



Institute for Environment and Human Security





Gender, Vulnerability and Resilience Building in Extreme Hydro-meteorological Events

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- 1. Questions raised during the seminar
- 2. Regional and Gender Vulnerability
- 3. Social Vulnerability and Gender
- 4. Gender Security and Identity
- 5 Social Representations
- 64 Gender Differences
 - 7. Gender Situated Knowledge
 - 8. Multi-Resilience Building

Questions arising this Week

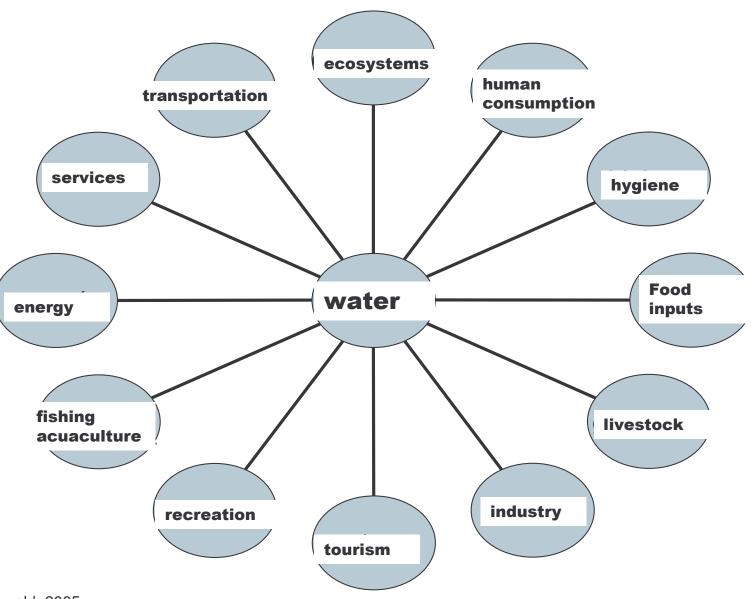
- 1. Is scientific objectivity serving specific interests?
- 2. How can we deal with risks when we still do not know what kind of new risks will emerge as a result of global change?
- 3. Is an open self-organizing and dissipative system able to offer a general methodology that responds to newly created anthropogenic threats? What kind of contextual conditions should be defined, that impact on the stability of the whole system? Is this possible? Is this convenient?
- 4. How are gender dimensions changing the methodology of research, the analytical approach and the theory-building?
- 5. Why are we still mostly using Eurocentric and recently North American theoretical concepts for analysis and how is this way of doing science resulting in bias and thus

perpetuating systemic social vulnerability?

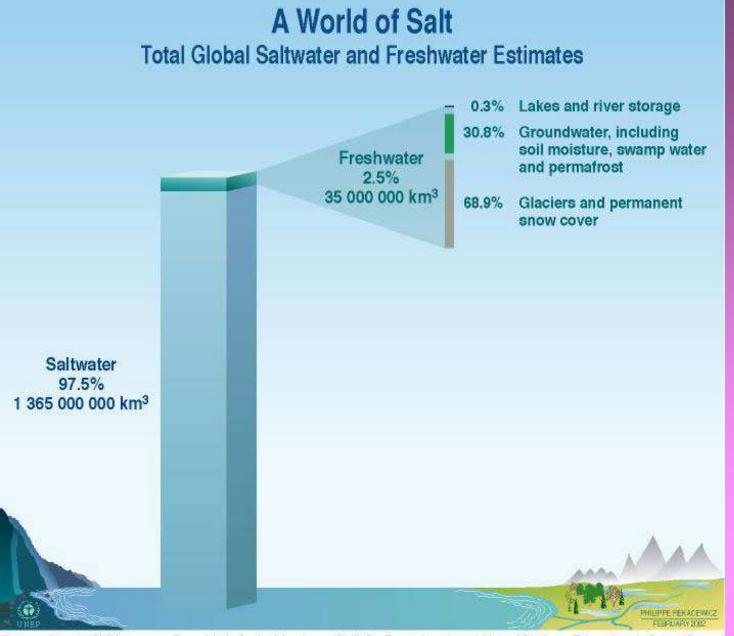
6. Is it enough to speak about Western ethics, based on male led philosophical traditions when addressing social vulnerability?



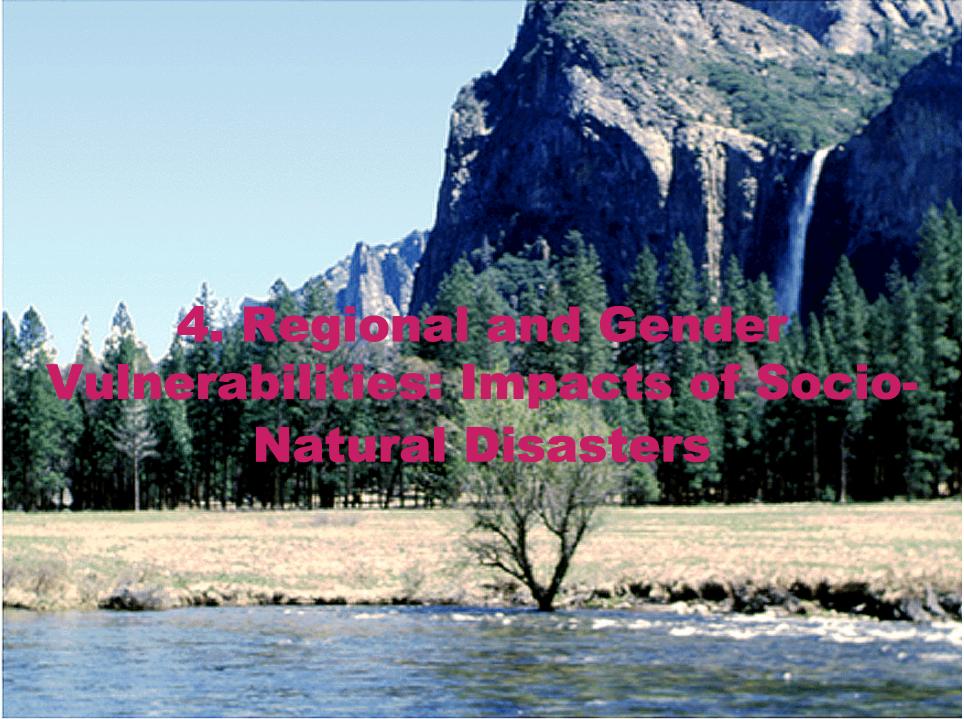
Uses of Water



Source: Oswald, 2005



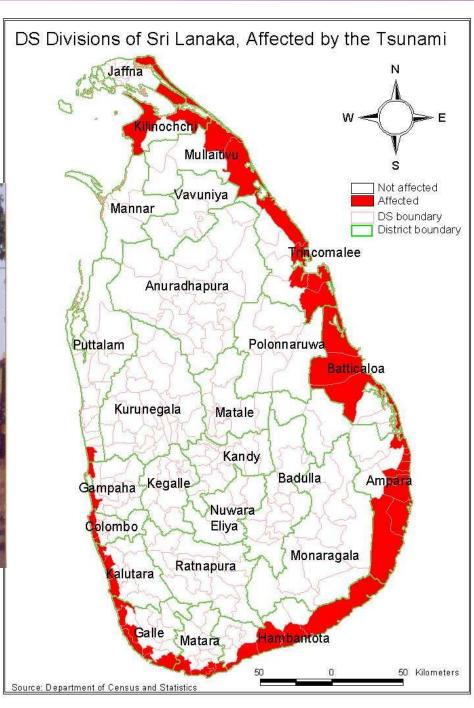
Source: Igor A. Shiklomanov, State Hydrological Institute (SHI, St. Petersburg) and United Nations Educational, Scientific and Cultural Organisation (UNESCO, Paris), 1999.



5.1. Regional Vulnerability



Source: Siri Hettige – University of Colombo Sarath Amarasinghe – University of Ruhuna Nishara Fernando – University of Colombo



5.4. Dead and Missing: Gender and Age Bias Gender (%) Marital status (%) Educational status (%)										
Female	65.3	Ne	ever married	45.1	1-5	5.4				
Male	34.7	Cı	ırrently		6-10	32.7				
		ma	arried	49.3	O/L	12.7				
Total	100 (72)	W	idowed	5.6	A/L	16.4				
		N/	'A	1.4	Higher educati	on 1.8				
Age (%)			otal	100 (72)	N/A	23.6				
1-4	13.9				Total	100 (72)				
			Activity (%)						
5-9	11.1	44.4	Student		27.4					
10-17		11.1	Household	l work	21.0					
18-25		1.4	Unemploy	ed	12.9					
26-35		13.9	Employed		27.4					
36-45		6.9	•							
46-55		16.7	Unable to	WOLK	11.3					
56-70		9.7	N/A		13.9					
			Total		100 (72)					
71> Total		15.3 100 (72)			Source: Siri Hettige – Unive Sarath Amarasinghe – Univer Nishara Fernando – Univer	versity of Ruhuna				

5.5. Focus of the Talk and Main Questions

- Why are women and other social vulnerable groups so highly exposed to natural risks and hazards?
- What are the possible policies and measures to improve resilience for these social groups and to reduce their risks?



Vulnerability



- Results from "poverty, exclusion, marginalization and inequities in material consumption" O'Riordan (2002: 369).
- "The conditions determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility o a community to the impact of hazards" (ISDR, 2004: 7)
- "Is conceptually located at the interaction of nature and culture" that also links "social and economic structures, cultural norms and values and environmental hazards" (Oliver-Smith, 2004:11).
- Increases the empowerment of victims. Wisner (2004: 194-205) distinguishes four approaches for dealing with social vulnerability: demographic, taxonomic, situational, contextual or proactive.

Gender, Threats and Disasters

Women contribute subjective and objective values

Subjective values (social identity):

- · Caring about their families, children, neighbors and those in need
- Positive self-esteem in crisis situations
- Emotionally stabilizing families before, during and after a disaster
- Guardians of traditions and values
- Locally attached

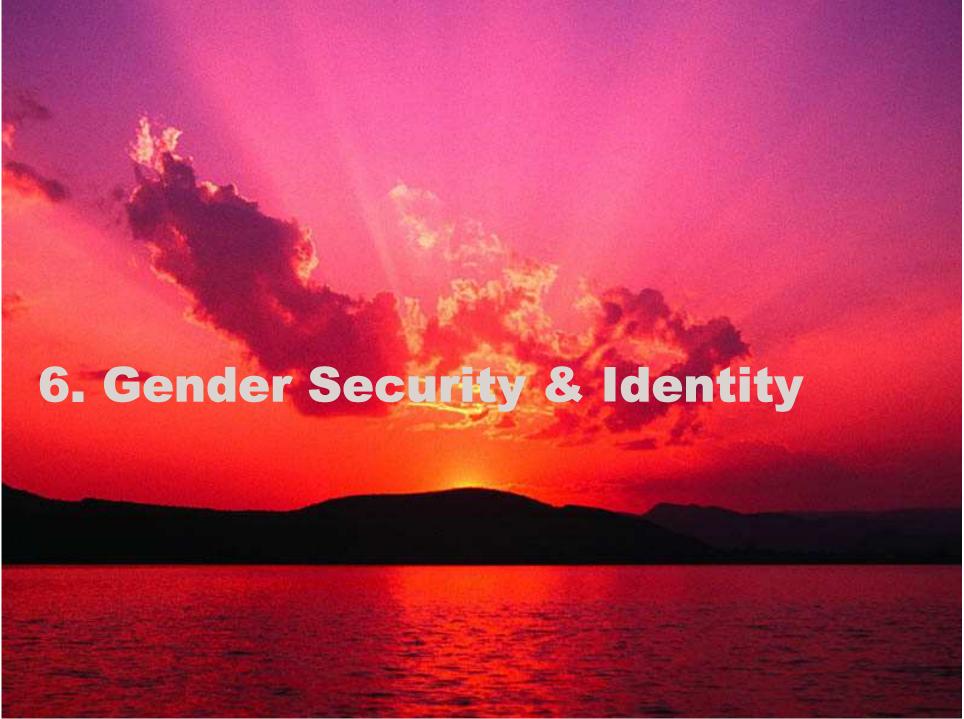
Objective values (contextualized social agency):

- Flexible, adaptable and able to shift activities immediately by diversifying (refugee camps, survival activities, collection, reconstruction, services, agriculture, reforestation, ecotourism,)
- Open to collaborate in rescue activities
- Generate survival strategies in case of disasters
- Contribute to the national economy
- Create local employments, incomes and stabilize emigration
- Generate political stability and conciliate conflicts

How is Vulnerability Assessment Functioning

It involves collecting, and analyzing data together with concern building on:

- Type of hazards and frequency
- Elements at risk and how to reduce them
- Mapping specific hazard prone locations and resettlement of people at risk
- Socioeconomic conditions and type of shelter
- Gender and family structure
- Genuine coping strategies
- Learning process from previous disasters and capabilities building
- Training for evacuation
- Evaluation of training and hazard mitigation process
- Avoiding survival dilemma (migration)



Gender Security & Identity

- Refers to the process of socialization to "become" a gendered human being; a men or a women, depending on the position of the social structure.
- Gender security is socially constructed and systemic within the
 present patriarchal society, and it is normally taken for granted.
 The relations are linked to gender status—ethnicity/race, class,
 age and minority status- in relation to the model of reference.
 Equity and identity are values at risk. The source of threat
 comes in first instance from the patriarchal hierarchical and
 violent order, characterized by exclusive, dominant and
 authoritarian institutions such as non-democratic governments,
 churches and élites.
- The symbolic distribution of space and time assigns the male the public sphere: production, res publica, homo sapiens; and the women the private: reproduction, home, homo domesticus. The distribution of power acquires also generic forms. Men exercise a hierarchical and vertical power of domination and superiority.

2.2. Human, Gender and Environmental Security (HUGE)

Level of expansion	Determination Which security?	Mode of expansion Reference object Security of whom?	Value at risk Security of what?	Source(s) of threat Security from whom or what?	
Without expansion	National security (political, military dimension)	The State	Sovereignty, territorial integrity	Other States, terrorism, sub-state actors, guerrilla	
Increased	Societal security	Nations, social groups	National Unity, national identity	(States), Nations, Migrants, Alien cultures	
Radical	Human security	Individuals (Humankind)	Survival, quality of life, cultural integrity	The State, globalization, nature, GEC, poverty, fundamentalism	
Ultra-radical	Environmental Security	Ecosystem, urban and agricultural system	Sustainability	Nature Humankind	
Trans- radical Source: Bjørn Mø	Gender security ler, 2003:279 and Úrst	Gender relations, indigenous, minorities la Oswald, 2001, 2004	Equity, identity, social relations	Patriarchy, totalitarian institutions (élites, governments, religions, culture), intolerance	

HUGE

- Human, Gender and Environmental Security (HUGE) combines a
 wide gender concept (vulnerable) including children, elders,
 indigenous and other vulnerable groups with a human-centered
 focus on environmental security and peace challenges and
 analyzes the patriarchal, violent and exclusive structures within the
 family and society questioning the existing process of social
 representation-building and traditional role assignation between
 genders by overcoming the consolidated women discrimination but
 also some narrow feminist approaches of male-female opposition
 anchored (Oswald, 2001, 2004, 2006).
- It reorients 'human security' to create equity, development and conflict resolution through social organization, specific governmental policies, private ethical investments and legal reinforcements by stimulating sociopolitical participation of women, young and elders. At the international level HUGE improves free and equal access to world and regional markets without trade distortions. It stimulates further world solidarity to support the poorest countries with financial aid, technological support and debt relief.

- As a holist concept, HUGE includes 'environmental security' concerns where a healthy environment, integral management of natural resources, prevention and remediation practices reduce vulnerability of hazard impacts. Hazard-prone countries are enabled to develop technical, economic and human support to reduce social vulnerability, to progress in internal organization and to stimulate bottom-up resilience-building, supporting rapidly and efficiently regions affected by social and natural disasters, counting also on efficient external help, effective early warning, evacuation, disaster support and reconstruction in regions affected by social and natural disasters.
- As nonviolent conflict resolution is a central part of personal and social identity in a world where processes of unification and diversification are occurring quicker than ever in the past history, human beings have a basic necessity to simplify and to put order into complex realities through social comparison. The upcoming systems of values, ideas and practices creates simultaneously processes of living together offering persons and groups the possibility to get familiarized with the social and material world, on behalf contradictory messages and behaviours.
- Finally HUGE includes the consolidation of participatory democracy and governance, promoting conflict prevention, nonviolent conflict resolution processes and peace-building; in summary a 'huge' solidarity process of sustainable and equal development.

Characteristics of Social Identity

Social identity is:

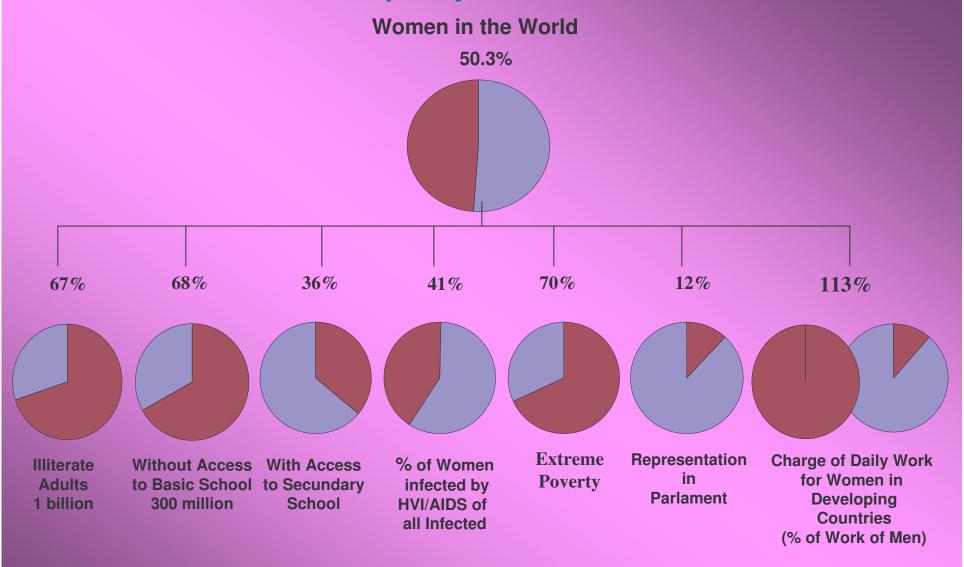
- processual resulting from and leading to permanent change (Taijfel, 1985; Adams, 2005);
- relational due to its transformation linked to interaction (Moscovici, 1976, 2000);
- multidimensional operating inside, between individuals, groups and ideologies (Doise, 1986);
- systemic open, dissipative & self-organizing system (Prigogine, 1992; Oswald, 2005)
- contextual forging relationships in specific contexts;
- essential due to the diversity and complexity of social interactions that are sustained and transformed by identity processes (Serrano, 2004, 2005).

Women's Role and Perception

Women's roles and social identity are manifold:

- reproductive (child-bearing, nurturing and maintenance of households)
- productive (livelihood support, food production, survival strategies)
- social (integrating family and community as a whole), and psychological (stabilizing personal relations and emotions)
- cultural (historic memory of family, clan and village)
- self-perception of women: weak, incapable and depending on men
- socially our work force is taken for granted and considered without or with less economic value, producing a historical discrimination consolidated during thousands of years (USA: 40% of GDP).

Inequality for Women



Source: UNIFEM, 2000 and UNAIDS, 2000

90% of all Maternal Deads ocurs in Developing Countries: (500,000 deads/year)

Solidarity and Gender

- Feminism and the emancipation of women will be a factor, but for patriarchy to be dismantled, and for solidarity to take root, feminism (and all other movements seeking the common good of humanity) will have to work together, in partnership. Riane Eisler offers a list of the "seven key relationships that make up our lives":
- 1. Our relationship with ourselves
 - 2. Our intimate relationships
 - 3. Our workplace and community relations
 - 4. Our relationship with our national community
 - 5. Our international and multicultural relationships
 - 6. Our relationship with nature and the living environment
 - 7. Our relationship with our spirit

Social Identity

- Tajfel (1979:31) affirms that social identity is generated in a world where processes of unification and diversification are occurring with giant steps, faster than ever in previous history.
- Hogg and Abrams (1988: 78) argue that persons have a basic necessity to simplify and order reality, where the categorization of the social environment is elaborated by social comparison.
- Social representation of gender is specifically charged with stereotypes, to be weak, incapable, dependent and vulnerable. These are social categories that are rich and complex in a symbolic system that has been socially and dialogically constructed (Habermas, 1998, 2000, 2001). Both are part of an inalienable collective life, enriched by ideologies, rites, beliefs and daily practices.

Main Attributes of Social Identity

 Thousand of years of experiences have created a society within a specific socio-historic environment, where symbolic elements have developed -class, ethnicity, age, religion, race, nationality, professional adscription, political ideology, education etc. However they are in permanent change, but the main attributes -gender, sex and race- and the socioeconomic condition -rich, poor- are stable (Habermas, 2000). Each process of classification implies relations of identity, inclusion or rejection and exclusion, which constitutes the base of any power exercise.



Social Representations

- "Systems of values, ideas and practices" simultaneously creating a system of order, are able to offer a person the possibility to get familiar with the social and material world. The communication within a community offers a code of common social interchange, where several aspects of life, personal and collective history are classified without ambiguity (Moscovici, 1976: xiii).
- Therefore, social representations originate in daily life, where society and its members are the thinking and acting system.
- The theory of social identity establishes a continuum between personal and social identity with a processual, relational, multidimensional, contextual and inevitable character.

Gender as Mode of Social Situation

- Role: man and women get different social roles (military, childrearing)
- Norms: Men assertive, logic, strong; women deferential, modest, weak: a society expect to conform to those roles
- Performance and behavior: not fixed trails, but increasingly more flexible and variable
- Identity "All the ways on might understand oneself to be a man or a women...with any subset of gender norms, roles and traits ascribed (Anderson: 2006:4)" and understood, while repudiated others (stereotypes, racism)
- Symbolism: gendered representations through conventional association, imaginative projection and metaphoric thinking: male space (garage) women (kitchen)



Patriarchy

- Patriarchy is the systematic domination of women by men.
- Religious patriarchy is the systematic exclusion of women from roles of religious authority, often based on the presupposition that God is male, and is an enormous obstacle to cross-gender solidarity. However, religious structures are not an expression of divine laws; rather, they are the result of historical events driven by human decisions (Wikipedia, 2005).
- In gender studies patriarchy refers to a social organization marked by the supremacy of a male figure, group of male figures, or men in general. It is depicted as subordinating women, children, and those whose genders and bodies defy traditional man/woman categorization.

Gender Equity Indicator	Country	Average		Reporting	
Ratio of girls to boys in primary education	0.63	0.95	1.03	163	2001
Ratio of girls to boys in secondary education	0.46	0.69	1.39	144	2001
Ratio of girls to boys in tertiary education	0.15	1.13	3.36	116	2001
Ratio of literate women to literate men	0.42	0.93	1.09	123	2004
Women's share in salaried office employment (%)	6.1	40.26	55.9	136	2003
National parliament seats held by women (%)	0	14.43	49	182	2005
U.N. Gender Equity Index (combined male-female parity in economic, political, and resource decisions)	0.123	0.551	0.908	78	2003

Lowest Worldwide Highest Countries

<u>Source</u>: United Nations Statistics Division (UNSD), 2005 http://unstats.un.org/unsd/demographic/products/indwm/ww2005/tab4b.htm

FROM VIOLENCE TO NONVIOLENCE FROM PATRIARCHY TO PARTNERSHIPS **OF SOLIDARITY AND SUSTAINABILITY**



Exponential Growth ("more, more, more")

MIMETIC DESIRE LEADS TO **MIMETIC VIOLENCE**

IN THE PURSUIT OF WEALTH ACCUMULATION **POWER & DOMINATION** WORLDLY HONORS

Solidarity **Ethos**

Sustainability **Enabling**

MIMETIC DESIRE FOR NONVIOLENCE

LEADS TO **GENDER EQUITY** WEB OF PARTNERSHIPS TRUTH, FREEDOM, CARE



Development

Human Person Integration

MIMETIC DESIRE FOR A SIMPLE LIFE

FOCUSED ON **HUMAN DIGNITY AND HUMAN GROWTH IN** BODY, MIND, SPIRIT

Sustainable Sustainability **Ethos**

Human Habitat Enhancement

MIMETIC DESIRE FOR ECOHEALTH

LEADS TO **GLOBAL STEWARDSHIP HUMAN HABITAT LEGACY** SUBSIDIARITY NETS



Girardian: Revision of the Process Model, 2005



Patriarchal Hegemony has a Negative Influence on Solidarity

(i.e., as patriarchy increases, solidarity decreases)
? ? ? ? ? ? ? (-)

Sustainable Human
Development?
has a
Negative
Influence on?
Patriarchy
(i.e., as human integral development increases, patriarchy decreases)

Patriarchy Mindset

Sustainable Human Development Solidarity Ethos

Sustainability Ethos

```
? Solidarity
has a
Positive
Influence on
Sustainability
(i.e., as solidarity
increases,
sustainability
increases)
?
(+)
```

(+)?????????

Sustainability has a Positive Influence on Human Development

(i.e., as sustainability increases, human development increases)

9. Gender: Situation Control of the State of

- Alternative knowledge located in space and time, inside view, different position and knowledge
- First person vs. third per on knowledge, interpretation of external symptoms (I am here and now)
- Emotions, attitudes, interests and values: source of security and transparency
- Personal knowledge of others (difference Erkenntnis and Wissenschaft): others interpret differently their behavior, with different skills
- Cognitive style: background beliefs and worldviews
- Epistemic relations to other inquirers (informants, students, interlocutors)
- Situated knowledge relates tormal with informal forms; affect attitudes (doubts, certainty); justify deepness; questioning authorities, create confidence, and empower other as subject

Results of Patriarchy: Epistemic Disadvantage of Women in Science

- Excluding from inquiry
- Denying epistemic authority
- Denigration their feminine cognitive style and mode of knowledge
- Producing theories that represents women as inferior, serving male interests
- Producing theories rendering gendered power invisible
- Producing knowledge reinforcing gender and other social hierarchies
- Hierarchical barriers to achieve leadership positions

Situated Knowers and Knowledge

- 1. Feminist empiricisms
- 2. feminist standpoint theories
- 3. feminist postmodernisms
- 4. feminist science
- 5. feminist defense
- 6. feminist critics and conception of objectivity
- 7. trends in feminist epistemology

10.2. Standpoint Theories

(Hardsock, 1987; Rose, 1987; Smith, 1974; Mac Kinnon, 1999; Collins, 1990, Harding, 1991; Longiono, 1990; Butler, 1993)

- Represent world from a articulated socially situated perspective giving epistemic privilege or authority
- 1. Social location: privileged perspective
- 2. Scope of privilege: what question or subject?
- 3. Aspect of social location: social role, subj. identity
- 4. Ground of privilege: what justifies it?
- 5. Type of epistemic superiority: greater accuracy, ability, sensitivity
- 6. Relative perspectives of others
- 7. Modes of access to perspective (location, within, training)

10.6. Feminist Critique of Objectivity

- Subject/object dichotomy: was is really existing? F: absolute knowledge presuppose problems with ontology
- **Aperspectivity**: objective knowledge is ascertained through the view of nowhere; *F: representations of world implies interests, positions, biases, epistemological errors linked to power and androcentric projection*
- **Detachment**: knowers are objective when they are emotionally detached; *F: androcentric perspective maintaining sharp boundaries*
- Value-neutrality: with neutral attitude; F: never possible, subjacent
- Control: experiment and observation under control; F: impossible without subjective mode of interaction, observation, dialogue, political engagement and caring for needs
- External guidance: representations dictated by the way tings are, not the knower; F: False dichotomy between external and internal. Object of study is selected, what aspect, how to interpret evidence implies choices and metaphors, constraining scientific explanation (Haraway, 1989, 1991).

10. 5. Types of Legitimate Influence Social Values in Science

- Selection and weighting cognitive values (Kuhn, 1977) to take up the slack between theory and evidence: diffusion of power, simplicity, scope, fruitfulness, internal consistency, empirical adequacy, consistency with other beliefs and not a truth-oriented.
- Diffusion of power recognizes cognitive accessibility of the knower
- Holism implies the meaning or significance of facts depends on their relations to other facts: divorced women get poorer, does not mean that women are better married.
- Pluralism of theories and research programs should be normal feature of science

10. 4. Empistemic Advantages

(Elizabeth Anderson, 2006)

- Women have generated new questions, theories and methods
- Gender has played a causal role in scientific transformation
- Defense of these changes as cognitive, unjust socially, exclusive, hierarchal and violent



- Resilience means in Latin resilio, referring to "return from a leap, jump, rebound", and in common acceptation "elasticity".
- In physics it represents the capacity of a material to recover the same form after having been exposed to extreme pressures.
- In the social field it refers to the "human capacity which permits persons after having passed through adverse situations to be not only safe but also transformed through this experience"
- Gloria Laengle defines it as "the capacity of human being to overcome difficulties and at the same time learning from the errors".
 - Ángela Quintero refers to "the capacity of a family to adapt and reconstruct from the adverse situation"
- Helena Combariza defines "human resilience is the capacity of an individual or social system to live well and develop positively, irrespective of the difficult conditions and even being reinforced and transformed".2

Elements of Vulnerability Assessment

- Vulnerability assessment requires collecting and analyzing data linked to building consciousness on:
- Types of hazards and frequency
- Elements at risk and how to reduce them
- Socioeconomic conditions and types of shelter
- Gender and family structures
- Genuine coping strategies
- Mapping specific hazard prone locations
- Learning from previous disasters and coping strategies
- Training for evacuation
- Resettlement of people at risk
- Evaluation of training and hazard mitigation process

Women and Disasters Management

Water and food production in hand of women:

- Under normal conditions women produce half of world food; in developing countries even 60% to 80%;
- But women in México only own 17% of their land & in Africa 2%
- Women practice survival strategies in coping with long-term disasters such as economic crises and famine.
- They contribute in Africa to:
 - 33% of the paid labor force
 - 70% of agricultural labor days
 - 60-80% of subsistence production
 - 100% of food transformation
 - 80% of food storing
 - 90% of spinning and weaving
 - 60% of harvesting and market activities
 - 2% own land or have land rights (FAO, 2002)

15. Conclusion

- 1. Complex social networks sustain humans in normal times. Human vulnerabilities during change, hazard, disaster or conflict related to global warming, are usually a matter of disruption or failure of these networks.
- 2. A central challenge for research and practical policies is that formal data banks on such disruptions do not distinguish between gender and other demographic questions. Existing data overlooks social vulnerability and does not account for gender identity during normal, let alone in crisis situations.
- 3. Future research and policy on resilience building during extreme hidrometeorological events helps to improve theories, data and concrete training about the impacts of climate, disaster, and other disruptions.
- 4. Gender analysis will lend a more nuanced understanding of women as social beings aligning in networks of family and community.
- 5. More accurate understanding and training will facilitate to support networks that underlie a resilient society, where women educate, care and reproduce the historical memory and the cultural background, but increasingly generate also the material family sustain.
- 6. Active female participation opens the possibility to reduce gender related social vulnerability, improve hazard resilience, and increase the survival of the whole communities frequently affected by hydrological disasters, but reduce also gender violence and insecurity before, during and after disasters.



10.1. Feminist Empiricisms

- Experiences provides the sole and gives justification of knowledge. They
 cannot be separated in disciplines, methods, assumptions and canons
- For Quine (1963) a) observation is thoroughly theory-laden; b) another project within science where our own practices of inquiry are empirically researched; c) division between facts and values; d) individualist inquiry reduces bases for naturalized behavioral and neuro-psychology; but feminism is concerned on inquiry of social practices relating to gender, race, class and other bases of inequality
- Feminists exposed androcentric and sexist biases of scientific research, related to social and political factors and through construction of knowledge oppression in maintained.
- Analyses for underlying bias, displacing evidence; pragmatic approach stresses plurality of aims: paradoxes shows social interests helping deconstruction of social representations; procedural approach controls bad biases by appropriate social organization of inquiry; moral realist approach argues that social and political value judgments have truth-values within feminist approach.

Divergence with marxist standpoint theory

- Worker class epistemic privilege on economics, sociology and class struggle (Marx, Lukács, Gramsci) through collective consciousness within capitalistic system
- Oppression gives centrality to experimental access
- Value of change or supplanted by appropriation of surplus values of use
- Universality: workers represent social world representing universal human interests
- Greater objectivity than capitalistic representations
- Collective self-consciousness and self-fulfilling
- Collective revolutionary actions generates selfunderstanding

10.3. Feminist Postmodernisms

- Poststructuralist and postmodernist theories attempts against universality, necessity, objectivity, rationality, essence, unity, totality, foundations and ultimate truth and unique reality. Particular situatedness and contestability of claims or systems of thought serves to critical and libratory functions.
- "Discursive fields: signs get their relative meaning from their relations to other signs in a system of discourse. Not fixed in meaning neither time (critic of Kant). No whole truth exist, no definite set of terms. Actions and practices are linguistic signs going beyond themselves as metaphors and metonymy. Meanings are constantly subverted by other actions and postmodernisms celebrate ironic, parodic and campy renditions of conventional behavior as politically liberating (Butler, 1993).
- FPM view the self as constituted by signs, but with social twist, occupying multiple social identities (women, mother, worker, black, poor, heterosexual...) and tensions among conflicting identities open space for disrupting discourse systems, individually constructed.

10. 7. Trends in Feminist Epistemology

- Tendency of feminist empirism, standpoint theory and postmodernism have evolved.
- Unsituated empirism, politically neutral subject of knowledge has embraced relativism of standpoint theories, blurring separation between currents. Today stresses centrality of situated knowledge, interplay of facts and values, plurality of theories without standpoint.
- Standpoint focussed on justification of context of discovery from subaltern perspective abandoning transcendental standpoint position
- Postmodernism stabilized with empiricist standards, reconstructing ideas of objectivity and epistemic responsibility as situated knowledge. Nicholson (1990) reformulates toward pragmatism, fallibillity and contextualization claims.
- Differences remains, reflected in choices of tools, theories and identity politics with materialist epistemology (Harsock, 1996).
- Missing are approaches to synthesize and to deconstruct claims.