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**GENDER, THE ENVIRONMENT  
AND THE SUSTAINABILITY  
OF DEVELOPMENT**

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## ABSTRACT

In view of the close relationship that exists between environmental problems and those of economic and social origin, it is impossible to separate the human and environmental dimensions of development, which are linked both by the aggregate effect of social relations and actions as they influence the natural ecology and by the impact of environmental changes on society.

There is a perception that, as the century draws to a close, global society is witnessing the exhaustion of a development style that is harmful to natural systems and fosters inequality among people. It is becoming increasingly clear that humanity must move towards a new style and a new concept of development based on the criteria of sustainability and equity.

The notion of sustainability has gradually broadened; it was originally applied in the biological and physical context, but has now come to imply the balance that must be struck between environmental, economic, political, social and cultural processes under a systemic, multidimensional view of development that incorporates intergenerational solidarity, social equity and long-term considerations as essential elements. The present document examines the evolution of the concept and the areas of agreement reached concerning it; the study also analyses the discrepancies between the views of different social actors and interest groups, primarily with regard to the actions and decisions that should be taken to achieve sustainable development.

Increasing knowledge about the ways in which women in different groups and sectors of society participate in development has highlighted the interconnection between gender, the environment and sustainability. In the transition towards the goal of sustainability, women have emerged as a force, not only in support of proper environmental management, but also in demands for better quality of life and greater social equity. Recognition of this contribution is reflected in the documents, declarations and plans of action that have emanated from international conferences held in recent years.

Although the women/gender/environment interconnection is a relatively new topic of interest and analysis, it is already possible to identify different theoretical approaches to the subject. Chapter III presents a critical review of the main tenets of "ecofeminism" and the "women and the environment" model and concludes with a discussion of a line of thought that can be termed "gender, the environment and sustainable development", a model which could serve as the starting point for a new approach in the formulation of public policies aimed at sustainability.

In order to design public strategies and policies and adopt instruments that reverse and prevent environmental degradation while at the same time fostering greater equity among the sectors of society, more information is needed about the situation of men and women and how it relates to the state of the environment. The study therefore concludes by outlining a conceptual and methodological proposal from a systemic, cross-disciplinary perspective, with the aim of improving diagnostic analysis and research on the interconnection between the gender system, environmental change and its impact, in the light of the countries' differing local and regional conditions.

## INTRODUCTION

Over recent decades, deepening concern about the environment has had a widespread effect on social behaviour and thinking. There are ever-increasing demands from people generally, and from young people in particular, for a higher quality environment. Also apparent is a growing awareness around the world of the close relationship between environmental problems and those of an economic, demographic and social nature, and of the need to take an integrated approach to solving them. This combines with a perception that, as the century draws to an end, global society is witnessing the exhaustion of a development style that is unsustainable in the medium and long term, one which has been characterized by its harmfulness as regards natural systems and its unfairness as regards people, and which is the outcome of major structural inadequacies in the growth strategies adopted

For these reasons, there is now a clear need to move towards a new style of development, and thus towards a new way of thinking about the issue in which sustainability, both in ecological and environmental terms and from the social, economic and political points of view, plays a defining role. It is with this in view that the proposal for transforming productive activities on the basis of equity, drawn up by ECLAC and adopted by the member countries, affirms that Latin America and the Caribbean need to achieve equitable growth, including equality between men and women, by ensuring that natural and environmental resources are managed on a sustainable basis, and that to achieve this, given the diversity and complexity of the situations and problems that the region is facing, it is necessary to take an integrated approach that incorporates intersectoral policies offering a great diversity of outcomes and options, as environmental problems can only be overcome by changing fundamentally the way society is organized, and not simply by making technical adjustments (ECLAC, 1991; 1992 and 1997a).

As knowledge about the ways in which different groups of women participate in development has increased, so the connection between gender, the environment and sustainability has grown in importance. Likewise, this knowledge has led to the conviction that a systematic effort is required if environmental issues linked with social and gender equity are to be incorporated into the development process. This is because environmental problems unquestionably reveal flaws in the socio-political and economic system, and the consequences for the environment of the way in which humanity uses the planet's resources are conditioned by the types of relationship that exist between individuals and the different segments of society. These reflections lead on to the consideration that the human and environmental dimensions of development are inseparable, and that this link is a result both of the aggregate effect of social relationships and actions as they influence the natural ecology, and of the impact of environmental changes on society (Gallopín, 1986).

As regards the problems associated with women and the dynamics of the gender system, the development agenda for the 1990s contains some issues that are only just

beginning to rise to prominence. One of these issues is in fact a recognition of the need to ensure that, in the process of bringing about sustainability in development, there are real assurances that they will continue to fulfil their roles and participate actively in the decision-making process. Along the way to meeting this objective, women are a force that both presses for attainment of the goal of proper environmental management and creates a demand for better conditions in terms of quality of life and social justice.

The first part of this document describes how the definition of sustainability has come to be expanded, the main issues raised in the debates which have shaped this idea, the types of consensus reached and the contradictions affecting its implementation. The document then deals with the changing attitudes taken in international meetings towards the link between women and the environment in the context of proposals to bring about sustainable development, and ends with a review of the propositions contained in the main theoretical approaches to this relationship.

The second part of the work sets out a conceptual and methodological proposal of a systemic nature for improving diagnoses and studies in general on the interconnection between the gender system, the way environmental changes come about and the impact of these, in the context of the development policies being implemented by these countries.

## I. REGARDING THE CONCEPT OF SUSTAINABILITY

The idea of sustainability was originally developed within a biological and physical framework, in response to the realization that natural resources were finite. From the post-war period to the beginning of the 1970s, world concern was centred on economic growth and the accumulation of physical and financial capital, with technological progress providing the symbol for this process. But in adopting this development style, the importance of other crucial aspects such as human resources and natural, institutional and cultural systems was underestimated (ECLAC, 1991). In the 1970s this system began to be questioned, debated and studied by various organizations which, as the Club of Rome concluded, maintained that natural resources were not inexhaustible and were already growing scarce, and even that industrial development could damage existing environmental resources irreversibly. In this way the need for sustainability, though only as far as the natural system was concerned, began to be incorporated gradually into the thinking and planning of the most influential countries, these being to begin with the industrialized countries.

The idea is now being applied in a wider context, and this has often led to confusion in the way it is used, as the policy implications that derive from it in the form in which it was originally employed (physical stocks regarded in isolation) do not give the right signals when they are applied in a different context. As a result, there has been a gradual move towards a more inclusive and comprehensive approach in which social, political and economic aspects are considered alongside natural resources issues, all of these being integrated into a common objective: sustainable development.

This broadened approach is beginning to take shape in the international debate which was initiated with the United Nations Conference on the Human Environment held in Stockholm in 1972. This meeting tackled the problems of poverty and the welfare of the world's population, dealing with aspects such as housing, water, health, hygiene and nutrition. The stress, however, was placed on the technical aspects of contamination caused by industrialization, population growth and urbanization, with emphasis being laid on the undesirable consequences of these processes. The approach taken to the environmental crisis was thus a markedly first world one.

In the middle of the 1980s, this initial standpoint gave way to a conviction that the problems of the environment cannot be disassociated from those deriving from development. As a result, attention began to be focused on the problems facing the countries of the South and the least protected sectors, women being among them.

Against this background, the World Commission on Environment and Development (WCED) concentrated its efforts on development styles and the repercussions of these on the workings of natural systems, emphasizing that the problems of the environment are directly related to those of poverty, the satisfaction of basic nutritional, health and housing needs, renewable energy sources and the process of technological innovation. It also defined the three main axes of development as being increased production (economic growth), appropriate distribution of resources (the fight against poverty) and maintenance



of the ecosystem (ecological sustainability). Again, in its Report called "Our Common Future" this Commission defined sustainability as the ability to "satisfy the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Commission, 1987). The implication of this definition is that the long term needs to be regarded as a central issue in development planning, as do considerations of equity within and between generations.

Although this approach is still current and indeed widespread, it has not been immune from controversy. Its scientific validity is questioned, as are its implications for political and economic programmes already in existence and those being started up. Furthermore, the very breadth of this approach leaves it open to very different interpretations, and this has often led to confusion.

Certain authors maintain that one of the problems is the lack of consensus over how to measure welfare in social terms. For this reason, more complex definitions have been put forward. For example, Robert Ayres notes that "sustainability is conceived of as a process of change in which the use of resources, the management of investments, the direction of technological development and institutional change are in harmony with and enhance our current and future potential to satisfy human needs and aspirations" (cited in Arizpe, Paz and Velásquez and others, 1993).

In the regional context, the report "Our Own Agenda" produced by the Latin American and Caribbean Commission on Development and Environment (1990) emphasized the links between wealth, poverty, population and the environment, and attempted to establish the basis for initiating a process of sustainability in the region. In parallel with this, ECLAC identified the need to harmonize the challenges of making Latin American economies more competitive, promoting greater equity and enabling the quality of the environment and natural heritage in these countries to be preserved, while at the same time it regarded the relationship between development and the environment as being of a systemic character. Likewise, it concluded on the basis of previous studies and assessments that "sustainable development requires a dynamic balance among all the forms of capital or assets involved in the countries' economic and social development efforts so that the resulting use rate for each form of capital will not exceed its own reproductive rate [...]. The most important forms of capital include human capital (where people also constitute the subject of development), natural, institutional capital (decision-making systems), cultural capital, physical capital (infrastructure, machinery and equipment, etc.) and financial capital" (ECLAC, 1991, pp. 24 and 25).

The United Nations Conference on Environment and Development held in Rio de Janeiro in 1992<sup>1</sup> like the process that had gone before it, was marked out by an awareness that poverty and environmental damage are closely related, so that environmental protection cannot be separated from that context. Again, it was agreed that sustainable development requires changes in production and consumption patterns in the industrialized countries, as well as new forms of relationship between North and South.

As an example of how the concept has been expanding, it is stated in the "Alliance for Sustainable Development of Central America" Platform signed by the governments of Central America in 1994 that sustainable development is "a process of incremental change in the quality of life of human beings, who are placed at the very centre of development as its primary objective, which is brought about by economic growth with social equity and radical changes in production methods and patterns of consumption, and

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<sup>1</sup> This Conference produced the Rio Declaration on Environment and Development, Programme 21, the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity and the Forestry Principles Declaration.

which is sustained without disturbing the region's ecological balance and the systems that support life. This process entails respect for ethnic and cultural diversity regionally, nationally and locally, as well as a greater role for citizens participating fully in peaceful coexistence and in harmony with nature, not compromising but rather guaranteeing the quality of life of future generations".

It can thus be seen that the scope of sustainable development goes beyond purely ecological issues. Increasingly, social issues are regarded as crucial in the search for sustainability. As a result, some researchers postulate a need for this to become an attribute of culture, in which ideas about nature and the world, and about social relationships, lead to greater equity, balance and harmonization of the factors in play, and to solidarity between the generations becoming an absolutely central factor. Following the same approach, there are more and more commentators who agree that sustainable development involves a bid for social and cultural change. But for this process to be carried forward, all sections of society need to participate on an equitable basis, both in the decisions as to the direction which is to be given to policy and in the benefits of economic growth and development. For this, it is indispensable to consider procedures and objectives that favour men and women equally, and to improve distribution of resources, be they natural, economic or social.

Another reading, to some extent complementary, is the one put forward by Arizpe, Paz and Velázquez (1993), when they suggest that the concept of sustainability is like that of democracy: difficult and elusive, but indispensable to provide a point on the future horizon at which to aim. Again in common with democracy, it is a way of approaching the world that has to be built upon the realities of everyday life, alongside implementation of public policies designed to carry forward both processes. To this should be added the interconnection between them: sustainable development needs a democratic political culture within which people can improve their quality of life in an equitable way and cooperate in addressing the problems raised by the resources issue.

There is a remarkable degree of unanimity regarding proposals for bringing about sustainability. It is now difficult to find any social actor of importance that is against sustainable development; there is still something paradoxical about this, however. Conflicting interests and struggles for power between different groups and institutions show that not everybody is in agreement on what type of measures and processes are needed to achieve sustainable development, and that the gap between rhetoric, political will and action is very wide. Governments, a large section of the business world and different social groups and citizens' movements use the word sustainability to justify measures that they wish to carry through and to defend their interests, which in many cases are conflicting.

In practice it can be seen that although the majority of the world's population agrees with the proposition that sustainable development is the goal, there are disagreements over the measures and decisions necessary to achieve this, and over how to measure such progress as is made.<sup>2</sup> Sustainable development will involve accepting sacrifices, a learning process and certain preconditions such as restrictions associated with

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<sup>2</sup> In the negotiations carried out during the Earth Summit + 5 held in New York in June this year, it was clear to see that there are still substantial differences of opinion as to what sustainable development means for developing nations and industrialized ones. The greatest obstacles to concluding agreements are found in the phrases that relate democracy with development, the fight against poverty and workers' rights, the obligation to change patterns of consumption in the industrialized countries and the unavoidable need for international cooperation in finance and technology if sustainability is to be achieved in developing countries.

demographic control (an issue which has been widely discussed in the International Conference on Population and Development (ICPD)), reformulating the concepts of economic growth and development itself, and making the paradigm shifts that all this implies. It will also entail increasing investment in knowledge and information about natural processes before these are interfered with, redistributing access to and use of resources, strengthening citizen involvement in decision-making processes and associating improved quality of life with equity, all of which makes it difficult to achieve consensus as regards the procedures and measures to be taken for sustainability to be attained.

It is also important to stress that rather than being a goal which can be reached in a given time-scale, sustainable development should rather be seen as something that is always in a state of transition and development. For this reason, if progress is to be made, it becomes necessary to break down the debate on sustainability into different aspects, and to look at it in terms of operational criteria and sectoral connotations so that proposals have real substance, within the framework of a comprehensive development process. This means that achieving a level of development that is sustainable also involves recognizing the relationships that exist between sectors and within and between countries, and the effects of macroeconomic factors on local situations.

This is specifically acknowledged in Programme 21, the world agenda for action to guide the process of moving towards sustainability, which incorporates the idea that the different factors and areas of action are interrelated and inextricably linked, and which asks governments to adopt development programmes that reflect a new understanding of the linkages between sectors. These documents also look at the environmental crisis and the different ways it manifests itself regionally and locally around the world, discarding the idea that it is concentrated primarily on the countries of the South or on poor women in the Third World.

The agreements and disagreements mentioned in relation to the concept of sustainability and what this denotes —combined with the tensions that exist between economic growth, the fight against poverty, population growth, preservation of the environment, equity and North-South relationships, which have been debated at various times and in various documents— reveal that no paradigm for sustainable development that is universally acceptable has yet been defined. They do also reveal, however, that some progress has been made, and this can be summarized as follows: (i) the concept has evolved towards a broader and more inclusive model; (ii) the technical and physical approach has given way to one that focuses more on society and even politics; (iii) the debates have made people aware of environmental issues; (iv) scientific and statistical information has been produced on the state of the environment; (v) concern about the running down of resources and the urgent need to take action has been increasingly incorporated into development policies; (vi) equity has become a component of sustainability; (vii) cross-disciplinary and intersectoral approaches have multiplied; (viii) the sheer scale of the interdependence and interchanges between countries and

regions has come to light,<sup>3</sup> (ix) problems of an ecological nature have to some extent broken down political frontiers to bring nations together, albeit with some difficulties, in their common desire for sustainability.

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<sup>3</sup> For example, deforestation of tropical woods and forests in the Amazon is something that connects the ecosystems of eight countries, but also has effects around the world, and it is not only the countries in the area that need to protect them—all countries are involved.

## **II. SUSTAINABLE DEVELOPMENT, THE ENVIRONMENT AND GENDER: HISTORY OF THE CONSIDERATION GIVEN TO THESE AT INTERNATIONAL MEETINGS**

The policy documents (reports, declarations, plans of action, platforms) that emerge from different international meetings have some impact at the world and regional levels, and at the same time reflect developments in the ideas and tendencies which are guiding the thinking and actions both of governments and of international bodies and organizations in civil society. For these reasons, this section gives a chronological summary and an analysis of developments in thinking about the inter-relationship between gender, the environment and sustainability.

In international policy, the linkage between the interests of women and of the environment in conjunction with development is a recent one. For example, in the Declaration of the United Nations Conference on the Human Environment (Stockholm, 1972), women are not even mentioned and the term “man” is constantly used in its general sense of “human being”. Likewise, the first World Conservation Strategy (IUCN/UNEP/WWF, 1980) did not touch on social issues to any great extent, and women were only mentioned on a few occasions and then in relation to issues traditionally associated with them such as illiteracy and population growth.

Only in 1984 did the United Nations Environment Programme (UNEP) set up a women’s advisory group (Senior Women’s Advisory Group on Sustainable Development), which began to study and advise on the Programme in terms of the connection that exists between the problems of exclusion as this affects women, the roles they fulfil and the damage done to the environment in the course of development, and the ways to deal with both situations.<sup>4</sup>

In 1985, at the Non-Governmental Organizations’ Forum, in parallel with the World Conference to Review and Appraise the Achievements of the United Nations Decade for Women: Equality, Development and Peace, held in Nairobi, a workshop was organized to study the impact of the environmental crisis on women. As a result of this workshop a plan of action was drawn up, the aim of which was to strengthen leadership by women in environmental management and administration, and to provide information, education and training to women on environmental issues.

But it was with the Nairobi Forward-looking Strategies for the Advancement of Women, adopted by this Conference, that the subject of the environment was

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<sup>4</sup> One example of the way sectoral environmental problems were extended to concern for the situation of women is the International Drinking Water Supply and Sanitation Decade (1981-1990) and the International Conference on Water and the Environment held in Dublin in 1992, which promoted participation by and training for women as providers of water for their families, with responsibility for the sanitation of their homes.

incorporated officially into the discussion on women in the light of the relationship between them, and that these issues in turn were linked with development concerns.<sup>5</sup>

In the Report of the Brundtland Commission (1987) mention was made of the crucial roles played by women as regards population and food safety, but no conclusions were put forward on the gender-environment relationship, nor were any specific recommendations made. Nonetheless, this document defined and delineated sustainable development, and was the first step towards debating the subject from this standpoint. It also led to the original view of women as victims of environmental damage being replaced by a conception of women as possessors of knowledge and skills that would enable them to act as effective administrators of the environment.

Nonetheless, when the first meeting to prepare for the Earth Summit was held in 1990, there was no mention in the official programme of the role of women in preserving the environment and the different ways in which they participate in development processes. The subsequent incorporation of women into the programme was to be largely a result of meetings held, under the auspices of the UNEP, in the four regions of the developing world: Africa (Harare, Zimbabwe, 1989), the Arab countries (Tunis, 1990), Asia (Bangkok, 1991) and Latin America and the Caribbean (Quito, 1991), where participants submitted the information then available on the main environmental problems of each region and their effects on the female population, while at the same time submitting proposals to be included in the debate undertaken at the Conference.

The work carried out culminated, before Rio, in two meetings held in Miami in 1991: the Global Assembly on Women and the Environment: Partners in Life<sup>6</sup> and the World Congress of Women for a Healthy Planet.<sup>7</sup> At these events the situation was analysed in detail and recommendations for the United Nations Conference were decided on. Together with the proposals there were questions about the current development paradigm and a call to introduce changes that would ensure sustainability and a development style focused on the needs and rights of people. The consensus arrived at was presented in the document Agenda 21 for Women's Action, which is an ideological framework providing a springboard for action, and in which participative democracy, universal access to information, ethical positions and full participation by women on an equal footing with men are put forward as the bases for change.

As there is generally a wide gap between international and government policy and women's activism, which often seem to come from different worlds, it is important to note the excellent work done by the Women's Organization for the Environment and Development in translating the Women's Agenda into terms appropriate to the politicians involved in the Rio Conference. During the NGO Forum, this same organization worked

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<sup>5</sup> Four paragraphs in the document deal with the subject of the environment. Among them, paragraph 227 is noteworthy for its continuing relevance: "The environmental impact of policies, programmes and projects on women's health and activities, including their sources of employment and income, should be assessed and the negative effects eliminated" (United Nations, 1985).

<sup>6</sup> During the Global Assembly of Women and the Environment: Partners in Life, presentations were made of 218 successful experiments carried out by women in areas such as energy, water and sanitation, waste, forestry, biodiversity and environmental education; 48 of these cases were from Latin America and the Caribbean, and their "success" lay in their being grass-roots initiatives that were visible, sustainable, replicable and economically viable.

<sup>7</sup> This congress, organized by the International Committee for Action Policies and the Organization of Women for the Environment and Development was attended by 1,500 women from 83 countries, who took part in practical courses and analysed the different ways in which the environmental crisis and the development style currently prevailing affect the female population.

together with the Coalition of Brazilian Women within the framework of the “Planeta Femea” to organize workshops dealing with the Women’s Agenda 21 issues, where two agreements were also reached: one on population, development and the environment, and another one covering the subject of women in general.

Lobbying carried out by the different women’s groups and networks, combined with growing international awareness of the problems of gender and the environment, resulted in principle 20 of the Rio Declaration, which says: “Women play a leading role in environmental management and in development. For that reason it is indispensable for them to participate fully if sustainable development is to be achieved” (United Nations, 1992).

In Programme 21, which sets out the priorities for action to achieve sustainable development into the next century, although women are referred to throughout the 40 sections dealing with particular sectors and intersectoral links, it is section 24 that is devoted specifically to dealing with them. In this section, the focus is on the crucial role they play in bringing about changes to the current model of consumption and production, and it is emphasized that the active involvement of women in political and economic decision-making is necessary if all the Summit resolutions are to be successfully implemented. At the same time, though, there are proposals for action to deal with the discrimination that currently affects them. Among the proposals are:

- Implementation of measures to strengthen institutions, non-governmental organizations and women’s groups so that women can be trained in the use and management of resources.
- Initiatives to reduce the enormous workload borne by women through the establishment of nurseries, equal division of household tasks between men and women and use of environmentally sound technologies.
- Implementation of programmes to set up and strengthen preventive and curative health services run for and by women, including safe, inexpensive and voluntary family planning services.

Now that the subject-matter has been identified, many of the donor agencies and international organizations and some governments are showing an interest in looking at aspects of the gender-environment relationship, as has already been happening in the fields of research and activism, but the obstacles to linking in these issues to policy implementation still seem to be very great. Both gender and the environment are matters which cut right across every area of public activity, so the sectoral approach which has traditionally been a feature of planning practices needs to be discarded if they are to be addressed.

This approach became firmly established in various conferences and international meetings held subsequently, where these points of view were given prominence and further developed. Both sustainable development and the issues of women and gender continued to gain in legitimacy and to occupy a place of their own in declarations, plans and programmes, not only in Latin America and the Caribbean, but around the world. Thus, in the Programme of Action issuing from the International Conference on Population and Development held in Cairo in 1994 it is stated that “The empowerment and autonomy of women and the improvement of their political, social, economic and health status is a highly important end in itself. In addition, it is essential for the achievement of sustainable development (United Nations, 1994, section IV.4.1.). Again, in point 7 of the Copenhagen Declaration on Social Development<sup>8</sup> it is stated “We acknowledge that social and

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<sup>8</sup> This Declaration was produced by the World Summit for Social Development held in 1995.

economic development cannot be secured in a sustainable way without the full participation of women and that equality and equity between women and men is a priority for the international community and as such must be at the centre of economic and social development” (United Nations, 1996b, p. 2).

As regards Latin America and the Caribbean, in the Regional Programme of Action for the Women of Latin America and the Caribbean, 1995-2001 (ECLAC, 1995a), there is consideration throughout of the interaction between women and the environment. This relationship is considered in Strategic Area II: “Economic and social development from a gender standpoint: equitable participation by women in the decision-making, responsibilities and benefits of development”. In the accompanying analysis a single advance of a very general character is described, this being the progressive recognition of the importance of protecting the environment and adopting Programme 21, while among the obstacles that are identified three stand out:

- Lack of clarity in proposals for sustainable development of a kind that enables the benefits to be shared fairly between women and men, and a lack of opportunities for women to become involved in identifying problems and creating and applying policies and programmes related to environmental issues, something that would make their contributions towards resolving these matters more efficient and effective (paragraph p).
- Lack of political will to take concrete measures to improve the management of resources and thereby achieve sustainable development (paragraph q).
- Women are characterized as administrators of the environmental crisis solely in terms of their domestic role (paragraph r).

Strategic Objective II.6 “Securing equitable participation by women in designing and managing environmental policies” (p. 33), incorporating eleven strategic measures to enable it to be achieved, was produced as a means of dealing with these obstacles.

By the time of the Fourth World Conference on Women: Action for Equality, Development and Peace, held in Beijing, and of the NGO Forum, held in parallel, the linkage between gender, the environment and sustainable development had come to prominence. In point K of the Platform for Action, specific reference was made to the environment, and measures and strategic objectives were decided on, the central themes addressed by these being: the situation of poverty that affects many women, the need for them to participate actively in decision-making on matters relating to the environment at every level, and incorporation of gender issues into policies and programmes for sustainable development (United Nations, 1995b).

This progress in dealing with the interrelationship that we are concerned with has been reflected in the most recent policy documents such as, for example, the Santa Cruz de la Sierra Declaration and the Plan of Action for Sustainable Development in the Americas, both signed by the Heads of State and Government at the Summit Conference on Sustainable Development, which took place in Bolivia in December 1996. Nonetheless, it should be noted that many of these treat women as a “vulnerable group”, and they do not necessarily reflect genuine incorporation of the gender viewpoint into the different subject areas dealt with.

In the first six months of 1997, with the United Nations Conference on Environment and Development concluding its fifth year of existence, there were a substantial number of meetings to monitor fulfilment of the commitments accepted at Rio and implementation of Programme 21, and in June the Earth Summit + 5 was held in New York. In general terms, this evaluation revealed that although some progress has been made in terms of environmental protection, there are serious deficiencies in the process of orchestrating activities, and that changes in economic and political structures have not led to significant



progress in overcoming poverty and achieving equity. Again, another of the subjects still to be dealt with is that of financial<sup>9</sup> and technological aid from industrialized countries to developing ones to enable them to implement activities and processes that lead to sustainable development.<sup>10</sup>

In this same process, the United Nations Commission on the Status of Women once again highlighted the need for a gender-based approach to be incorporated into the mainstream of development, as well as into the design and implementation of environmental programmes and policies, including those measures that came out of Programme 21 and the Beijing Platform for Action, both nationally and locally (United Nations, 1997a).<sup>11</sup> Complementary to this is the contention, in the Report of the High-level Advisory Board on Sustainable Development for the 1997 inquiry into the Rio commitments, that one of the prerequisites for securing positive changes to bring about sustainable development is action to secure greater independence for and involvement by women (United Nations, 1997b, p.8).

To end this historical summary, it is important to note that, as Caren Levy points out (1992), despite all these recommendations there is a curious resemblance between the fate of gender issues and that of environmental issues: both rose to prominence thanks to the activities and agitation of particular movements, the feminist and environmental movements, and departments, projects, and specific programmes were brought into being for each, with the result that they were left outside the development mainstream, with few human and material resources being allocated to them. Likewise, it is often seen that “women’s” and “environmental” initiatives compete with one another for the few resources available, rather than being complementary (IDB, 1996).

In the face of this, there is often a tendency to emphasize the institutional nature of the problem, i.e., to bring about coordination of strategies and efforts between those responsible for environmental projects and those dealing with the subject of gender (Vega, 1996). However, the systemic vision that arises out of the notion of sustainable development goes beyond this. It requires a change of approach and mentality so that awareness of the environment can be informed by an understanding of the implications of social equity, and so that those who set themselves to achieve social and gender equity, equality and justice can forge new kinds of relationships with nature. Given the difficulty of the task, with both subjects cutting across all sectors of planning and development as well as being interrelated between themselves, the challenge is to identify both those areas where the two sets of issues are complementary and those where they are in conflict, if progress is to be made in terms of public policy proposals.

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<sup>9</sup> Although at the Rio Conference the industrialized nations promised to raise their official development aid to 0.7% of their gross domestic product, the figure has dropped from 0.3% to 0.2% in the last five years.

<sup>10</sup> Information from Reuter's news dispatches during the sessions of this Summit.

<sup>11</sup> This report was the Commission's contribution to the V session of the Commission on Sustainable Development, which discussed the documents to be submitted at the special session of the General Assembly of the United Nations on the implementation of Programme 21.

### III. MAIN MODELS USED TO INTERPRET THE GENDER-ENVIRONMENT RELATIONSHIP

The debate about women and the environment arose in the mid-1970s. Whereas in the countries of the North it was associated with the involvement of women in the environmental and pacifist movements and with their criticism of feminists who had not so far taken a position as regards the environmental crisis, in the countries of the South it was related to problems deriving from the forestry sector and agriculture. As regards the first, the uncertainty about the supply and cost of oil that was generated by the energy crisis led to calls for the consumption of wood as an energy source to be reduced, and programmes were initiated with women in mind, to encourage them both to cut down their day-to-day consumption and use alternative fuels, and to take part in reforestation projects. As regards the second, the study carried out by E. Boserup (1970), which marked a considerable change of course in the perception of the role played by women in economic development, showed that rural programmes had adverse effects on them due to ignorance of the important role they play in agriculture, regarding them as the main victims of the environmental damage that the sector was faced with.<sup>12</sup>

From that time onwards, different conceptual and methodological approaches to dealing with the women-gender-environment interrelationship can be identified. These are categorized as follows: (i) ecofeminism, (ii) women and the environment; (iii) gender, the environment and sustainable development. Each of these lines of thought has aspects deserving of consideration, and they have given rise to a complex and multi-faceted international debate. Although the different positions have evolved according to their own dynamics and in different circumstances, they have influenced one another; nonetheless, interpretations of the role of development and its repercussions on women and the environment vary. This means that there is a wide spread of attitudes and approaches, and that the deductions and criteria drawn from them and their consequences for public policy are dissimilar.

In Latin America it is recognized that women have been “invisible administrators” of the environment from day to day. In view of this, stress has in some cases been laid on their role as environmental protectors and educators, with the contribution deriving from the functions they perform being appraised without any attempt to remedy the disadvantageous situation they are in because of the dominant gender system. In other cases they are treated as an economic resource or a demographic variable. From other points of view they are put down as victims and thus as potential saviours of the environment, while others again regard them as the main despoilers due to the many

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<sup>12</sup> It is interesting to note that this study, by developing classifications for agrarian production systems as follows: (i) female (predominant in African countries); (ii) male (common in Asia); (iii) mixed (found in Latin America), and analysing the participation of women in the context of economic variables and in relation to the men in their social groups, was one of the first analyses carried out from a gender standpoint, as this is now understood.

tasks they carry out using natural resources and their link with poverty. These labels are based, on the one hand, on certain real facts and, on the other, on different ideological standpoints regarding the links between women and the environment, of which it is important to be aware.

This section will give a critical synthesis of the main arguments used to support ecofeminism and the women and the environment position, concluding with the basic tenets of the gender, environment and sustainable development stance, which we believe can spearhead a new approach to the production of public policies aiming at sustainability.

## 1. Ecofeminism

The ecofeminist approach takes a number of forms, but two can be distinguished in general terms: social ecofeminism and cultural ecofeminism (Plumwood, 1992, p. 10). What will be given at this stage, however, are the points that both forms have in common, and the main tenets of the latter, as it has had an important influence on the work of activists promoting the subject of women and the environment inside both the feminist and the ecology movements.

The distinguishing feature of ecofeminism is the way it conceptualizes the relationship of women with nature, maintaining that there is a strong link between the two, and defending a return to a “femininity principle” involving harmony, sustainability and diversity (Shiva, 1989).<sup>13</sup> This position leads, on the one hand, to the affirmation that all women have a special relationship with nature, and “woman” is considered as a unitary concept and reality, centred on the role of women as mothers and nurturers of life, without acknowledging the differences that exist within this category due to ethnic background, social class and age, among other factors. Again, it is maintained that the experiences of women, be they biological, as determined by the female body and its functions (pregnancy, childbirth, lactation, menstruation), or cultural (the care and bringing up of children), give them a different “natural mindset”. In turn, the closeness of women to nature supposedly gives them a “special” knowledge that will enable them to save the planet (Shiva, 1989), and their “natural” propensity to protect the environment is an extension of their role as carers in the family group and the community.

Critics retort, however, that this responsibility as “saviours” and “privileged carers” is delegated to women without any specific consideration as to whether they do or do not have the resources needed to fulfil it (Leach, 1991, p. 15). Furthermore, this point of view is unsatisfactory insofar as it is static and does not take account of historical changes and the impact of these on the dynamics of interaction between people and their environment, while the construction of gender, i.e., the fact of being a woman at a particular point in space and time, is not contextualized in a social, historical and material way.

Again, from ecofeminism comes the contention that the assertion of control over nature and over women has been an integrated, parallel process, historically connected (Mies and Shiva, 1993). This, it is maintained, is due to the effects of the patriarchal

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<sup>13</sup> These arguments may be described as being of an essentialist and biologicistic kind. The term essentialist is used to describe philosophical doctrines and ideological positions that are based on deterministic explanations for which reality comes down to the essence of things, so that it possesses intrinsic properties of a universal character (atemporal and aspatial) which survive any changes that may occur in the context (Ferrater Mora, 1979). In this case the essence would be consubstantial with sex and its role in the continuation of the species, whence its biologicistic property.

structure and the preceptive dualism that subordinates nature to culture and the feminine to the masculine, so that women are socially perceived as being close to nature, and as a result there are connections of an ideological type, based on a system of ideas and representations, values and beliefs, between the oppression that they experience and the exploitation of the natural system. With this approach, women are cast as “victims” of development (Shiva, 1989).

This strand of thought is also defined as a movement arising spontaneously from groups made up of ordinary women, which links and integrates theory and practice, on the basis of what is called the survival approach. This means shaping society to reflect a new economic and sociopolitical vision based on satisfying basic needs, which is characterized by its anticolonialist and antipatriarchal position. The origin of what is called “bad development” is pinned down to the western patriarchal system and its reductionist science; traditional societies are often idealized and prominence is given to respect for cultural diversity. This latter characteristic is a valuable contribution insofar as it means that priority is given to considering the cultural dimension of sustainability.

Although this line of thinking has had a great impact in highlighting the interrelationship between women and the environment, it is not clear what contribution it has made, beyond the debate, to the development of public policy aimed at improving the situation of these.

## 2. Women and the environment

The movement known as “women and the environment” forms part of the strand of thought and action called “women in development”, which marked a stage of thinking and action in the field of development projects and programmes that, in many cases, is still current today, and that centres around women and their needs as individuals and groups (Rico, 1993a).<sup>14</sup> Again, the “women and the environment” viewpoint has had a large impact among NGOs, and indeed it is in the documents for the NGO Forum held in Nairobi on the occasion of the 1985 World Conference to Review and Appraise the Achievements of the United Nations Decade for Women that many of the tenets arising from this line of thought, later to be developed by different authors, are to be found.

In literature, this position is found to be greatly influenced by ecofeminism, particularly in the way it is based on the assumption that women have a special affinity with nature, that they are committed to it, that their objectives in the way they use resources and protect nature are distinguished by their “altruism”,<sup>15</sup> and that they are the main “volunteers” in the fight against environmental degradation.<sup>16</sup> The central problem with trying to postulate the existence of a special relationship between women and nature

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<sup>14</sup> Cecile Jackson (1993) considers that the literature of the “women and the environment” movement soon differentiated itself from that of the “women in development” movement by being less rigorous academically and anecdotal in character, and by failing to adduce empirical evidence for one of its central arguments: the strong presumption that women have a special affinity with nature which is not to be found among men.

<sup>15</sup> In Jackson’s view (1993), the altruism that is believed to lie behind the work and behaviour of women, rather than being something positive, is a symptom of their powerlessness, their inability to defend and enforce their own interests, and the ideological domination to which they are subjected.

<sup>16</sup> These arguments may also be described as essentialist ones insofar as women are viewed as a homogeneous category, not just within countries but around the world.

is that this ignores context, for example the different strategies used for day-to-day survival, the variety of objectives involved in the use and management of environmental resources, the power relationships that exist, and above all the gender relationships that differentiate men and women in the processes of production and reproduction. Furthermore, these assertions take no account, for example, of aspects related to a kind of short-term rationalism that goes together with the way the reproductive roles played by women are fulfilled from day to day, or factors associated with their position in the social structure, such as poverty, which, if they do not contribute to environmental damage, can lead them to become involved in projects for preserving resources to ensure that basic needs such as food and health are satisfied, or the various conditioning factors that derive from the economies and productive systems in which they are acting, in ways that bring about sustainability or degradation.

The “women and the environment” approach stresses the potential of women’s role as “day-to-day administrators” of natural resources (Dankelman and Davidson, 1989), with analysis being carried out mainly at the microsocial level. Much is made of their vulnerability to environmental change due to their dependence on these resources, and emphasis is put on the need for sustainable development initiatives to support the contributions made by women to managing and preserving the environment (Collins, 1991). For example, it is maintained that women are the most affected by the energy crisis, and that they should therefore be considered as being the best placed to tackle and resolve this crisis (Dankelman, 1985). With this approach, the focus is on the special characteristics of women as “custodians of the environment”, while at the same time they are regarded as the “most valuable resource, and the most neglected one” (Linggard and Moberg, 1990). It is this that provides the rationale for giving them particular consideration in environmental projects and programmes, since they are an important “instrument” of environmental protection in view of the different forms of organization that they have developed to respond to environmental change, and of the successful experiments they have carried out (Dankelman and Davidson, 1989). This is also used to justify the claim that more should be invested in them, their education in particular, as the chief resource for improving the environment.

This way of looking at women, although it values the roles they play, reflects a viewpoint that takes account neither of the way social roles are determined in terms of gender and ideology, nor of the fact that “just as it is not they who are responsible for the world environmental crisis, so it is neither feasible nor realistic to expect them to resolve it on their own” (Sen and Grown, 1988). At the same time it ignores two realities: (i) poor women in developing countries are too heavily exploited and overworked, with the negative impact on their health, the amount of time available to them and their powers of self-determination as people that this entails, for a new responsibility to be given to them without new opportunities to improve their quality of life, (ii) the subordinate position that women occupy in our society, because of the system of power that regulates gender relationships. Specifically, to focus exclusively on the roles that women play sidelines the issues of power, the way these roles are regulated and the value that society puts on them, in other words the obstacles that they face in seeking to participate actively in decision-making processes that relate to the handling and management of environmental resources.

This position also leads to the inclusion of a “women’s component” in environmental programmes, or to work being carried out exclusively with women, this being in keeping with the theory that the problems of women can be isolated and addressed in a particular way. As regards this, although it is true that some of their problems are specific and can be dealt with separately, evaluation of development projects and policies implemented on

this basis has shown that this stance does not produce adequate results in practice,<sup>17</sup> and they have not been successful in bringing a gender-based approach into the development mainstream; there is also the erroneous assumption that women are not catered for in sectoral policies and programmes. Failure to take into account the interdependence that exists between the social conditions of men and women, and between the gender system and development policies at both the microsocial and macrosocial levels, has acted as a serious obstacle to making decisive progress towards equity, which should express itself in people's day-to-day life as well as in public policies and legislative changes initiated by the State, and thus to making the processes currently underway socially and politically sustainable.

### **3. Gender, the environment and sustainable development**

The "gender, environment and sustainable development" strand of thought ties in with the approach known as "gender in development", which has consolidated its position during the 1990s. It maintains that the discrimination that affects women is expressed in our societies mainly through: (i) the division of labour by sex, with the result that responsibility for household work and bringing up children devolves almost exclusively upon women; (ii) inequality between men and women in terms of access to productive resources and the benefits of these; (iii) limitations on participation in decision-making processes and access to the various forms of public power.<sup>18</sup>

From this standpoint, the gender structure is regarded as one of the agents that intermediates in the relations that women and men have with the environment. Setting out from the concept of gender produces a profound change in the way the object is delimited, since discussion is no longer just about women but about the social relationships that they establish and the system of power into which they are incorporated, and the essentialism which predominates in the lines of thought described earlier is abandoned. Furthermore, deploying the concept of gender not only enables the sex-based inequality that people experience to be identified, but also brings to light one of the factors that go to make up the multitude of situations and conditions in which people live.

The tenets of "gender, the environment and sustainable development" enable us to identify the differences that exist between women by emphasizing the social, historical and cultural nature of the processes of subordination and negotiation in which they are involved. The corollary of this is the observation that not all women experience environmental deterioration in the same way, and nor do environmental problems affect all of them equally. The particular relationships that given groups of women have with the environment depend on their lifestyles, physical location and social structure and the interconnection of gender systems, class and ethnicity, and these relationships change for

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<sup>17</sup> Evaluation of the repercussions that various women-oriented development projects and programmes implemented in Latin America and the Caribbean have had reveals that in many cases the result of some of the initiatives that have focused exclusively on women has been that they have ended up with greater responsibilities, leaving them more exhausted and with fewer opportunities to make choices and change their disadvantageous position in relation to men, despite the progress that these have produced in terms of helping to identify their particular problems (Rico, 1993a). Furthermore, policies aimed specifically at women are a necessary but not sufficient precondition for the issue of gender to be incorporated into development models.

<sup>18</sup> For further information on the most characteristic features of the "gender in development" approach, see Rico (1993a).

individual women themselves over the course of their lives. Added to this are the types of relationship they have with the men in their families and the division of labour and decision-making patterns that obtain within their households, all of which to a large degree determine the way in which access to and use, ownership and control of resources are managed. This viewpoint, in turn, places gender relationships against the concrete background of countries and regions, taking into account the political economy of the current development scenario and the way in which this influences the gender system and the environment, and paying particular attention to the way the negative effects of environmental damage fall predominantly on poor women.<sup>19</sup>

The role of women is a key factor in the processes that are recognized as being agents of intermediation in the relationship between sustainable development and the environment, such as population growth, migration, family organization of labour, patterns of production and consumption and unequal distribution of economic, political and technological power. Seen from this viewpoint, their participation is characterized not only by their status as “victims” of environmental changes as a result of their being more vulnerable than men to the negative impact of these changes,<sup>20</sup> but by their understanding, use and consumption of natural resources, and by the experience and creativity they bring to community work, which enable them to suggest mechanisms to achieve sustainability. In the same way, cases where women are instrumental in damaging the environment are also identified.

This viewpoint avoids the reductionist approach to gender roles. It does not just aim to study the division of labour by sex as an exclusive product of the dominant gender system which tends to allocate a reproductive role to women and a productive one to men, but takes account of the social relationships of production and power in respect of differential access to resources, specific cultural characteristics and gender identities in the process of socioeconomic change through which our countries are now passing. Among the researchers who subscribe to this viewpoint, the main areas of interest and study are as follows:

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<sup>19</sup> Various studies show that women are exposed to poverty in ways that men are not, and that in Latin America and the Caribbean they suffer greater relative impoverishment than men, with the situation growing worse by comparison with the past (ECLAC, 1995b). According to J. Anderson (1994), however, still more studies are needed to reach an empirical assessment of gender bias in situations of poverty within each specific context, and to analyse the causes of differences, including those that affect both sexes, those that affect mainly or exclusively men, and those that affect women. For many researchers, the so-called “feminization of poverty” is among the factors that embody one of the links between gender, the environment and development, and for this situation to be dealt with women need to have a voice and real power in the necessary decision-making processes. This was made explicit in the Platform for Action: “In order to eradicate poverty and achieve sustainable development, women and men must participate fully and equally in the formulation of macroeconomic and social policies and strategies for the eradication of poverty” (United Nations, 1995, paragraph 47).

<sup>20</sup> Most of the harmful effects of environmental deterioration are common to men and women. The greater vulnerability of women is explained, however, by analysing the degree to which they are exposed to risks deriving from biological and social vulnerability, and from the status that they hold in society. An example of this vulnerability is the adverse impact that certain contaminants have on the reproductive health of women who are in contact with them, and the difficulties that poor women have in minimizing, filtering out or forestalling environmental risks due to the obstacles they face in gaining access to and control of resources and participating in public policy decision-making processes.

(1) The way in which male-female interaction affects and is affected by environmental change. Discussion about this is centred around the gender-environment relationship in terms not only of those aspects associated with the reproductive behaviour of women or the situation of poverty in which they find themselves, but also of the key role they play in production activities, i.e., of their economic role, and of their activities within group initiatives that aim to meet people's needs locally (Arizpe and others, 1994; Paolisso, 1995; Rico, 1996a and 1996b; Vega, 1996).

(2) The structure of gender identities in different groups of women and men, in terms of the roles, subjectivities and socially constructed and culturally validated perceptions that place individuals in a particular relationship to environmental change and processes of social, political and economic transformation within countries and the interconnections between them (Joekes and others, 1995; Leach, 1991 and 1992; Arizpe, Paz and Velásquez, 1993; and Valdés, 1992).

(3) The ideology that sustains and defines the subordinate position of women as against men in our society and the obstacles that women face as a result in obtaining access to and control of environmental resources, and in exercising power in decision-making processes dealing with the direction of sustainable development (Jackson, 1993; Aguilar, 1996; Velázquez, 1994 and 1996).

Setting out from this position, and looking separately at the relationships that men and women establish with environmental resources, it is possible to understand some of the varied ways in which these resources are managed socially and the social production and reproduction practices found in each specific context. As a result, priority is given to carrying out studies to analyse not only the impact of environmental changes on human societies but also the patterns of social relationships involved in producing these changes, so that action can then be taken to alleviate the pressure on natural resources and secure sustainable management.

It is likewise proposed that the factor of gender should be taken into account not only in planning out the management of environmental resources locally, but also in relation to global trends and the way these affect the social situation of women and men. Again, gender analysis can assist in interpreting the changes which are arising in gender-environment relationships due to the economic and political processes that are now emerging and to the types of negotiation and consensus that are appearing. In other words, it can be used to assess the way in which the impact on women of the changes which the countries of the region are currently experiencing —globalization, modernization, democratization and decentralization— differs from the impact on men, for example in terms of their level of participation in the economy and in political power, and of their interdependence (Rico, 1994). It can thus serve to identify how these relationships have changed or might change due to the new factors at work. It is accepted that the globalization of economies brings changes in the employment structure of countries; this in turn influences the way work is divided by gender, the way employment is generated and the way natural resources are used and managed (Rangel de Paiva, 1995; Yáñez and Todaro, 1997); for example, international tariff and trade policies have a large impact on regional agriculture, and thence on the structure of agricultural employment and labour, as well as on the gender relationships that arise in this area of production, and thus it can be seen that the processes of reorienting agricultural production towards export markets and modernizing agriculture which are now underway in certain countries in the region are



resulting in significant changes, one of which is what is termed the “feminization of the agricultural labour market”.<sup>21</sup>

Another strand of analysis along the same lines puts the main focus on the active role of women in the economic sector and as consumers of resources, and the way in which they are affected by the failures of environmental policies and by the problems found in markets, insofar as these generate prices that do not reflect the social costs and benefits associated with the goods concerned (IDB, 1996). This approach is used to analyse the fact that, for example, women farmers without secure tenancy of their land are less willing to invest in new technologies or to plant trees because they cannot be sure that they will recover the investment costs, or because the use of new farming technologies, although beneficial in terms of long-term sustainability, requires intensive labour in the first instance and often jeopardizes production levels in the short term, which makes it difficult for them to be used by women running small holdings, with few resources and soils that may not always be ideal.

As regards policy orientation, this school of thought maintains that it is not enough to have programmes and projects aimed at women, but that development activities as a whole must contribute to equity, which means that men must be involved as well. As a result, when gender-environment policies are designed and implemented in the context of a process of sustainability, women should not be regarded just as a “resource” for conserving and improving the environment, transmitting a new environmental culture or helping to ensure the success of projects. For example, if the labour and knowledge of women in the countryside are used in reforestation work to control erosion, but they have no say in the use, management and ownership of the trees and the land recovered, the benefits they derive will only be marginal and not commensurate with the effort they have made. Again, it needs to be borne in mind that there are factors that act as an incentive for women to take a “friendly” approach to nature, and others that act as a disincentive, for instance for them to adopt resource conservation technologies or practices that require negotiation within the gender relationships between the members of the household, and which might lead to contradictions arising between their gender interests and the needs of the environment. In this situation, there is a need to consider the way men relate to the environment as well, and to investigate the context within which damage occurs.

Treating women simply as a resource often results in development programmes containing serious discrepancies between both the practical and strategic needs of women (Moser, 1989) and what has to be done to preserve the environment. Again, using a gender-based approach when designing environmental and economic policies enables discrepancies in the way these affect men and women to be reduced, as such policies are generally introduced under the false assumption that their impact is the same for both. Furthermore, designing public policies from a gender standpoint entails a constant tension between fact and aspiration, so that it involves on the one hand recognizing, valuing and enhancing the roles that women perform in each specific context and their contributions to development, and on the other hand overcoming the rigid division of roles and the exclusion and subordination that affect them, in order to achieve equity and sustainability. The challenge, therefore, is to find development concepts and strategies that benefit both the position of women in relation to men and the quality of the environment and people’s

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<sup>21</sup> In the case of Chile, for the last two decades women in paid agricultural employment have formed the second largest group within the economically active female population, the largest group being those who work in domestic service. This situation is not however recorded in agricultural censuses or in the employment statistics, as the activity of “casual workers” is seasonal in nature (Valdés, 1992).

lives in general, based on a synergic and integrated approach, on the understanding that the benefits will be mutually reinforcing. The concern is how to ensure that projects for managing natural resources appropriately or reducing the adverse effects of environmental damage can at the same time help women to gain greater autonomy and improve their social condition as a sex. In any case, it is important to be able to determine when sexual equality and protection of the environment can be made joint objectives in development initiatives, and when they cannot. It is necessary too to bear in mind that working from a gender standpoint can help to broaden the scope for the “win-win” policy approaches postulated, for example, by the World Bank, to overcome poverty and improve the environment, as studies show that relieving poverty, although it improves women’s quality of life, does not necessarily bring about changes in the subordinate position that they occupy (Jackson, 1993). It is therefore necessary to clarify all the factors and forces at work, assessing their effects and limitations in terms of these “integrated” approaches.

The “gender, environment and sustainable development” approach also aims to make a methodological contribution to the planning and implementation of development programmes and projects. On the one hand, stress is laid on the need for these processes to have a consultative and participatory character, with women, as well as men, helping to produce diagnoses and proposals, in such a way that they are involved with sustainability on a day-to-day basis while at the same time democracy is reinforced. On the other hand, a start has been made both on introducing gender planning into development,<sup>22</sup> and translating it into the terms of specific environmental issues, and on producing indicators that capture the interrelationship between these in certain concrete cases and that enable situations to be analysed so that initiatives undertaken can subsequently be evaluated and this approach made an integral part of the way projects are implemented. One effort with these objectives is that undertaken by the ECOGEN project, which provides a concrete methodology for carrying out gender analysis in the field of natural resources administration, crossing gender with social class and laying stress on the way different groups in the population cooperate, complement one another, coexist, compete or enter into conflict (cited in IDB, 1996, p. 147).

It is important to note that the theoretical connections between the different critical strands dealing with development, environmental changes and the gender system have progressed almost independently of the development policies adopted by governments in each of the countries. Because of this, one challenge for the future is to carry out analytical work on the approaches and attitudes to gender, the environment and sustainability that underlie these policies, and to work to ensure that gender considerations become part of the development mainstream.

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<sup>22</sup> Gender planning has to be based on the following operations and criteria: (i) ex-ante and ex-post analysis and assessment of the way in which development activities undertaken within the countries differ by gender. For ex-ante analysis, models have to be constructed to enable inferences to be drawn as to how the changes initiated in accordance with the objectives concerned would affect women, and how women in turn would contribute to them; (ii) formulation of explicit objectives that take into account the strategic needs of gender (doing away with subordination), as well as whatever is required to improve people’s quality of life; (iii) incorporation of analysis and evaluation of the costs and benefits deriving from the power negotiations which will necessarily have to be carried out by women with the men around them if equity is to be achieved (Rico, 1993a, p. 16).

#### IV. PROPOSAL TO IMPROVE GENDER-BASED ENVIRONMENTAL STUDIES AND DIAGNOSES

The concept of sustainable development extends to virtually all areas of policymaking. Again, both the gender system and the environment, due to their ramifications, are cross-sectoral issues and are generally considered to be problems that touch all sectors of development planning, as well as being related between themselves. This means that a multisectoral and multidisciplinary approach needs to be adopted. Given this situation, the challenge is to identify, then prioritize, the areas in which these issues could be mutually supporting.

Latin America and the Caribbean has great economic, social and environmental diversity. There is a considerable spread as regards the main natural resources that the countries possess, the state and economic and cultural importance of those resources, the character of human settlements, the services and infrastructure that they operate and the social and productive patterns of development. Likewise, the situations in which the women and men living in the region are placed, and from which gender relationships and forms of interaction with the environment are constructed and reproduced, are manifold.

Again, the situation as regards issues connected with the relationship between gender and the environment shows that in Latin America and the Caribbean public policy planning is hampered by the lack of appropriate theoretical frameworks, the scarcity of trustworthy scientific data<sup>23</sup> and the absence of institutional and political mechanisms through which these issues can be articulated. Furthermore, from a methodological point of view, diagnostics is inadequate and environmental and gender indicators are still relatively crude, all of which can be put down to the fact that both issues are still emerging ones and work is at an early stage.

This raises substantial problems when it comes to prioritizing common areas of public action to design and implement gender-based environmental programmes in the region as a whole. Nonetheless, in this diverse and still little understood area, two issues which are associated directly with the lack of equity, and which therefore jeopardize the sustainability processes of the development model adopted, can be seen to be central in all the countries: the poverty in which a great part of the population lives, and the obstacles to active participation in the decision-making process and in power which are faced by various sectors of society, and by women in particular.<sup>24</sup>

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<sup>23</sup> It is worth drawing attention to the existence of studies that, although incomplete and of a descriptive nature, have set themselves the objective of identifying the ways in which women achieve access to and use and control of natural resources, and the impact of environmental problems on their health, work, time and quality of life. Thanks to these we are aware of the important role they play in the day-to-day management of resources and the contributions they make to sustainability strategies, and of the obstacles they face as a result of the dominant gender system and their social condition.

<sup>24</sup> It is beyond the scope of this document to examine these areas in depth in terms of public policy proposals.

In order to grasp the situation, and before they can design strategies and adopt instruments for reversing and forestalling environmental damage, politicians and planners need reliable information on the state of the environment, the pressures to which it is subject, the origin of these pressures and their impact on the population. Something similar is true as regards the situation and condition of women and men when a gender policy comes to be drawn up.

In the region, from the point of view of a policy to generate knowledge and information on the interrelationship between gender and the environment, the main obstacles centre on: (i) the restricted use made of information resources obtained from censuses, household surveys and other sources of statistics; (ii) the lack of communication and coordination between the institutions and organizations which have carried out studies; (iii) objectives not being defined strategically; (iv) the lack of investment and available resources; (v) large gaps in information<sup>25</sup> and aspects hitherto unexplored.

If we are to have the tools both to evaluate and monitor the policies to be implemented and to have on hand reliable information to support decision-making processes when these policies are being drawn up, priority must be given to the still pending task of improving the existing statistics on the environment and gender, and to producing new and more refined indicators that meet both the needs of the countries and certain policy objectives. To achieve this, ongoing, organized and coordinated work will have to be done on statistics.<sup>26</sup>

As a further step towards improving information, cross-disciplinary studies need to be carried out, firstly to obtain detailed empirical data enabling gender-focused environmental policies and programmes to be developed effectively, and secondly to enable a suitable methodology to be devised so that we can deal with the gender system and the environment in a combined form, taking account of data covering a whole range of variables, both biological and social, and thus put together models that provide an understanding of the complex interrelationship between them.

The emphasis on the need to know more about the gender position and social condition of women becomes more understandable when it can be shown that in most cases they are overlooked or ignored in analyses, while they are given a very real role, often a totally subordinate one, in practice.

## **1. Criteria and aspects to be considered**

For the quality of diagnoses and studies in general on the interrelationship between gender and the environment to be improved, certain criteria, aspects and variables need to be taken into account when they are being produced. This is due to the fact that, despite the complexity that surrounds the subject, and without ignoring its systemic character, particular synergic factors need to be isolated, taking into account the linkage between each of the subjects dealt with.

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<sup>25</sup> A significant gap, in the region and around the world, is the availability of comparable environmental statistics and indicators (United Nations, 1996). Gender statistics are better in this respect, but there is a need to develop indicators that connect the two issues together.

<sup>26</sup> An important development is the decision by the countries of the region, taken during the Summit Conference on Sustainable Development held in Santa Cruz in 1996, to improve and harmonize integrated economic and environmental accounts statistics, a process being coordinated in collaboration with the United Nations Statistics Division.

Each one of the factors to be considered represents a potential focus of interest in itself for an exercise in diagnostics or research; nonetheless, it is considered important for their more or less direct —and not necessarily causal— dependency on the other elements in the system, and the way they reinforce one another, to be taken into account at all times. Furthermore, each area must be understood as a field that contains gender meanings, identities, practices and power relationships. The aspects selected provide a means for orienting and structuring research, while at the same time providing a guide for carrying out assessments and directing activities.

This crossing of variables, as well as recognizing the diversity of the ecological and productive contexts within which men and women work, makes it possible to pin down the linkages between the situation of women and that of the environment and to identify opportunities for or obstacles to changing the current development style, so that public policy proposals that are more precisely targeted at equity and sustainability can then be drawn up. These operations require a cross-disciplinary approach and participatory research techniques.

The following outline, which sets out the criteria and aspects to be considered, does not have just a single starting point. There may be different ways of approaching the subject in relation to the different factors, as the objectives of the studies concerned require, and for this reason it will be necessary, as needs dictate, to establish priorities among the links and look at these more closely so that operational proposals and recommendations can be extracted.

In this context, it is important to emphasize that gender analysis is not a substitute for other types of analysis, like those dealing with class or inter-ethnic relations, but complements them and, if carried out simultaneously, enriches them. Likewise the flows shown in the diagram, from an integrated point of view, enable us to escape from partial, black and white ideas which, on the one hand, make women into victims by centering on environmental damage and, on the other, use the roles they play and the use they make of resources to mark them out as the main despoilers, blaming them for environmental harm.

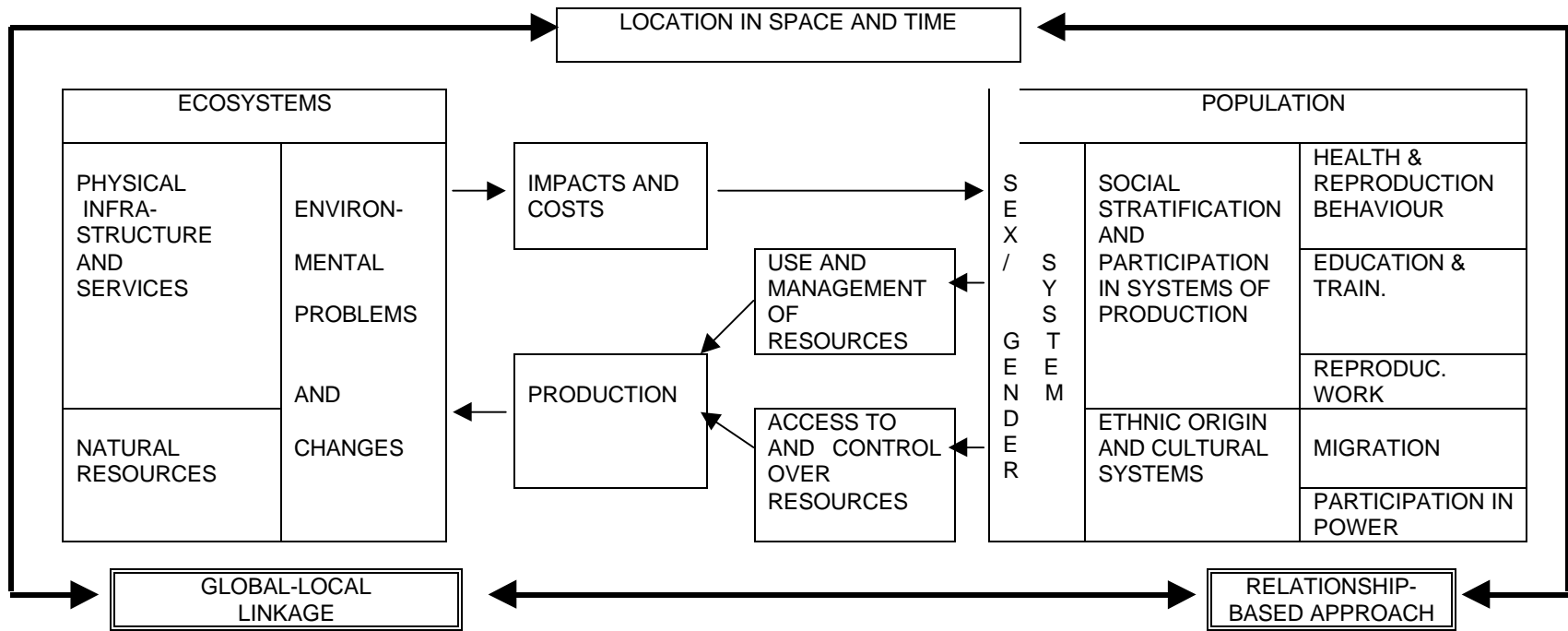
#### **(a) Contextual criteria**

In the first place, three conceptual criteria of a contextual nature are considered. These are interrelated, and provide a framework from which analysis needs to be carried out on the situation to be diagnosed or researched, and to a certain extent they characterize the standpoint of gender in development.

##### *(i) Location in space and time*

The concept of the environment, which is of course an abstraction, takes on validity and objectivity when it is placed within a particular historical and territorial context, i.e., in the diachronic relationship between the ecosystem and the human action which has been exerted on it, resulting in a concrete situation at a particular time and in a particular space.

Diagram of the gender-environment interrelationship



Likewise, gender constructions, and thus the relationships that are established between men and women, have a cultural historic character and take on their specific forms because of processes associated with particular territories, such as production systems, and systems for appropriating nature and the environment both symbolically and in day-to-day practice.

(ii) *Global-local linkage*

While it is necessary to consider the particular circumstances of a specific environment and the ways in which environmental problems are produced locally, this analysis also has to include the relationship that exists between the local situation and global changes in the environment. This relationship needs to be analysed in both directions: (i) the contribution made by the local processes to environmental problems having a worldwide impact;<sup>27</sup> (ii) the effects that global processes have on given communities and spaces. Again, consideration needs to be given to the national policies or “strategies or plans for sustainable development” which have been adopted by certain countries in the region, and which cover a wide range of environmental, economic and social objectives, and the impact of these on the people and natural resources of specific territorial units.

(iii) *Relationship-based approach*

The relationships that human beings establish among themselves are affected by different forms of cooperation, competition, solidarity, conflict and power, and this constitutes a complex and diverse matrix within which both the daily actions of individuals and development policies and models have to function, impelling or resisting the changes necessary for equity to be achieved. Again, the relationships that are established with nature and with an environment that has been shaped by human action, through the workings of the productive and reproductive systems of social life, give their character to patterns of relating that correspond to the forms of development being implemented. The emphasis is therefore on the nexus or relationship between the human action and the natural environment which this action affects. In this context, one of the strategic aspects consists in the gender constructions and relationships that are incorporated into patterns of occupation of and action on the environment.

Again, when using this criterion it is necessary to consider government policies which have the direct aim of reducing the gap that exists between men and women, and thereby bringing about changes in their relationships, such as equal opportunities plans, particularly when these treat the environment as a strategic area for attaining equality of opportunity in these countries through the setting of concrete objectives.<sup>28</sup>

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<sup>27</sup> For example, emanations of gases in urban areas do not just contaminate the air breathed by the people who live there, but make up a significant and growing proportion of the gases causing global climate problems and depletion of the ozone layer.

<sup>28</sup> For example, the Plan for Equal Opportunities for Women and Men, 1996-1998, in Costa Rica.

**(b) Operational aspects and variables**

The ability to distinguish between environments and recognize differences in the nature of different social relationships, systems of production and types of habitat and human settlement is a crucial step if we are to make progress in understanding the origin of concrete obstacles when the gender-environment relationship is established. For this reason, studies need to deal with the following aspects and variables, which are set out descriptively in list form, but whose potential causal relationships and parallels are shown in visual form in the flows of the diagram.

(b.1) *The environment*

(i) *Ecosystems and spatial locations*

In the first place, it is necessary to decide, for both theoretical and methodological purposes, whether the study refers to a rural, urban or intermediate environment. The rural and urban environments are very often treated as though the concepts were interchangeable. This leads to confusion in approaches, practices, types of concern and levels of detail. At the same time, it distorts our understanding of the role that is played by human beings in the environmental changes being experienced. Rural and urban environments differ fundamentally in their relationship to nature, the type of damage they experience, the sources of this damage, and their connection with poverty and the structure of society. This means that studies and analyses need to be focused in a particular way so that environmental policies can respond consistently to the particular territorial situation and natural resources involved, and to the different forms of productive activity carried out by women and men in each case.

Likewise, it is important to classify ecosystems on the basis of the topology, climatic situation, hydrology and soils that are determinants both of environmental problems and of the prevailing production systems.

(ii) *Natural resources*

In each context to be considered, it is important to identify clearly the renewable and non-renewable natural resources affected: earth, water, air and woods, among others, and their particular dynamics in terms of the constitution, reproduction and replacement of stocks,<sup>29</sup> and the biodiversity to be found in each ecosystem. For example, although natural forests represent a natural resource of the first order in the region, covering as they do an area of 918.1 million hectares, during the 1980s the wooded area of Latin America and the Caribbean dropped by 8.4 million hectares a year, and over the past fifteen years, with the conversion of woodland to arable land, wood extraction, consumption as fuel and construction of transport roads in wooded areas, the volume of timber felled in the region has accounted for the bulk of world deforestation (United Nations, 1993).

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<sup>29</sup> A significant contribution to an understanding of the natural resources situation in Latin America and the Caribbean is the analysis carried out by the World Resources Institute in Washington and its annual publication "World Resources". For regional information too, see the document Global Environment Outlook (UNEP, 1997).



(iii) *Physical infrastructure and services*

The coverage and quality of services and physical infrastructure, in particular the supply of housing, available in the different types of human settlement whether urban or rural, are directly linked to various environmental problems and to people's quality of life.<sup>30</sup> Similarly, a lack of such resources is associated with adverse effects on health and with time costs when carrying out reproductive tasks. As a result it is necessary to assess the deficits existing in each case under study and their connection with diseases of environmental origin and with the levels of poverty and exclusion suffered by certain segments in society, women in particular.

(iv) *Environmental problems and changes*

In accordance with the particular ecosystems and natural resources concerned, it is necessary to identify which of the environmental changes and problems being dealt with are present, considering the past situation on the basis both of existing quantitative data and of the perception that local people have about how the environment has changed over whatever period is covered by the collective memory or oral tradition of the community.

The relationship between environmental problems and the local inhabitants needs to be established in two directions: (i) the impact that these problems have on people; (ii) the extent to which human beings have caused them. At the same time, both of these influences are associated with demographic variables such as fertility and migration, and will differ by sex, social class, ethnic origin, age, education, and participation in the productive and reproductive areas of social life and in the processes of decision-making and power.

Under this heading, analyses and studies also have to consider the permanent threat to people and the environment that is posed by the occurrence of natural disasters, such as hurricanes in the Caribbean, earth movements in the Andean region, or large floods in the various hydrographic basins.

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<sup>30</sup> Latin America suffers from an acute shortage of drinking water. Only 60% of the population in Buenos Aires and Lima, for example, is covered by this service. Similar shortfalls are to be found in the case of drainage systems, and even in cities with good coverage like Santiago (95%) waste water is not treated but is discharged directly into river beds. As of 1994, 72.8% of the urban population of Paraguay and 45.5% of the inhabitants of the cities of Honduras did not have access to basic sanitation (ECLAC, 1997b). This situation has serious consequences for human health, such as diarrhoea, hepatitis and typhoid, and was a determining factor in the 1991 cholera outbreak, the first in the region for 100 years.

## **(b.2) Aspects that intermediate in<sup>31</sup> the relationship**

### *(i) Impacts and costs of environmental problems*

Environmental changes produce adverse effects both on systems of production and on people's quality of life. The most dramatic and visible effects are on people's physical and mental health and on the productivity of subsistence systems. Again, the efforts that people make day by day to mitigate these effects, women in particular, entail costs which translate mainly into money, time and opportunities for achieving greater well-being. However, costs are not necessarily associated just with these effects, but can arise out of failure to prevent them and a lack of policies to ensure that resources are conserved. These consequences of environmental damage need to be analysed in terms of their differing effects on women and men because of the asymmetry of their positions in the structure of society, and thus in their vulnerability.

Furthermore, there is a need to examine the environmental regulations that exist in each country, in particular environmental impact assessment (EIA) systems, so that the role played by the different sectors of society in the assessment process can be identified, together with the way social and cultural variables are included in this process so as to forestall the negative effects of the various investment projects that are to be implemented.

### *(ii) Production of environmental changes*

Interaction between gender and the environment means the contribution made by human agents to producing the environmental changes that are occurring. To understand this phenomenon more accurately, it is necessary to find out how people use and manage resources and what form of access to and control over them they have, in order then to determine their environmental consequences. Equally, consideration needs to be given to the types of technology in use for both productive and domestic purposes, their harmful and contaminating effects, and the way they are used by women and by men and the roles with which they are associated. Attention also needs to be paid to the patterns of consumption obtaining in the higher-income sectors and the cultural values that determine these patterns and the patterns of well-being, given their relationship with the over-exploitation of environmental resources.

### *(iii) Use and management of resources*

To analyse the connection between gender and the management of resources it is necessary to consider the roles that are traditionally assigned to women and men in the productive and reproductive spheres, as well as the new roles and positions they are being placed in together with other associated conditioning and/or limiting factors such as poverty, and the effects of these on the environment. At the same time, an understanding of the differentiated way in which resources are used and managed makes it possible to

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<sup>31</sup> The concept of intermediation is used on the assumption that there is no causal continuity between the population with its specific characteristics and the state of the environment, but that there are one or more factors or agents which come between them and relate them in a dialectical process, and that it is these that enable the interconnections to be explained.

identify, and then replicate or reinforce, knowledge, practices and technologies that contribute towards protection of the environment and sustainability.

(iv) *Access to and control over resources*

The distribution of capital and access to natural resources, including land, are factors that provide an indication of the degree of equity existing in a society (ECLAC, 1991 and 1992). Furthermore, given that natural resources are finite, ascertaining who has effective access to and control over them makes it possible to determine who is responsible for damage to the environment and how much opportunity people actually have to introduce sustainable practices and make decisions as to the course of development. This variable relates closely to participation in decision-making processes and in the exercise of power held by different sectors of society and individuals.

It is important to note that gender-based analysis of access and control in relation to environmental resources is linked with legal, cultural and economic issues that regulate power between and over people, and the discrimination that affects women in relation to men. For example, it is necessary to know the relationship between land ownership and gender as embodied in legal restrictions that may affect women's position as regards inheritance, or the weight given to their rights in the agrarian reform models implemented and the counter-reform processes which are now underway in certain countries.<sup>32</sup> Likewise, given that financial and technical backing is essential if sustainable initiatives are to be mounted, research needs to be done on financial policies and the access that women now have to credit.

(b.3) *The population*

The population at large, while it benefits from sustainable development, is also a vital agent of it, and is unquestionably an important factor in producing environmental changes; nonetheless, it cannot be regarded as a homogenous whole, but has to form part of analyses which look at different variables that cross over to define characteristics belonging to different social groups. Likewise, "the population problem does not just involve absolute numbers of people or even rates of population increase or density, but also, and very importantly, includes social, political and institutional factors. Complex patterns of human interaction conceal, alter and distort the relationship of people with the land and cities" (Arizpe and others, 1994, p. 3).

(i) *Sex/gender system*

Over and above the logical need to include this dimension in every aspect related to the population, due to the objective of the studies, it is considered necessary to: (i) break down all data by sex; (ii) carry out an analysis of these data from the point of

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<sup>32</sup> The percentages of women benefiting from the agrarian reform process in certain countries were: 3.8% in Honduras, 4.8% in the Dominican Republic, 6.0% in Nicaragua, 5.0% in Peru, 11.2% in Colombia and 25.0% in Cuba (Deere, 1986). For further information on the situation of women in the current counter-reform processes that are taking place, see Deere and León (1997).

view of gender, i.e., in relation to the division by gender of social roles, access to resources and participation in power by women and men, so as to determine what degree of equity exists; (iii) specify the social structure of gender relationships and identities by means of a crossover with the other variables under consideration.

(ii) *Social stratification and participation in systems of production*

This aspect makes it possible to determine what the socioeconomic relationship of the different segments of society with the environment and natural resources is. At the same time, it places them in specific productive activities, i.e., it classifies them as farmers, fishermen, agricultural labourers, urban workers in the informal sector, businessmen, and others, together with their respective levels of income. Likewise, due to the large gap between men and women in the labour market,<sup>33</sup> it is important to take a differentiated approach to the characteristics and quality of the jobs and work done, since the conditions that characterize, for example, the work done by women in towns, have direct consequences for their ability to escape from poverty and attain a good quality of life. In this context, it is also necessary to pay particular attention to the fact that the way work is divided by gender means that women in rural areas play an important part in agriculture, with responsibility for the crucial stages in the processes of producing and processing foods and tending to and looking after kitchen gardens and domestic livestock, and they are often the only ones that collect wood, water and forage. This is emphasized because of the fact that agriculture has traditionally been regarded as a predominantly male sector; national censuses have always shown low participation by women, and the stereotypes applied to rural women led to them being regarded as “housewives” who made no significant contribution to the development of the sector.

Furthermore, it is vital for these variables to be considered if more specific conclusions are to be drawn in terms of identifying the limitations faced by women and the policy directions necessary to change patterns of consumption and welfare in families. This is because of the enormous importance that analysing poverty takes on in the region if public policies are to be designed to reduce it<sup>34</sup> since it is a severe limiting factor on the sustainability of any development process, while at the same time it is the main factor underlying the lack of equity, and the role played by the higher-income sectors, through consumption, in over-exploitation and damage to natural resources.

In Latin America and the Caribbean, although most of the poor live in urban areas, poverty rates are higher in rural areas, a situation that is even more pronounced in indigenous communities which suffer great disadvantages in terms of access to land and education. One of the factors contributing to this situation is the impact of environmental damage on the productive base of the poor, something that has brought into existence

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<sup>33</sup> In Latin America and the Caribbean, participation by women in the labour market has increased steadily over recent decades and to some extent has diversified. However, there are still high rates of unemployment and underemployment, and their position in the labour market is characterized by a number of negative factors such as: casualization of the jobs which they carry out, wage discrimination and employment segmentation by gender, and difficulty in combining domestic tasks with paid work, among other things (Arriagada, 1997).

<sup>34</sup> In the last decade the percentage of households in poverty in Latin America rose from some 35% to some 41%. Between 1990 and 1994 this percentage dropped from 41% to 39%, but despite this progress the number of those living in poverty in the region exceeded 200 million people (ECLAC, 1997b).

highly diversified family and individual survival strategies, which also need to be identified and described.

(iii) *Ethnic origin and cultural systems*

Due to the multicultural nature of Latin America and the Caribbean, it is important to give consideration to the ethnic factor and the particular world views and ways of appropriating space and nature of the different groups, be they indigenous, Afro-Latin American, Afro-Caribbean or Creole, whenever the people involved in studies manifest characteristics related to ethnicity in the way they interact with the environment.

Again, the cultural variable and the way in which it manifests itself provides the means to identify certain particular characteristics of social actors, such as the way they represent and symbolize nature and its resources as a group or as individuals, the use they make of it and the techniques they employ to extract these resources, their patterns of territorial occupation and settlement and the rationale behind the distribution of tasks on the basis of patterns associated with sex, age and labour specialization. For this purpose, these practices must be considered both in the light of the traditional values obtaining in the region and in relation to the values which are emerging as a result of the changes in the condition of women which have been brought about over recent decades.

A solution to environmental problems can be negotiated only if we know how the different social groups involved view and assess their situation in terms of actions that generate environmental changes and those that are needed to avoid further deterioration. To achieve this, it is important to know the opinions and demands of the different women's groups and organizations, as well as those of men of different ethnic origins and social segments.

(iv) *Reproductive behaviour and health*

Damage to resources and environmental problems in general are having an adverse effect on people's health, as empirical evidence increasingly reveals.<sup>35</sup> If the degree and level of these effects can be determined, it becomes possible to lay down guidelines for policies to relieve and prevent them, with the aim of minimizing them in the immediate future and eliminating them in the longer term. This knowledge also provides an important early warning of environmental crisis.

The adverse effects of contamination, although felt by the entire population, have the greatest consequences for child sickness and mortality rates, and thus indirectly for women, who bear the main responsibility for looking after their family's health and who are in more direct contact with primary care health services. Using a differential gender analysis, it can be seen that the adverse consequences for women's health are caused not so much by environmental factors in themselves, as by the social forces that ensure that women are exposed to those perils. In summary, these forces are two in number:

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<sup>35</sup> For example, 80% of all illnesses and more than a third of deaths in developing countries result from drinking contaminated water and, on average, up to one tenth of each individual's productive time is lost because of illnesses associated with this (ECLAC, 1994). Furthermore, in the urban areas of the region, more than 50 million people are exposed to dangerous levels of air pollution (UNEP, 1990). This is one of the commonest causes of respiratory ailments, such as asthma and bronchitis, which mainly affect young people, pregnant women and the elderly.

marginalization and powerlessness to reverse these factors, combined with the vulnerability of their biological function of reproduction. To deal with this, it is also necessary to know what quality of care people receive and what access they have to health services and insurance. Another factor that must be regarded as one of the points of interest in studies is the indiscriminate use of agricultural toxins or other contaminants and the effects of these on the health of workers who are in contact with them.<sup>36</sup>

At the same time, reproductive behaviour, understood chiefly as fecundity in a population, is associated both with demographic pressures on given ecosystems and their support capability, and with aspects related to the health and reproductive rights of women and the consideration given to them when any policy having the objective of controlling population growth or improving the position of women in society is being drawn up. To deal with this, it is necessary to study the persistence of stereotypes, prejudices and negative assessments of women and the roles they play in society as factors that limit their ability to exercise their reproductive rights effectively, and the actual participation and responsibilities of men and women in reproduction and family planning. This is important because one of the problems in collecting information and taking action in respect of reproductive health is to be found in the female population.

(v) *Socialization, education and training*

Broadly based training of human resources is a central factor in initiating any sustainable development process. The type and direction of the socialization received by girls and boys, and the level of education and training possessed by the population, can be pointers to the opportunities that people have both to minimize or resist the negative impact of environmental problems on their lives and to develop methods for using and managing resources that ensure that these are protected and that the process is a sustainable one.

In this respect, various situations associated with environmental policies need to be considered: (i) the structural factors that contribute to the exclusion of women belonging to the less developed sectors, such as rural and indigenous sectors, from formal education; (ii) the inclusion of environmental and non-sexist content in educational curricula at the different levels; (iii) the employment training received by men and women and the appropriateness of this to the new requirements for economically and ecologically sustainable technology and production methods; (iv) the incorporation of women's knowledge about methods of using and managing resources into environmental education programmes and into the design, execution and evaluation of policies; (v) the implementation of informal environmental education initiatives, and the participants in these; (vi) access for and participation by young people in the scientific and technological development of these countries, particularly in university and technical courses in the environmental field; (vii) access for men and women to agricultural assistance programmes, and the availability of rural extramural services to provide training in technologies that increase productivity while at the same time contributing to sustainability.

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<sup>36</sup> In Chile, research has shown that use of these products is the cause of the poisoning frequently suffered by female workers in agro-industry: vomiting, fainting, stomach pains, chronic headaches, respiratory ailments. There are also studies which find a relation between contact with these poisons and congenital malformations such as defects in the closing of the neural tube: anencephaly, myelomeningocele, hydrocephalus (Mella, 1990, cited in Díaz, 1991).

(vi) *Reproductive work*

An understanding needs to be reached from a gender standpoint of the dynamic between development and the environment. This must involve bringing to light the management processes applied not just to resources associated with production, but those involved in social reproduction processes as well.

The use and management of environmental resources is part of people's daily lives, in the form of the reproductive work carried out mainly by women as they discharge the gender role that, culturally and socially, is assigned to them. Every day women, and the poorest women in particular, have to cope with shortages of, or difficulties in gaining access to, services, infrastructure,<sup>37</sup> or resources such as drinking water,<sup>38</sup> and although it is mainly women that are in charge of obtaining, transporting and storing them, they are not generally involved in the administration of the sources from which they are obtained. Furthermore, the work they do to maintain and clean the home means that they have responsibility for monitoring and handling environmental risks there, in other words they are the main agents of household sustainability.<sup>39</sup> Again, one of these reproductive tasks is looking after the family's health, and to discharge this women need to take measures to forestall or alleviate the effects of resource contamination on the members of the household. Contamination found inside homes is also something that is directly harmful to women, and to children as well, due to the greater amount of time they spend in the home and the tasks allotted to them, such as handling food, cleaning products or pesticides, and the use of contaminating energy sources, poor ventilation of houses and the handling of rubbish. In the case of households where biomass energy is used, whether in the city or the countryside, air pollution in the home is such that it has been identified as one of the world's most critical environmental problems.<sup>40</sup>

The importance of the reproductive role for the sustainability of homes, the costs that these entail for women and the day-to-day management of environmental changes within families, and the existence of certain unsustainable practices, together with the limitations they face such as poverty and a lack of resources and training, are important issues that need to be brought out in any study centering on the interaction between gender and the environment. It is also important to identify the way men participate in meeting the reproductive needs of households and society at the different stages of their life cycle, and the situation as regards issues related to what are termed shared family responsibilities.

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<sup>37</sup> In Latin America, the growing participation of women in economic activities is notable in large urban centres. One of the consequences of this state of affairs is an increase in the demand for support services for domestic work which city-societies do not satisfy, and which constitutes one of the greatest shortcomings of urban infrastructure as far as women are concerned.

<sup>38</sup> Difficulties in obtaining drinking water may mean that one or more of the following situations obtain: contaminated water, water source at a distance from home, very difficult ground on the way to the source (steep slopes, rocky or sandy ground), supply insufficient for the number of people living in the dwelling, supply limited to a few hours a day or inconvenient hours (late at night or in the small hours of the morning), a large proportion of the family income has to be spent on water.

<sup>39</sup> For further information on an empirical study dealing with this subject, see Rico (1996a and 1996b).

<sup>40</sup> See World Bank, *Development and the Environment. Report on World Development, 1992*, Washington, D.C.

(vii) *Migration*

Disparities in infrastructure, services, incomes and opportunities between cities and the countryside continue to make the cities more attractive than rural sectors.<sup>41</sup> There are now people who migrate not just for economic and social reasons, but who can be categorized as ecological migrants. This is the case, for example, with inhabitants of dry rural areas with impoverished and eroded soils whose economic units cannot support all members of the family and, in general, the inhabitants of fragile ecosystems. This fact makes it clear that one of the failures of rural development schemes has been the inability to create employment opportunities that depend less directly on the natural resources base. Also, because of this migration, the population of many of the region's cities has increased at a rate that has saturated the capacity of urban infrastructures and outstripped job creation in the cities. Within this context, it should be noted that previous trends have been reversed, and country-city migration by women is now greater than male migration (ECLAC, 1997a).

For these reasons, population movements within the countries need to be observed initially in the light of two situations: (i) the environmental damage, ecological disasters and lack of basic infrastructure, services and opportunities in rural areas that cause people to migrate; and (ii) the environmental problems that arise in urban sectors due to the demographic pressure exerted by migrants, plus the inability of cities to satisfy the infrastructure and services needs of their entire population equitably.

The need to analyse gender in migration arises mainly from two factors: (i) the continuing qualitative and quantitative increase in women's share in these migratory flows, and the particular characteristics they bring to this phenomenon, as well as the inequalities they face by comparison with men in the cities to which they go, such as the quantity and types of work; (ii) the migration of men leaves behind communities which have an extreme age structure (very young or very old) in the male population, so that responsibility for supporting households and administering resources devolves mainly upon women.

When this aspect is considered, there is also a need to identify and analyse such international migration or emerging movements as may exist, such as temporary movements and movements between and within cities, as these have become increasingly significant over recent decades.

(viii) *Participation in power and in decision-making processes*

If the processes of democratizing development and securing its social and political sustainability are to be firmly established, equitable and responsible participation by all the social actors at the different levels where decisions are made and control is exercised,

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<sup>41</sup> The *1995 Human Development Report* states that the disparities between rural and urban areas in the region in terms of people's access to health services, drinking water and sanitation are still very great, even though there has been a sustained increase in coverage in many of the countries (UNDP, 1995, p. 188). According to the latest Social Panorama of Latin America, the proportion of people who live in households with access to adequate sanitation systems is between 30% and 40% greater in urban areas than in rural areas; during the first half of the 1990s, these differences in coverage diminished somewhat in most of the countries, however (ECLAC, 1997b, p. 113).



and at every level of the power structure, will be a precondition. The position that different sectors of the population occupy in the social structure and the limitations they face in terms of gaining access to the sources of economic, political and social power and, specifically, to the management of environmental policies of a local and global nature which have a direct influence on the quality of life, are indicative of the degree of responsibility that they hold as passive or active agents of environmental change and/or of sustainable practices.

It is important to recognize the active contribution made by men and women through unpaid, shared and cooperative work in local initiatives designed to mitigate existing deficiencies or overcome particular environmental problems and thus improve the quality of life for their families and the world around them,<sup>42</sup> and the private and state resources that are channelled into these activities. Research also needs to be done into intermediate bodies such as women's and environmental NGOs<sup>43</sup> and the involvement of different segments of the population in the various organizations of civil society, including whether the latter are consulted or regarded as having valid suggestions to offer in setting the public agenda as regards the design and implementation of policies aiming at sustainable development. Likewise, there is a need to determine the involvement of men and women in the processes of decentralization and reinforcement of municipal power now being implemented in these countries, and the political will and commitment that exists for implementing gender-based environmental policies.

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<sup>42</sup> In many of the countries, women have been the leading actors in successful initiatives involving reforestation, paving of roads and pavements, creating and maintaining green areas, removing rubbish from public spaces and building homes.

<sup>43</sup> In Latin America and the Caribbean, there are a growing number of institutions that are active in carrying out research and implementing initiatives to address the interaction between gender and the environment. A study carried out at the beginning of the 1990s identified 94 organizations in the region that aim to advance women while at the same time preserving the environment by means of reforestation projects, agrosilviculture, the cultivation of medicinal plants, organic horticulture, rubbish management and recycling, environmental education and environmental sanitation and hygiene (Paolisso and Yudelman, 1991).

## BIBLIOGRAPHY

- Aguilar, Lorena (1996), "Centroamérica: el reto del desarrollo sostenible con equidad", *Género y ambiente en Latinoamérica*, M. Velázquez (ed.), Cuernavaca, Regional Informatics Centre on Woman/National Autonomous University of Mexico.
- Anderson, Jeanine (1994), "La feminización de la pobreza en América Latina", Lima, Red Entre Mujeres/Diálogo Norte-Sur.
- Arizpe, L., F. Paz, and M. Velázquez (1993), *Cultura y cambio global: percepciones sociales sobre la deforestación en la Selva Lacandona*, Cuernavaca, Regional Informatics Centre on Woman/National Autonomous University of Mexico.
- Arizpe, L., P. Stone and D. Major (eds.) (1994a), *Population and the Environment: Rethinking the Debate*, Boulder, Colorado, Westview Press.
- Arizpe, L. and others (1994), "Las mujeres y la sustentabilidad del desarrollo: administración y protección del medio ambiente", paper presented at the Regional Conference "Las mujeres en el continente americano: participación y desarrollo", convened by the Inter-American Development Bank, the Economic Commission for Latin America and the Caribbean and the United Nations Development Fund for Women, Guadalajara, Mexico, 5 to 7 April.
- Arriagada, Irma (1997), "Mitos y evidencias del trabajo femenino urbano en América Latina", *Mujer y desarrollo* series, No. 21 (LC/L.1034), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).
- Boserup, Ester (1970), *Women's Role in Economic Development*, London.
- Braidotti, Rosi and others (1994), *Women, the Environment and Sustainable Development: Towards a Theoretical Synthesis*, London, Zed Books.
- Brundtland Commission (1987), *World Commission on the Environment and Development; Our Common Future*, New York, Oxford University Press.
- CELADE (Latin American Demographic Centre) (1996), *Impacto de las tendencias demográficas sobre los sectores sociales en América Latina. Contribución al diseño de políticas y programas* (LC/DEM/G.161), Santiago, Chile.
- Collins, Jane (1991), "Women and the environment: social reproduction and sustainable development", *The Women and International Development Annual*, vol. 2, Rita Gallin and Anne Ferguson (eds.), Boulder, Colorado, Westview Press.
- Congreso Mundial de la Mujer para un Planeta Sano (1991), *Agenda de acción de la mujer 21*, San José, Fundación Arias para la Paz y el Progreso Humano.
- Dankelman, Irene (1985), "Rapporteur summary", *Women and the Environment Crisis: A Report of the Proceedings of the Workshops on Women, Environment and Development*, D.K. Munyakho (ed.), Nairobi, Environment Liaison Centre.
- Dankelman, I. and J. Davidson (1989), *Women and Environment in the Third World: Alliance for the Future*, London, Earthscan Publications.
- Deere, Carmen (1986), *Rural Women and State Policy: The Latin American Agrarian Reform Experience*, Geneva, International Labour Office (ILO).

- Deere, C. and Magdalena León (1997), "Women, land rights and the Latin American counter-reforms", document presented at the XX International Congress of the Latin American Studies Association (LASA), Guadalajara, 17 to 19 April.
- Díaz, Estrella (1991), *Mujer, condiciones de trabajo y medio ambiente*, Santiago, Chile, Instituto de la Mujer.
- ECLAC (Economic Commission for Latin America and the Caribbean) (1997a), "Women in Latin America and the Caribbean in the 1990s: Diagnostic elements and proposals", *Mujer y desarrollo series*, No. 18 (LC/L.836/Rev.1), Santiago, Chile.
- \_\_\_\_ (1997b), *Social Panorama of Latin America. 1996 Edition* (LC/G.1946-P), Santiago, Chile. United Nations Publication, Sales No.: S.97.II.G.4.
- \_\_\_\_ (1997c), The equity gap. Latin America, the Caribbean and the social summit (LC/G.1954(CONF.86/3)), Santiago, Chile.
- \_\_\_\_ (1995a), Regional programme of action for the women of Latin America and the Caribbean, 1995-2001 (LC/G.1855), Santiago, Chile.
- \_\_\_\_ (1995b), *Social Panorama of Latin America. 1995 Edition* (LC/G.1886-P), Santiago, Chile. United Nations publication, Sales No. S.95.II.G.17.
- \_\_\_\_ (1994a), The role of ECLAC Secretariat in following up the United Nations Conference on Environment and Development (LC/G.1814), Santiago, Chile.
- \_\_\_\_ (1994b), Economía y ecología: dos ciencias y una responsabilidad frente a la naturaleza (LC/R.1457), Santiago, Chile.
- \_\_\_\_ (1992), *Social Equity and Changing Production Patterns: An Integrated Approach* (LC/G.1701/Rev.1-P), Santiago, Chile. United Nations publication, Sales No. S.91.II.G.5.
- \_\_\_\_ (1991), *Sustainable Development: Changing Production Patterns, Social Equity and the Environment* (LC/G.1648/Rev.2-P) Santiago, Chile. United Nations publication, Sales No. S.91.II.G.5.
- ECLAC/UNEP (Economic Commission for Latin America and the Caribbean/United Nations Environment Programme)(1990), *América Latina y el Caribe: El reto ambiental del desarrollo*, Santiago, Chile.
- Ferrater Mora, José (1979), *Diccionario de filosofía*, Madrid, Alianza Editorial.
- Fundación Natura/CEPLAES (Centro de Planificación y Estudios Sociales) (1991), *Mujer y medio ambiente en América Latina y el Caribe*, Quito.
- Gallopin, Gilberto (1986), "Ecología y ambiente", *Los problemas del conocimiento y la perspectiva ambiental del desarrollo*, Enrique Leff (ed.), Mexico City, Siglo Veintiuno Editores.
- Harcourt, Wendy (ed.) (1994), *Feminist perspectives on sustainable development*, London, Zed Books/Society for International Development.
- IDB (Inter-American Development Bank) (1996), *La mujer en las Américas. Cómo cerrar la brecha entre los géneros*, Washington, D.C.
- Institute of Social Studies, Department of Women's Studies, University of Utrecht (1991), "Remaking the world together: women, the environment and sustainable development. A state of the art report and a proposal for a reassessment of the topic", unpublished.
- IUCN/UNEP/WWF (World Conservation Union/United Nations Environment Programme/World Wide Fund for Nature) (1980), *The World Conservation Strategy*, Geneva.
- Jackson, Cecile (1993), "Doing what comes naturally? Women and environment in development", *World Development*, vol. 21, No. 12, London, Pergamon Press.

- Joekes, Susan, Melissa Leach and Cathy Green (eds.) (1995), "Gender relations and environmental change", *IDS Bulletin*, vol. 26, No. 1.
- Latin American and Caribbean Commission on Development and Environment (1990), *Our Own Agenda*, Washington, D.C., Inter-American Development Bank/United Nations Development Programme (IDB/UNDP).
- Leach, Melissa (1992), "Women and the environment: Traps and opportunities", *Development in Practice*, March.
- \_\_\_\_ (1991), "Engendered environments: Understanding natural resource management in the west African forest zone", *IDS Bulletin*, vol. 22, No. 4.
- Lechner, Norbert (1990), *Los patios interiores de la democracia: subjetividad y políticas*, Santiago, Chile, Latin American Faculty of Social Sciences (FLACSO)/Fondo de Cultura Económica.
- León, Francisco (ed.) (1994), *Conocimiento y sustentabilidad ambiental del desarrollo en América Latina y el Caribe*, Santiago, Chile, Dolmen Ediciones.
- Levy, Caren (1992), "Gender and the environment: the challenge of cross-cutting issues in development policy and planning", *Environment and Urbanization*, vol. 4, No. 1, April.
- Linggard, Trine and Mette Moberg (1990), "Women and sustainable development: A report from Women's Forum in Bergen", Bergen, Centre for Information on Women and Development, 14-15 May.
- Mies, María and Vandana Shiva (1993), *Ecofeminism*, London, Zed Books.
- Moser, Caroline (1989), "Gender planning in the third world: Meeting practical and strategical needs", *Gender and Planning Paper*, No. 11, London.
- Paolisso, M. and S. Yudelman (1991), *Women, Poverty and the Environment in Latin America*, Washington D.C., International Centre for Research on Women.
- Paolisso, Michael (1995), *New Directions for the Study of Women and Environmental Degradation*, Washington, D.C., International Centre for Research on Women.
- Plumwood, V. (1992), "Beyond the dualistic assumptions of women, men and nature", *Ecologist*, vol. 22, No. 1.
- Rangel de Paiva, Alice (1995), "Globalización, género y trabajo", *El trabajo de las mujeres en el tiempo global*, R. Todaro and R. Rodríguez (eds.), Ediciones de las mujeres, No. 22, Santiago, Chile, ISIS Internacional/Centro de Estudios de la Mujer.
- Rico, María Nieves (1997), "Género y ambiente urbano en América Latina: una interrelación por descubrir, un desafío por enfrentar", paper presented at the Latin American Seminar "Desarrollo y medio ambiente en la práctica urbana", Rosario, Argentina, CEDEA, publication pending.
- \_\_\_\_ (1996a), "Género, ambiente y pobreza. Un estudio exploratorio en el medio urbano popular de Santiago de Chile", *Género y ambiente en Latinoamérica*, M. Velázquez (ed.), Cuernavaca, Regional Informatics Centre on Woman/National Autonomous University of Mexico.
- \_\_\_\_ (1996b), "Género, ambiente y pobreza en el medio urbano popular. Informe final de investigación", Santiago, Chile, Casa de la Mujer La Morada, unpublished.
- \_\_\_\_ (1994) "Género y medio ambiente, nuevos desafíos para el desarrollo", *Población y ambiente. Interrelaciones que afectan el desarrollo andino*, César Quiroz and Eloísa Tréllez (ed.), Lima, CALEIDOS/UNFPA (United Nations Population Fund).
- \_\_\_\_ (1993a), "Development and gender equity: an uncompleted task", *Mujer y desarrollo series*, No. 13 (LC/L.767), Santiago, Chile.

- \_\_\_\_\_ (1993b), "La perspectiva de género en el análisis medioambiental y del desarrollo", Working document, No. 4, Santiago, Chile, Colomba Consultoras.
- Sen, Gita and Karen Grown (1988), *Development, Crisis and Alternative Vision: Third World Women's Perspectives*, Development Alternatives for Women in a New Era (DAWN).
- Shiva, Vandana (1989), *Staying Alive. Women, Ecology and Development*, London, Zed Books.
- UNDP (United Nations Development Programme) (1995), *Human Development Report, 1995*, Mexico City, Harla S.A.
- UNEP (United Nations Environment Programme) (1997), *Global Environment Outlook*, Nairobi, Oxford University Press.
- \_\_\_\_\_ (1990), Plan de acción para el medio ambiente en América Latina y el Caribe (UNEP/LAC-IG.VII/4), Mexico City.
- UNEP/World WIDE Network (United Nations Environment Programme) (1992), *Women and the Environment: An Analytical Review of Success Stories*, Washington, D.C.
- United Nations (1997a), Preparations for the special session of the General Assembly for the purpose of an overall review and appraisal of the implementation of Agenda 21 (E/CN.17/1997/23), New York, April.
- \_\_\_\_\_ (1997b), Critical issues and policies for sustainable development: Energy, transport and water. Report of the High-level Advisory Board on Sustainable Development for the 1997 review of the Rio commitments (E/CN.17/1997/17.Add.1), New York.
- \_\_\_\_\_ (1996a), Environment Statistics. Report of the Task Force on Environment Statistics (E/CN.3/1997/6), New York, December.
- \_\_\_\_\_ (1996b), *Report of the World Summit for Social Development (A/CONF.166/9)*, New York.
- \_\_\_\_\_ (1995), *Report of the Fourth World Conference on Women (A/CONF.177/20)*, New York.
- \_\_\_\_\_ (1994), "Programme of Action", *Report of the International Conference on Population and Development (A/CONF.171/13)*, New York.
- \_\_\_\_\_ (1993), "Expert Group Meeting on Population, Environment and Development", *Population Bulletin of the United Nations (ST/ESA/SER.N/34-35)*, New York.
- \_\_\_\_\_ (1992), "Rio Declaration on Environment and Development", *Report of the United Nations Conference on Environment and Development (A/CONF.151/26)*, vol. 1, New York.
- \_\_\_\_\_ (1986), *The Nairobi Forward-Looking Strategies for the Advancement of Women*, New York.
- United Nations/International Research and Training Institute for the Advancement of Women (INSTRAW)/State of the Science & Technology Commission of the People's Republic of China/All China Women's Federation (1993), *Interregional Workshop on the Role of Women in Environmentally Sound and Sustainable Development*, 2 vols.
- Vega, Silvia (ed.) (1996), *Hogares urbanos y medio ambiente*, Quito, Centro de Planificación y Estudios Sociales (CEPLAES).
- \_\_\_\_\_ (1995), *La dimensión de género en las políticas y acciones ambientales ecuatorianas*, Quito, Centro de Planificación y Estudios Sociales/United Nations Population Fund (CEPLAES/UNFPA).
- Valdés, Ximena (1992), *Mujer, trabajo y medio ambiente. Los nudos de la modernización agrícola*, Santiago, Chile, Centro de Planificación y Estudios Sociales (CEDEM).

- Van den Hombergh, Heleen (1993), *Género, medio ambiente y desarrollo; una guía a la literatura*, Amsterdam, Institute for Development Research Amsterdam (INDRA).
- Van der Aa, Pauline (1997), "Participación social para un desarrollo sostenible: mejores oportunidades para grupos menos favorecidos", San Salvador, United Nations Development Programme/United Nations Development Fund for Women (UNDP/UNIFEM), unpublished.
- Velázquez, Margarita (1996), "El uso y manejo de los recursos forestales desde una perspectiva de género. Una propuesta metodológica", *Género y ambiente en Latinoamérica*, M. Velázquez (ed.), Cuernavaca, Regional Informatics Centre on Woman/National Autonomous University of Mexico.
- \_\_\_\_ (1994), *Mujer y medio ambiente en América Latina y el Caribe: propuestas para la investigación*, Mexico City, Autonomous University of Mexico, University Gender Studies Programme.
- World Bank (1992), *Development and the Environment, World Development Report, 1992*, New York, Oxford University Press.
- Yáñez, Sonia and Rosalba Todaro (1997), "Globalización, reestructuración competitiva y empleo femenino en Chile", *Sobre mujeres y globalización*, Sonia Yáñez and Rosalba Todaro (eds.), Santiago, Chile, Centro de Estudios de la Mujer (CEM).

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