowledge, are far from timeless (as ecofeminist assertions about woman-nature links would suggest), but could be constructed and altered in the politics of the colonial encounter.

The image of *citemene* as centred on male tree-cutting - driven by a particular sexual division of labour - had, by the 1930s, become strongly consolidated in the discourse of the colonial administration, and in conjunction with several contemporary developments, it came to drive subsequent research and policy concerns over the 'problem of *citemene*'. In the context of greater colonial concern about vegetation and soil degradation from the 1930s, agricultural and ecological scientists began investigating the sustainability of the 'wasteful' *citemene* system in the face of population growth, coming to perceive it as a system on the verge of ecological collapse. The period from the 1930s onwards saw an expansion of labour migration of male labour for tree cutting. Integration into the cash economy was, moreover, seen by anthropologists such as Audrey Richards (1939) to be engendering a breakdown in the kinship relations with which *citemene* had been so closely entwined. The Bemba food production system was thus perceived as breaking down at the same time as women were abandoned by their menfolk - a contemporary image not unlike those invoked in some WED acccounts.

However, Moore and Vaughan detail a number of reasons, rooted largely in overlooked relationships between gender, ecology and economy, why this breakdown scenario did not come to pass. From farmers' perspective, for example, the *citemene* 'system' was actually comprised of multiple production strategies, and also encompassed a range of semi-permanent gardens, largely cultivated by women, and gathering activities linked to fallow cycles, and these extended the flexibility of the practice in the face of population growth and male absenteeism. Women were also able to make adjustments to land use and cropping strategies which altered the gender and generational division of labour; for instance in the 1940s and 50s by incorporating more semi-permanent cultivation of cassava - a crop which suited the timing and availability of female labour, and certain local soil conditions - into the *citemene* cycle. There was great variation between households and localities in levels of male absenteeism, linked not least to the dynamics of marriage arrangements, and these intersected with variations in micro-environment - and hence cropping possibilities - to alter the specific impacts from place to place. And rather than greater integration into the cash economy 'breaking down' the social economy around food and agriculture, women and men were able to incorporate money and partial market integration into the transactions which sustained altered, but nonetheless viable, kinship relations and networks; in particular, women re-worked jointhousekeeping and redistributive exchange networks to suit their changing circumstances. These responses thus strongly deny the dichotomy between 'subsistence' and 'commercial', and the image of subsistence-grounded women 'subordinated' by the colonial commercial relations, so often invoked in ecofeminist/WED accounts.

Between 1940 and 1960 the colonial administration became increasingly concerned about Bemba food security, and intervened both in agricultural production and marketing. They encouraged, for

instance, the shift from millet towards cassava production already evident in some areas. Where this shift was not taking place, administrators tended to invoke ethnic explanations and 'the laziness of the male Bemba cultivator'. But Moore and Vaughan point out how the interaction of local soil conditions with intra-household gender politics may have been more significant. In some soils cassava evidently did not flourish, while 'an insistence on the importance of traditional *citemene* practice was also an insistence that male labour was required to keep this system running and this gave women some moral leverage over their husbands' (Moore and Vaughan 1994: 94). While women could be agricultural and ecological innovators, then, incorporating new crops and rotations, they could also resist adaptations that would let their migrant husbands 'off the hook'. In this, they appear to collude with colonial discourse about the problem of *citemene*.

In the period after World War II, the colonial government began actively to promote a new type of 'progressive', modern farming, in which individual farmers would occupy a permanent area of land and cooperate with others in using modern farming methods in 'peasant blocks'. This new conception of 'development' was also a renewed attempt at colonial land control - and in the creation of a docile, politically-loyal peasantry - and was accompanied by a succession of attempts to establish rural cooperatives and group institutions. It also contained ideas about gender; that a progressive farmer would be male, and his wife a contributor of 'family labour' and 'domestic science' skills. For certain young men, identification as a progressive farmer came to be attractive as a channel of access to State grants and subsidies and a means to demonstrate wealth and conspicuous consumption, as well as a means to resist chiefly authority and kinship obligations. Nevertheless, even such farmers did not abandon *citemene* as the colonial government intended. It persisted - sometimes in secret - as a means of diversification and risk aversion in the context of perceived insecure benefits from the State. It thus also persisted as an activity in which women were involved and retained some autonomy, albeit with changes in the gender division of labour and cropping strategies to make it compatible with settled residence (Moore and Vaughan 1994: 139). In the 1970s, similar State strategies and responses to them were to surface, this time focused on the cash-cropping of hybrid maize targeted at men. As in the 1950s, complex and varied gender struggles ensued over the control of gendered labour, land and products. In this process *citemene* also continued, in some cases with women gaining greater control over its products; but they also lost much control over their own labour, and over their semipermanent *citemene* gardens which, in a process of contestation of meanings, often came to be redefined as men's maize fields.

Evidently, as Moore and Vaughan show, transformations in 'female farming' here cannot be simply reduced to social and ecological 'marginalisation' by a male-dominated colonial cash crop economy, as ecofeminist 'histories' would suggest. Indeed a major emphasis of Moore and Vaughan's account is to deny meta-narratives about change, and instead to highlight the variability in experiences of change

which emerged as different ecological possibilities, relations of land and labour use, and dynamics of marriage and household formation interplayed with regional political issues.

2. Gender, land and forests in the Jarkhand region of India

Turning to the Indian sub-continent, Kelkar and Nathan (1991) provide a detailed analysis of changing relationships between gender and forests in the Jarkhand region. Taken together with Agarwal's (1989, 1991, 1995) broader works on gender and colonial environmental policy, this provides a case of gender analysis of ecology and colonial politics which strongly qualifies some of Shiva's ecofeminist assertions about Indian women and forests.

The *adivasi* groups in Jarkhand maintained a pre-colonial economy which combined agriculture with the gathering of forest products, such as leaves, fruits and nuts used as food during the rainy season, firewood and construction materials. The labour and ecological knowledge involved in gathering 'wild' products were not female preserves, as ecofeminist analyses tend to suggest. Rather, men were involved in collecting timber for house construction, for instance, and there was considerable gender sharing of jobs; in fruit collection, men would usually shake the trees while women and children collected the produce. However, gathering was important to women in that forest produce collected or exchanged generally represented a source of income which they could use and spend without prior consultation with their husbands or male kin. This contrasted with agriculture, where men (on the basis of male land ownership) were able to claim rights over produce and income, and managed grain stores. Notably, in focusing on the intersection of gender with property relations, this analysis interprets women's involvement with wild plants and gathering very differently from ecofeminist histories, which take it to epitomise women's 'closeness to nature'.

In the pre-colonial period, villagers in Jarkhand seem to have been the acknowledged owners of the forest (Guha 1983, 1988). Among most groups, including the Munda, Ho and Oraon, land was held on behalf of the village by *khuntkattidars*, the patrilineal descendants of original settlers. These village authorities were involved in decisions about clearing forest for agriculture, retaining certain village forests for gathering purposes, and in the allotment of agricultural land to individual patrilineages. That there were such hierarchies in control over land and ecological processes, even in these *adivasi* areas where distinctions of caste were absent, certainly refutes the ecofeminist notion of pre-colonial 'equality' regarding environment. In the nineteenth and early twentieth centuries, there were a number of State attempts to remove restrictions on land transfer, in the name of encouraging investment and enabling peasants to get the full value of their land. Individual titleholding and land markets were, for instance, included among the Survey Officer's recommendations in the 1920s Land Survey in Santhal district. In response, *adivasi* groups led a number of rebellions aimed at defending the communal, lineage-based control of land.

Pre-colonial rights to agricultural land were nevertheless strongly differentiated by gender, and in this context Kelkar and Nathan (1991) examine how land rights acquired different meanings for women through manipulation by colonial officials and male kin during the colonial period. Women's land rights reflected a gender bias in structuring, such that land passed through patrilineages, and women's access was derived indirectly through male kin. Nevertheless they were also structured among women, refuting the image in WED analyses of women as a homogeneous group: daughters and wives tended to have indirect rights to the produce of land held by their husbands, whereas widows were entitled to claim what amounted to a life interest in land, involving its maintenance, management and control of produce. It was the latter that became most open to contest. Thus in 1906 Santhal women were recorded in the colonial land settlement records as holding life interest rights to land, but by 1922 these were increasingly being recorded as *khorposh*, or basic maintenance rights where women were allocated specific plots of land for the fulfilment of their familial obligations. This reflected attempts to level out life interest rights to a lower order, especially by male kin reluctant to wait for a widow's death before inheriting the land. In many cases, women found it difficult to resist these claims, not least because their attempts to do so opened them to accusations of witchcraft. In other cases women have shown outright hostility to altering patrilineal inheritance rights. However, Kelkar and Nathan avoid construing images of women lacking agency, documenting for instance some Santhal, Ho and Munda women's attempts to side-step male appropriation by transferring land rights to daughters. There is also evidence to suggest that, at the turn of the century, alongside the efforts of some male kin to speed up their inheritance of widows' land, other Jharkhandi men, particularly from amongst the Santhals, were active supporters of the need to extend women's land rights (Bodding 1925, cited in Kelkar and Nathan 1991: 92). This historical analysis thus creates a variegated picture of conflict, manipulation, and trade-offs around gender and land rights.

In the context of this historical trend towards reducing women's residual rights in land, their relative autonomy through control over gathering income was particularly important. But this was also under threat of erosion, through struggles with the colonial State over rights to forests. Agarwal (1991) notes four key aspects of British policy which had the effect of increasing State control over forests and village commons, and granting selective access rights to a favoured few. First, there were reforms to establish State monopoly over forests; the Indian Forest Act of 1876, in particular, had elaborate provisions by which blocks of forest were designated as 'reserved' for timber. Second, in such reserved forests the customary rights of local populations were severely curtailed, although forest officers usually retained significant leeway to grant rights to those they chose. Third, the State actively promoted a notion of 'Scientific' forest management, which encouraged commercially-profitable species at the expense of those locally used and managed - a discourse which Shiva is right to emphasise overlooked the importance of forest products in subsistence and reproduction, but which it seems misleading to label as 'masculine'. Fourth, forests were exploited by European and Indian

private contractors, and forest land alienated, often with the permission or collusion of Forest Department officials, first for railway or ship-building in the mid nineteenth century, then for tea plantations, and later for commercial timber extraction. Agarwal argues that these processes progressively eroded local management systems, in some areas leading to degradation of forest resources.

The early twentieth century nevertheless saw a number of protests in Jarkhand against British encroachments and takeover of forests. These protests were not 'environmental movements' in the sense that they were entwined more broadly with struggles about a way of life. Nor were they 'feminine', although women played an active part in them, at times fighting and raiding. Issues of gender oppression also surfaced in these protests; for example in the Munda uprising at the end of the nineteenth century, led by an upper section of *adivasi* society, men were asked to give up the practice of polygyny, as practiced by upper-section men. But as Agarwal (1989) emphasises, there was no organisational framework within which women's specific concerns could systematically be discussed and articulated; women's participation in these movements less served to empower them, than to oppose anti-women practices in a way that would enhance the moral and social standing of the men around them.

The protests did have the effect of preserving some of the rights of *adivasi* communities. These have been greatest in the case of the Mundari khuntkatti system, in which complete village ownership of forests has in effect been retained. In other areas, village ownership survived only in a modified form, rakhat, which was officially recognised in the 1927-33 settlement, in which forest land was subject to joint State-village management with certain restrictions on local rights. In further areas, State agents exercised rights to manage and sell forest land and products, leaving inhabitants the right only to take wood for domestic purposes and sale, for which they paid a fixed amount per family to the State. Katyayan (1987) claims that such areas often became denuded, as commercial demand led to unrestricted felling, and the *adivasi* cultivator-gatherers had little incentive to do anything but mine the wood. Even where village control was maintained, however, this did not necessarily serve to safeguard the forest products that were important to women. For as Kelkar and Nathan (1991) show, the forests were managed by village-level assemblies or panchayats within which khuntkatti descendants held dominant authority, and women seldom had representation. As the alienation and degradation of forests elsewhere increased pressure on these forests, so they sometimes came to be managed for products of interest to certain groups, to the exclusion of women's resource priorities. In some cases, village authorities and elites would collude with local contractors-cum-traders to allocate timber cutting rights, for example. And where sal trees were felled for timber, women lost access to leaves which they had marketed as a source of independent income. Furthermore for the village chiefs, priests, and *khunkattidars* who dominated the *panchayats*, the forest was relatively less important as a source of gathered products than as a source of land for agriculture. This particular

example thus illustrates how gender relations within the institutions managing 'communal' resources have affected people's ability to access, control and maintain their resources over time.

As presented in the works of Kelkar and Nathan and of Agarwal, then, the history of gender and forests in India turns strongly on issues of resource access and control, and on the gender dimensions of institutions which influence rights over property and decision-making. These issues, missing almost entirely from ecofeminist acccounts, are - from a gender analysis perspective - central to explaining the processes through which colonial forestry developments did indeed constrain many women's practices, but in varied - and sometimes resisted - ways.

3. Gender in the politics of rice development in the Gambia

In West Africa, Carney and Watts (1991) examine gendered responses to repeated government attempts to intensify rice production in the Gambia River Basin. In this case, State attempts to harness and modify local ecology in the interests of the colonial economy and polity ultimately 'foundered on the reefs of household gender roles and property relations' (1991: 653).

Struggles in the early colonial period reflected the way government schemes intersected with the then prevailing gender division of labour by crop in Mandinka society. This had every appearance of Boserup's classic female farming system, in that women were the main food producers. But Carney and Watts show that this apparent tradition was in fact a product of the growing commoditisation of production in the mid- nineteenth century. Prior to European presence, indigenous African rices had been cultivated both on rainfed uplands, as part of dryland cropping systems also involving millet and sorghum, and in various forms of wetland. Wetland rice was primarily the domain of Mandinka women who controlled what they produced and marketed their own surplus; an export trade which the British became interested in encouraging during the first wave of territorial expansion in the early nineteenth century. But this attempt at imperial intervention was soon cut short by the rapid development of the groundnut industry and exports from the 1840s. While the expansion of groundnut production was acheived through heavy dependence on hired immigrant male labour, it also eroded men's contribution to upland food crops. Men increasingly devolved responsibility for food production onto the female members of extended farm-households. And while previously the division of labour in both upland and wetland rice had been task based, with men responsible for certain swamp preparation tasks, and women rotating vegetable and fonio (Digitaria exilis) production with household upland crops, the division of labour now became much more separated, both spatially and by crop. Rice became women's work, and unlike groundnuts, largely non-commoditised.

Carney and Watts argue that women were unable to shoulder the burden of meeting food needs, increased as they were by immigrant labour. This contributed to a growth in rice imports. By the time

British colonial rule was established in 1889, the high level of rice imports was seen as a source of structural instability in the political economy, not least because food was necessary to feed the immigrant labour on which the groundnut export economy depended. The concern to reduce imports motivated the first in a series of attempts to boost domestic rice production, and in this context the colonial administration became highly interested in women's agricultural practices. Tidal swamps were seen as a potential rice bowl for The Gambia, and became the focus of technical interventions, including the introduction of Asian rices, the clearance of mangroves, and the promotion of new methods for seedbed clearance. A surge in production did indeed result, doubling the area planted to rice by the mid-1950s. But further expansion was limited by problems over the mobilisation of gendered labour. The administration recognised that women's labour was already used to the full, and thus that further expansion depended on encouraging men to take part, transforming rice production into a 'household' enterprise. But officials lacked mechanisms to compel men to participate, and men successfully resisted these attempts to intensify their labour by appealing to gender identity, claiming that rice was 'a woman's crop' (Carney and Watts 1991: 661). Meanwhile women felt the impact of government efforts in increased work burdens - Haswell (1963) noted that the period women laboured in swamps extended from 90 to 102 days between 1949 and 1962 - and long daily commuting. The expansion ultimately foundered on the limits of women's labour time.

Furthermore, these colonial attempts at harnessing wetland rice ecology precipitated gender struggles over crop rights, linked to claims over land. Mandinka society had recognised at least two types of cropland: *maruo* or household land, dedicated to food production for household consumption, and *kamanyango* - land cleared by an individual or allocated in exchange for fulfillment of household labour obligations - whose product was individually controlled and marketed. Women sought to define the newly cleared and improved swamps as *kamanyango*, over which they could claim product control. Men, however, saw the expanded output as an avenue to reduce their purchase of imported rice, and thus save part of their groundut revenue from expenditure on food. In seeking such a definition, they opposed women's land claims, stating that 'women cannot own land' in a manner that drew the attention of colonial officials. Men sought to define the rice fields as *maruo*, a classification that diminished female control over the products of their labour and enabled male family heads to appropriate women's surplus production. Colonial officials tended to concur with such a reinvention of tradition, sensitive to the possibly negative implications of women's rice control for household food reserves and the feeding of migrant labour- issues so central to the regime.

From the 1950s onwards, and pressured by post-war crisis, the colonial government attempted a new phase of rice development to be based on mechanised dry season irrigation. Initially in 1949, the British Treasury and Colonial Development Corporation (CDC) acquired 10,800 acres of land at Wallikunda for a large-scale irrigated rice project. The scheme foundered, partly for ecological reasons - virtually no prior hydrological or soil data had been obtained - but mainly because of the

gendered resistance it provoked. The scheme's land lease rode roughshod over the fact that most of the land was already communally owned, and that a quarter was under *kamanyango* cultivation by local women (Carney and Watts 1991: 666). Women were offered wage work in rice processing in compensation, but they found this highly unsatisfactory, and they and their angry husbands were soon demanding the return of the appropriated land. When this was refused, protests became violent and men broke into the CDC rice stores. This failed project was replaced, in 1952, by a more modest 200 acre development to be based on sharecropping, which the colonial government saw as a way to redress the labour problem. But again women did not come forward, and those who did undermined government yields by appropriating more than their share of the crop. In a third phase, the CDC withdrew and the project fell into the hands of the Sapu Rice Research Station, which attempted yet another labour arrangement: leasing land to female rice growers who were provided with subsidised tractor services. But once again, women resisted the claims on their labour, responding by defaulting on the payment for tractor services, so that 'in effect, the project was captured by heavily indebted female tenants' (Carney and Watts 1991: 668).

Seeds were thus sown of continuing gender conflict in the post-independence period. When at independence lands from the collapsed rice development project were returned to farmers, they were claimed by women as *kamanyango* and men as *maruo*. And recent government attempts to promote small-scale irrigated rice have again defined land as *maruo*, and men as household heads, promoting resistance among women and again jeopardising project success.

This case presented by Carney and Watts (1991) bears strong echoes with several other accounts of West African rice production from a gender perspective (e.g. Linares 1992, Leach 1992b, 1994). It shows clearly that gender roles were far from static - as ecofeminist/WED accounts would suggest - but changed in interaction with the policies and politics of the colonial State. It also shows that when State interventions initiated struggles and conflicts over customary relations in ecological and social practice, there were consequences not only for women - albeit of an ambiguous, even contradictory kind (Carney and Watts 1991: 653) - but also for the shaping of the agricultural environment.

CONCLUSIONS

The approaches exemplified above begin to allow the possibility of 'rescuing' gender-differentiated environmental experiences, not only from the silences of conventional environmental history, but also from the mystifying glosses which ecofeminist 'histories' place on them. These examples - and others like them - do suggest some commonalities in the broad historical relationships linking gender, ecology and colonial politics. The discourse and practices of colonial states did tend to marginalise the aspects of ecological relations in which women enjoyed most autonomy and status. The changes in material relations of property and power which unfolded did frequently disenfranchise women, whether of land, gathering rights or labour. But the examples also indicate much more variation, flexibility and resistance in these processes than has usually been recognised. In different situations, this may have related to important differences among women; to the effectiveness of unseen struggles and forms of resistance, or, more specifically, because women were able to find space to mobilise alternative claims or adjust practices in their favour.

Such alternative accounts of history, in turn, suggest the flawed nature of ecofeminist/WED policy implications: that women, as guardians of nature, should be targeted as allies in resource conservation projects, or that women's and environmental interests are necessarily complementary. Instead, they point out the social and historical contexts which may indeed make some women especially concerned with resource conservation in some situations, but in others may divorce them from it. They point out the conflicts between women's and 'environmental' interests in some circumstances, for instance where women's involvement with natural resources reflects their subordinate position in gendered relations of property and power. And they underline the risk that policies premised on an assumption of a generalised affinity between women and nature, or simplistic observations of 'what women do' will simply instrumentalise women as a source of cheap or unrewarded labour in activities whose benefits they may not control. Gender analysis of environmental relations suggests that in policy, 'complementarities' between women's and environmental interests have to be carefully sought out - not assumed - from a perspective which takes account of gender relations in the valuation, access, use and control of particular resources.

Studies from a gender analysis perspective show the importance of gender issues not only for illuminating changes in women's status, but also for the more general project of colonial environmental history. They suggest that gender relations shape patterns of environmental use and management with tangible ecological effects, making gender analysis indispensable for understanding environmental event histories. And gender relations mediate the effects of external economic and policy processes on people and the environment, rendering their comprehension necessary to a historical account of colonial environmental politics and interventions.

Whether the concern is in using gender analysis to produce feminist knowledge, or simply for a fuller understanding of environmental history, a number of issues emerge from these and other cases which would be important for more focused study. These include first, relationships between changes in gendered product, site and technique use, and specific ecological processes. Existing work often documents the former effectively while making sweeping assumptions about their environmental impact; yet differences in the local dynamics of soil, water, vegetation, fire, climate and animals may profoundly alter how land responds to the same use practices (cf. Leach and Fairhead 1995). Second, there is scope for much more work on changing regimes of tenure and property rights. This needs to pay attention to the particular channels of resource access and control used by different groups of

women - often involving the manipulation of meanings and ambiguities in tenurial frameworks - and to examine their specific intersection with changing ecological conditions (and landscape niche availability) on one hand, and the politics of colonial environmental policies on the other. Third, and related, are gender dimensions of the institutional arrangements which surround natural resource use and management, where it would be fruitful to explore the implications for gendered authority, resource access and status of the shifting configuration of household, family, village, regional and State institutions which have claimed authority over different ecological domains and usages over time. And fourth, a deeply understudied area concerns the historical relationship between gender and ecological knowledges, including those of colonial states.

It also begins to be evident that a gender approach means not merely 'adding women in' to accounts of imperialism, ecology and politics, but re-thinking and collapsing their existing categories in a more fundamental re-writing of history (cf. Scott 1988). Thus 'politics', from a gender perspective, must extend not only to relationships with the colonial State, formal government authorities and their discourses, but to the more diffuse processes through which these forms of authority intersected with power relations in everyday resource-using processes, and in the negotiation of gendered domains of action and agency. In other words, gender is located among a more multiple, mobile field of power relations (Scott 1988: 26; cf. Foucault 1978) which merges any distinction between 'public' and 'private'. 'Ecology' ceases to be treatable as separate from 'society', but comes to be differentiated and 'socialised' (Fairhead and Leach forthcoming) in the sense that the definition and valuation of ecological processes are integral to expressions of social identity and struggles. And a properly gendered environmental history with the appeal to reproduction and subsistence in ecofeminism/WED, but replaces these oppositions with a more textured, nuanced analysis.

Nevertheless in arguing for better event histories of gendered environmental relations, and privileging their material dimensions, part II of this paper has left begging important questions about historical representation. As our treatment of Moore and Vaughan's case acknowledges, women and men have, during and since the colonial period, produced their own representations of their own histories, and the politics of this process is certainly an area which deserves further study.

There is already some work which reveals how representations of past environments - of landscape history - become part of oral histories which uphold particular social or political relations, and gendered rights and statuses linked to them. In West Africa for instance, descent group status in local politics, linked to control over women in marriage, is frequently legitimated through 'origin stories' of settlement-founders moving into uninhabited 'wilderness' areas (Dupré 1991); whether high forest (as among Sierra Leonean Mende groups; Hill 1984; Leach 1994), or barren savannas (in much of the forest-savanna transition zone; Fairhead and Leach forthcoming). These representational histories may have little to do with 'real' ecological events, or indeed with women's experience of social ones.

Yet colonial administrations were sometimes exposed to them, constructing their own versions of history and environmental policy in relation to them, as West African administrators sometimes did in taking accounts of forest loss literally. In this respect, and following Moore and Vaughan's lead, a major challenge for future work is to examine the production of diverse historical representations about a place, produced at different times and by different authors (local women and men, chiefs and commoners; colonial and modern anthropologists, colonial administrators), exploring how these accounts speak to and past each other, and how (as discourses) they had material effects.

This paper has also left begging important questions about the post-colonial politics of authorship and representation. Questions about who has the right to speak about whom and for whom are of course relevant when it is the event history of people's diverse, materially-grounded experiences at stake; and they become even more pressing if one attempts to represent people's representations of their history. There has not been space here to enter the diverse and extensive debates on this topic. Indeed, basic questions about the politics of voice, the power relations involved in setting feminist research agendas, and the extent to which Northern or elite Southern feminists can or should do so on behalf of others (Zeleza 1993) could be applied in critique of the arguments presented here. Of relevance, too, are debates on the construction of colonial subjectivities and their intersection with gender - whether or not phrased in the terms of colonial discourse theory and 'subaltern studies' as prevalent in Asian scholarship (e.g. Spivak 1988) - which question the extent to which alternative, 'indigenous' discourses are recoverable from the constructions colonialism placed on them. A comprehensive review of gender and environmental history would need to address the insights and uncomfortable issues raised by these debates.

Yet a concern with the politics of representation also contextualises the argument forwarded here. To a certain extent, all historical accounts are representation as well as event, discursively constituted, and supportive of particular political or institutional outlooks. By essentialising the relationship between women and nature, ecofeminist analyses have represented history in generalised ways which entrap women in static roles. These accounts may, as Jackson (1995) points out, be better treated not as 'real history' but as meta-narratives which serve other purposes, whether in upholding particular policy agendas, or constructing a coherent image of female solidarity. Recognising this - interrogating ecofeminism as one sort of historical narrative - has made space to explore a gender analysis of historical events as presented in part II. Yet this, too, could be treated as another sort of representation, constructed through different feminist theoretical lenses and supporting different policy implications. Recognising this, in turn, opens up the research agenda for gender analysis of imperialism, ecology and politics to consider a plurality of other accounts, including the representations of their own environmental history which women and men have been actively forging during and since the colonial period.

NOTES

¹ An earlier version of this paper, produced as *IDS Working Paper* 16, was reviewed by Barbara Harriss-White and Anna Tsing. Within the spirit of the original paper, we have endeavoured to respond to as many of their helpful comments and criticisms as possible. Our thanks are also due to James Fairhead for comments on this version; responsibility for the arguments forwarded and the ways we represent others' work nevertheless rests with us alone.

 2 At this stage in the argument, we are using 'nature' in the same ill-defined way as most ecofeminists do; this lack of definition is one of the problems which we draw attention to below.

³ The Green Belt movement in Kenya is frequently referred to as the African equivalent of Chipko, and is similarly represented as a feminist environmental movement indicating women's agency in environmental protection. However we know of no systematic ecofeminist 're-writing' of the movement's history and stimuli.

⁴ As we have argued elsewhere (Joekes, Green and Leach 1995), the analytic framework (and flaws) of the WED perspective can be closely related to assumptions inherited from the WID approach to gender and development more generally. While we cannot pursue this argument here, representations of history from a WED perspective clearly reflect the influence of WID policy assumptions, as well as of Northern cultural feminism.

⁵ Shiva implies that both gender inequality and class/caste stratification were external, western influences on Indian society, and thus non-existent in pre-colonial India. However, this invisibilises the older roots of patriarchy in both Vedic and pre-Vedic culture (Dietrich 1992: 99), and the caste systems which - albeit operating in an attenuated form in the hills - are seen by Peritore (1992: 205) as crucially underlying the emergence and form of the Chipko movement.

⁶ Peritore (1992) argues that up to 60 per cent of the male population of Garwhal District have outmigrated, while Jain (1984) presents evidence that 20 per cent of the area's households are femaleheaded.

⁷ In this context, it has been argued that the reassertion of images of Prakriti may be harmful to women: 'Picked up by the cross currents of caste and middle class ideology, [ideas such as the feminine principle] are open to communal manipulation and can even be used to manipulate women and ecological issues from a middle class perspective. Patriarchal manipulation of women's power concepts is, anyway a sad chapter in the history of religions.... [In India] there is a class component in the difference between the Devi as an independent female power-principle and the spouse Goddess, the more domesticated, patriarchal version of the goddess...the projection of a certain middle class type of feminine principle has...turned lethal to women in the practice of an debate on *sati*' (Dietrich 1992: 104).

⁸ We apologise to the authors of this material if they feel that these selective summaries have in any way misrepresented their work or its intentions. Readers are referred to the full works for more detail of the particular cases.

⁹ As a re-study of Audrey Richards' 1939 'Land, labour and diet', Moore and Vaughan's book is also intended as a methodological work addressing the problem of writing and context. As such, it treats history both as representation and event, and explores the narrative contradictions among numerous possible interpretations of *citemene* - by male and female farmers, officials, scientists, anthropologists and others. While this innovative approach is a central aspect of the work, it cannot be the focus of the brief account we give here.

REFERENCES

- Agarwal, B., 1989, 'Rural women, poverty and natural resources: sustenance, sustainability and struggle for change', *Economic and Political Weekly* XXIV (43)
- Agarwal, B., 1992, 'The gender and environment debate: lessons from India', *Feminist Studies* 18 (1): 119-158
- Agarwal, B., 1995, A Field of One's Own: Gender and Land Rights in South Asia, Cambridge: Cambridge University Press.
- Baumann, H., 1928, 'The division of work according to sex in African hoe culture', Africa 1: 289-319
- Berry, S., 1975, *Cocoa, Custom and Socio-economic Change in Rural Western Nigeria*, Oxford: Clarendon Press
- Berry, S., 1988, 'Property rights and rural resource management: the case of tree crops in West Africa', *Cahiers des Sciences Humaines* (ORSTOM) 24 (1): 3-16
- Berry, S., 1993, No Condition is Permanent: The Social Dynamics of Agrarian Change in Sub-Saharan Africa, Wisconsin: University of Wisconsin Press
- Braidotti, R., Charkiewicz, E., Häusler, S. and Wieringa, S., 1994, *Women, the Environment and Sustainable Development: Towards a Theoretical Synthesis*, London: Zed Press/INSTRAW
- Carney, J. and M. Watts, 1991, 'Disciplining women? Rice, mechanization, and the evolution of Mandinka gender relations in Senegambia', *Signs* 16 (4): 651- 681
- Croll, E. and Parkin, D. (eds), 1992, Bush Base: Forest Farm: Culture, Environment and Development, London: Routledge
- Dietrich, G., 1992, *Reflections on the Women's Movement in India: Religion, Ecology, Development,* New Delhi: Horizon India Books: 94-114
- Dupré, G., 1991, 'Les arbres, le fourré et le jardin: les plantes dans la société de Aribinda, Burkina Faso' in G. Dupré (ed.) *Savoirs Paysans et Dévéloppement*, Paris: Karthala-ORSTOM: 181-194
- Etienne, M. and Leacock, E., 1980, Women and Colonisation, New York: Praeger
- Fairhead, J., 1992, 'Indigenous technical knowledge and natural resources management in Sub-Saharan Africa: a critical overview', paper prepared for Social Science Research Council project on African Agriculture, Dakar, January 1992
- Fairhead, J., and Leach, M., 1995, 'Reading forest history backwards: the interaction of policy and local land use in Guinea, 1893-1993', *Environment and History* vol 1 no 1, March 1995.
- Fairhead, J., and Leach, M., 1996, *Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic*, Cambridge and New York: Cambridge University Press.

Foucault, M., 1978, The History of Sexuality, Translation Random House. Penguin.

Guha, R., 1989, *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya*, Delhi: OUP

- Guyer, J.I., 1984, *Family and Farm in Southern Cameroon*, Boston: Boston University, African Studies Centre
- Guyer, J.I., 1988, 'The multiplication of labour: historical methods in the study of gender and agricultural change in modern Africa', *Current Anthropology* 29 (2): 247-259
- Guyer, J.I., 1991, 'Female farming in anthropology and African history' in M. di Leonardo (ed.) Gender at the Cross-roads of Knowledge: Feminist Anthropology in the Post-modern Era, Berkeley: University of California Press
- Haswell, M., 1963, *The Changing Patterns of Economic Activity in a Gambia Village*, Department of Technical Cooperation, Overseas Research Publications no.2, 22-33. London: Her Majesty's Stationery Office.
- Hay, M.J. and Wright, M. (eds), 1982, *African Women and the Law: Historical Perspectives*, Boston University Papers on Africa, Vol 7, Boston: Boston University
- Hill, M., 1984, 'Where to begin? the place of the hunter founders in Mende histories', *Anthropos* 79: 653-656
- Hill, P., 1956, The Gold Coast Cocoa Farmer, Oxford: Oxford University Press
- Jackson, C., 1992, 'Gender, women and environment: harmony or discord?', Gender Analysis in Development Discussion Paper Series 6, School of Development Studies, Norwich: University of East Anglia
- Jackson, C., 1993, 'Women/nature or gender/history? A critique of ecofeminist "development"', Journal of Peasant Studies 20 (3): 389-419
- Jackson, C., 1995, 'Radical environmental myths: a gender perspective', *New Left Review* 210 (March/April): 124-140
- Jain, S., 1984, 'Women and people's ecological movement: a case study of women's role in the Chipko Movement in Uttar Pradesh', *Economic and Political Weekly* XIX (41): 1788-1794
- Joekes, S., Green, C. and Leach, M., 1995, Integrating gender into environmental research and policy. Report of commissioned study for EPAT/MUCIA, United States Agency for International Development (USAID), September 1995.
- Joekes, S., Leach, M. and Green, C. (eds), 1995, 'Gender relations and environmental change', *IDS* Bulletin 26 (1)
- Kelkar, G. and Nathan, D., 1991, *Gender and Tribe: Women, Land and Forests in Jharkhand*, New Delhi: Kali for Women
- Leach, M., 1991, 'Engendered environments: understanding natural resource management in the West African forest zone', *IDS Bulletin* 22 (4): 17-24
- Leach, M., 1992, 'Gender and the environment: traps and opportunities', *Development in Practice* 2 (1): 12-22

- Leach, M., 1992b, 'Women's crops in women's spaces: gender relations in Mende rich farming' in E.Croll and D. Parkin (eds) Bush Base: Forest Farm: Culture, environment and development, London: Routledge: 76-96
- Leach, M., 1994, *Rainforest Relations: Gender and Resource use among the Mende of Gola, Sierra Leone*, International African Library. Edinburgh: Edinburgh University Press, and Washinton: Smithsonian Institution.
- Leach, M. and Fairhead, J., 1995, 'Ruined fields and new gardens: gender and soil-ripening among Kuranko farmers in the forest-savanna transition zone', *IDS Bulletin* 26 (1)
- Linares, O.F., 1992, Power, Prayer and Production: The Diola of Casamance, Senegal, Cambridge: CUP
- Nair, J., 1994, 'On the question of agency in Indian feminist historiography', Gender and History 6 (1)
- Maathai, W., 1988, *The Greenbelt Movement, sharing the Approach and the Experience*, Nairobi, Kenya: Environment Liaison Centre International
- Martin, S.M., 1988, Palm Oil and Protest: An Economic History of the Ngwa Region, South-Eastern Nigeria, 1800-1980, Cambridge: CUP
- Maxwell, D., 1994, 'Religion and environmental change in north-east Zimbabwe 1880-1990', paper presented at the African Studies Association of the UK Biennial Conference, University of Lancaster, 5-7 September 1994
- Merchant, C., 1982, *The Death of Nature: Women, Ecology and the Scientific Revolution*, London: Wildwood House
- Merchant, C., 1992, Radical Ecology: The Search for a Liveable World, London: Routledge
- Mies, M. and Shiva, V., 1993, Ecofeminism, London: Zed Books
- Molyneux, M. and Steinberg, D.L., 1995, 'Mies and Shiva's *Ecofeminism:* a new testament?' *Feminist Review* 49: 86-107
- Monimart, M., 1989, *Femmes du Sahel: La Désertification au Quotidien*, Paris: Karthala and OCDE/Club de Sahel
- Moore, H., 1988, Feminism and Anthropology, London: Polity Press
- Morre, H. and Vaughan, M., 1994, *Cutting Down Trees: Gender, Nutrition and Agricultural Change in the Northern Province of Zambia, 1890-1990,* London: James Currey
- MacCormack, C. and Strathern, M. (eds), 1980, *Nature, Culture and Gender*, Cambridge: Cambridge University Press
- Mackenzie, F., 1991, 'Political economy of the environment, gender and resistance under colonialism: Murang'a District, Kenya, 1910-1950', *Canadian Journal of African Studies* 25 (2): 226-256
- Nathan, D., 1990, 'Women and Forests', Economic and Political Weekly, 14 April

- Omvedt, G., 1994, "Green earth, women's power, human liberation" women in peasant movements in India' in V. Shiva (ed.) *Close to Home: Women Reconnect Ecology, Health and Development*, London: Earthscan
- Peritore, N.P., 1992, 'India's environmental crisis and Chipko Andolan', *Asian Thought and Society* VXIII (51)
- Persoon, G., 1989, 'Respect for nature among forest people', BOS Newsletter 18 (8): 11-27
- Philipose, P., 1989, 'Women act: women and environmental protection in India' in J. Plant (ed.) Healing the Wounds: The Promise of Ecofeminism, London: Green Print
- Plumwood, V., 1986, 'Ecofeminism: an overview and discussion of positions and arguments' in *Australian Journal of Philosophy* 64: 120-138
- Richards, A., 1939, Land, Labour and Diet in Northern Rhodesia, London: Oxford University Press
- Rocheleau, D., 1995, 'Gender and biodiversity: a feminist political ecology approach', *IDS Bulletin* 26 (1)
- Rodda, A. (ed.), 1991, Women and the Environment, London and New Jersey: Zed Books Ltd.
- Salleh, A.K., 1984, 'Deeper than deep ecology: the ecofeminist connection' in *Environmental Ethics* 6: 339-45
- Schoffeleers, J.M., 1979, 'Introduction' to J.M. Schoffeleers (ed.) *Guardians of the Land: Essays on Central African Territorial Cults*, Zimbabwe: Guelo
- Scott, J.W., 1988, Gender and the Politics of History, New York: Columbia University Press.
- Sharma, U., 1980, Women, Work and Property in North-West India, London: Tavistock
- Shiva, V., 1988, Staying Alive: Women, Ecology and Development, London: Zed Books
- Shiva, V., 1989, 'Development, ecology and women' in J. Plant (ed.) *Healing the Wounds: The Promise of Ecofeminism*, London: Green Print
- Spivak, G. C., 1988, 'Subaltern studies: deconstructing historiography', in R. Guha and G.C. Spivak (eds), *Selected Subaltern Studies*, 3-35. Oxford.
- Starhawk, 1990, 'Power, authority and mystery: ecofeminism and earth-based spirituality' in I. Diamond and G.F. Orenstein (eds) *Reweaving the World: The Emergence of Ecofeminism*, San Francisco: Sierra Club Books
- Thomas-Slayter, B., 1992, 'Politics, class and gender in African resource management: the case of rural Kenya', *Economic Development and Cultural Change* 40 (4): 809-828
- Warren, K.J., 1987, 'Feminism and ecology: making connections', *Environmental Ethics* 9, Spring issue
- Zeleza, T., 1993, 'Gendering African history', Africa Development XVIII(1): 99-117