Protocols, treaties and action: the 'climate change process' through gender spectacles (1)

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This paper starts by assessing the extent to which gender considerations have been taken into account in the international processes concerning the development of climate change policy. Finding that there has been very little attention to gender not only in the protocols and treaties but also in the debates around them, the paper goes on to consider whether there are in fact any meaningful gender considerations as regards (a) emission of greenhouse gases (b) vulnerability to climate change and (c) participation in projects under climate funding. It concludes by suggesting some areas in which attention to gender might not only improve the effectiveness of climate interventions but also benefit women, particularly in the area of adaptation.

Introduction

It takes no more than a simple word search of the UN Framework Convention for Climate Change and the Kyoto Protocol, the two most important treaties which relate to global efforts to combat climate change, to discover that the words 'gender' and 'women' are not mentioned in either. One might ask oneself whether the absence of reference to gender considerations in such documents matters at all; they are legalistic tracts designed to provide a general framework under which much more detailed plans have to be worked out. They do not mention 'poverty' or 'deprivation' either, and refer only in very general terms to social and economic development.

More alarming is perhaps the fact that there has been almost no attention to gender issues in the discourse around climate change, and particularly in areas where a gender factor could be anticipated, for example where the effects of climate change are linked to poverty. Very little appears to have been written on the subject. A scan of a number of prominent journals dedicated to the climate issue reveal not a single article on gender implications of climate change in recent years (2). An exception is the article by Denton (2000), in which among other things the author points out that owing the feminisation of poverty, women in developing countries are more vulnerable to the effects of climate change than men are.

Gender issues have also not been discussed much in the so called 'climate change process', that is, the debates that surround the formulation of climate change policy. At the 6th Conference of Parties to the UNFCCC meeting (CoP6) in The Hague in November 2000 the topic was hardly mentioned, although the Chairman of CoP6, Jan Pronk, interviewed after the proceedings, said :

> *"Encouraging the widest participation in the process of promoting and cooperating in education, training and public awareness related to climate change is crucial. In developing country households women are often the primary providers and users of energy. Therefore, the participation of women and women's organisations is crucial".*

While this is undoubtedly true, there are many other aspects of climate change which might well have gender dimensions but which are not included in this statement. The fact that the gender dimension was evidently not a burning issue at the Hague meeting, is perhaps all the more surprising given the fact that the spokespeople for three of the major NGOs – World Wildlife Fund, Friends of the Earth and Climate Action Network – were women, and nearly 20% of all the environment ministers present were female (3), some of whom had key negotiating roles. Indeed the success of earlier meetings, particularly the Kyoto meeting itself, is put down by some observers to the excellent networking done by female delegates committed to action on climate change (see article in this issue by Delia Villagrassa). Their lack of attention to gender issues may perhaps be attributed to their perceived need to focus on the more universal issues and not divert attention towards gender aspects given the limited human resource for negotiation

and the crisis in which the whole debate on the Kyoto Protocol found itself at that time. In 1995, a Women's Climate Coalition called rather wonderfully 'Solidarity in the Greenhouse' had been set up, which was pushing for special attention to women's energy needs (4) but their website is no longer active, and the group cannot be contacted by phone, fax or email. All sight of it has been lost by the UNFCCC in Bonn and it was certainly not present at CoP6 (5).

However the gender issue did come up as one of the very first conclusions at a preparatory meeting for the Earth Summit 2002, which was held in Berlin shortly after the Hague CoP6 meeting (German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the Heinrich Boell Foundation, 2001). Participants at this meeting called for development of a gender analysis in all international energy related processes, and more immediately for a Women and Climate Change Forum at the resumed CoP6 in July 2001. However, just prior to this President Bush announced the USA's decision to opt out of the Kyoto Protocol, pushing other concerns, including gender issues, to the background.

Despite women's caucus participation in the UN Commission for Sustainable Development process (CSD), they had limited influence in integrating decisive text into the energy draft decision text deliberated by the ad hoc Open-ended Intergovernmental Group of Experts on Energy and Sustainable Development in Feb 2001, an area that is extremely relevant for climate change. The group was however able to persuade the G77 and China to introduce the issue of women and energy no less than 5 times in the Outcome Document at the CSD-9 meeting on New York in April 2001 (where there had been none before). The persistent advocacy has thus borne some fruit. And at the CoP7 held in November 2001 in Marrakech, a draft decision was reached (FCCC/CP/2001/L.22) on improving participation of women in the Parties representatives. The decision invites Parties to give active consideration to the nomination of women for elective posts in any body established under the Convention and the Protocol. In addition the Secretariat is requested to maintain records on gender composition of the various bodies (6). Perhaps the election of a woman as the Coordinator of African Negotiators Group from the term starting after CoP7 will help to bring some gender issues into the mainstream of the climate negotiations of the CoPs in future, although whether there is a positive relationship here remains to be see; past experience, as noted above, has not been very good in this respect.

Potential areas of gender concern in the climate discourse

Apart from ensuring that there are more women on the various commissions within the climate change policy development process, gender considerations need to be included explicitly in future policy formulations and activities. Two rationales may motivate this: the idea that inclusion of gender considerations may increase the *efficiency* of the climate change process, and the idea that if gender considerations are not included, gender *equity* may be threatened, both of which are valid principles. There are three areas in the climate debate in which gender spectacles might assist in promoting efficiency and/or equity: responsibility for emissions, vulnerability to climate change, and participation in climate change funded activities.

1. Responsibility for emissions of GHGs

As Nations or as Indidivuals?

Although the debate on what causes global warming may not yet be entirely resolved, the position taken here is that depicted in the IPCC reports and by the majority of scientists, which is that human activities producing carbon dioxide and other GHGs are responsible for a large share of the measured and predicted climate change. When discussing responsibility for the emission of GHGs however one could raise the question of who, exactly, is responsible. At present this is being dealt with in the climate change negotiations with nations as the unit of consideration. Since the larger part of the GHGs emitted into the atmosphere is the result of combustion of fossil fuels, and since the developed countries have large economies which use (and have in the past used) the lion's share of these fossil fuels, most people hold that the developed countries should shoulder the burden of the problem, hence the allocation of emission reduction quotas to all developed countries (varying from 12% reduction (UK) to +10% (Iceland)).

A more radical idea is that every individual on earth should be given one and the same quota, and that through 'Contraction and Convergence' (Meyer, 2000) we would eventually stabilize the level of GHG in the atmosphere: a measure that would imply much greater reductions in emissions in developed countries than is provided for under the current agreements, while allowing developing countries to increase their emissions to a certain extent. Under this system every individual is in the long run equally responsible but in the short term the problem has to be solved by those whose emissions per capita are highest.

The Contraction and Convergence idea however still does not solve the problem of how the responsibility for *action* is to be subdivided within any nation To what extent can one group in a given economy be said to be more responsible for GHG emissions than another, or to be using more, or less, than their own individual quota? The only way in which it might be possible to administer a system by which all individuals, or groups of individuals, are in some way made directly accountable for their own GHG emissions would be via some kind of carbon tax on all products. In the context of the gender issue, is it reasonable, or expedient, to argue that men and women may differ in this responsibility?

Gendered responsibility for primary emissions

On the one hand it has been argued that major and global environmental threats stem primarily from industrial patterns of production and consumption. They are not due primarily to gender relations, nor will they be solved by improving gender relationships (Martine and Villareal, 1997). For this point of view, there is no need to take a gender position on 'responsibility' for climate change. One can contrast this with the Ecofeminist school which explicitly relates modern economies and their production processes to a male-dominated culture, arguing that economies based on feminine principles would look very different and would be much more environmentally friendly (Shiva, 1989). Whether this is so or not, and what ever may change as regards the economy in the future, the fact is that we are at the moment stuck with the economic and industrial structures we have, with the problems that they entail, and with the need to clean up the mess they have produced.

The primary sources of greenhouse gases in the developed economies are the power industry, household use and transport, followed by various industrial processes. Primary sources in the developing countries are the power industry and land-use change, including clearing of forests. It would not be difficult to show that the power and the petroleum industries and many industrial processes are managed by men, both in the North and in the South, and if a shareholders' survey is made, the probability is that where these companies are on the stock market, the majority of their ownership will also be found to be male (in that more capital is in

the hands of the male population in general). The question is, whether men should be considered more responsible than women for the problem. To answer that we need to look at the services and products that these carbon producing industries provide, and who uses them.

Gendered responsibility for use of products and services

There is some uncertainty surrounding the gender distribution of the services of these industries. Consider car ownership: although it has become increasing less skewed over the last few decades in Europe and North America, and is slowly changing in Eastern Europe, it is evident that cars are still used more by men than by women, with the side-effect that women are often disproportionately dependent on public transport (the situation in developing countries is even more extreme in this regard). So men – but of course not all men – are more responsible for the GHGs produced than women are – at least, than some women are. One could argue that the responsibility for GHGs resulting from production of most manufactured goods must ultimately lie with the consumer so the question of responsibility depends on who the consumer is considered to be, making a gender analysis difficult. When it comes to other uses of energy: household energy use in the developed countries is mostly related to heating and cooling, and thus presumably equally consumed by men and women (although in most countries women are still at home more than men. Basically it is very difficult to make a strong case for a real gender difference, not least because income factors may have a much more important and confounding influence on energy use than gender.

The situation in the developing countries is also difficult to assess clearly. Land clearance of forest for agriculture is traditionally a male activity, although much of the farm work that follows is carried out by women. Much of the benefit is for the household as a whole, even in cases where the cash crop profits accrue to the men. To distinguish gender responsibilities becomes not just difficult but pointless. Besides, as they are the majority of household cooks, women could be blamed for GHG emissions from unsustainably managed fuelwood supplies! And who is responsible for the garbage problems in cities such as Nairobi, where the Dandora dump alone holds over 1.3 million m^3 of garbage; tonnes of methane emissions are produced from such dumps, which cannot be allocated particularly to one or other gender. Perhaps one could perhaps the blame the local government officials (mainly male!) who have failed to provide an adequate alternative for trapping the methane. The absurdity, and the dangers, of using this kind of argument to genderise responsibility are clear.

Responsibility for the direct or indirect production,, of greenhouse gases is more or less proportional to financial shares in the economy. In that women have a smaller financial share in the economy, one could say that they are proportionately less responsible. But using this as a principle on which to directly levy funds to cover the cost of global warming is in fraught with difficulty. Such a policy would not increase the efficiency with which the problem of global warming can be tackled, nor would it easily serve to bring about greater gender equity. In the long run it is evident that the costs of control of GHG emissions will have to be paid by the consumers of all goods or services via some kind of taxation system which reflects the real environmental costs of the whole lifecycle of that particular good or service. Thus women, if consuming less, will pay less.

2. Vulnerability to climate change outcomes: determinants and variables

Denton (2000), see also her article in this issue of Gender and Development, makes a strong argument that women in the South are more vulnerable than men to the effects of climate change. Her point, briefly, is that women are in general poorer than men, and more dependent on the kinds primary resources that are most threatened by the changes in climate, both in agriculture and in fisheries. As 'climate refugees' they will also be disproportionately affected. As a result of gendered socialization, it is women who bear the burden of caring for the sick, and in that increased levels of sickness are to be expected to result from climate change, much

of the cost will be borne by women. There is no doubt that these are valid points. A possible question could be, is the particular vulnerability of women to the effects of climate change due more to the fact that they are (on average) *poorer,* or more to the fact that they are *women*, with particular roles and responsibilities which are especially prone to the effects of climate change. Translated into practical terms, the question of concern is whether it is better to approach vulnerability from the point of view of *gender*, or more generally from the point of view of *poverty*.

The view taken here is that analyses of vulnerability should explicitly recognise poverty as the primary variable. There is ample evidence at global and local levels that it is the poor who will suffer most from loss of livelihood related to gradual climate change and also from sudden disastrous climatic events (floods, droughts), as they have little scope for adaptation, resistance and insurance. This would seem to override most other considerations. Most of the gender specific characteristics which make people vulnerable to climate change (heavy dependence on local natural resources, lack of alternative income possibilities, responsibility for care of the sick etc) are in fact characteristics of women in societies of extreme poverty. In better off societies the climate change effects will have less gender differentiation. What is important, therefore, is to recognize that poverty is not gender neutral, and to understand and highlight the particular gender aspects of climate change vulnerability of the poor. Such recognition will lead to more efficient programmes for dealing with the effects of climate change, but also to greater gender equity.

In practice this should not be difficult to follow this course once the principle is recognised. Poverty research in general is increasingly becoming sensitive to gender issues and recognition of the feminisation of poverty is a central issue in many development programmes. Methodologies and frameworks for such analyses (such as the Harvard method) are now widely available in the development literature. What is important is that such methods are taken on board and used in any climate change vulnerability studies that are undertaken in the context of the climate convention. In order to ensure that this happens, there is an urgent need that this be explicitly mentioned in the internationally accepted texts, which define the contents of such studies.

3. Participation in climate funded activities

Combating the climate change problem is becoming a multibillion dollar business with funds for all kinds of projects both in the private and public sectors. The question here is whether women are likely to be able to at least take an equal share in this and what has to be done to ensure that they do. A reasonable aim might be for women to access funds for climate purposes which at the same time have beneficial gender effects, for example opening opportunities for women to acquire technology which otherwise would be financially out of their reach. This would be beneficial from the efficiency point of view – cleaner technology spread, thus more carbon reduction - as well as the equity point of view – more technology for women. The funds under the climate umbrella fall into a variety of types, which need to be addressed separately, since the opportunities for this type of 'win-win' strategy vary.

First, a number of donors are providing funds for so-called 'climate studies', which include the National Communications that all countries are required to produce under the UNFCCC, and other reports which document both the emissions of greenhouse gases and the effects of climate change on local populations. These are essentially scientific papers and the funding is therefore essentially research funding. The scientific community, particularly in developing countries, is of course more male than female but this is a general gender issue and not one that can be tackled specifically for the case of climate change.

More important will be the funds for *mitigation*, for *adaptation* and for *capacity building.*

(i) Mitigation funds.

In the climate change negotiations, it is foreseen that mitigation (that is to say, reduction of greenhouse gases in the atmosphere) will mainly occur not through reduction of production and economic growth, which many environmentalists see as essential, but by economic growth with substitution of old technology with clean technology. The countries that are internationally held responsible for reduction of emissions (Annex 1 countries – i.e. the developed countries) have, with the exception of the USA, accepted reduction quotas, and plan to achieve these reductions not only in their own economies but by a number of so called flexible mechanisms abroad. The mechanism that concerns cooperation with developing countries is the Clean Development Mechanism, under which carbon saved by the transfer of clean technology to a developing county can be deducted from the quota of the developed country, which sponsors at least part of the costs of this clean technology.

The kinds of technologies most likely to be involved are those with the lowest cost per ton on carbon saved, and include energy conservation technology (eg in power generation, transport and manufacturing, fuel switching (eg from coal to gas), and substitution of fossil fuel equipment by renewable energy technology where this is economic, although solar PV technology cannot compete price-wise in the carbon stakes at present. Under CDM the setting up of 'sinks' (carbon sequestration in the form of forests) is also allowed, but only for the case of 'afforestation' and 'reforestation', which in practice means putting up forests where there were none before. CDM projects have to demonstrate that they have 'development effects' before they are certified, but the definition of 'development effects' will be locally determined by the individual developing countries. There is no specification in the law that they have to have any particular gender consideration, this is an aspect of development that also has to be determined by the host country.

Despite the fact that projects are supposed to have a development effect as well as a carbon mitigation effect, the reality is that carbon will be uppermost in the minds of the sponsors, who will select the cheapest ('most efficient') ways of reducing greenhouse gas emissions. The cheapest ways of saving carbon are large scale projects in the power and manufacturing sector, and in forestry sink projects and although women might be involved in any of these as employees/labourers, there is no specifically gender benefit to be gained from them (though like everyone else, they will hopefully enjoy the increased access to electricity, reduced power outages etc).

Much more interesting for women, and particularly for poor women, would be a range of technologies in the areas in which they use energy now, areas which have received very little attention as regards project finance in the past: household energy, agricultural and food-processing, forest management, water-pumping etc, in the rural areas, and energy appliances and processing equipment in the peri-urban areas. The problem is that while in theory the CDM offers a whole new opportunity to market renewable energy technology to women, in reality this may not be so attractive to carbon investors as the large one-off types of investments in industry, despite the additional financial bonus that is implied by the emission reduction. They are unlikely to decide that targeting women will result in greater efficiency in offsetting carbon. This despite the fact that there are obvious equity reasons for wishing to promote technologies for women.

(ii) Adaptation funds.

From the beginning, there have been claims from many Southern countries that what is needed, even more than reduced emissions, is assistance with adaptation to the inevitable damaging effects related to climate change (raised sea levels, changing runoff patterns, increased disease levels, more weather turbulence etc). Some of the developing countries have prepared National Communications and it is expected that this will be the basis on which adaptation programmes will be developed and implemented. Funds are to be provided for adaptation projects by a small

levy on all CDMs and by two special funds under the UNFCCC. At present these funds are very small in comparison with the scale of the problems to be solved, especially due to the withdrawal of USA from the Protocol and thus from the CDM mechanism, moreover the parameters or criteria under which a project may be considered an adaptation project have not yet been defined.

Nevertheless, taking the long term view, there may be other opportunities for project financing for climate adaptation and it is likely that more of the developed countries will pledge contributions bi-laterally. There are various kinds of investments likely to be considered: civil engineering work to shore up dikes and seawalls, but also projects in agriculture and in forestry to enable vulnerable populations to maintain their livelihoods despite rather rapid changing climatic conditions (whether increased or decreased rainfall). These are areas in which women are deeply involved and where, if treated in a gender sensitive manner, there might be real benefits to be gained, both in efficiency and in equity terms. An example would be forest management. Locally based community forest management projects already exist in many countries (India, Nepal, Mali, Burkina Faso, Uganda to name but a few) in which women play an active role. In some cases they are able to earn considerable income from continued sustainable harvesting of forest products to supplement meagre agricultural earnings. Such projects could easily be promoted as climate adaptation projects in the sense that they modify micro-climates and protect water catchments, at the same time diversifying income opportunities thus building in protection of livelihoods, not least for women (Skutsch, 2002). They are much more likely to be directly beneficial to rural women than the sinks allowed under CDM.

(iii) Capacity building funds

The pool of women professionals in the fields of engineering, energy and other technical areas at all levelsis small. There are few women who own or are involved in managing large businesses. Lack of financial and management capacity has been the main cause for this imbalance. If women are to be able to tap climate finances at all, it is clear that capacity building focused on their needs will be necessary, including the need to lobby for their own interests within the climate negotiations. But also specifically within the context of technology transfer and the flexible mechanisms, capacity will be needed to identify, assess, access and assimilate technologies as well as to implement them.

Capacity building has been seen by the international community as essential to enable implementation of the UNFCCC and Kyoto Protocol. Funding has been and will continue to be allocated in increasing amounts. The question is, to what extent may women, and particularly low income women, benefit from this and what steps need to be taken to ensure that they do.

The need to address the likely bias of CDMs to large scale industrial projects and large scale sinks which are of little direct interest to most poor women has already been mentioned. This implies that one aspect of capacity building should be to assist women's groups to lobby for a more 'women-friendly' CDM policy, at least in the long term. There is also need for attention to their specific needs and capabilities as regards adaptation projects. Cleaner technologies in the agricultural and water sector should target women as far as possible and this may require gender sensitive training for those responsible. This could be justified both on efficiency and on equity grounds.

Conclusions

There are many gender angles related to the climate change convention and the instruments therein. Some, however, seem to be more strategic than others. While there is little to be gained by looking at the responsibility for emissions on a gendered basis, there would be benefit in publicizing the fact that mitigation activities under the CDM are unlikely to bring much benefit to women unless that policy is explicitly adopted and measures are taken to counter the flow of

investment funds to the cheapest, large scale investments for carbon saving. The opportunities to 'hi-jack' climate funds to direct renewable energy technologies towards women's real needs , so long under estimated or ignored, should not be lost, even if this requires insertion of special clauses in the texts and special sub-funds to finance them. Special attention also needs to be paid to the opportunities in adaptation investment which, based on assessments of vulnerability to climate change, will allow populations to survive the inevitable changes in the climate that are to come. Since these will to a large extent involve land use solutions in rural areas, there is a lot of scope for women to be involved in these and therefore gender sensitive approaches in their design and implementation are important. Capacity building both of women themselves and as regards gender sensitivity of those entrusted with the development of policy and projects is therefore essential at all levels in the international climate change process. Perhaps it is time to suggest that gender is specifically mentioned in the next international climate change treaty.

Notes

(1) This paper is draws on an earlier publication: Wamukonya, N. and M. Skutsch (2002). The 'gender spectacles' is a reference to Caren Levi (1992). I am grateful to N. Wamukonya for comments on this new paper.

(2)Climate Policy, Joint Implementation Quarterly, Climate Change

(3) From Bangladesh, Bulgaria, Chile, Costa Rica, Egypt, El Salvador, EU, France, Gambia, Guinea, Honduras, Iceland, Iran, Japan, Mexico, Norway, Surinam, Tunisia, Venezuela, South Africa rep.

(4) The platform of the coalition had been to promote women's participation in policy and expert levels of UN decision making, to reject Joint Implementation and nuclear power as climate strategies, to ensure that women's needs were explicitly dealt with at CoP1, and to lobby for financial support for women's renewable energy networks. They further stated that environmental policymakers should not instrumentalise women of the South by holding them responsible for population growth (as this is a means of trying to shift the blame for environmental degradation from the industrialised to the developing countries). Within industrialised countries, the Coalition argued, responsibilities must not be shifted to the private households entirely, as this will only conceal the role of industrial production processes (Solidarity in the Greenhouse, 2001).

(5) I am grateful to Sharon Taylor of the Climate Change Secretariat for this information.

(6)The newly established 20 member CDM Executive Board has 2 women. The Technology Transfer Expert group has 15 members, which includes 3 women.

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