# Gender and International Environmental Negotiations – How Far and How Much More?

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#### Introduction

The welfare of human beings is the final reference point in judging the impact of what we do or fail to do. Each one is entitled to a healthy and productive life in harmony with nature. Women have an essential role to play in the development of sustainable and ecologically sound system of natural resource management. Contrary to the common belief that natural resources have an unlimited capacity to meet humanity's needs, the denudation of forests, and environmental destruction has adversely affected the women more than any thing else. Each day, the life of many rural women living in developing nations begins with a long march in search of water, fuel, and fodder. The direct and critical relationship between women and natural resources draws its strength not from biology—but from gender, and the socially created roles and responsibilities that fall on women in households, communities, and ecosystems. There are large number of complex problems which women face - work burden, lack of property, unequal distribution of food and other resources within the family, duality of roles, coupled with inferior social status and their total lack of control over cash and productive resources. All these problems are acute in their own way and their neglect in environmental negotiations only accentuates and heightens the existing problems. Evidence suggests that many treaties – involving water and sanitation, social forestry, etc fail to promote women's interests. The same is true of responses to environmental disasters.

Environmental issues are not always gender neutral. The lack of the presence of women at all decision-making levels in the international treaties and environmental impact assessments, as well as limited access to the negotiating table, relates directly to the extent of incorporation of women's concerns who are intimately connected and most affected by environmental issues, but have no vote and voice in the treaty making or implementation process. As a result, their concerns are not being adequately addressed. Leaving environmental negotiation to the States, international bodies, governments, or the handful of national and international NGO's and leaving its implementation to the country level institutions leads to women being viewed as "mere local assets" by the planners and administrators.

### Objectives of the paper

This term paper explores how far women have participated in decision-making and negotiation processes and to what extent have their concerns been taken into consideration. The treaties largely dealing with fuel, water, and food--those which touch women's life more closely--have been studied to examine how far sustainable development has been perceived from the standpoint of women's empowerment and gender equality. Some of the select treaties that have been surveyed are:

- African Convention on the Conservation of Nature and Natural Resources, Algiers, 1968
- Convention Concerning the Protection of World Cultural and Natural Heritage, Paris 1972
- Agreement Concerning the Protection of Water of the Mediterranean Shores, Monaco, 1976
- Agreement on the Joint Regulations on Fauna and Flora- Enugu, 1977
- United Nations Convention on the Law of the Sea, 1982
- Benelux Convention on Nature Conservation and Landscape Protection-Bruxelles, 1982
- World Charter for Nature (1982)
- International Tropical Timber Agreement, 1983
- ASEAN Agreement on the Conservation of Nature and Natural Resources- Kuala Lumpur 1985
- Convention for the Protection of the Marine and Coastal Environment of the Eastern African Region-Nairobi, 1985
- Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (SPREP Convention) Noumea, 1986
- Fourth ACP-EEC Convention- Lome, 1989
- Convention on Biodiversity, 1992
- Agenda 21 UN Conference on Environment and Development June 1992
- International Convention to Combat Desertification Paris, 1994
- UN Fourth Conference on Women 1995
- Land Mine Treaty 1997
- Convention on Access to Information Public Participation in Decision-Making and Access to Justice in Environmental matter – Aarhus, 1998

Some of the other conferences that dealt with women's issues were also studied. These include:

- World Conference to Review and Appraise the Achievements of the UN Decade for Women: Equality, Development and Peace, Nairobi 1985
- The World Summit for Children, held in New York in 1990
- The International Conference on Nutrition, held in Rome 1992
- The World Conference on Human Rights, held in Vienna 1993
- The International Year of the World's Indigenous People 1993
- International Conference on Population and Development, Cairo1994 The Global Conference on the Sustainable Development of Small Island Developing States, held in Barbados 1994
- The International Year of the Family1994
- World Summit for Social Development, Copenhagen 1995
- Habitat II- Istanbul 1996

The author scrutinized these treaties to discern if there exists a general pattern in the treaties that either addresses gender as called for in Agenda 21 and in other UN documents or not. Do any of the Beijing goals for women, for example, get included? Finally, this paper asks the larger question: Are high profile conferences like Beijing 95 or soft law items like Agenda 21 ever incorporated into treaties? This analysis explores the structural pattern of the past treaties as well examines how far their concerns have been consciously taken up and the various factors that influence the gender patterns of activity and access to participation in environmental negotiation and treaty making.

The factors that have been accounted for include the regional locations and demographic factors, general economic conditions such as poverty levels; infrastructure of the major participating (countries) parties to the environmental treaties; their cultural, political, institutional factors; education levels and gender participation rates. An analysis of how far gender issues have been addressed in international environmental treaties involves important elements of a conceptual framework like the accountability, comparability, networking, cultural values, and strategies.

The Gender lens (adapted from the *Gender Analysis Framework: FAO*, "Gender issues in the Zambia Forestry Action Program" (1997)) has been applied to study the evolving role of women with respect to changes in:

- □ The development of context or patterns in environmental negotiations How have women been perceived with changing times? What is getting better? What is getting worse?
- □ Women's and men's activities and roles in environmental treaty making Who does what?
- □ Women's access to information and control over implementation and reporting and its comparison with men Who has what? Who needs what?
- □ In the environmental negotiation framework what actions are needed What should be done to close the gaps between what women and men need? How and what should development deliver?

"The term 'gender' is largely understood as a social construction of female and male identity. It transcends 'more than biological differences between men and women.' It encompasses the manner and mode in which those differences, whether real or perceived, have been valued, used to assign and define the distinct roles of men and women and expectations placed on them." (Source: Report of Ministry of Women's Affairs, New Zealand, http://www.gdrc.org/gender/gender-ests.html#tre- 12<sup>th</sup> Paragraph-contextualizing gender analysis). It is important to recognize that women and men's lives and their experiences, needs, issues, and priorities are different. And that the interests that women have in common may be determined as much by their regional location, social position, or their ethnic identity as by the fact that they are women and that different strategies are necessary to achieve equitable outcomes for women and men as well as

different groups of women. An attempt has been made to examine the following (based on the adaptation from *ADB 2002*, "Gender Checklist – Agriculture"):

- Do the goals, purposes, or objectives of the treaty explicitly refer to women or reflect women's needs and priorities?
- Does the negotiation process performance indicator identify the need for data to be collected, disaggregated by gender? Was such data laid on the table and ever used?
- Do the planning assumptions of the environmental treaties adequately reflect the constraints on women's participation in the process?
- Does the treaty making process include measurable indices for the attainment of gender analysis objectives?
- Does the process input identify opportunities and obstacles for female participation in treaty formulation, management, implementation, and delivery, and in the monitoring and evaluation of resources and benefits?
- Can the process of environmental negotiations meet both *practical* gender needs thereby improving the efficiency of women's and men's productive roles and *strategic* gender needs impacting gender equity through women's participation?
- Are the treaty regimes relevant and accessible to women from developing countries?

#### **Analysis and Prescriptions**

The first mention of women in the environmental treaties was in 1968 during the African Convention on the Conservation of Nature and Natural Resources held at Algiers. In the 1980s the relationship between women and the environment had received considerable attention and since then the impact of the international environmental crisis on women has been an important subject of study. The parallel workshop of NGO's along with the first World Conference on Women in Nairobi (1985) was symbolic of the interlinked concerns of women, development, and environment. Both recognized and stressed women's concerns and their incorporation as an integral part of the policy planning. Women's Action Agenda 21 as part of the 1992 UN Conference on Environment and Development (UNCEDA) reflected a cross sectoral approach including women's issues. The focus was on the strong links between women and environment. But it was the International Drinking Water Supply and Sanitation Decade and the UN Conference on Environment and Development (UNCED) that has been hailed as promoting the role of women in natural resource management in a major way. Later, the Beijing conference in 1995 listed a greater need to involve women in issues of sustainable development and environment.

In 1998, the World Conservation Union (IUCN) framed a "Gender Policy Statement" that recognized the need to consciously enlist women's concerns for sustainable use, management, and conservation of natural resources. Gender equality and equity were felt to be fundamental to human rights and social justice issues and a foundation paving the way for sustainable development. Understanding the linkages between gender

relationships and the environment became a major theme for advocacy and shifting paradigm. It concluded that only with a gender perspective in place can a complete picture of human relationships and ecosystems be built up.

#### **Results of Treaty Analysis**

- 1. The analysis of these treaties shows that the incorporation of gender issues in the planning, design and implementation of environmental treaties has been very limited. There is a predominant focus on women rather than on gender relations and the tendency is to take the category of "women" as a homogeneous entity and assume the universality of gender roles. Women have been approached and viewed as a group. This is clearly brought out in the observations of Bina Aggarwal: Environmental projects are support for collective actions by women. "This has the potential to confer inalienable use rights though not necessarily property rights over natural resources. Women have more chance of exercising rights as a group than as individuals" (Agarwal, 1994).
- 2. Thus far, treaties are also marked by quasi-exclusive attention to gender/sustainability issues within the context of poor and rural habitats, thus partly ignoring the overwhelming impact of current economic liberalization and globalization. Deforestation, erosion and desertification are more common and of greater concern in poor countries. The urban bias has been in respect to seeing poor urban households to be most dangerous to environment. Poor urban people who live in unsafe and cramped structures, located in environmentally vulnerable areas, have been perceived to be most undesirable. The urban rich and others often perceive those who live in slums and congested areas, by virtue of their socio economic position, more vulnerable. Thus, these treaties have failed to take a balanced view.
- 3. A basic and most general weakness of the environmental treaties is the tendency to put together all environmental problems into the same undifferentiated category, with no attempt to discriminate serious and generalized problems, minor and localized ones, or short-term issues from long-term threats. This leads to difficulties in assessing the real contribution and impact of different factors or social causes on gender issues. This classification is imperative to specifically study the influence of gender issues on environmental problems in terms of the degree of intensity, gravity and reversibility. A simple classification (taxonomy) that lists critical/universal environmental problems relating to women as well as one featuring secondary and localized/ temporary problems should be done. An attempt should then be made to identify how gender issues affect each of these sets of problems. Some of the critical/universal environmental problems could be categorized as those that affect men's basic survival too. This exercise should precede the formulation of an agenda.

- 4. Most of the environmental issues dealt with so far have been more closely related to production and consumption patterns associated with industrialization and are largely related to the notion of "development" as understood in high-income countries and the North and, to a much lesser but growing extent, as perceived by the less-developed world and the South.
- 5. The view of development that dominates the environmental treaties is market-based economic growth. Deregulation, structural adjustment, reduced government intervention, heightened trade and increased competitiveness are perceived as more important and critical rather than the miracle of the women's empowerment, which is the key to development. The domineering approach of the miracle of the market does not principally favor redistribution of resources, roles or responsibility. Gender-environmental considerations and precautions tend to be perceived as superfluous by comparison to the urgency of survival. Concern with gender and environmental issues are largely seen in the domain of the rich nations.

Environmental issues have largely viewed women as either victims or not as effective resource managers, and in more of a secondary and local nature. For example, women are often depicted as spending much time and effort in fending for fuel wood or carrying drinking water pots for miles. This kind of narrow analysis usually overlooks women's roles in resource management. While it remains true that women in rural areas of the third world are largely responsible for fetching water and fuel wood, their role has not been taken equally into account in the discussion of sustainability. This overlooks the relationship that women have developed with nature and the attributes that would make them develop more sustainable practices. Because this relationship is culturally defined, it evolves with cultural change.

Environmental change has itself been a source of gender role changes. Men and women tend to occupy, use and manage aspects of the biophysical environment in a gender-differentiated manner. At the local level women have often played leadership roles more or taken the lead in promoting an environmental ethic, reducing resource use, and reusing and recycling resources to minimize waste and excessive consumption, e.g., Wangari Mathai's green belt movement and Chipko movement in India.

Wangari Mathai led the green belt movement in Kenya by organizing women to plant trees and preserve resources. The process of mobilizing people to action addresses a wide range of issues that directly affect the lives of individuals, particularly women, including education, access to water, equity, and reproductive health. People then begin to stand up for their rights and those of their communities. It is their empowerment that leads them to decide to prioritize the environment and good governance.

The Chipko Movement started in the 1970s and 1980s as a resistance to the destruction of forests. The first Chipko action took place in April 1973 and over the next five years it

spread through the entire Himalayan range in Uttar Pradesh. The name of the movement comes from a word meaning "embrace": the villagers hug the trees, saving them by interposing their bodies between them and the contractors' axes. The Chipko protests in Uttar Pradesh achieved a major victory in 1980 with a 15-year ban on green felling in the Himalayan forests of that state by order of India's then Prime Minister, Indira Gandhi. Since then the movement has spread to the entire country. The movement is an important milestone in the environmental preservation.

- 6. Women can have a particularly powerful role in influencing sustainable consumption decisions. In addition, women's contributions to environmental management, have often taken place at the local level, where decentralized action on environmental issues is most needed and decisive. Women have particular knowledge of ecological linkages and fragile ecosystem management. Because women are responsible for fuel, fodder and water, the depletion of these resources has increased their work burden as now they have to tread miles to gather the same. Thus they are more conscious of the need and manner in which natural resources need to be preserved. Hence their role is crucial to the enhancement and the preservation of the environment through more participatory international treaties and conventions. "Human beings are at the centre of concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature. Women have an essential role to play in the development of sustainable and ecologically sound consumption and production patterns and approaches to natural resource management, as was recognized at the United Nations Conference on Environment and Development and the International Conference on Population and Development and reflected throughout Agenda 21. Awareness of resource depletion, the degradation of natural systems, and the dangers of polluting substances has increased markedly in the past decade. These worsening conditions are destroying fragile ecosystems and displacing communities, especially women, from productive activities and are an increasing threat to a safe and healthy environment. Poverty and environmental degradation are closely interrelated. While poverty results in certain kinds of environmental stress, the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries, which is a matter of grave concern, aggravating poverty imbalances" (Beijing Conference. Para246. http://www.un.org/womenwatch/daw/beijing/platform/environ.htm).
- 7. Environmental impacts that increase the burdens of women, or that have negative health consequences for women have not been perceived as a result of degradation. Greater political will and financial resources are required to reverse the process and to contain the problem. "Rising sea levels as a result of global warming cause a grave and immediate threat to people living in island countries and coastal areas. The use of ozone- depleting substances, such as products with chlorofluorocarbons, halons and methyl bromides (from which plastics and foams

- are made), are severely affecting the atmosphere, thus allowing excessive levels of harmful ultraviolet rays to reach the Earth's surface. This has severe effects on people's health such as higher rates of skin cancer, eye damage and weakened immune systems. It also has severe effects on the environment, including harm to crops and ocean life" (ibid).
- 8. The study of various environmental treaties reveals evolving perceptions and changing praxis concerning the role of women in development. It also reveals the divergent views of the North and South's perception and definition of the problem. Shifting positions and changing priorities over the last few decades have marked interpretation of women's roles and gender relations. The concepts of "development" and "underdevelopment" first voiced the economic role of women was perceived basically in the area of reproduction. Early 1970s emphasized Women in Development (WID), stressing greater participation and resultant benefits thereby making development more effective. In the 1980s it was Gender and Development (GAD) that became the catchphrase. According to Braidotti, "GAD sought to empower women and to transform unequal social/gender relations. It aimed for full equality of women within the framework of economic development" (Braidotti 1994: 80-82). This approach examined the relative positions and system governing the relations of men and women and the extent to which they determine their ability to participate in development. The aim was to involve women as active participants in ongoing interventions, but it failed to concern itself with the underlying inequities. Later, the efforts of women's movements to cope with the Earth's deteriorating environment has led to a concept of Women, Environment and Sustainable Development (WED) in the South; in the North it has given rise to Nature Feminism and Ecofeminism. The WED emphasizes problems such as deforestation and desertification, poverty, fuel wood, animal fodder, and water, which are becoming increasingly scarce. However, the underlying assumption of the approach is that knowledge is a male prerogative. While Nature Feminism and Ecofeminism emphasizes nature versus culture with culture being viewed as superior. Feminism is associated with nature while men are more closely related to culture, thus underlining their superiority.
- 9. Even where women's concerns are noticed, they are perceived to have a privileged relation with nature. This relation is seen to stem from the caring, nurturing, and non-violent traits which are more closely associated as innate to women and which enhances their propensity to conserve the environment. Men are seen as having a patriarchal attitude towards nature, which is dominated by a mechanistic approach and a profit-driven pattern of resource exploitation. "The common approach is that women are related to nature and men to culture implying that, nature being inferior to culture, women are seen as inferior to men" (Leach, Joekes and Green 1995, http://www.gdrc.org/gender/gender-and-envi.html). This is the predominant view held by many eco feminism theorists. "Women thus fall in the same category as nature, both of which suffer from a

relation of oppression and dominance by the patriarchal male.... Women and nature are intimately related and their domination and liberation similarly linked" (Shiva, 1989).

- 10. The broad perception of the earlier treaties has been that in South Asia, the Women's Rights Movement focused on the legal aspect and redressal of women's rights, whereas the Feminist Movement identifies patriarchy as a source of oppression.
- 11. The report of the Fourth World Conference on Women Platform for Action on Women and the Environment as a part of the Beijing Conference emphasized that "Women have largely remained absent at all levels of environmental policy negotiations, formulation, and decision-making in natural resource and environmental management, conservation, protection, and rehabilitation, and their experience and skills in advocacy for and monitoring of proper natural resource management. Women are rarely trained as professional natural resource managers with policy-making capacities, such as land-use planners, agriculturalists, foresters, marine scientists and environmental lawyers."
- 12. The main reasons why women have so far remained largely out of the processes of environmental treaty making is the skewed perception of women's roles; being viewed as dependents and victims, lack of their control over resources, low levels of education, and consequently low level of aspirations, as well as the failure on part of women to see themselves in an enlarged role and empowering positions. Even men initially resist women taking on new roles, though once they are aware of the benefits, men's attitudes can dramatically change. Moreover, women are unable to commit to major financial outlays. Their desire for many things is often not matched by the ability to pay, or to command resources within the household and community. The most important obstacles in lack of adequate and effective women's participation in the environmental treaty making have been more attitudinal rather than the dearth of resources.

In general, I think it has been both male apathy and also neglect of their roles by women themselves. It is often not ignorance but literally the distrust of women's abilities to cope with new roles that has led to their neglect in environmental negotiations. So far, the perception of environmental problems has been one-sided. Substantively, the inter linkages of structures have not been fully reckoned with and this has posed these limitations. Therefore, future action should seek to change the attitude of both men and women on these issues and clearly spell out women's potential role and function in dialogue restructuring and negotiation processes.

# Main Recommendation: To Frame an Additional Protocol to the Biodiversity Conference, 1992

There is a dire need to have greater women's participation and address women's concerns using the gender lens. This author sees two possible approaches to deal with this issue. One is to develop a separate framework that could be uniformly used with every environmental treaty by the parties and countries that intend to incorporate gender concerns and emphasize the issue. The other way is to integrate it as part of each treaty (agenda wise) or to design additional protocols/ amendments that make the whole process of treaty making more comprehensive. I personally would prefer the second choice as I strongly feel that women's concerns should not be treated in isolation or exclusively but what is more important is to enable the process participant to use the gender lens effectively. I would see the integrative approach more overpowering and more result oriented.

I think of all the treaties the most comprehensive has been the UN convention on the Bio diversity, held in June 1992 at Rio de Janeiro, which dealt with multifarious issues. Women's concerns were very well articulated in the report of the UN conference on environment and development. The Convention was established after years of negotiations by the Preparatory Committees with the objective of ensuring the conservation of biological diversity and the sustainable use of its components. The Convention aimed to promote a fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Five major agreements on global environmental issues were signed. The two formal treaties whose provisions were binding in nature were the - Framework Convention on Climate Change and the Convention on Biological Diversity. The other three UNCED agreements were non-binding statements on the relationship between sustainable environmental practices and the pursuit of social and socioeconomic development. So far there are no protocols to the Convention, although at the second Conference of the Parties (COP-2) in 1995, a sincere attempt was made by a working initiate bio-safety group to protocol on (http://www.ciesin.org/TG/PI/TREATY/framwork.html).

The objective of these intended protocols is to minimize the adverse impacts and potential risks posed by modern biotechnology through modification of living organisms. There was no consensus in the meeting held in Columbia in1998. Due to the cross-sectoral nature of the issues relating to bio-diversity, the Convention has close relationships with a number of other UN Conventions and dealt with many cross cutting issues impinging on women's concerns. However, I would suggest that an *additional* protocol to that convention be added. This protocol should focus on translating the commitment of the Beijing conference which was to involve women actively in environmental decision-making at all levels, integrate gender concerns and perspectives in policies and programs for sustainable development and strengthen or establish mechanisms at the national, regional and international levels to assess the impact of development and environmental policies on women.

#### Recommendations

- I. To enlist the greater participation and involvement of women they should have a defined role in pre-conference deliberations, framing of issues, preparation of agenda, role in monitoring and evaluation. Women should have access to basic information on the agenda. I think it would be extremely beneficial and necessary to create an institutionalized mechanism for women's participation. May be to begin with, it could be prescribed that at least one-third of participants be women. The countries and other participating parties could be advised to follow suit in the constitution of delegations and teams representing various interests. The countries of the North could take an initiative and demonstrate the positive outcomes associated with such a protocol. The mechanism could be on the lines of reservation for women in the local self-governing institutions in India, which I think has been instrumental in giving women a voice and a vote. In fact, they are impacting major areas of development through their participation in agricultural plans, social forestry, cropping patterns, use of water, etc. In addition, the actual physical participation (as member of negotiating teams) of the available enlightened women in politics and in government, should be sought. They could play a leading role by inspiring and motivating many others. The participatory approach enhances the validity of agreements in the treaty negotiations, permits the triangulation of results, gives an insider's perspective, is more interactive and also taps richly detailed, contextualized, specialized knowledge and information that provides multiple perspectives. It also leads to interdisciplinary outlooks so that organizations are not dealing with issues in isolation. Opponents to this approach say that the process may become more time intensive, require more training and experience, and that the data can be difficult to analyze, making it more difficult to define differentiated strategies. These are only perceived disadvantages however.
- II. Diverse issues in relation to gender equity needs to be examined in consultation with all staff and information on "best practices." One strategy can be to include gender equity in the terms of reference of the treaty's reviews, meaning there should be gender auditing for each treaty both in the implementation review and also in the agenda formulation of the new treaties.
- III. The whole dialogue and the negotiation process needs to be restructured. It is important to give women a chance by allowing them to take over guaranteed leadership positions within the negotiation structures based on the proportion of women (region wise) who are likely to be affected by the issues under consideration. Greater and institutionalized representation at the local, national, and international level is imperative in order to carve a special role for them in implementation. There is a need for more information, education, and empowerment to enable women to bring their perspective on environmental protection to the fore. Women gain knowledge and experience both in their home

- and working environment, yet this double contribution to society often denies them the opportunity to influence the decision-making process.
- IV. The rationale for inclusion of women, by reason of their values and attitudes, could make a qualitative change in the decision-making process of environmental treaties. Thus, given their moral commitment for protecting the environment, the presence of women in specific treaty regimes and institutions would make a significant contribution to the achievement of more balanced sustainable development. Consequently, their empowerment in the decision-making process would naturally lead to more sustainable negotiation practices. This does not mean that women will always be more prone than men to make decisions that favor sustainability. It is the attributes that are culturally ascribed to them that are linked with sustainability. In this sense, it is in society's interest to propagate such attributes and values, but there is no reason to identify them with women only. According to Jiggins (1994), "The female participants in the Women's World Conference on the Environment noted that one of the main reasons for their involvement in environmental activism was their concern for the well-being of future generations, and that male respondents ranked this interest much lower in their list of concerns." Moreover, it is obvious that women neither exclusively nor mostly lead environmental treaty making. Both men and women will have to work hard at developing the values and fostering the attitudes and behavior patterns consistent with the development goals.
- V. Participation of women at the local level in devising agricultural plans, water and land use, social forestry, identification of public service needs, spatial planning and the provision and design of urban infrastructure should be enhanced.
- VI. The key issue should be to clearly spell out the level and intensity of gender-environmental commitment and the tradeoff with economic growth concerns. The situation differs in developing and newly industrialized countries, which have realistic perspectives for socio-economic growth in the future. For many, gender-environmental concerns tend to pale into insignificance on an everyday basis in comparison with the need for economic growth. The bottom line is that future environmental negotiation outcomes depends fundamentally on the manner and extent to which women's concerns and sustainable development is pursued and the extent to which it is attained during coming years. How gender relations affect critical environmental outcomes has to be framed within the context of the dominant processes of economic globalization.
- VII. Greater investment in human resource development through liberal expenditure on education of girls and women of all ages in science, technology, and economics is required. To increase the proportion of women in scientific environmental education programs, particularly at grass-roots levels and greater involvement as decision makers, planners, managers, scientists, and technical

- advisers of various small and big projects is imperative. There should be additional training as professional natural resource managers with policy-making capacities, such as land-use planners, agriculturalists, foresters, agriculture scientists and environmental lawyers.
- VIII. In order to enable women to perform effectively in the treaty making, they should be given training in negotiating their new roles. They should be trained as good administrators, good natural resource managers; taught communication skills, networking, and even effective bargaining. Evolution in gender roles induced by environmental change can mean better communication and shared decision-making but negotiating new roles and responsibilities can be a painful process.
  - IX. Women should be involved in the design, approval and execution of environmental related projects. The project evaluation should include assessments in terms of environmental impacts on women and the degree of efficacy and efficiency of women's participation.
  - X. Institutional coordination between women's NGOs and international and national institutions dealing with environmental issues should be firmly established. For this the tripartite structures could be adopted.
  - XI. Establishing structural links between gender relations, environment, and development, with special emphasis on particular sectors, such as agriculture, industry, fisheries, forestry, environmental health, biological diversity, climate, water resources, and sanitation is important.
- XII. Gender-sensitive databases, information, and monitoring systems should be consciously developed. It is vital to integrate demographic factors into environment impact assessments.
- XIII. The most important is that the principle: "In the best interest of women" be kept as the dominant principle in all decision making. The "rightist approach" should be strengthened rather than the "care giver approach." Countries, particularly the non-signatories, should be urged to sign, ratify, and implement all existing agreements that promote women's rights, e.g. CEDAW. (As of 2 March 2006, 183 countries over ninety percent of the members of the United Nations are party to the Convention. An additional State has signed, but not ratified, the treaty therefore it is not bound to put the provisions of the Convention into practice. The United States has signed it but still not ratified it.)
- XIV. Vienna Declaration and Program of Action adopted at the World Conference on Human Rights in 1993. There is a need to promote greater coordination and establish a linkage within and among institutions and secretariats, implementing the Platform for Action and chapter 24 of Agenda 21 and the Beijing conference

along with the Commission on Sustainable Development, seeking inputs from the Commission on the Status of Women with regard to women and the environment and monitor their participation.

#### The Additional Protocol should specifically focus on:

- A. Development strategies must realistically reflect the short, medium and long-term implications of and consequences for women.
- B. Poverty Alleviation strategies should be evolved to prevent deterioration of natural resources that displaces communities, especially women, from incomegenerating activities. Poverty is also closely related to inappropriate spatial distribution of population, to unsustainable use, and inequitable distribution of such natural resources as land and water, and to serious environmental degradation. Particular attention is to be given to the socio-economic improvement of poor women in developed and developing countries. As women are generally the poorest of the poor and at the same time key actors in the development process, eliminating social, cultural, political, and economic discrimination against women is a prerequisite of eradicating poverty.
- C. Governments at all levels should ensure that women can buy, hold, and sell property and land equally with men; obtain credit and negotiate contracts in their own name and on their own behalf; and exercise their legal rights to inheritance. National legislation should safeguard the existing intellectual property rights.
- D. Efforts aimed at negotiating and implementing international treaties for rehabilitation of ecologically sensitive areas should necessarily take into account the burden of work of women, especially the women in hilly areas where the ecological destruction is at its worst and the work burden is the highest. It is important to emphasize reducing risks to women from environmental hazards at home and work and in other environments, and improve their access to and application of appropriate clean technologies. This is particularly true of women agriculturists who need access to knowledge, skills, marketing services, and environmentally sound technologies.
- E. Organizations must ensure the development of women's equal access to housing infrastructure, safe water, and sustainable and affordable energy technologies, such as wind, solar, biomass, and other renewable sources. An effort to involve women in promotion of new technology, like biogas plants, fuel wood plantations, and fuel conservation is required.
- F. Research on the role of women, particularly rural and indigenous women, in food gathering and production, soil conservation, irrigation, watershed management, sanitation, coastal zone and marine resource management, integrated pest

management, land-use planning, forest conservation and community forestry, fisheries, natural disaster prevention, and new and renewable sources of energy should be undertaken. Women's traditional knowledge and practices of sustainable resource use should be integrated with the development of environmental management and extension programs. Measures should be taken to strengthen food, nutrition and agricultural policies and programs, and fair trade relations, with special attention to the creation and strengthening of food security at all levels. Every effort should be made to encourage the expansion and strengthening of grassroots, community-based, and activist groups for women.

- G. Consumer initiatives that promote the marketing of organic food and recycling facilities, product information, and product labeling, including labeling of toxic chemical and pesticide containers with language and symbols that are understood by women as consumers should be incorporated.
- H. There is also a need to identify potential leaders both in government and politics for effective articulation of gender concerns as well as to play a proactive role in environmental treaty making. It is also equally important to co-opt representatives of women's organizations and associations who can be actively associated with framing of environmental issues and in treaty making processes and their negotiations. Women have more chance of exercising rights as a group than as individuals. Therefore, the women NGOs should be given enlarged definitive roles. Support for women's collective actions in addressing natural resource management problems is one instance of a general strategy to strengthen women's bargaining power in their relations with men. Involving informal women's organizations alongside formal institutions can be more effective. But the location, timing, and structure of meetings must be planned. If women are well represented at higher levels, grassroots participation will be more effective.
- I. Policies, procedures, and education programs need to be developed and implemented on an integrated basis and evaluated to promote healthy attitudes towards gender equity.

#### **Future Challenges**

The biggest challenge in the future is to evolve and have a harmonized definition and understanding of the concepts of gender equity and gender equality, which works to the satisfaction of all interested parties at the negotiating table. So far different treaties have viewed the pre-eminence of one or the other based on different assumptions and definitions.

It is essential to realize that gender issues do have a significant direct role in the genesis of critical environmental problems at the global level. A simple classification that lists critical and universal environmental problems relating to women, and one that features secondary and localized or temporary problems should be formulated. At a global level,

there is growing awareness of the need to get women to contribute to the identification of environmental problems, as well as to help plan activities geared to the sustainable development of their communities.

Public opinion is one of the most important areas of work for promoting environmental concerns and interests. Women in local organizations have a firsthand knowledge of the impact of environmental degradation in their communities. Through their work with the media, they can help publicize regional examples of the abuse of the environment. Within this framework of planning, women must be acknowledged as political subjects, capable of contributing to the economy in such a way that sustainable development can be reached. Women are bearers of a powerful impulse for change and, therefore, they are capable of contributing to the creation of a style of development that will favor social justice as well as respect for the environment. The bottom bench mark has been rightly and succinctly pointed out by Braidotti, "If only women and the environment were considered in development practice, the environment crisis would be solved....Rarely is a connection made between macro-economic and political processes: over consumption of natural resources by the few in the North and poverty of the many in the South" (Braidotti et al. 1994, pg. 96).

A huge conceptual and structural change in the paradigm is essential. And the parties interested in negotiating development, environment and policy issues need to work in cooperation with development agencies who would have much to contribute for a new vision which balances the values of natural environment with social and economic developing aims. A promotion of gender equality and equity will also result in reduced fertility rates. The education of women is positively correlated with lower fertility rates as is demonstrated by the demographic trends as well as by many research studies. This is particularly important in the context of population growth and its impact on natural resources, sustainability, and the environment. Any future development alternative, which intends to provide a more permanent solution, will have to ascribe high priority to women, the environment, and sustainable development.

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