



**IPRA 2016**

**Climate-smart agriculture and  
a sustainable food system:  
towards a sustainable-  
engendered peace**

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# **1. Research Question**

**How could a climate-smart agriculture promote a sustainable food system based on sustainable-engendered peace that is able to reduce hunger, disasters and improve livelihood of the poorest people (girls in Sub-Saharan Africa)?**





Con la comida NO se juega

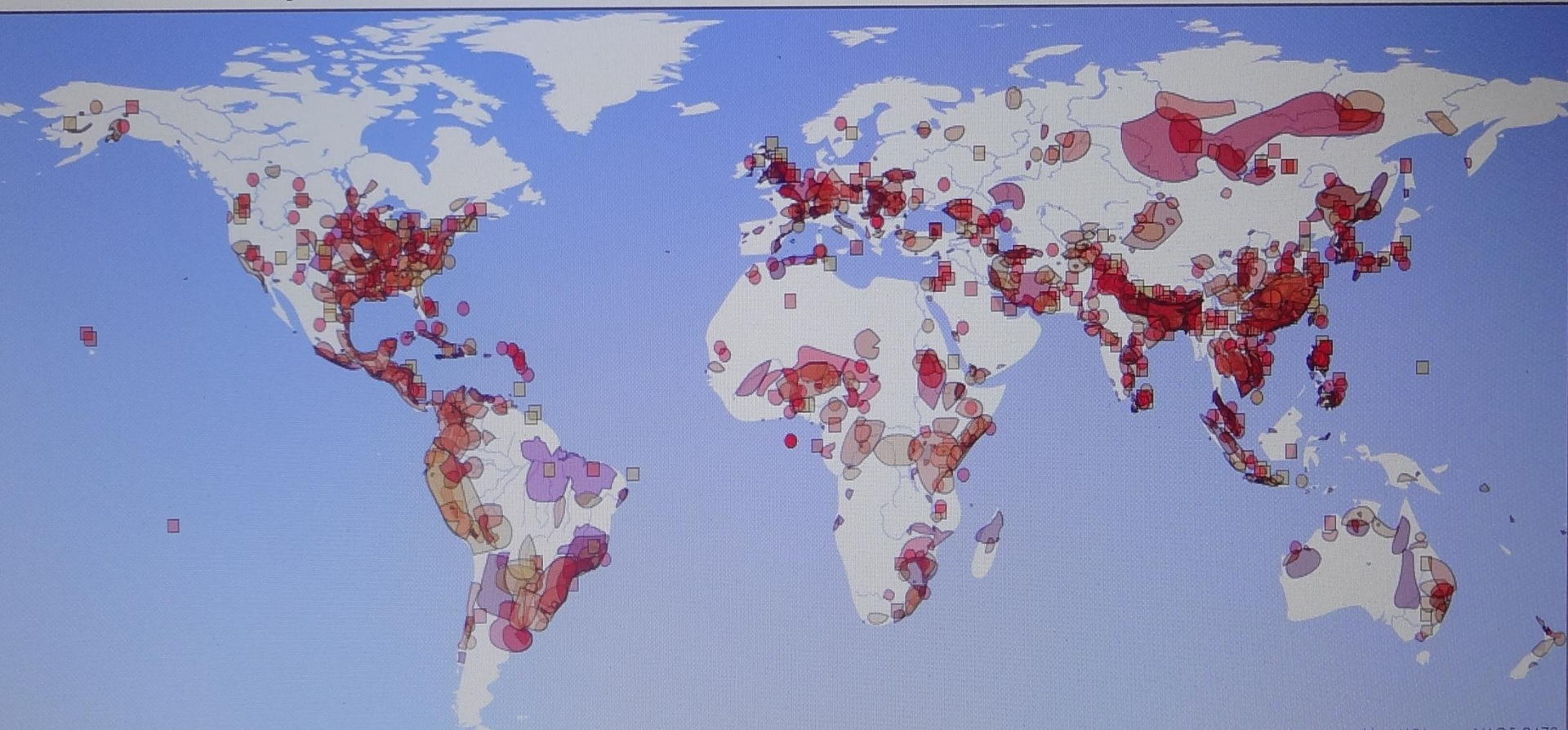
## 2. Climate-smart agriculture: CSA (FAO)

- Climate-smart agriculture helps to guide **actions needed to transform and reorient agricultural systems** to effectively support development and ensure food security in a changing climate.
- CSA tackles four main objectives: **sustainably** increasing agricultural productivity and **incomes** together with adapting and building **resilience to climate change** and reducing or **removing greenhouse gas** emissions.
- CSA is an approach for **developing agricultural strategies** to secure sustainable food security under climate change.
- CSA provides means and **helps stakeholders** from local to national and international levels to **identify agricultural strategies suitable to their local conditions**.

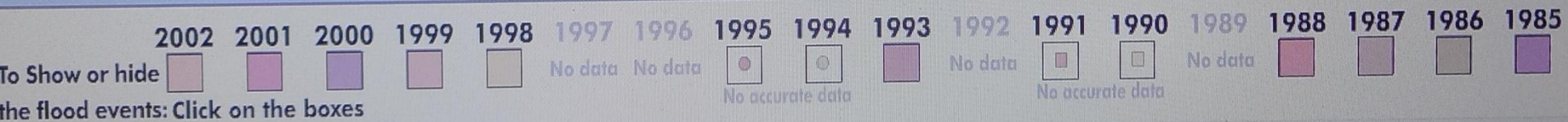


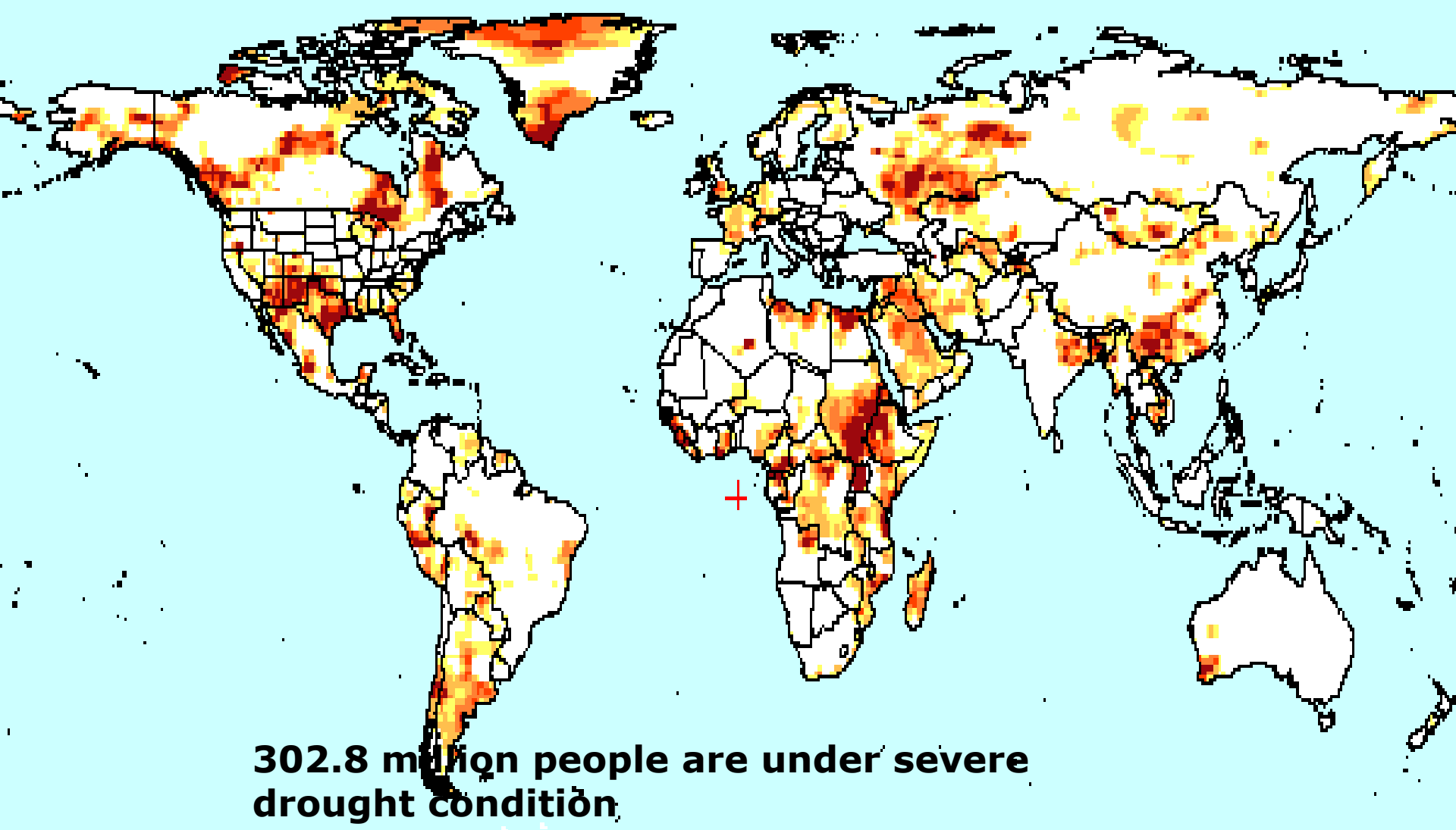
# Extreme floods: 1985 to 2002

<http://www.dartmouth.edu/~floods/Archives/GlobalArchiveMap.html>



© 2002 - Dartmouth Flood Observatory - G.R. Brakenridge, Elaine Anderson - Cartography: S. Caquard - Work supported by NASA grant NAG5-9470





**302.8 million people are under severe drought condition.**

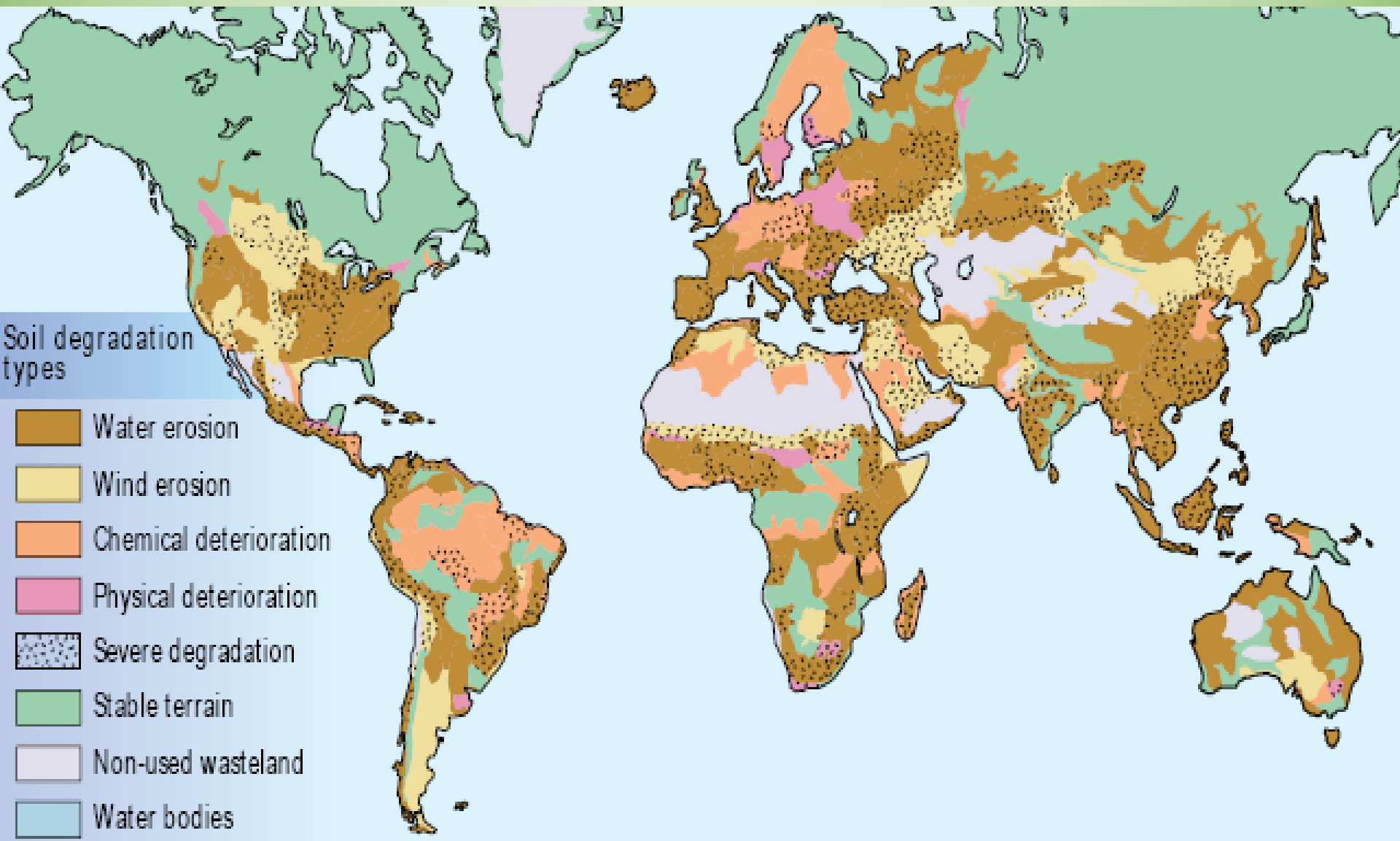


# **Major drought: 36 meses from Sept 2011**

Data from UCL global drought monitor. Based on 36 months standardized precipitation in

# Degradation of soils due to anthropogenic impacts

Fuente: ISCRIC-UNEP (1996: 12)





## 2. Climate-smart agriculture

- Climate-smart agriculture (CSA) goes **beyond new technologies and practices** like drought resistant varieties or precision farming.
- It achieves **multiple objectives**: productivity, food security & sovereignty, enhanced farmer resilience, greenhouse gas emissions reduction.
- CSA adopts a **system perspective**, which includes landscapes, ecosystems and value chains.
- From the systems perspective, CSA pursues **synergies among food, sustainability, equality and equity** with bottom-up stakeholder involvement.
- CSA addresses **trade-offs**, and performs **cost and benefits analysis**.

# 3. Sustainable CSA with gender perspective



- Rural women play an **increasing role in smallholder agriculture** as a result of out-migration of men. In least developed countries, 79% of economically active women report agriculture as their **primary economic activity**.
- Women and men farmers have **different vulnerabilities** and capacities to adapt to climate change. Women face **lower access to resources, finance, information and extension services**. Adaptation measures can provide co-benefits to **gender equality and social inclusion**.
- Greater engagement with women **in technology design** and management decisions can help maximize women's potential as agents of change. In western Kenya, training and agro-advisory services directed at women have helped to **reduce by 60 % the number of households that experienced at least two months without or only one meal/day**.



1. **Healthy soils** include the following: comprehensive soil cover of vegetation; soil carbon levels close to the limits set by soil type and climate; minimal loss of soil nutrients from the soil through leaching; zero or minimal rates of rainfall run-off and soil erosion; no accumulation of contaminants in the soil.
2. National & local **planning** with efficient, effective and equitable allocation of limited resources to benefit the most vulnerable farmers and systems, especially women; local decision-making with participatory approaches to increase local knowledge, capacities and preferences.
3. Adaption & **finance** to achieve local and global goals for adaptation, disaster risk reduction, **economic incentives, value chain initiatives, including effective research and knowledge systems.**
4. **Connect** farmers, women, youth with policy-makers, businesses and researchers to accelerate sharing of emerging knowledge, and help adapt to dynamic current climates and to **future development**
5. **Future generations** have a right to develop and use the existing resources for their own development. **Today we use 1.5 planets** and have only one.

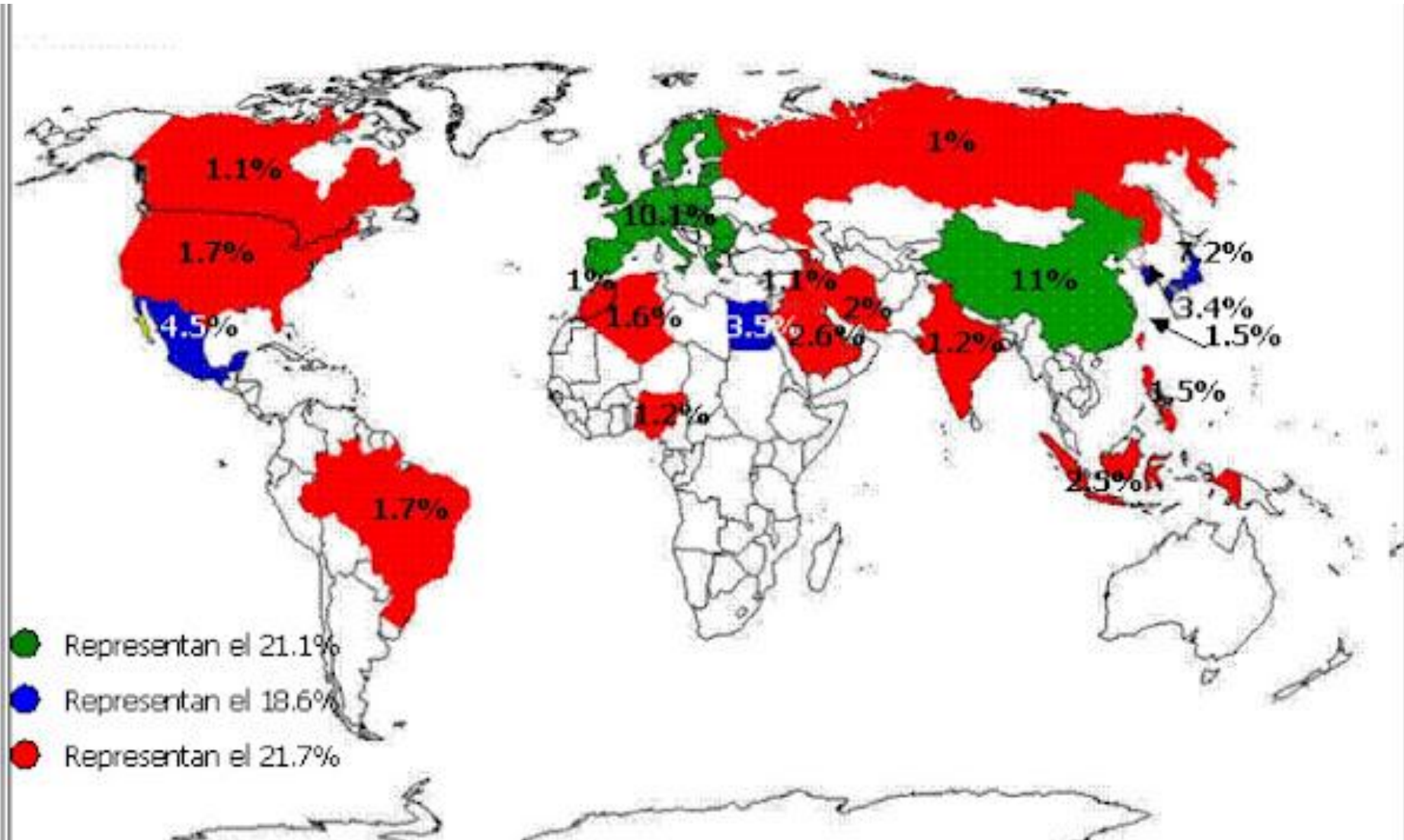
# Food sovereignty vs. security

- **Food security** [is] “a situation that exists when all people, at all times, have physical, *social* and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO 2002).
- **Food sovereignty:** a.) **local production** and trade of agricultural products with access to land, water, native seeds, credits, technical support and financial facilities for all participants; b.) **women** are the main food producers; c.) **access to land**, credit and basic production means **for women and girls**; d.) inclusion of the **indigenous**, women, and peasants in regional and national rural policy and decision-making processes; e.) **basic right** to consume safe, sufficient, and culturally accepted food; f.) the rights of regions and nations to **establish compensations** and subsidies to get protection from dumping; g.) **the obligation of** national and local governments to improve the food disposal; h.) **discounts in urban poor regions**; h.) **governments should guarantee adequate nutrition** for babies, infants, and pregnant women; i.) during bad harvests **avoid famine**; j.) **clean water** and sewage facilities; k.) links among **environmental services, agriculture, territorial planning**
- The sum of these processes reinforce for each citizen **the basic rights of life**, but also the **right of non-migration**, thanks to sustainable life



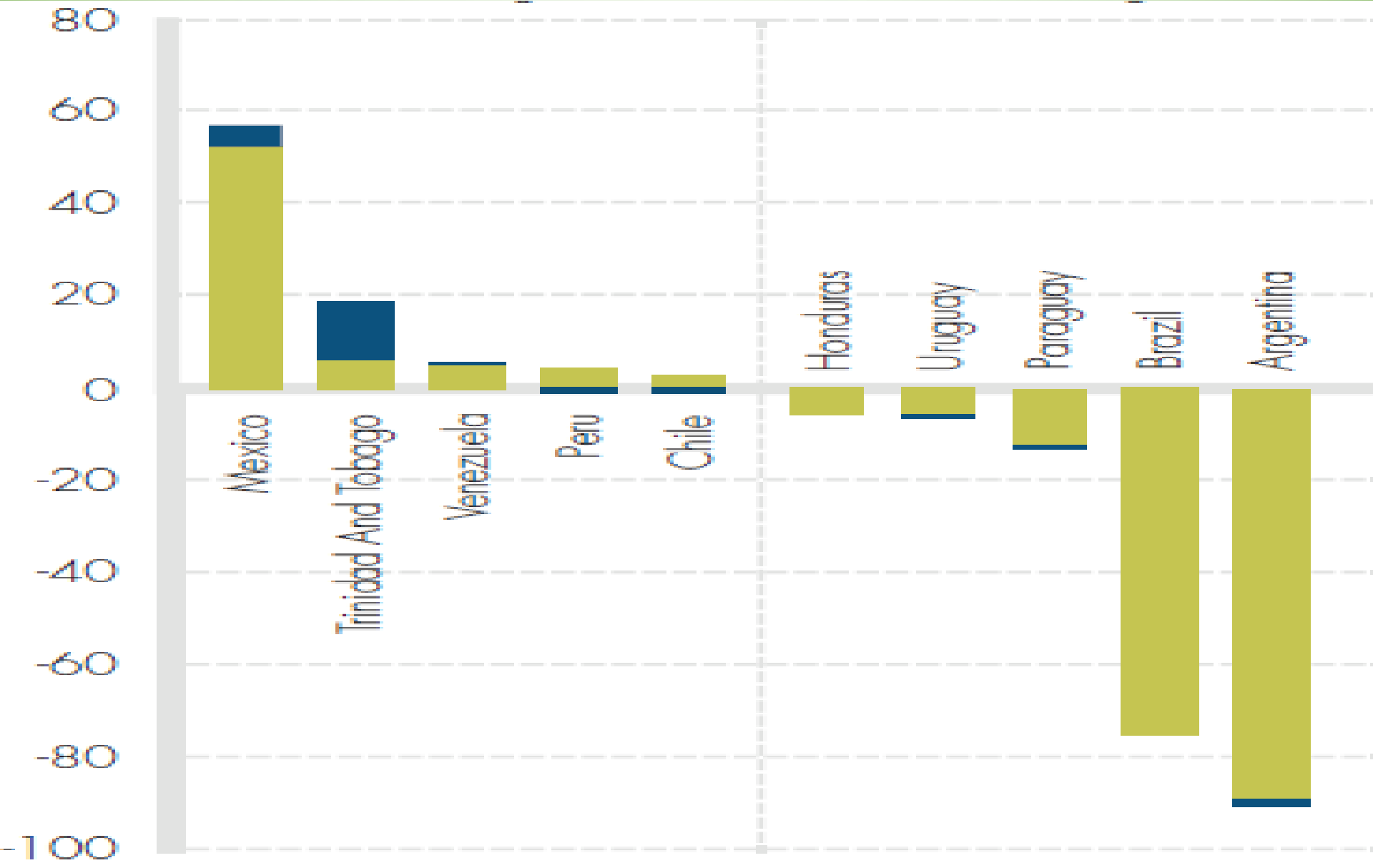


# Import of food (61.4%) worldwide



Corn, wheat, soya beans, barley, sugar, sorghum, oil, pork, rind and chicken meat, milk

# Import of food in LA: virtual water





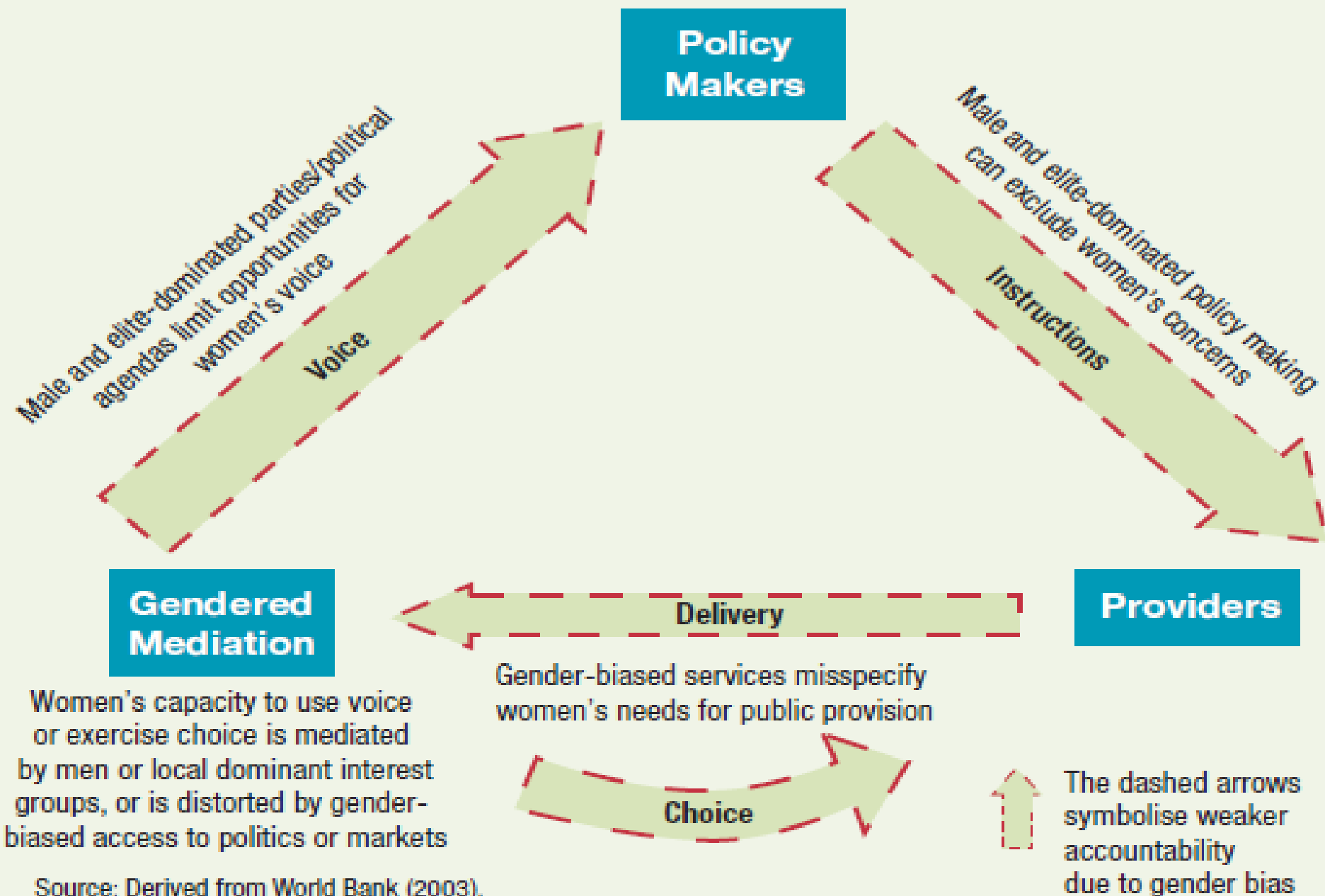
## **4. Engendered peace and sustainability**



- The **values at risk are established gender relations** (Lagarde 1990; Lamas 1996), deeply rooted in the **dominant social representations of gender** (Jodelet 1991; Serrano 2010), which are **manipulated by an oligarchy** (Stiglitz 2010; Yiamouyiannis 2013) and reinforced by **religious fundamentalism, hierarchical churches** (Gutiérrez 2013), and **schools** (Gramsci 1975, 1998). This social structure affects values such as equity, equality, solidarity, justice (Truong et al. 2014), **cultural identity** (Serrano 2014), and often even the **survival of individuals and social groups** (Oswald 1994).
- The **sources of threats** have been consolidated over thousands of years by **patriarchal institutions** (Folbre 2006), **religious controls** (Jasper 2013), and the **totalitarian exercise of power** (Held 2004).
- **Patriarchy** must be understood historically as being **imposed on women through violence** (via conquest, spoliation, rape, and feminicide), **discrimination** (by laws and rules), **subordination** (through economic and sexual control), **hierarchy** (by the notion of paterfamilias, today represented by the global oligarchy), **inequality** (in education, income, leisure and political power), through **exclusion** (patrilineal and patrilocal inheritance and exclusive globalization), and through **social classes and social representations** (constructed self-discipline and internalization of gender roles).



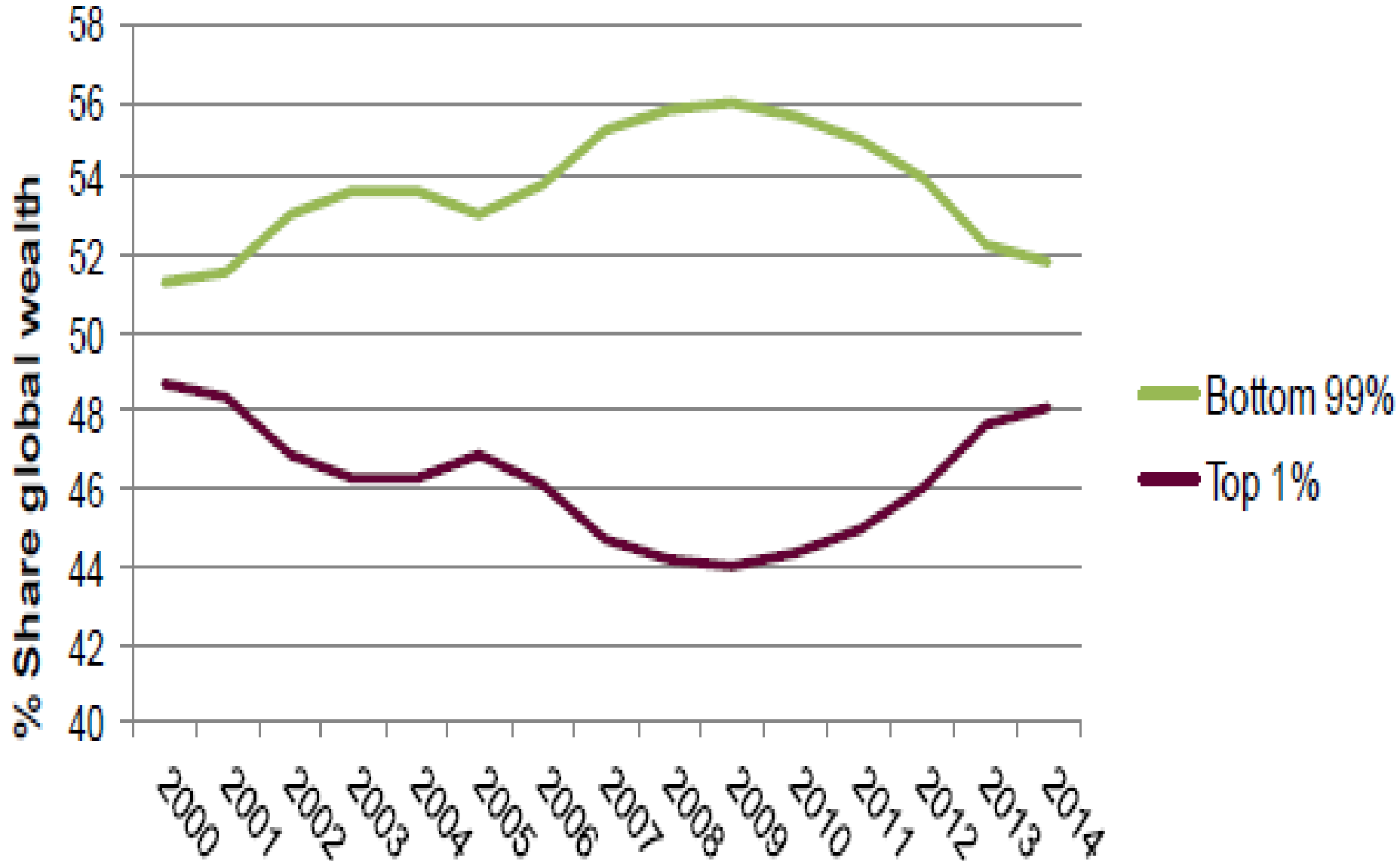
## 5.5 Engendered peace





# Social inequality

(Oxfam 2016, based on Credit Swiss data available 2000-2014).



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



**Patriarchal Mindset**  
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

**Sustainable Development**  
Human Person  
Integration

**MIMETIC DESIRE FOR A SIMPLE LIFE**  
FOCUSED ON  
HUMAN DIGNITY AND  
HUMAN GROWTH IN  
BODY, MIND, SPIRIT

**Sustainability Ethos**  
Human Habitat  
Enhancement

**MIMETIC DESIRE FOR ECOHEALTH**  
LEADS TO  
GLOBAL STEWARDSHIP  
HUMAN HABITAT LEGACY  
SUBSIDIARITY NETS



**FROM SUSTAINABILITY TO  
SUSTAINABLE NONVIOLENCE AND  
SUSTAINABLE HUMAN DEVELOPMENT**



# 5. Human, gender and environmental security and peace (HUGE) to overcome social inequality, dual vulnerability and catastrophic outcomes

## Widening and deepening the security concept: Human security

- Human, Gender and Environmental Security & Peace (HUGE) analyzes a **widened gender concept** including vulnerable groups with a human-centered focus on **environmental security** and peace challenges (Oswald, 2001, 2004, 2008).
- HUGE **scrutinizes 'human security'** where equity, equality, development, conflict resolution, solidarity and social organization are key variables.
- HUGE examines **gender security** and the impacts of disasters on vulnerable groups and regions.
- HUGE searches the fulfillment of **human rights**, gender equity and social equality among the most vulnerable people, thus **equality and equity**.



# HUGE Security & Peace

Determination Which security?	Reference object: Security of whom?	Value at risk: Security of what?	Source(s) of threat: Security from whom or what?
National security	The State	Territ. integrity	State,substate actors
Human security	Individual, humankind	Survival of humankind people	Nature, state, globalization
Environmental sec.	Ecosystems, rural and urban systems	Sustainability	Humankind, Nature
Gender security	Gender relations, indigenous people, minorities	Equity, identity, social relations, solidarity, identity, tolerance	Patriarchy, totalitarian institutions (élites, governments, religious fundamentalism, dominant cultures), intolerance, intra-family violence

# 6. Conclusiones

A scenic view of a lake with a green boat and a tree. The boat is a long, narrow vessel with a green hull and a red frame, possibly a ferry or a small boat. It is on the water, and its reflection is visible in the calm surface. A large, dark tree trunk leans over the water from the left side of the frame. The background is filled with lush green trees and foliage, suggesting a park or a natural area. The sky is bright and clear.

1. Promote domestic and small-scale sustainable agriculture with **minimal carbon footprint**, urban roof and balconies, **organic agriculture in orchards, basically in the hands of women.**
2. Worldwide, **50% of food** is produced by **women**; in Africa up to 90%. Orchards offer fresh vegetables and reduce waste and losses of food. Almost **half of produced** food get lost.
3. Small-scale **livestock** or fishing ponds support **nutrient cycle.**
4. Sustainable CSA reduces environmental foot print, **improves management of all natural resources –water, soil, organic pesticides and bio fertilizers.**
5. **Mixed sustainable agriculture** integrates waste from one cycle to the other, **feed animals** with stubble from agriculture and **reduces pollution of water.**





**GLOBAL FOOD SECURITY**

# How can we reduce green-house gases and achieve food sovereignty?

- Preserve and restore flora, fauna, biodiversity, water, soil and air, and **protect and restore existing natural areas**, but also take care of the local food culture.
- Promote natural protected areas in forests, grassland and marine and coastal areas, in order to conserve **the natural heritage**.
- **Encourage sustainable use to the environmental units**, so that the diversity of seeds is taken care of biodiversity; the natural fertility of the soil is maintained and the exchange of these environmental goods is promoted locally.
- Apply **ancestral practices of crop association**, planting medicinal plants, reforesting with native species, generating the biomass needed for cooking and heating at home, reusing solid and liquid wastes.
- **Negotiate peacefully emerging environmental conflicts**.
- Stimulate **greater diversity in production, transformation and consumption**, improve efficiency in the use of natural, technical, human and financial resources.

- 1. Recover land** that is badly used or eroded for sustainable CSA, where you have water and workforce.
- 2. Vertical and horizontal integration of productive, trade and consumption process** to improve economy of scale, reduction of food loss, improvement of income for farmers & reduction of food costs for final consumers.
- 3. Reduction and control of trade monopolies**, which reduces prices for farmers and increase them for consumers.
- 4. Education for a healthy and nutritious diet**, which reduces expenses in health, improves scholar and labour involvement and increase wellbeing.
- 5. Nutritional and health control for pregnant women and school children with support** for school breakfast.



# Circular urban and rural economy



- **Reduce environmental, climate, health and development impacts.**
- **Circular economy: zero waste, recycle, reduce, reuse & re-educate: RRRR**
- **Eco-design** in houses and parks
- **Recover** forests and green areas
- **Rise awareness among citizens**
- **Cooperate and share** experiences of success
- **Love** nature & care about environment
- Promote benefits of circular economy: less GHG emissions, recovering of soils, healthy food, less diseases and long life

# Alternatives

- post-carbon society
- dematerialised production
- Recycling everything, no waste
- Access to credit and training for women
- processes of solidarity during disasters with social justice and gender equity
- We are part of the planet, **not its owners**
- Thinking in **Mother Earth, ecosystems** and coming generation
- **Pacha mama and good living**





**Muchas gracias por su atención**  
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