

EMPOWERING WOMEN THROUGH TREE PLANTING? GENDER AND GLOBAL ENVIRONMENTALISM IN NORTHERN GHANA

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The Earth Summit of 1992 ushered in an era of global environmental management based on conventions signed by governments, international panels of experts, global environmental monitoring centres, and interventions of international non-governmental organization (NGOs) working in collaboration with donor nations and aid recipient governments. The framework for global environmental management articulated within the Report of the United Nations Commission on Environment and Development (UNCED) is based upon a conception of sustainable development which draws together strands of economic development based on neo-liberal, free market development with environmental protection. Breaking with previous conceptions of environmental protection, as being dependent upon a transformation of world capitalist markets and a limitation of economic growth, it is argued that environmental protection is dependent upon sustained economic growth and the expansion of new technologies that make more efficient utilisation of natural resources possible without depleting the natural environment.

The UNCED report is participatory and inclusive. It places a special emphasis on community participation in the management of resources within localities and addresses the needs of ensuring the rights of minorities to natural resources and to participation in environmental management, including the rights of women and "indigenous people". This is clearly seen in the capacity building programme on promoting Sustainable and Rural Development of UNCED, which lists as its objectives:

- a) To promote greater public awareness of the role of people's participation and people's organizations, especially women's groups, youth, indigenous people, local communities and small farmers, in sustainable agriculture and development;
- b) To ensure equitable access of rural people, particularly women, small farmers, landless and indigenous people to land, water and forest resources and to technologies, financing, marketing, processing and distribution;
- c) To strengthen and develop the management and internal capacities of rural people's organizations and extension services and to decentralize decision-making to the lowest community level (UNCED 1992:185)

This marks a turning point away from earlier mainstream approaches to environmental management, which were essentially based on legislation and regulations enacted and implemented by specialised government departments. The new emphasis is on a greater participation of civil society in managing the environment, empowerment of women in environmental decision-making, and respect for the cultural integrity and rights of "indigenous people" and the sharing of experience and knowledge. But does this really represent the empowerment of rural people and their increasing control over the management of natural resources and their associated production systems? Participation may also be a device through which people are cajoled into implementing systems of environmental management which they have not made an input in determining and which do not reflect their immediate interests. As Henkel and Stirrat (2001: 183-184) argue:

The attempt to empower people through the projects envisaged and implemented by the practitioners of the new orthodoxy is always an attempt to reshape the personhood of the participants... [P]articipatory approaches to development, far from marking a radical shift away from an ethnocentric concept of modernity are intimately part of the process of modernization itself. In fact, we argue, they might provide even more

effective ways of incorporating people into the 'modern project' compared to those available to the 'old orthodoxy'.

Drawing on case material from the Upper East Region in Ghana this paper critically examines how global environmental models impact on women. Given the rhetoric of the Earth Summit it looks at three central issues identified at Rio as heralding the new age of participatory and sustainable development:

- the meaning of women's empowerment in decision-making in this process;
- the extent of knowledge and experience sharing in the processes of implementing environmental projects;
- and the way in which global environmentalism respects the cultural integrity of these women.

Environmental Discourses and Women's Empowerment

Many researchers have enthusiastically embraced the new sustainable development paradigm paraded at Rio. A large literature now exists showing the success of local popular actions in preserving the environment against "free riders". The more radical scholars have developed an 'environmentalism of the poor' which shows local people enthusiastically adopting sustainable development frameworks and developing social movements to counter the environmentally destructive activities of the corporate world, large-scale developers and the state. Ecofeminism constitutes an important part of this environmentalism of the poor, which sees the essential nature of women as being at harmony with the environment, and which seeks to liberate women and nature from domination. Merchant (1992:185) comments:

Ecofeminist actions address the contradictions between production and reproduction. Women attempt to reverse the assaults of production on both biological and social reproduction by making problems visible and proposing solutions. When radioactivity from nuclear power-plant accidents, toxic chemicals, the hazardous wastes threatens the biological reproduction of the human species, women experience this contradiction as assaults on their own bodies and on those of their children and act to halt them. Household products, industrial pollutants, plastics, and packaging wastes invade the homes of First World women threatening the reproduction of daily life, while direct access to food, fuel, and clean water for many Third World women combat these assaults by altering consumption habits, recycling wastes, and protesting production and disposal methods, while Third World women act to protect traditional ways of life and reverse ecological damage from multinational corporations and extractive industries.

The Chipko (tree-hugging) movement in India is one of the most cited of these environmental movements of women. Ecofeminists have portrayed Chipko as a movement that shows women's concerns about the environment and their interest in protecting the environment against the corporate male world (Shiva 1989)

Cecile Jackson has questioned the wisdom of equating women's innate interests as bound up with environmental conservation. She argues that in many instances environmental models are developed against women's interests. Jackson (1994) further argues that environmentalism is frequently socially coercive and premised on social constraint and inequality rather than on equity and popular democracy. Models of environmentalism were originally introduced into developing countries under colonial domination. Early colonial policies were concerned with securing natural resources for European interests and introduced many environmental policies to achieve this end and regulate usage of natural resources.

In searching for frameworks for participatory natural resource management, present-day policy-makers frequently return to colonial models based on a rapprochement between colonial

authorities and the chiefs, in which through the system of Native Administration or Indirect Rule, chiefs were given control over natural resources and land, and through this control over labour and rights to extract forced labour (communal labour) for public works development and for work on the farms of chiefs. Jackson argues that under colonial rule this alliance of colonial and chiefly interests in natural resource management strengthened the position of dominant local chiefly-patriarchal interests and eroded those of women. Thus for example in the grasslands of Cameroon, Diduk (1989) records that in 1958 a women's protest movement developed which demonstrated outside the residence of the colonial officer. The women were protesting against attempts to reinforce soil and water conservation based on contour ridge ploughing, which created excessive labour for the women. The women were also protesting against an erosion of their economic interests in land, as the new order heralded by colonialism resulted in a transfer of land from women's food cropping to cash crop farming and cattle herding, which were spheres controlled by networks of powerful men revolving around chieftaincy and patriarchal patron-client networks. Jackson argues that women and environmentalism do not naturally go hand in hand. While women may defend the environment when it suits their livelihood interests, they may also protest against environmental policies when they threaten their interests.

Women experience a diversity of lived environmental relations that are the product of power structures that mediate environmental relations, which also include ideologies of gender (Jackson 1994). Gender differentiation results in men and women relating to natural resources in different ways, and these variations are inserted into class, social and economic relations. People's interests in the environment will reflect their economic and livelihood interests. Jackson argues that where commercial interests threaten their access to natural resources women may adopt discourses associated with environment. Thus in the Chipko instance, village women joined into an environmental movement (which had been fostered and was controlled by middle class men), because their access to trees for various economic purposes was being threatened. They stood for the preservation of a conservative moral order, which gave them access to resources. However, in many instances the environmental rhetoric is against the interest of women and suppresses their livelihood interests in the name of protecting the environment. Thus, in examining the relationship between women and the environment, it is important to understand that environmentalism is socially constructed, and contains implicit assumptions about social, economic and gender interests. It is important to understand how the environment is gendered and the implications of various environmental policies for women in different socio-economic and class categories. A blanket assumption of women's interests in the environment cannot be made and has to be teased out through an analysis of household relations between men and women within the context of production relations, class, property right and access to natural resources, and the power relations that mediate and determine concepts of the environment and access to resources.

Environmental Discourses and Tree Planting In Chiana

The Chiana district is situated in the Kassim-Nankani area of the Upper East Region of Ghana, bordering Burkina Faso. It lies in the savannah zone, in area in which agriculture is highly risky, in which the climate is variable and unpredictable. Some years the rains fail and crops perish, but other years too much rain falls at the wrong time and this also prevents good yields from being realised. While the environment can be described as risky, the people have effectively managed to develop a viable agricultural base which supports a high density of population often above 200 people per square kilometre. This is one of the highest rural population densities in Ghana. This has given rise to a system of intensive cultivation based on the permanent cultivation of compound plots around houses, which are fertilised with manure. These permanent plots are usually controlled by the male elders of families. Women and youth usually have to travel far into the interior, beyond human settlement, to make their farms on bush plots. In contrast with the compound plots bush plots are cleared using slash and burn techniques

and cultivated for short periods before being abandoned. No inorganic or organic fertilisers are used on these bush plots. The main crops grown on the compound farms include millet, sorghum, groundnuts, bambara beans and leafy vegetables. Women mainly cultivated groundnuts on their bush plots. Useful trees are frequently preserved on the compound farms, but not in bush plots, which are abandoned after cultivation and cannot be protected against bush fires.

Desertification and land degradation

The perceived harshness of the environment has induced an environmental rhetoric since the early colonial period on desertification within the region. In the 1930s Stebbing (1937) produced an alarmist narrative on the southward extension of the Sahara, resulting largely from the destructive practice of shifting cultivators and herders. Stebbing regarded savannah as originally forest land, which had been degraded by shifting cultivators. Stebbing's alarmist desertification narratives were by no means widely accepted during the 1930s and the 1937 Anglo French Forestry Commission systematically refuted Stebbing's allegations, pointing out that the lowering of the water table and general desiccation identified by Stebbing were not taking place. In place of a rapid expansion of the Sahara they depicted a much more complex picture of wet and dry phases with rapid regeneration taking place in wet years and vegetation retreating in dry phases (Swift 1996). During the 1970s with the commencement of a new dry phase with drought years and famines these desertification narratives gained a new lease of life and found a new home in United Nations Environmental Programme (UNEP).

In recent years there has been a proliferation of environmental-crisis narratives, which substantiate themselves by reference to these older colonial narratives. For instance Korem (1985) writes:

Literature dealing with the problems of savannization and expansion of the Sahara Desert in general consider shifting cultivation, annual fires all over the savannah, browsing of shrubs and tree vegetation by animals, over-grazing, deforestation, cultivation on steep slopes and improper grazing to be the main causes of the very fast expansion of the Sahara Desert.

He attempts to substantiate his argument by specific reference to Stebbing's thesis that the desert around Gao has resulted from over-cultivation and the use of fire in farming. Gao may be in Mali, but it is closer to the northern zone of Ghana than Accra, Korem warns.

If narratives about impending ecological catastrophe originally developed within the 1930s are being reproduced in the twenty-first century, then clearly the ecological crisis is not as serious as it was felt to be in the 1920s, since the same types of environmental deterioration are the subject of contemporary desertification narratives. The depiction of an ecological crisis serves as a heuristic device to justify some kind of intervention, to depict some moral blame and a transformation of behaviour which must occur to promote ecological modernisation and "improved" environmental management at the community level (Hajer 1995). Swift (1996: 85) argues that today:

There are few scientists or international administrators now who would defend the received narrative of desertification, although it lingers on in many government departments in dryland areas and some development agencies, and is often raised as a critical issue in project formulation in dry areas. A simple idea, adorned with powerful slogans, proves remarkably hard to change, even when shown to be patently inaccurate.

But the concept of desertification continues to exist as an international convention and as a political symbol of ecological calamity which requires the interventions of policy makers and development experts to introduce constraints on existing production systems and compel peasant producers to introduce new technologies in the "national", "global" and "future" interests.

Other colonial accounts depicted a rudimentary agricultural system in the Northern Territories of the Gold Coast, which was about to collapse through growing population densities and poor methods of maintaining soil fertility (Moor 1935; Lynn 1937). The main problem in the farming systems of the people of northern Ghana was not seen to lie in regional patterns of the expansion of the Sahara but in soil erosion and declining fertility as the result of the local practice of backward cultivation techniques. In contemporary discourse, concepts of desertification draw on this conception of a process of declining environmental qualities originating from farming practices and the need to replace these with new practices. Desertification results from local inappropriate farming practices rather than the southward shift of the Sahara, which are replicated over a large area. These inappropriate farming practices are often ascribed to poverty and thus poverty alleviation through improved farming practice becomes a major rationale for combating desertification. The description of these processes as part of desertification enables parochial local interests to be combated through global or regional environmental interests and programmes (desertification describes a supra-regional process of environmental decline) and by the future interests of the planet. The dangers of desertification justify the need for immediate actions beyond the interests of localities.

Tree planting

In the contemporary period these story-lines (Hajer 1995) of impending ecological calamity are frequently used to promote tree planting programmes and other environmental technologies under the control of NGOs or government agencies.

The Adventist Development and Relief Agency (ADRA) is one of the major NGOs involved in tree planting in the Upper East Region. ADRA was one of the central NGOs involved in the Rural Forestry Initiative in Ghana, working in collaboration with the World Bank and the Peace Corps. ADRA was instrumental in supporting many tree planting initiatives, supplying seedlings to farmers and supporting them with food for work initiatives. ADRA has sponsored many community agro-forestry groups in the Upper East Region. ADRA anchors the rationale of its support for tree planting in crisis narratives of deforestation and desertification:

Desertification in this area is caused greatly by deforestation or removal of crop and tree cover; there is the need to enhance the replacement of tree cover and efficient utilization of wood resources. ADRA in collaboration with the Forestry Department of Ghana, (and) the United States Peace Corps has established 31 tree nurseries in this country (named CCFI [Collaborative Community Forestry Initiatives]). The purpose of the CCFI project is to rehabilitate the environment, to raise the level of soil fertility and to provide a source of construction poles, fuel wood and other wood products that can either be used in the communities or commercialized. The nurseries are currently operating effectively. Within the past two years (1996 & 1997) the 10 CCFI nurseries produced and out planted 250,000 fruit and leguminous tree plants generating an income of £16 million to the beneficiary communities... ADRA organizes awareness creation campaigns aimed at creating awareness about problems of land degradation and desertification with staff from collaborating agencies (Ministry of Food and Agriculture, Ministry of Health, Co-operative Department, etc.) during our community animation.

With the imposition of structural adjustment, neo-liberal market policies, and the removal of agricultural subsidies the Ministry of Agriculture no longer plays a role in distributing subsidised fertilisers and high input technologies. Tree planting has become a major activity for the Ministry of Agriculture replacing fertiliser promotion. Like ADRA, the Ministry of Agriculture has found the rhetoric and symbols of desertification as a useful shorthand device for justifying its new role in tree planting and other low input technologies. In a presentation to the Inception Workshop on The Savannah Resource Management Program (SRMP) for Opinion Leaders in the Upper East

Region, the Regional Director of Food and Agriculture, Upper East Region (Derry 1998:1) outlines the initiatives of the Ministry of Food and Agriculture (MOFA):

The uncontrolled wood removal, shifting cultivation and forest fires have led to an estimated 45,000 ha (1990) of closed forests and savannah woodland being degraded annually....

The government of Ghana embarked on an overall case of action to ensure the proper development and acceptance of a comprehensive Agro forestry programme to address land degradation and desertification issues.... A total of a little over half a million seedlings were produced during the project life out of which 200,000 seedlings were planted in the various catchment areas. Approximately 400 ha of land were also bunded at 30 dam sites.

The accounts of the NGO and MOFA are similar. Having positioned themselves on the side of a specific coalition, by adapting its political mythology and genealogy (desertification), the protagonists identify their position in the environmental campaign by the number of seedlings they have given out to communities, who in this act also become members of a coalition, which extends into communities through tree planting activities.

However, tree planting activities in the area precede the development of the desertification narrative. The original modern (postcolonial) tree planting programmes in Northern Ghana (the CCFI programme) were part of a basic needs approach to rural development which identified the fuel wood crisis as the basic rationale for planting trees. The fuel wood crisis was a powerful symbol in the late 1970s and early 1980s, reflecting the energy and oil crisis exacerbated recession of that period. With the rising of a more powerful global coalition around environmental degradation and desertification, the main partners of this coalition have now transferred their allegiance to the anti-desertification coalition.

Tree planting activities are justified in relation to a discourse which manipulates symbols of desertification, land degradation, and broad statistics on quantifiable areas of land or biomass that have been converted from woodland or forest into other uses. However, these statistical figures are drawn from presumed areas under forest or woodland in the past rather than any empirical evidence of the actual nature of the forest cover (Fairhead and Leach, 1998). The discourse does not tell us anything of the significance of the tree cover that exists in these areas, or of the species which people have chosen to preserve and those that they have no interest in preserving. The discourse does not tell us anything about what rural farmers think of trees and how they manage trees, but rather assumes that farmers destroy trees because of poverty and backward agricultural practices.

An alternative reading of the environment in the Upper East to the desertification-land degradation narrative, would recognise the anthropogenic nature of much of the environment, particularly in farming areas. This largely consists of a parkland environment, in which a select number of trees are preserved by farming people and dot the landscape at regular intervals. Among the most popularly preserved trees are the Shea (*Vitellaria paradoxa*), Locust Bean/Parkia (*Parkia biglobosa*), Acacia *albida*., *Diospyrus* spp., baobab (*Adansonia digitata*) and silk cotton (*Ceiba pentandra*). The most commonly preserved trees are Shea and Parkia, which prove important dietary supplements. Shea is processed into shea butter and Parkia yields dawadawa, a condiment with high protein content used in preparing soups. In recent years shea has become an important export crop and with a large demand for supplies increasing numbers of shea trees are being preserved in farming areas. In some areas these preserved shea trees resemble plantations, and occur at regular intervals of between 10-12 metres as farmers weed out dense clumps of competing trees. There are often high densities of these trees on the land, to the extent that there is no space for other trees.

A second tradition of planting exotic high forest plants can also be found in valley bottoms, near dams and wet areas. This includes oil palms, avocado, and cocoa. This planting tradition is

associated with migrant labour that went to work on cocoa plantations in forest zone and returned with seed to experiment with in wet locations. The most popular of these trees is the oil palm, since many migrants working in the south gained a liking for palm nut soup and palm oil.

The third tree planting tradition is associated with global environmental species identified by global environmental research centres as useful agroforestry species. This includes *Cassia siamea*, teak, *Leucaena leucocephala*, eucalyptus, and fruit trees such as mango and cashew. In recent years several tree planting groups have sprung up within the Chiana district in the Upper East Region, promoting these global trees. Modern tree planting groups in Chiana are associated with Daniel Loguzuri, who originates from Paga Kajelo. He started a tree planting group in the early 1990s at Paga Nabio before extending into the Chiana area. In 1996 he founded the Kassena Nankani Tree Growers Association. He has gone on to found a new NGO, the Gia Nabio Agroforestry Development Organisation, with its headquarters at Navrongo. Daniel Loguzuri has been instrumental in encouraging the formation of other tree planting groups. The Ministry of Agriculture has also played an important role in encouraging tree planting and tree planting groups. Most tree planting groups trace their genealogy back to either contacts with Dan Loguzuri or the Ministry of Agriculture. Both groups offer incentives to farmers to take up tree planting. As the Deputy Director for Agriculture in Chiana commented:

I personally think that there is environmental degradation in this area. But the people are now aware and are taking steps to arrest the situation---through the education of our extension staff and other NGOs such as the Kassena Nankani Tree Growers Association.... We find that only dawadawa [Parkia], shea trees and baobab trees are left on most fields. We are therefore emphasising planting of trees on farms and compounds. But our staff is limited and people are always requesting for financial assistance before they plant the trees. The NGOs are doing better because they usually support the farmers with seedlings, watering cans and at times financially.

In Chiana women's tree planting groups are springing up. One example is the Kaligabia Women's Group (KWG). It was formed in 1994 and has a membership of 16 women who pay dues. Members of the group narrated their experiences:

We heard that there was going to be a loan for women, so we came together to enable us to benefit from the loan. But we finally did not get the loan. We also come together to help our members when one is sick, has a funeral or during the plastering of the walls of our homes. We also help each other to weed our groundnut and rice farms and make a group farm. It was the agricultural extension people who actually brought us together. We realised that it was a good idea because if any of us is building we all help by fetching water or plastering and rendering the plaster with boiled and burnt dawadawa husk. No other group has helped us, although Dan Loguzuri once gave some seedlings to some of our members to plant. The agricultural extension agent here is our main advisor and helper. He writes our letters for us...

Our group is now breaking up because we wrote for a loan three years ago and did not get it. Some people used politics and gave the loan money to their favourite groups and left us out. They gave mainly to [salaried] workers and left the right people who need the money out.

We are reorganising ourselves to plant some trees, which the agricultural people have promised us. But our problem is that we cannot get land to plant the trees. So we have to share the trees among ourselves and each and every one will plant on her own land. The agricultural people gave us eucalyptus, *Cassia* and *Leucaena*. Dan Loguzuri also gave us some seedlings. However we are most interested in oil palm because we can use the fruits for soup.

We do not really have a problem with lack of trees here, although we walk long distances to fetch fuel wood and rafter for roofing these days. This is because the trees on the compounds are not sufficient to supply all of us with the rafters and fire wood. It is also because we do not have the right to cut trees from the compound farm areas. You can only cut trees if you are the landlord --even if you are farming there. But in the bush, where we farm, you are free to cut trees anywhere. The trees we preserve on our fields include *dawadawa*, shea, neem, *sinzano* (*Acacia albida*), *kolu*, and *kachigu*.

Our major problem is money to finance our farming activities. Here the rains come at the time when money is scarce and nobody has anything in hand which will enable them to hire bullock to plough our fields. This results in late planting and leads to poor harvest.

The KWG originally formed with the hope of gaining access to a development loan, in an era in which micro-credit finance for women's groups and small-scale enterprises are being promoted. Unfortunately, they were unable to gain this loan, which they attributed to using politics or building patron-client networks. With no access to any other resources, the women were forced to take up tree planting, the only resource being made available to them. However, the women do not see lack of trees to be a serious problem in their area. Moreover the trees they preserve on their farms (*dawadawa*, shea etc.) are completely different from those they are planting, and the new trees that they are interested in planting (oil palms).

Another women's tree planting group is the Central Women's Group (CWG), which was founded in 1990. It has 15 members. Some of these women narrated their experience:

We are all farmers who decided to come together and each contributes a bowl of groundnuts to make a joint farm. We started out with four members when Stella Altia, who works with the 31st December Women's Movement, came around to talk to us about forming a women's group to help ourselves. Then the agricultural people came and they told us to increase our membership to sixteen to enable us to gain agricultural extension service support. Our group members are also members of 31st December Women's Movement and during their meetings we get information on what to do. The agricultural extension officer has also been helping us and telling us what to do on our farms. He is even our secretary and writes our letters for us for free.

In 1994 we applied for a loan to the Ghana Commercial Bank and were granted 880,000 cedis to cover our fertiliser, seed, ploughing, weeding and jute sack needs. We repaid this loan and in 1995 we were given a further loan for 1,268,000 cedis for farming and trading purposes. But because of poor rainfall that year we have not been able to pay the loan in time and are still left with 80,000 cedis interest to pay.

Each of us have been given trees to plant on our farms by the agricultural services. These included eucalyptus, Cassia and *Leucaena*. But most of them died. We wanted to make a joint tree farm but we could not get the land for this. Some of us have individually planted cashew, mango and eucalyptus. We would also like to plant shea, dawadawa, teak and more mango.

The CWG has been more successful than the KWG is getting access to development funding. This is largely through its client linkages with the 31st December Women's Movement¹ and the Agricultural Extension Service. In return for becoming a client to the 31st December Women's Movement the women have been able to gain access to the necessary linkages to gain loans through forming a group with linkages to the agricultural services. But in return they are obliged to support the tree planting exercise of the agricultural services, whose success enables the agricultural services and government to tap into international development funding. The 31st December Women's Movement also launched its own tree planting exercise with support from international funding. While the women plant these global environmental tree species, their own preferences are clearly for a different set of trees, but these do not bring aid and credit and other

support. The tree planting programmes are indeed political programmes as insinuated by the KWG.

Tree planting places considerable strain on these women's groups. They have to find land on which to plant these trees. On the compound farms, there is no space for these trees since other important economic tree species, such as dawadawa and shea are often preserved in large quantities. It is not practical to plant them on their bush farm plots, since they are likely to be destroyed by bush fires during the dry season, and they are not in a visible location, far away from the main transport routes. The ideal placement for a community woodlot is on a main road, with a signpost in front identifying the community groups, NGO, government service or donors involved in the project. The trees that are given to the women to plant are not considered very useful by them, beyond their symbolic ability to channel development funding to various groups who adopt the global environmental symbols. The women would prefer to plant other trees such as shea and dawadawa, trees that they are already planting. But these trees are taken as evidence of degradation and desertification by the existing global environmental coalitions, since it is the very environments in which these trees are being preserved that are seen as a problem. After all, did not the Deputy Director of Agriculture comment: "We find that only dawadawa, shea trees and baobab trees are left on most fields. We are therefore emphasising planting of trees on farms and compounds."

Are these trees being discounted because of the poverty of biodiversity that is entailed by preserving large number of these trees? The answer to this must be no, since the tree planting programmes are hardly recommending biodiversity, but are promoting a narrow range of fast growing exotics which are often planted in monocultural woodlots. Large numbers of cassia, *Leucaena*, teak, mangoes and cashew replacing the much larger *Parkia*, shea, baobab, acacia and *Diospyros* trees, would hardly result in a better environment. However, if the environmental programmes were to focus on these trees, as the women would wish, they could undermine their own success. Recognition of the value of these trees could lead to the eventual questioning of the story-lines on desertification and land degradation (since there are large numbers of these trees in the landscape). It would also be difficult to measure the success of these programmes, since they could no longer claim to have distributed x numbers of seedlings which have been planted over y hectares, which has halted a decline of z rate of loss of woodland. It would be difficult to measure the impact of these programmes on the environment, since in many areas growing number of these tree species are being preserved by farmers.

The significance of planting exotic trees is that they lead to a discernable transformation of the environment. Through this transformation to fast growing global environmental exotics, the impact of environmental messages, the effectiveness of NGOs and government agencies in disseminating these messages, and the receptivity of the people to these message can be measured in the number of trees planted by community groups. Thus the significance of these trees, as the women's groups have realised, is more as a symbol of membership of an environmental and development coalition, rather than in enhancing linkages between agriculture and trees or in environmental protection. The major problem that can arise from these programmes is an overload of trees in the system, with many trees being planted as a way of playing politics, rather than enhancing the environment.

Conclusion

The major rhetorical emphasis on post-Rio global environmental programmes has been of promoting community participation, the participation of minority groups, especially women, respect for the indigenous knowledge of communities and their traditional institutions, and building local capacities to manage programmes. In contrast, this paper has found that environmental programmes erode local capacities to manage the environment by imposing

programmes on them that do not make sense to their local contexts. Local knowhow is eroded by these global environmental programmes which present a situation of crisis that warrants external intervention. Community participation only occurs after the external interventions have been defined and the communities can only participate in furthering the interests of the coalitions that are empowered and funded to implement this environmental programme. Capacity building for community groups involves the groups becoming clients of these environmental coalitions, and being provided with the channels and information to participate in these coalitions.

These coalitions invariably involve the welding of national political interests with agencies involved in development and environmental administration (Ferguson 1994). Credits, aid, development support and other "poverty alleviation" measures are provided to groups that have developed the right political and development linkages. However, these are used to implement programmes which are marginal to the central interests of the people, and which involve considerable expenditures of time and resources. The major problem for the women's groups in the Chiana area is to find land on which they can plant exotic species. These programmes are technocentric and involve the community groups in adopting new technologies. The NGOs and government services involved in the extension of the technology, and the researchers involved in the design of the technology are those who are most likely to benefit from international donor funding. There is only a very minor trickle down of resources to the communities and community groups.

A more appropriate approach to the management of the environment would be critical of crisis narratives, and would recognise their story-lines as a discursive device to develop certain kinds of interventions by experts. The crisis narrative affirms the lack of capacity of peasants to manage their environment and the necessity to support interventions by experts and development agencies who have the capacity to develop the necessary technology to halt environmental decline. It would recognise that most environments are anthropogenic and have been adapted by humans over centuries to their needs. Nature and society cannot be demarcated as two discrete spheres as the boundaries of a forest reserve. It would seek to understand the changes that humans have made to the environment, the strategies that inform these changes, and the potential enhancements that humans have made to the environment in creating natural assets. Technologies generated by international researchers in research stations, working under the constraints of donor funded projects evaluated within narrow time-scales and log frameworks, would not form the starting point for environmental programmes. These natural assets would form the foundations for building new strategies in natural resource management. Since nature and society are interconnected and not divided by discrete boundaries, environmental programmes would be integrated with the production and livelihood interests of various types of rural producers.

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Note

¹ The 31st December Women's Movement was launched in the 1980s by the wife of the then President, J.J. Rawlings. While depicted as an NGO it served to rally women behind the National Democratic Congress (NDC) regime and to channel significant amounts of available development funding into an organisation with close ties to the governing party.