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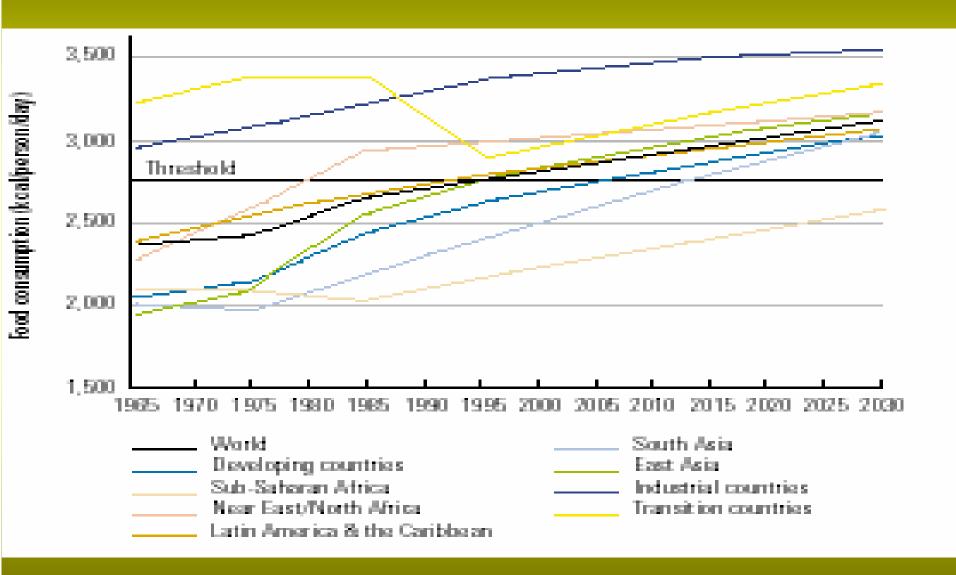
- Integral Management of Food
- Child attention
- Food a Basic Human Right
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# 1.1. Productivist Paradigm

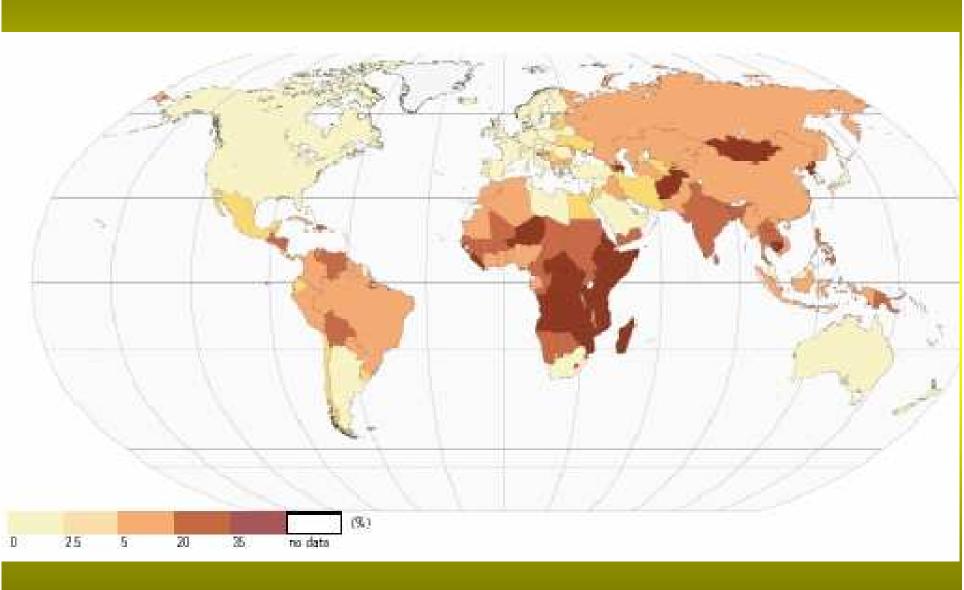
- Offer is in the centre. Started 200 years ago. Tried to industrialize agriculture through massive production tools (monocultivation, intensive use of chemicals, veterinarian drugs, improved seeds, machines, fossil energy and irrigation systems).
- Politically, this systems depend on high governmental subsides (USA,EU, OCDE, Japan), offering consumer homogenized and cheap products.
- Production is in hand of agronomist, veterinarians and chemical industry.
- Health and environment are marginal and Ministry of Agriculture manage natural resources such as soils, water and fishes.



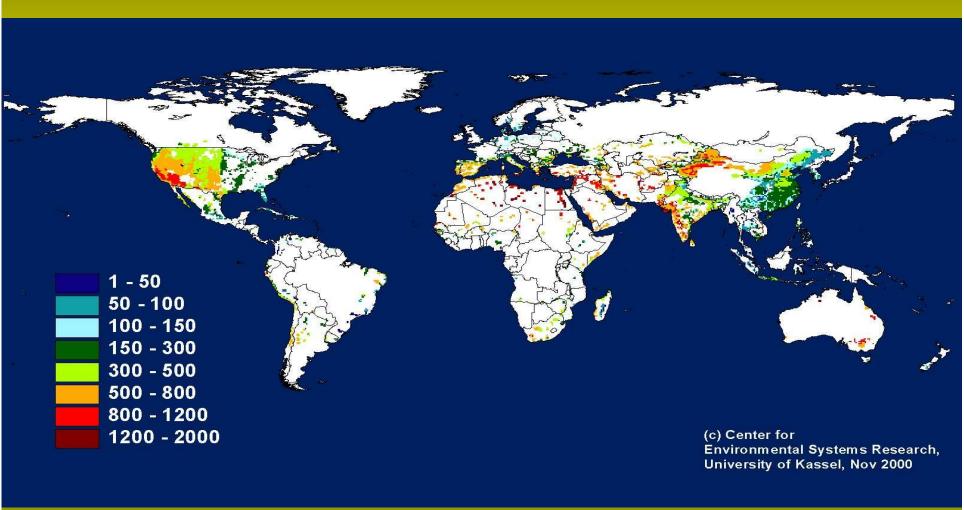
### **Evolution of Food Situation**



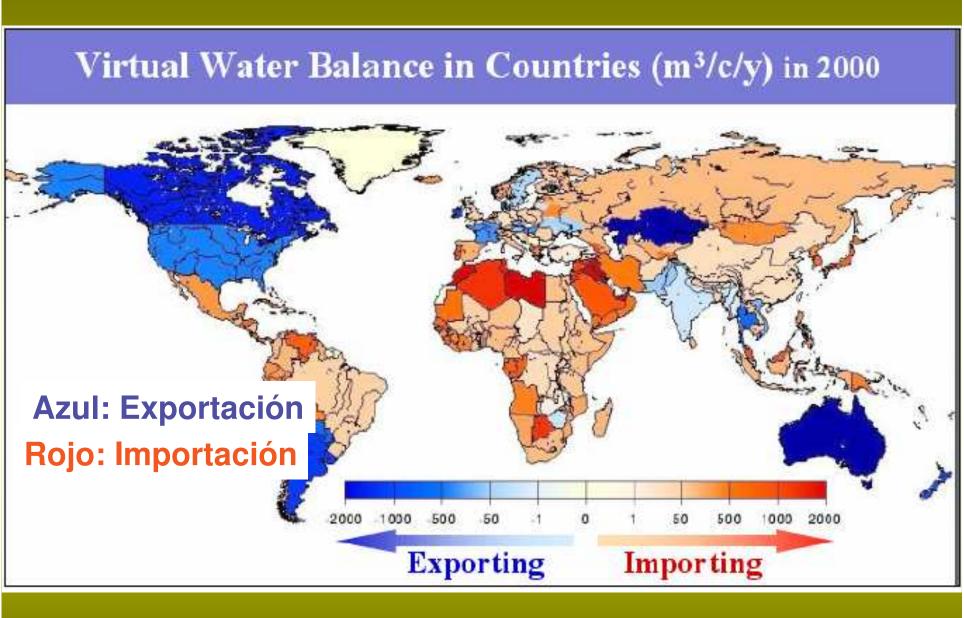
# % de Undernourished Persons



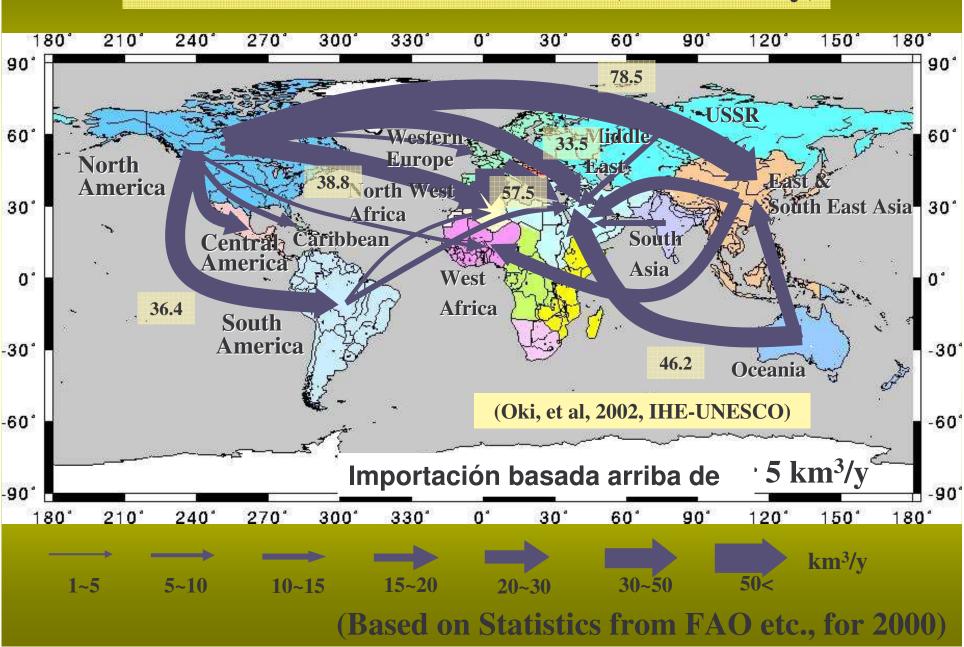
# Water Use – Agriculture Irrigated Area and Water Use



Source: WaterGAP, 2000



### "Virtual Water" flow in 2000 (cereals only)



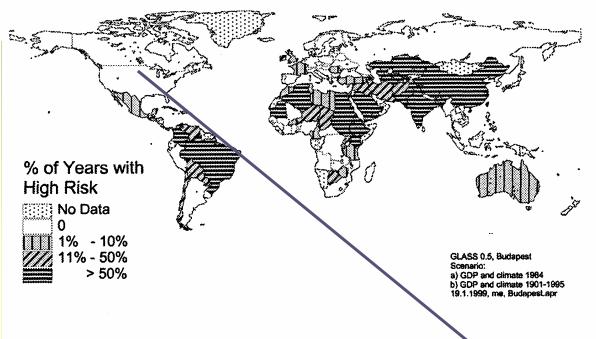


Figure 4. High Potential for Food Crisis 1901-1995.

### **Food Crises:**

with climate change and medium GDP growth (2001-2050) Alcamo/Endejan 2002:143 ←Hiogh
Potential of
existing food
crises
(1901-1995)
Alcamo/Endejan 2002:
143

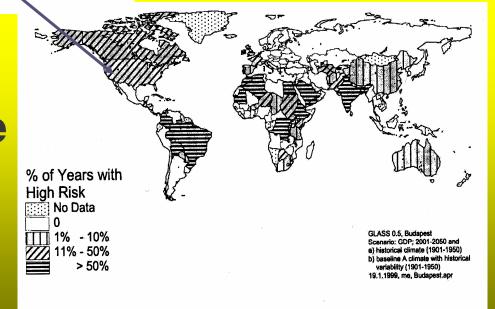
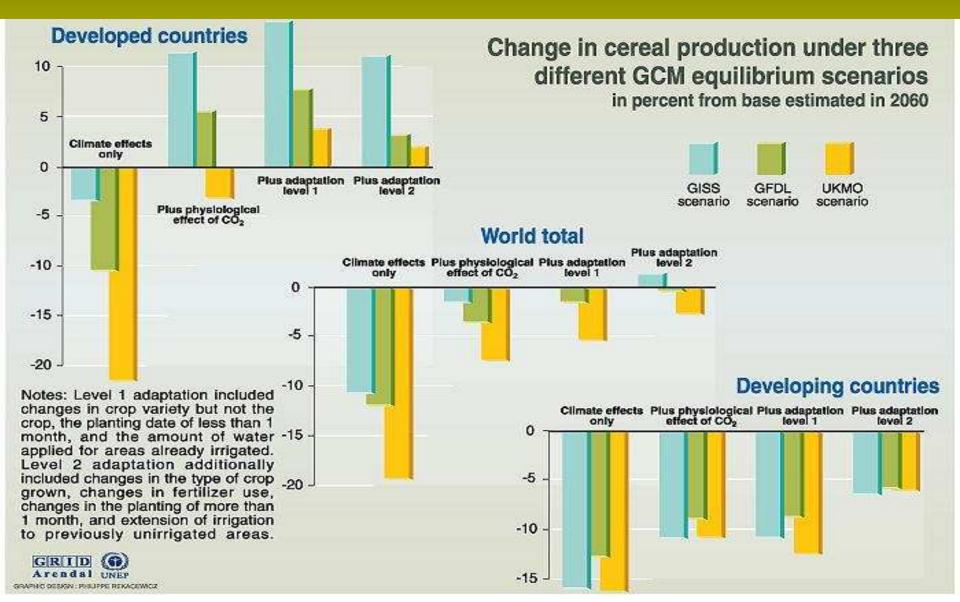


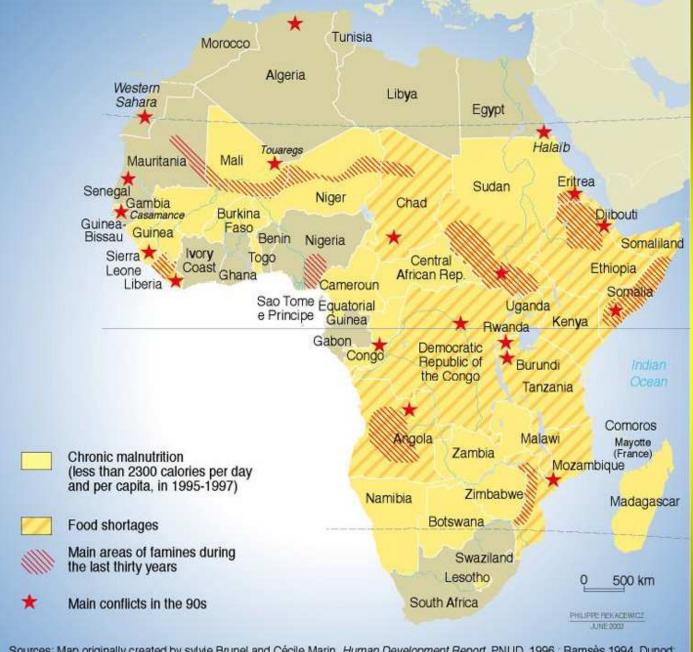
Figure 6. High Potential for Food Crisis 2001-2050 – with GDP Increase and Climate Change.

# 1.2. Science of Life Paradigm

- Demand oriented to final consumer and its necessities.
   Productivism is still important.
- Mayor integration of food chain in cluster related to transformation and trade of food.
- Links to genetic research including biology, engineering, nutrition, pharmacology, mobile labs in fields and industries in hand of multinational food chains offers clean, safe and homogenous products able to be weeks in supermarket shelves thanks to genetic modified organisms (GMO).
- Food is modified with artificial nutrients to prevent illness, thanks to enzymes enrichments.
- Experts and MNE are supervisors and arbiters (Beck, 1998) in process of production of enriched "healthy" food.
- Centre of concerns is individual health, limited to a technological proceeding in labs with high tec and specialists (Nestlé, 2002).

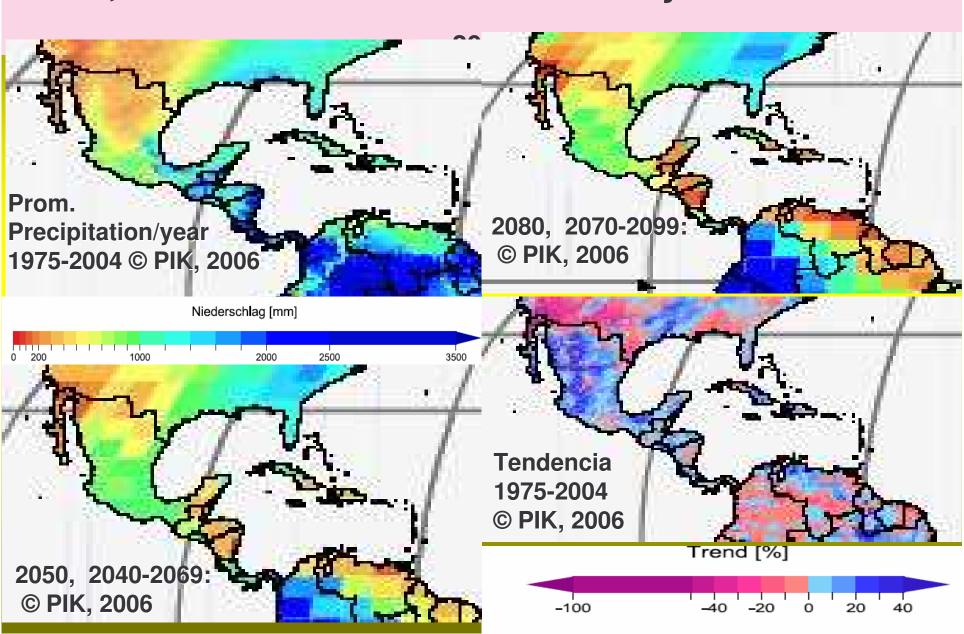


Source: Climate change 1995, Impacts, adaptations and miligation of climate change: scientific-technical analyses, contribution of working group 2 to the second assessment report of the intergovernmental panel on climate change, UNEP and WMO, Cambridge press university, 1996.

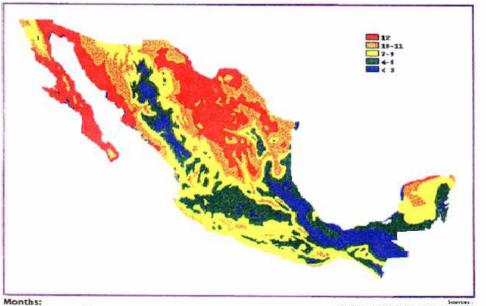


Sources: Map originally created by sylvie Brunel and Cécile Marin. Human Development Report, PNUD, 1996; Ramsès 1994. Dunod, Total Call of the HCR Examination of the Programs, HCR, 2001; The State of Food Insecurity in the World, FAO, Rome, 1999; Populations en danger, Médecins sans frontières - Lepac, La Découverte, 1995; Interventions, Action Internationale contre la faim, 1994; Le Monde peut-il nourrir le monde?, Les Clés de la planète, hors-série n° 1, Croissance, Paris, 1998.

# Tendencies of Precipitation (1975-2004) y Projection 2050, 2080: México/Centro America y Caribbian ©PIK



#### Average Number of Dry Months Per Year



12

10-11

arid area

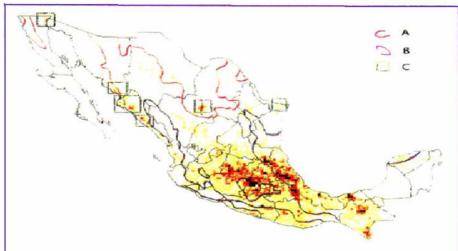
semi-arid area

humid area very humid area

dry and subhumid areas

Sources : Mins Bluenour des Media Fluto de Misono de PACI Mapas tempinos es Atus Hackonal de Mexico de

#### Aridity and Density of Rural Population



- A. Transition from arid to dry area
- B. Transition from dry to humid area
- C- Arid area with irrigation
  Density of rural population (living in localities of less than 2500 inhabitants) in 1990 (X Mexican Census).

Sounder

R Camerida Foblación y Evalunda, 1996

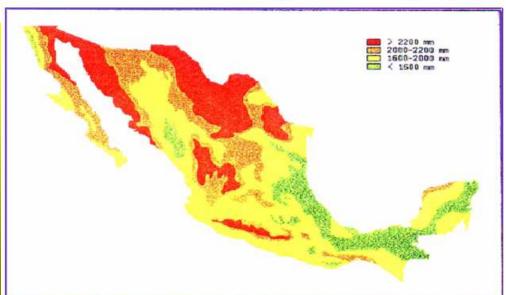
RECO (Camerida Foblación y Evalunda), 1996

RECO (Camerida Foblación de Marcologo (Camerida Foblación)

Sesama de Información (Camerida Foblación)

Foblación (Camerida Foblación)

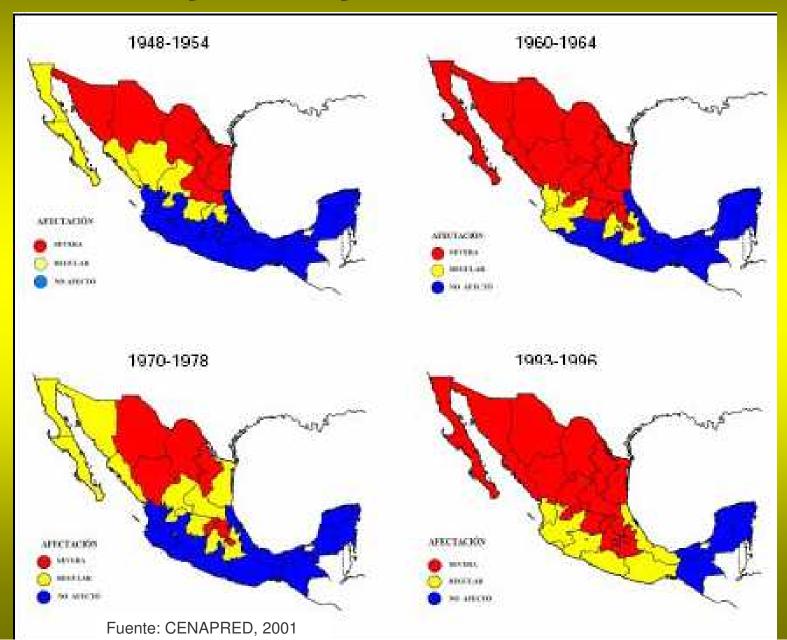
#### **Average Annual Evaporation**



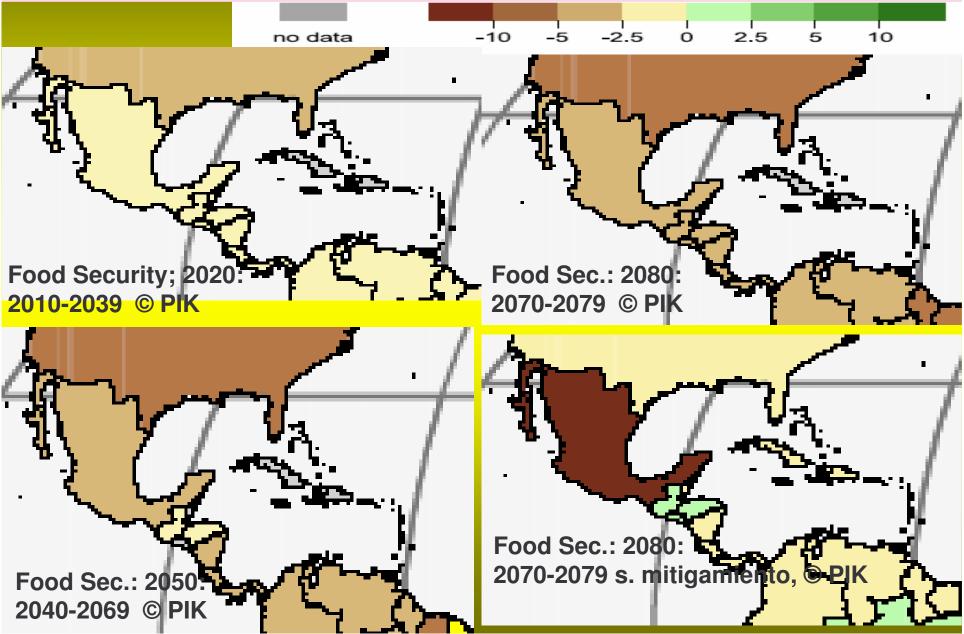
> 2200 mm 2200 - 2000 mm 2000 - 1600 mm < 1600 mm > 83.6 inches 78.7 - 86.5 inches 62.9 - 78.6 inches < 62.8 inches Scharces

Action: Martinenal dell'infection i militio del Mérimo del Pélifor
Magnet technishens del Pélifor
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# **History of Dryness in Mexico**



# Agricultural tools with Climate Change: 2020, 2050 and 2080 without mitigation



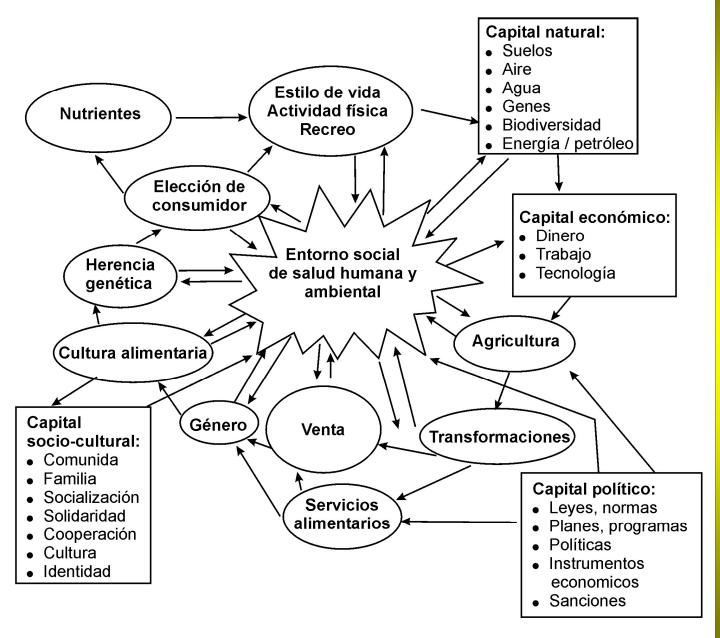
### **Undesired Effects of Modern Agriculture**

- GMO started in 1995 and in 2005 is produced in more than 80 million hectares.
- USA (68%), 22% in Argentina, 6% in Canada y 3% in China.
- One holding (Monsanto) controls 90% of seeds with genetic modified proprieties: a herbicide (roundup) and a insecticide (Bt).
- The recombinant process could produce unknown effects, some irreversible in natural plants, destroying biodiversity, getting new toxics, new plagues and resistant insects.
- Socially, oligopoly with 8 MNE produce 83% of biotechnological research in the world.
- Expulsion of small farmers due to high productive processes and subsidies concentrated within big enterprises and though patents (TRIPS).

### 1.3. Organic Agriculture at Small Scale

- Symbiotic relation and mutual dependency between nature and food production.
- soft methods regionally diverse: policultivation, association of products, rotation, fixation of nitrogen from air to soil, bio-plaguicides, traditional methods of soil conservation and food, integral management of water and environmental services.
- Combination among traditional knowledge and modern one consolidating regional food sovereignty.
- Conserving diversity of species it is agro-ecological. Safe ecosystems and social relation creates synergies and cooperative social relations with health care and cultural diversity at local level.
- This mode of production is no able to be globalized.
   Commercialized surplus goes to the regional market reducing environmental pollution and global warming.

#### Salud Integrada Ecológicamente



Fuente: Lang y Heasman, 2005: 39, modificado por Oswald, 2006

### Feminizatoin of Agriculture

- Women in poor countries produce between 60 y 80% of food in the world
- In Mexico only 17% of women have land rights or proprieties
- In Africa women generates (FAO, 2002):
  - 33% of labor force
  - 70% of agriculture paid labor
  - 60-80% of subsistence production
  - 100% of food transformation
  - 80% of conserving of food
  - 90% of weaving
  - 60% of market activities
  - 2% have land rights

# Regressive Globality

- Strategy of groups and governments that favor a globalization only to the extent to benefit them
- Bush administration unilateralism makes use of global strategies of pre-emption and counter-proliferation in a clearly expression of national interest. Is this also isolationism and imperialism?: Wild West anarchic global system of governance?
- The rise of nationalistic and religious fundamentalist groups, which spawned a new geopolitical terrorism. This new groups are global and depend on global infrastructure such as internet, global funding, global financial system and technology.
- Las leyes deberían proteger a la sociedad ante terroismo, pero también ante el acotamiento de derechos existentes.

## **New Social Movements**

- Based on global mobilization and values:
- 1. Peace movements and antiwar
- 2. Women against intrafamilar and external violence, right for equity
- 3. Transnational peasant organization
- 4. Indigenous movements
- 5. Religious movements
- New movements, based on values of equity of gender, race and color, pluralism, diversity and freedom
- 7. Research and scientific movements for peace and new world order

### **World Social Fora**

- New political opportunity
- Innovation against TINA and promotion of TAMA
- Intermediary step between International NGO's (INGOs) and internet anonimity
- Exlosion of social fora, termed initially antiglobalization and anti-capitalistic movements
- New agenda: ATTAC: restructuring financial networks; Via Campesina: food sovereignty; indigenous: anti-NAFTA y FTAA; social: water and its privatization
- Divides between alternatives (Other world is possible) and traditional rejectionists

### Value sets

New social movements connected to new set of values and in transnational space:

- Tolerance seen as equality in children
- Democratization: especially in Latin America, linked to issues of development, peace and women equity
- Peace and environment in Africa, linked to fight against corruption and transparency in governments
- Human Rights and abolition of torture overall
- Environmental protection: sustainable development
- Third World and community actions: in the South, fair trade in the North, solidarity campaigns

### **New Trends in Social and civil movements**

- 1. 1970-1980: cosmopolitan values associated with new social movements, overcome poverty, development: social agenda
- 2. 1990: Political openness, abolition of military regimes, democratic forms of governments and lost decade, that favored the institutional expansion of global civil society: political agenda
- 3. 2000: Value changes, which consolidate civil society, code of conduct to TNE, transparency to governments, preference for diversity, human rights, tolerance and traditional knowledge: ethical agenda

# **Characteristics of Civil Society**

- Cross-national, transnational, plural social movement related to common issues such as values, democracy, equity, equality, peace, women's, indigenous', environment sustainability, justice and political participation
- Escapes conventional political parties and led to broader mobilization worldwide
- The challenge is to obtain all basic rights. To press to obtain them, civil society may operate outside the national laws in a nonviolent active opposition until they achieve their goals.

# Crisis of peasantry: Vía Campesina

- NAFTA reconfigured traditional alliances and opposition along non-national lines
- Unequal terms of trade oblige producer to associate within product lines: coffee, pineapple and fair trade
- Zapatista upraising linked indigenous discrimination and poverty to international solidarity and agrarian crises worldwide
- Vía Campesina shows global farmer alliance between small producers in the North and the South, claims for food sovereignty, democratic land reforms, seeds "patrimony of humanity" and sustainable agriculture, fresh and artisanal food production linked to culture, rejection to WTO and TRIPS, " life is not for sale". They create new networks and as political actors organized internationally with new knowledge, solidarity and tools of struggle



