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FEMINIST ECOLOGICAL ECONOMICS

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Keywords

feminism, ecology, economics, women, gender, communities, households, ecofeminism, socialism, provisioning

- 1. Introduction
- 2. Theoretical Foundations of Feminist Ecological Economics
 - 2.1 Ecological Economics
 - 2.2 Feminist Economics
 - 2.3 Ecofeminism
 - 2.4 Political Ecology and Green Socialism
- 3. Theoretical Contributions of Feminist Ecological Economics
- 4. Applications of Feminist Ecological Economics
- 5. Future Trends and Perspectives
- 6. Conclusion
 - Bibliography

1. Introduction

Feminist ecological economics is about the fundamental connections between the problems of economic injustice towards women, ecological degradation, social unravelling in both North and South, global economic inequities, and unstable political and environmental systems worldwide. Because markets cannot function or exist outside of social and natural contexts which are often undervalued, undertheorized and misunderstood, the links among services provided "for free" are crucial to any notion of sustainability. Feminist ecological economic models view the economy as a complex of individual, family, community, and other interrelationships which each have economic <u>and</u> ecological significance. Absolutely central to feminist ecological economics -- like most feminist economics in general -- is the primacy of the work which takes place in households and communities.

This article provides an overview of feminist ecological economics, with special attention to three particular aspects: its theoretical foundations and relation to other schools of thought, its implications for activism and public policy, and directions for future research work.

The next section of this article discusses the theoretical foundations and heritage of feminist ecological economics, relating it to long-standing bodies of literature. Section three outlines the fabric of feminist ecological economics as it is now appearing, in the form of a review of recent theoretical work. Section four gives examples of feminist ecological economics in action and discusses its "policy relevance", addressing in particular the relationship between global and

local economic change. Research needs implied by feminist ecological economics are surveyed in section five, and the final section of the paper sums up and concludes.

2. Theoretical Foundations of Feminist Ecological Economics

2.1 Ecological Economics

The ecological critique of neoclassical economics has many dimensions. Economic scale, and how to take account of environmental realities in limiting or shaping the overall scale of the economy, is of primary importance; related to this are the observations that individuals do not always want more of everything, as assumed in the neoclassical principle of non-satiation, and that value itself has many dimensions and is not well-measured by money, in many cases. The fact that neoclassical economics treats most environmental factors (such as pollution, biodiversity, and forest preservation) as "externalities", because there are no markets in which their prices can be set, simply underscores the inadequacy of neoclassical theory for dealing with economy-environment interactions -- and these are increasingly critical in importance.

Ecological economists point out that much of what has been termed "economic development" has simply meant monetizing -- creating markets for, cutting down, digging up and/or selling -- natural and human capital which was formerly not part of the market system. A more wholistic concept of development would include some measure of efficiency in resource use, maximizing the use-value of natural capital for the human economy as well as the equity of its distribution, both inter-generationally and intra-generationally. Multiple scales for measuring value, respect for social and natural diversity, concern with ethics and justice, methodological pluralism, and an evolutionary approach to understanding economic change flow from this more humble outlook on human-environment interactions.

Central pillars of ecological economics which are relevant for feminist ecological economics are a concern with economic scale and how to constrain it; redefining economic efficiency and value; seeking insights in natural science theory and pluralistic/interdisciplinary approaches; and immediate policy relevance given the global importance of ecological limits on economic growth.

2.2 Feminist Economics

The feminist critique of neoclassical economics centers on who economics is FOR and what it is ABOUT. Models of markets in which each individual makes choices based on his or her own self-interest, and tries to maximize his or her own utility, are ludicrous given the many cross-cutting factors people consider when deciding things like whether to look for or take a job, and how to spend their money. Everyone, and particularly most women, because of gender roles and interpersonal relationships which spread individuals' responsibilities both within and across generations, considers much more than their own individual situation in making economic decisions. Rather than being about consumer choice, economics should be redefined as being about "provisioning", or how society is or might be organized to meet people's needs and wants -- and thus, to reproduce itself. Cooperative action is central to how economies work.

Feminist scholars have critiqued the idea of "objectivity," in the positivist scientific sense, and feminist economists argue for more pluralism in theory and more analysis of the way hierarchical and dualistic thought patterns constrain people's understanding of complex economic processes. For feminist economists who are modelers, this does NOT mean that simplification and abstract modeling is impossible or counterproductive, just that models need to acknowledge their assumptions, be flexible, fairly sophisticated, and allow for cross-influences and interactions among variables.

Household production, human and social reproduction, and "free" transfers of goods and services are outside the scope of neoclassical economics, unless they are somehow assigned dollar values. Unlike environmental factors, they are often not even regarded as "externalities"! So valuation of the under- or non-valued -- both "how" and "whether" -- is an important issue in feminist economic thought, just as it is in ecological economics.

Economists in the South have contributed to the feminist critique of neoclassical theory by emphasizing its inadequacies to explain the systemic effects -- and especially the effects for women -- of economic "development", industrialization, structural adjustment, and the Green Revolution. Again, this is because neoclassical models often leave out important economic variables -- especially those involving key factors of production and interpersonal relationships -- and make faulty assumptions about people's motivations for economic decisions.

Feminists have also pointed out that it is not just neoclassical theory which is fairly blind to women's reality and to less-gendered ways of thinking -- socialists have also tended to regard feminist ideas as "utopian, not scientific," and to scorn or downplay the importance of human and social reproduction.

To sum up: feminist economics emphasizes the interrelatedness of economic actors, the importance of family and community in individual and social reproduction, the centrality of non-monetized and usually unmeasured work, and therefore the need for relatively complex, nonhierarchical and nuanced models which do not pretend to be universal, and for basic empirical research to supply the data necessary to use these models.

2.3 Ecofeminism

Another influence on feminist ecological economics comes from ecofeminism, in all its myriad forms. Ecofeminism is the position that there are important connections between how one treats women, people of colour, and the underclass on one hand and how one treats the nonhuman natural environment on the other. The term, coined as long ago as the early 1970s, is employed in a huge and complex literature, and has inspired much hope and political creativity. The elaboration of debates on whether women are "essentially" closer to nature than men or not, and on the ethics and spirituality of human relationships with the non-human world, is very valuable in clarifying the gendered nature of women's economic roles as well.

Several themes in the literature of ecofeminism are particularly compelling in relation to feminist ecological economics. First, a number of writers have discussed the importance of acknowledging and valuing women's work and its absolute necessity, like that of inputs from the

natural environment, for the continuation of economic processes. What capitalism terms "productivity" is largely the extraction, exploitation, and appropriation of the non-wage labour of women. The hierarchical dualisms rooted in Western philosophy situate men's activity, which is named work, as "cultural" and important, while women's activity is called "natural", subsumed into men's production, and valued only individually and instrumentally. As an alternative, ecofeminist analysis explores the process of valuing as a product of community discourse.

Much feminist theoretical work is relevant to such collective approaches to economic issues, which rest on values such as co-operation, empathy and nurture stemming from a relational, nonhierarchical view of the world; a focus on process rather than end results; the belief that social change begins with personal transformation; and attention to intuition, subjectivity, creativity and spontaneity.

2.4 Political Ecology and Green Socialism

Political ecology deals with both the global and the local implications of ecological change, and how these effects are mediated internationally. It involves tracing global and North-South linkages of domination which undergird the environmentally-destructive status quo. Feminist political ecology contributes detailed analysis of identities, differences, and power relations. The political ecology focus on grassroots action and bottom-up political change is an important contribution to feminist ecological economics.

Green socialists relate ecological social and political transformation to current and historical social movements as they attempt to theorize what a "sustainable" alternative to capitalism would look like. Women's roles and responsibilities in building these alternatives are increasingly discussed in this literature. Green political theorists and policy analysts discuss the generalities and specifics of institutional transformation. The environmental justice movement shows the possibilities inherent in environmental organizing across differences. Community development activists develop and describe grassroots strategies for locally-specific economic transformation. All of these literatures contain elements that are relevant for feminist ecological economics.

3. Theoretical Contributions of Feminist Ecological Economics

Building on all the above theoretical strands, feminist ecological economics focuses on the family, household, community, and other interrelationships among humans, and between humans and "nature", which underlie and make possible the existence of the market economy. Women, who are often made primarily responsible as a group for the "caring" and reproductive activities on which industrial production depends, also in most societies bear a large share of the responsibility for human relationships to the ecological processes which are also basic to industrial production. But the industrial economy has negative impacts on caring activities and on ecological processes, which can reinforce each other. Meaningful analysis of the material and social constraints at work in industrial market economies must therefore be both feminist and ecological.

One outgrowth of this focus is the primacy of (socially and ecologically) sustainable provision

of basic needs over the production of new material consumer goods. The components of human satisfaction, as culturally determined and socially mediated, are crucial: how can people learn to be happy with economies which depend on much less material throughput than at present in the North?

Stronger community-based economies not only help people to survive the vicissitudes of world market fluctuations, they hold the potential for much more fundamental economic transformation. Communities which can meet their own needs need the global economy less. In self-sufficient communities, it is possible to live a healthy, fulfilling, productive life without consuming goods and services which come from far away. But this requires knowing one's neighbours: their skills, needs, abilities, and trustworthiness. This makes possible the sorts of exchanges which are efficient and beneficial for everyone concerned -- be they skills exchanges, community-supported agriculture, Local Enterprise Trading Systems, credit unions or informal credit groups, urban gardens, child-care and other cooperatives, environmental housing improvement programs or any other enterprises where local resources are transformed into goods and services which local people need. In many communities in both North and South, it is women who do the bulk of the networking, the conflict mediation, the organizing, and the fundraising for such community endeavours. Working toward economic self-sufficiency involves fostering the development, preservation, and appreciation of the skills needed to live with more quality and less material consumption. To the extent that women are the guardians of these skills, and the teachers of young people, their role in skills transmission is central for the community's future self-sufficiency.

Market valuation methods are worse than useless; they distort and destroy the "free" economic contributions which are essential to both economies and well-functioning societies. At the same time, understanding and protecting the "free" nature of economies' foundations is crucial to their sustainability. Feminist ecological economic models, centred around household or community provision of basic needs, reflect the importance of women's work and reduce ecological destruction and material throughput without commodifying or monetizing these elements regarded as "externalities" in the current economic system. Monetizing all of women's unpaid work would vastly increase material throughput in the economy -- a "perverse result", to use neoclassical terminology. Likewise, green taxes designed to make the polluter pay would drive up prices, disproportionately hurting poor people, who are largely women and children; market "solutions" to environmental problems erode the foundations of the economy itself.

Another commonality between "women" and "nature" in the economic system is demonstrated by the question of time. Production processes which ignore and externalize people's biological and time-consuming natural processes (such as eating, sleeping, caring for older and younger relatives, and recovering from illness) have the effect of distancing the economy from ecological realities. Economic processes which are in tune with biological time will have to substitute socially-mediated and shared groundedness in ecological realities, time-consuming though they are, for the vain attempt to escape, ignore and externalize them.

Feminist ecological economics, thus, provides a theoretical grounding in how social change and community building takes place, and why it is necessary both for the well-being of many women and for ecological/economic sustainability.

4. Applications of Feminist Ecological Economics

As noted above, the development of analytical foundations for a community-centred approach to economics requires theoretical tools which are far more adept than those of traditional economics. Neoclassical economics, based on analysis of self-interested individuals' behaviour, ignores other entire realms of human action and motivations. However, traditional economic analysis is still used at all levels of policy decision-making to justify government action (and inaction), from international trade agreements to child care programs. Its failure to measure many economic contributions made by women, its emphasis on individual over collective wants/needs, and the translation of this emphasis into policy, harm communities -- and women -- in both the South and the North.

In an economy where "provisioning" is central, production is guided by very different principles that those currently operative. While production, in the ideal, may still take its cue from consumer theory, the conditions considered 'optimal' by consumer would change dramatically if "utility" theory were replaced by "provisioning" theory. At the individual level the question of provisioning implies a conscious examining of what is enough. This includes revisiting a question raised by the moral philosophy tradition of economics: What makes for the good life? For most this would include meeting material needs of food and shelter, but also social needs of interaction and participation in social relationships, a sense of agency, of being heard and not left powerless in decision processes, the need to experience beauty, peace and sacredness.

Instead of utility maximization and insatiable demand as depicted by nested indifference curves, an economics built on "provisioning" would posit demand that has limits because of the tradeoffs among different sustaining services provided by nature and different groups of people. After some point, consumption-derived utility would drop, because goods and services require time and cut into the time needed for maintaining and enjoying things, relationships and nature.

At the collective level the question of provisioning dramatically changes the rationale of the growth economy itself. Welfare in a provisioning based economy is not only closer to the 'social indicator' notion of welfare; it also demands an understanding of and engagement with the complicated relationship between 'objective' quality of life indicators and 'subjective' perceptions of the quality of life. Different people (due to race, class, gender, poverty, etc.) have different potentials to act on economic variables; the universal consumer/ worker/ economic agent is a myth. Provisioning thus introduces a dynamic notion of welfare that needs to be defined and redefined in dialogue with those affected by changes in welfare conditions and notions of welfare.

Graphically, economic change in a provisioning based economics could be depicted by pathdependent phase diagrams whereby demand may be contingent on how much the consumer already has, on his/her access to opportunities, and on how they affect the larger whole. Such phase diagrams would be continuous rather than dualistic, derived from the specific context of peoples' reality and open to change. At the same time, it is the relationship among all parameters which constitutes the context and this the economic decision realm for each individual economic actor. Just as in ecosystems, which are defined by individual organisms interacting to bring about the emergent properties of the system as a whole, individual and system are intricately linked.

Is this a new kind of economic theory? Not really. It is instead an articulation of the discomfort with a universalizing and unifying 'theory of economics' itself. The sustainability debate may help to illustrate this point. One of the initial definitions of sustainability is found in the Brundtland report (1987). It defines sustainability as "...improving the welfare of present generations without impeding the welfare of future generations". As straightforward as this definition may seem at first glance, is raises some serious questions: How is welfare to be defined? Can different components of welfare (material, non-material, social, environmental etc.) be substituted and who determines their substitutability? Who determines the welfare of future generations? How can this notion of sustainability be operationalized?

This is one reason why feminist ecological economists have not spent much time on working out a new Theory (capital "T") which offers universally-applicable principles like neoclassical Theory. From a theoretical viewpoint, strict universal applicability is neither possible nor desirable – but this does not pose an insurmountable either-or dichotomy. Rather, one can think of theory (small "t") that recognizes the importance of context-specificity and groundedness in the real life and life-worlds of people while at the same time accepting the universality of all contexts and context systems belonging to a larger whole. Just as ecosystems are shaped by the organisms they encompass, while the systems' emergent properties brought about by the interaction of organisms in turn shape individual systems components, so too, the 'inside' and 'outside', the 'universal' and 'standpoint specific' of theory may be less clearly delineated than commonly assumed.

Diversity is important, in both economic and biological systems. Diversity contributes to resilience and stability. Neglecting different points of view is BAD SCIENCE both because it makes the theory less robust, and because it arbitrarily narrows the knowledge base from which we make decisions.

The question of the possible "policy relevance" of feminist ecological economics, however, masks a host of other questions. If women continue to be excluded from property ownership, from the top echelons of economic society, from literacy and even from voting in many places, how can one generalize about policy priorities?

Since communities are, in a sense, intermediate between the "public" and the "private", they represent a terrain in which many women are comfortable acting politically. At the same time, it is exactly the fact that communities are somewhat removed from national or international "public" life that can make them strong (and potentially subversive) bulwarks against centralized control, refuges of diversity, and incubators for creative human interaction.

The focus of feminist ecological economics is on activist work. The crux of building better economies lies in the interplay between theory and practical work. Applying the vision involves much more than theory; detailed familiarity with specific people and places is vital. Feminist ecological economics theory is informed at each step by practical experience and by knowledge gained at the local level.

One emergent economic tool generated by feminist ecological economists is a valuation method called "discourse-based valuation". This is a process for comparing benefits and costs which may be measured and understood in many different ways – for example, pollutant emissions, human health, recreation, jobs, views, and tax revenues associated with a specific development proposal – without necessarily having to assign a dollar value to each item for purposes of comparison. A "discourse-based valuation" process brings together all the people or groups with an interest in the political decision for which a valuation and comparison of various "goods" and "bads" is sought; by discussing their various perspectives on the valuation issues, they arrive at a common understanding of the factors which can lead to political outcomes which are acceptable to all. Valuation thus becomes a step along the way towards political consensus.

5. Future Trends and Perspectives

Viewing the economy as centred on the household underscores the vital economic importance of the productive and reproductive work done at home. Any quantification of the size or health of economies <u>must</u> begin with discussion of the household sector and its viability in performing its essential functions of meeting basic human needs for (among other things) food, shelter, companionship, health care, and intergenerational support. If we do not have measures of these things, or even a commonly-accepted means of discussing them, we have no handle at all on the size or health of "the economy".

Provisioning is not about MORE, it's HOW. There needs to be a shift in the resources used for data collection and empirical work and dissemination. Researchers need examples of how provisioning-related trade-offs take place; feminist ecological economists are currently suffering from huge inefficiencies with regard to the data available.

A major research focus should be the extent to which particular principles or characteristics DO apply to real cases; in other words, how much diversity is 'out there'?

Second, related to the uses to which this data is put, an *institutional shift* is needed to overcome the barriers to really using and implementing local information. Economic policy made at the local level can better meet the needs of people than national or international level economic policy; the appropriate scale of economic policy should be determined by people themselves. This again is an ethical question -- there is a moral need for broad-based change in how public institutions function.

Statistics Canada has begun an attempt to add estimates of the value of household work and natural resource depletion to Canada's national accounts. Other national governments are involved in similar projects. Groups such as Redefining Progress in the United States are advocating much broader changes to national accounting systems. Perhaps the single highest priority of those concerned about women's economic role should be to correct the ubiquitous misperception (fuelled by the neoclassical economic paradigm) that what happens in the household is relatively unimportant. The related issues which flow from this emphasis on household activities then assume a much higher profile as policy and research priorities: Just what is included in household work? Who does it? How many hours does this work take, and what is its comparative value, e.g. in money terms? Is this work being done well or poorly, and

how can it be done better? What about the phenomenon of several things being accomplished at once? What are the characteristics of a strong household-economic sector?

Feminist ecological economics places the community context in which households are situated at a more fundamental level of importance than the "external", production-oriented economy. But we know very little about the relationship between community organization and economic productivity, economic health or economic growth. This area, too, deserves a much higher research and policy emphasis than it presently receives.

The related issues of importance are both quantitative (how to measure and value the community-economic sector) and qualitative (how to recognize whether it is healthy and how to contribute to its development). Since the bulk of work involved in maintaining community organizations and ties is apparently done on a volunteer basis, valuation of this work in money terms is subject to many of the same complexities as valuation of household work.

Most of the existing literature which attempts to quantify women's economic contribution relates to women's work in the formal labour market. Another insight offered by feminist ecological economics is that it is no surprise that this "external", formal, production-oriented sector is highly unstable, subject to cyclical and externally-driven fluctuations, and unsatisfactory as a proxy for human well-being. While it may be of interest to know more about women's contributions in this realm of the economy, vastly more important economic sectors are vastly less well-understood.

Areas for research which are relevant to understanding women's role not only in the formal labour market, but in the household and community sectors as well, include: the economic implications of violence against women and children and of household violence; the economic importance of educating women and girls; potential benefits of shorter working hours in the formal economy; pay equity, "equal pay for work of equal value", and labour market discrimination; welfare, family benefits, social services and women's work; and integration of ecosystem health indicators, human physical, emotional and social health indicators, and economic indicators in overall assessments of economic "efficiency" and well-being.

To sum up, some of the specific areas in which feminist ecological economics can make contributions include the following:

- --"Redefining Progress", the Index of Sustainable Economic Welfare (ISEW), "discoursebased valuation", and other new economic indicators which provide ways of measuring the value of women's work and of environmental degradation.
- --Proposals for shorter working hours as a means of reducing unemployment, health care costs, mitigating many women's "double day", reducing material throughput in the economy, and contributing to growth of community social networks.
- -Economic policy rationalization via increasing taxes (or abolishing subsidies) on economic and environmental "bads" such as overwork, urban sprawl and resource depletion.

- --Specific proposals for modifications to international trade agreements, and government policies at all levels, to reduce harmful impacts on the environment, women's economic interests, and the growth of strong local communities.
- --Assessment of the social and economic value of creating the conditions for service provision at the local level (child care, health care, elder care, environmental remediation).
- --Elaborations of the short and long-term connections between pollution, human health, and economics so that the economic rationale for environmental and health policy becomes clearer.

In order to understand and begin to describe or quantify the economic contribution of women at present, a balanced and realistic view of what constitutes "the economy" is necessary. Examining only the formal economy distorts the analysis and grossly underrepresents women's vital economic role. But prevailing economic paradigms serve to justify and undergird existing systems of power and privilege; questioning them is not a purely academic, or economic, issue. Much work is required -- at the theoretical, political and empirical levels -- before a reasonably accurate assessment of women's total economic contribution, and its relation to local and global ecologies can be made.

Feminist ecological economics provides theoretical justification and impetus for a revisiting of research priorities by anyone concerned with economic sustainability, or with the economic contribution of women. This involves rethinking women's economic roles not only in the formal economy, but also in the household and community infrastructure which supports and sustains the formal economy.

Given that resources are always limited for progressive social research and action endeavours, what are the top research priorities indicated by feminist ecological economic theory? Empirical examinations of the value of household work are important, surely, and the prime importance of the household in sustaining economic production needs far broader documentation and description. Perhaps even more pressing, however, is the almost-unexplored question of the importance of community structures in making economic exchanges possible, and of women's roles in building and maintaining the fabric of communities.

6. Conclusion

The essence of a feminist ecological economics approach to understanding economic relationships involves four principles:

First, household and community production and reproduction must be the CENTRE of economic focus, because without human beings and the society they live in, the 'economy' has no meaning. Feminist ecological economics takes as a <u>starting point</u> the unpaid work which is vitally necessary to build and maintain homes, human relationships, and communities -- and without which there is no "economy".

Second, the precise form of interrelationships between the economy and nature is crucially important. Not only is industrial exploitation of nature different from the more benign interactions implied in small-scale agriculture and household cultivation; the very same product can be made using a range of techniques with different ecological impacts. Appropriateness of production techniques for their social and ecological context is a prime value.

A third theme in feminist ecological economics is respect for the time and effort it takes to be "green". Who will do the work of growing the tomatoes on urban rooftops, recycling the postconsumer materials, carrying the glass jars to the bulk food stores to be refilled with turtle beans, soaking and cooking and refrying the turtle beans? The work of creating sustainable economies, to the extent that it falls unequally on women and men, may be unsustainable. Both production and re-production take time; technology cannot do away with the time natural reproduction takes, which is an important link between human societies/economies and the natural world. Even when technology speeds up production, this happens at a cost, and technology cannot substitute for the basic and essential value which comes from nature.

The fourth major theme that of community activism and engagement in the process of social change. Because of its insights about the importance of communal and social processes, respect for diverse ways of knowing and valuing things, and methodological pluralism, feminist ecological economics implies working with other people to learn about and change the current unsatisfactory state of things. This can mean, for example, active searching out of relevant empirical research data. It can also mean involvement in popular environmental and economics education. Green community economic development, planning and design are other avenues.

The formal, money-denominated economy is only one aspect of the overall economic picture, one leg of a three-legged stool which would fall down without human/social reproduction and ecological reproduction. Attempting to assign money values to what happens in households and communities everywhere (for the sake of commensurability with processes in the formal economy) -- or even terming these activities "work" -- loses meaning and relevance in the context of the economy's sustainability as an integral, functioning whole.

Through a vibrant combination of theoretical and empirical academic research with grass-roots community organizing, political action and community-based discussion, feminist ecological economics is radically altering the way "the economy" is perceived. This process is, in turn, central to understanding and respecting both women's economic role and the economic importance of the natural environment.

Summary

Feminist ecological economics is about the fundamental connections between the problems of economic injustice towards women, ecological degradation, social unravelling in both North and South, global economic inequities, and unstable political and environmental systems worldwide. Because markets cannot function or exist outside of social and natural contexts which are often

undervalued, undertheorized and misunderstood, the links among services provided "for free" are crucial to any notion of sustainability. Feminist ecological economic models view the economy as a complex of individual, family, community, and other interrelationships which each have economic <u>and</u> ecological significance. The essence of a feminist ecological economics approach to understanding economic relationships involves four principles:

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This article provides an overview of feminist ecological economics, with special attention to three particular aspects: its theoretical foundations and relation to other schools of thought, its implications for activism and public policy, and directions for future research work.

Acknowledgements

This chapter is an updated version of the author's paper entitled "Feminist Ecological Economics and the Growth of Local Economies", which was presented at the 1996 Summer Conference on Feminist Economics of the International Association for Feminist Economics, American University, Washington DC, June 21-23, 1996. Eric Advokaat provided excellent research and editorial assistance.

Bibliography

Bennholdt-Thomsen, Veronika and Maria Mies. <u>The Subsistence Perspective</u>. (London/New York: Zed, 1999).

Ecological Economics vol. 20, no. 2, February, 1997. Special issue on Women, Ecology and Economics. Guest editor: Patricia E. Perkins.

Folbre, Nancy. <u>Who Pays for the Kids? Gender and the Structures of Constraint</u>. (London/New York: Routledge, 1994).

Mellor, Mary. Feminism and Ecology. New York: New York University Press, 1997.

Mellor, Mary. <u>Breaking the Boundaries: Towards a Feminist Green Socialism</u>. London: Virago Press, 1992.

Mies, Maria. <u>Patriarchy and Accumulation on a World Scale: Women in the International</u> <u>Division of Labour</u>. London/New York: Zed Books, 1998.

Nelson, Julie and Marianne Ferber (eds.). <u>Beyond Economic Man</u>. Chicago/London: University of Chicago Press, 1993.

Perkins, Patricia E. "Building Communities to Limit Trade: Following the Example of Women's Initiatives," <u>Alternatives</u>, Vol. 22, No. 1, January/February 1996.