

Hans Günter Brauch, Free University Berlin & AFES-PRESS

Nonmilitary environmental security challenges for Europe and North America from the MENA region

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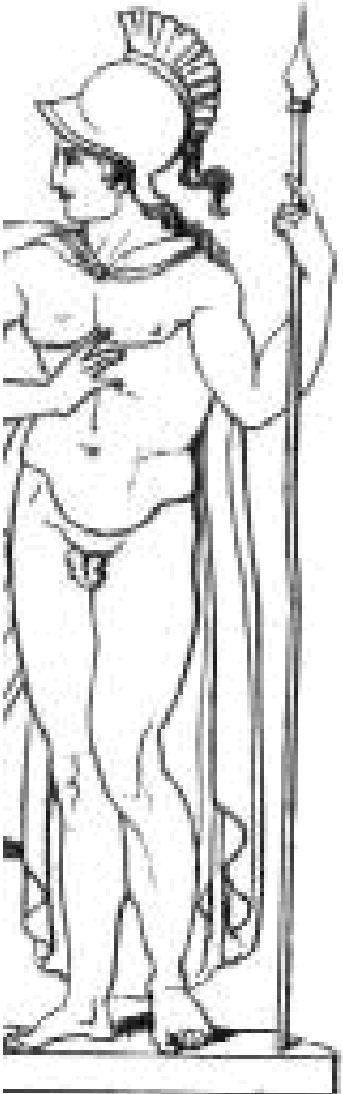
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Nonmilitary environmental security challenges for Europe and North America from the MENA region

- 1. Greek & Roman Mythology: Mars vs. Venus (R. Kagan)**
- 2. Philosophy: English School: Hobbes, Kant, Grotius**
- 3. Hobbesian vs. Kantian Perception & Agenda for the MENA Region**
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1. Robert Kagan*): Mars vs. Venus or United States vs. Europe (2003)

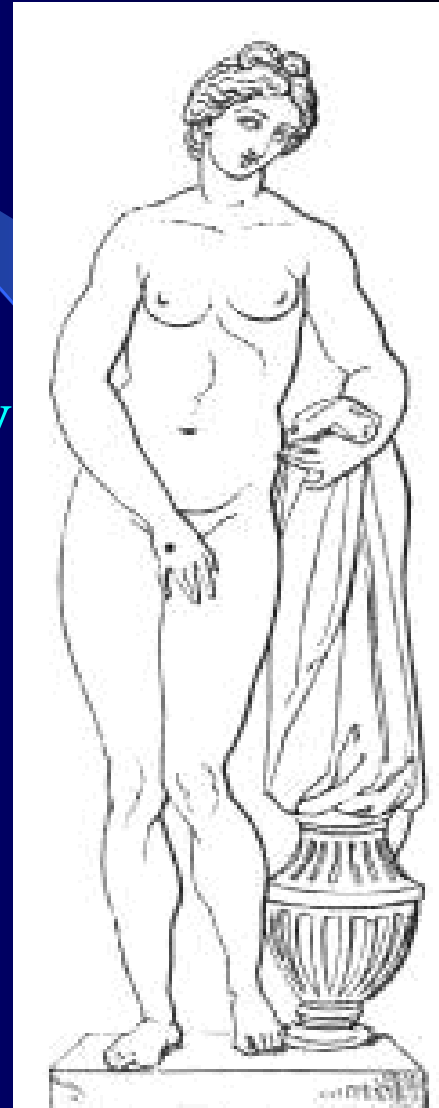


Encyclopedia Mythica
<http://www.pantheon.org/>

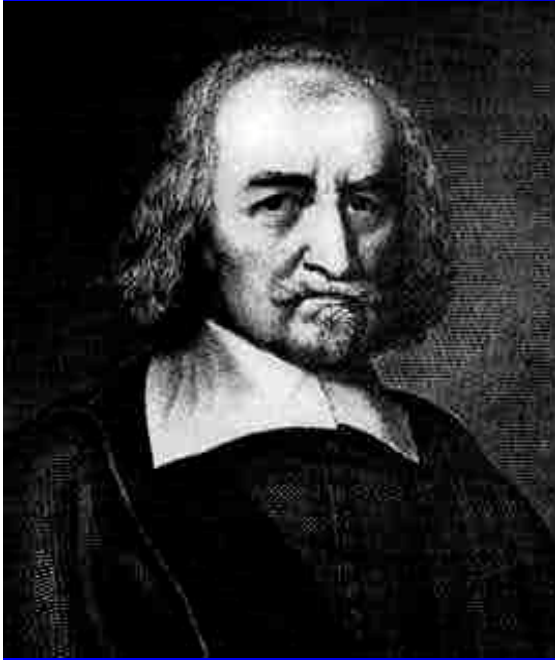
On questions of power
American and European
perspectives are diverging.
Europe lives in a world of laws,
paradise of peace & prosperity
Americans exercise power in an
anarchic Hobbesian world
where defence depends on
military might.

← Americans are from Mars
Europeans from Venus →

* **Of Paradise and Power**
(New York: Alfred A. Knopf, 2003)



2. English School: Hobbes, Grotius & Kant



Hobbes (1588-1679)

Grotius (1583-1645)

Kant (1724-1804)

Security perceptions depend on worldviews or traditions

- ❖ **Hobbesian pessimist:** *power* is the key category (narrow concept)
- ❖ **Grotian pragmatist:** *cooperation* is vital (wide security concept)
- ❖ **Kantian optimist:** *international law* and *human rights* are crucial

3. Hobbesian vs. Kantian Perception & Agenda for the MENA Region



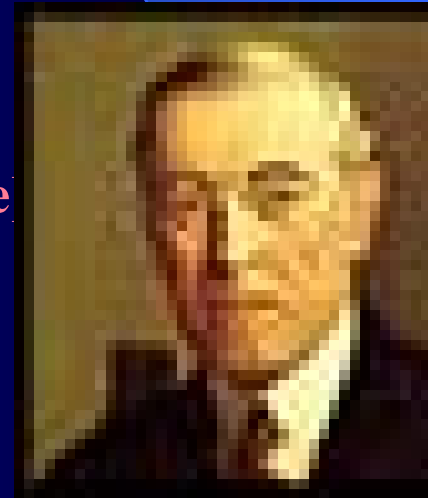
- **Hobbesian diagnosis: New threats: „rogue states“, „axis of evil“ [Iraq, Iran, Libya, Syria, N. Korea] , weapons of mass destruction & terrorists**
- **Recipe: Military build-up, missile defence, use of military power & force to achieve aims, preemption!**

Different worldviews: US & Europeans: diagnosis, recipe!

- ❖ **Kantian [Wilsonian] diagnosis: Human rights violations, nondemocratic regimes**
- ❖ **Recipe: Conditionalised economic aid, support for democratisation efforts & liberation [democracy imposed from outside]**

Hobbesian & Wilsonian symbiosis(neocons)

Both recipes have problems with the MENA [Middle East and North African region]



4. Grotian Perspective: Basis for a New Transatlantic Consensus



- **For Europeans** modern Westphalian internat. order was built on Grotian principles of international law.
- International law and multilateral cooperation in international institutions matter (EU: compromise).
- **We Europeans** pointed to other challenges to survival of humankind, ignored by the Hobbesian mindset.

- **David King: PM Blair's science adviser:** „Climate change is the most severe problem we are facing today, more serious even than the threat of terrorism“ (Independent, 9.1.2004)
- **Karl Deutsch (1960s):** Power means not having to learn! **Kagan:** Europeans lack military power – Advantage: Europeans must learn!
- **Grotians: Wider problem recognition, anticipatory learning, adaptation & mitigation, multilateral cooperation for solution!**
- **Grotian view: Basis for a new transatlantic consensus?**

5. Widening of Security Concepts

Arnold Wolfers (1962) distinguished objective vs. subjective security

„Security, in an *objective sense*, measures the **absence of threats** to acquired values, in a *subjective sense*, the **absence of fear** that such values will be attacked.“

Table: Dimensions (Sectors) & Levels of a Wide Security Concept

Security dimension ⇒ ↓ Level of interaction	Military	Political	Economic	Environmental ↓	Societal
Human individual ⇒				victim	
Societal/Community				↓↑	
National	MENA region			↓↑	
International/Regional				↓↑	
Global/Planetary ⇒				GEC	

Dutch OSCE Presidency (2003): Kiev process on environmental security focused on Balkans & Central Asia with UNDP/UNEP.

5.1. Environmental & Human Security

Table: Expanded Concepts of Security (© Bjørn Møller, 2003)

Label	Reference object	Value at risk	Source(s) of threat
National security	The State	Territ. integrity	State, substate actors
Societal security	Societal groups	Nation. identity	Nations, migrants
Human security	Individ., mankind	Survival	Nature, state, global.
Environmental sec.	Ecosystem	Sustainability	Mankind

Env. Security: Referent: Ecosystem; Value at risk is *sustainability*.

- ❖ Major challenges: *global environmental change & humankind*,
- ❖ Focus: Interactions between ecosystem & humankind, impact of global environm. change on environm. degradation, of increasing demand on environmental scarcity & environmental stress.

Human security: Referent: individuals and humankind.

- ❖ Values at risk: survival of human beings and their quality of life.
- ❖ Major source of threat: nature (*global environm. change*), globalisation, nation state with its ability to cope with dual challenge.

6. Human Security Network Members

NATO	EU	Third World
Canada		Chile
Greece	Austria	Jordan
Netherlands	Ireland	Mali
Norway	Slovenia	Thailand
	Switzerland	South Africa (observer)

The Network has an inter-regional & multiple agenda perspective, strong links to civil society & academia.

The Network emerged from landmines campaign at a Ministerial in Norway, 1999.

Conferences at Foreign Ministers level in Bergen, Norway (1999), in Lucerne, Switzerland (2000), Petra, Jordan (2001) Santiago de Chile (2002), Graz (2003), Bamako, Mali (May 2004).

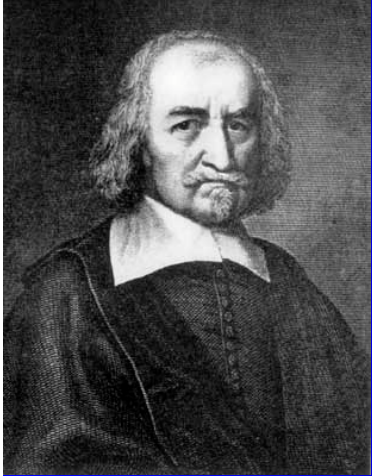
Anti-pers. Landmines, Intern. Criminal Court, protection of children in armed conflict, control of small arms & light weapons, fight against transnational organized crime, human development, human rights educat., HIV/AIDS, implement. of internat. humanitarian & human rights law, conflict prevention

6.1. Vision of the Human Security Network

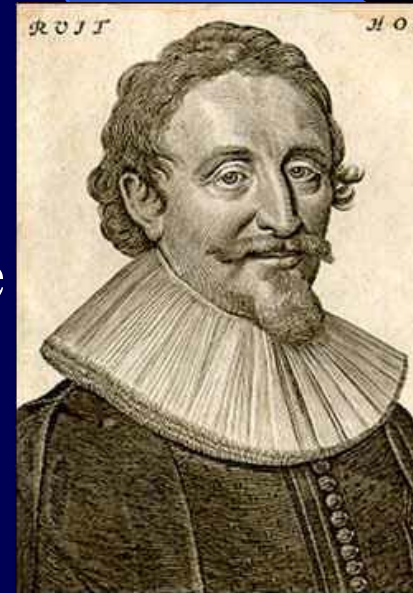
- A humane world where people can live in **security & dignity, free from poverty and despair**. ... In such a world, every individual would be guaranteed **freedom from fear and freedom from want**.... Building human security is essential to achieving this goal.
- In essence, human security means freedom from pervasive threats to people's rights, their safety or even their lives.
- Human security has become both a new measure of global security and a new agenda for global action. **Safety** is the hallmark of **freedom from fear**, while **well-being** is the target of **freedom from want**.

Human Security Commission: Human Security Now:
S.Ogata & A.Sen: „protection“ and „empowerment“.

7. Hobbesian vs. Grotian Perception & Agenda: Euro-Mediterranean



- RAND: promoted a Hobbesian policy agenda on WMD & missile defence needs in 1990s!
- Mediterranean group of Northatlantic Assembly different perceptions on the South during 1990s.



- Barcelona process (1995): European response to new challenge: increasing distress migration on the shores of Spain, France, Italy and Greece
- Response in three baskets: security, economic & cultural, environmental challenges and risks.
- But partnership with rogues is not possible!

8. Major Challenge from the South: Environmental, Economic, Political

- The major challenge from the South **is not power but poverty**, economic underdevelopment, **environmental scarcity, degradation, stress & crisis.**
- **In South:** There is a public perception of humiliation, of Northern double standards but also of a lack of public participation and democracy.
- Focus on the **environmental security dimension, i.e. on environmental challenges confronting the MENA during the 21st century (2010 - 2100).**

8.1. Model: Global Environmental Change, Environmental Stress & Fatal Outcomes

**Causes
(Hexagon)**

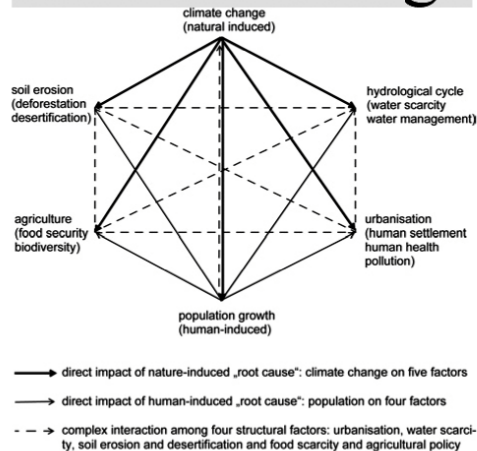
**Effect
(Interaction)**

**Environmen-
tal Stress**

**Probable
Outcomes**

↗ → → → → **Extreme Weather Events** → → → ↘

Climate change



environmental

→ **degradation**

(soil, water)

↓ ↑ →

→ **scarcity**

(water, food, housing)

global cond.



**Environ-
mental stress**



nation. cond.

disaster **conflict**
avoidance



Crisis

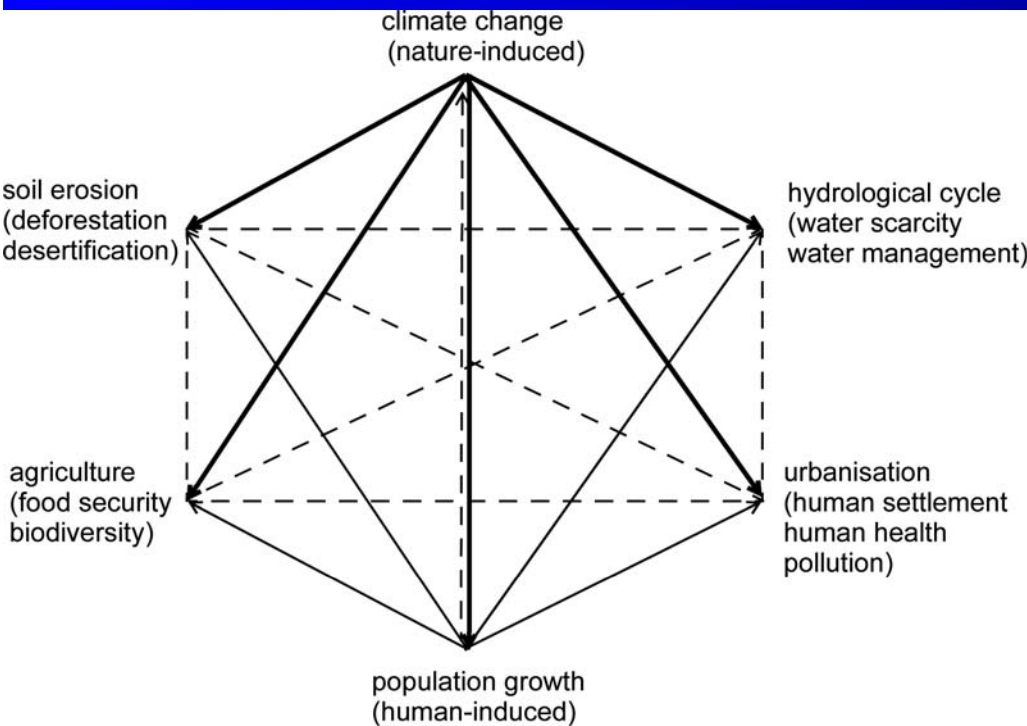


migration

conflict

9. Environmental Challenges for the Mediterranean: Survival Hexagon

Survival Hexagon: 6 key factors



—→ direct impact of nature-induced „root cause“: climate change on five factors

—→ direct impact of human-induced „root cause“: population on four factors

- - -→ complex interaction among four structural factors: urbanisation, water scarcity, soil erosion and desertification and food scarcity and agricultural policy

Environmental security in **Mediterran.** is affected by **Nature & human-induced**

- ❖ **Air:** Global climate change
- ❖ **Soil** degrad., desertification
- ❖ **Water** scarcity and hydro-logical cycle

Human-induced factors

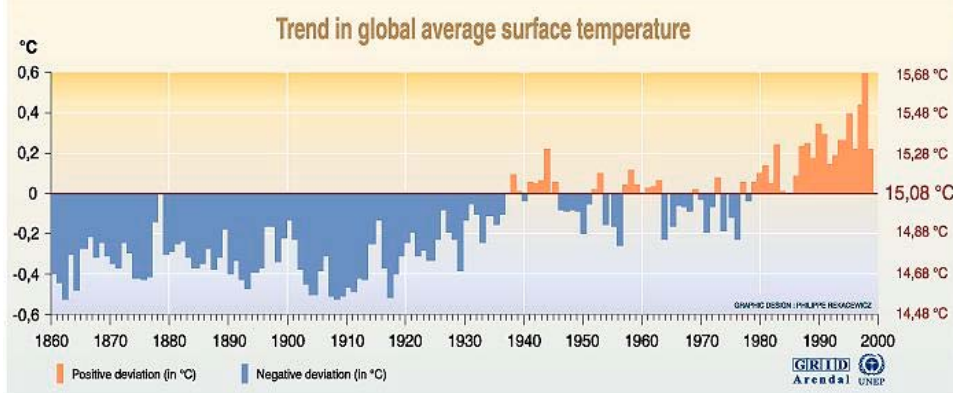
- ❖ **Population** growth
- ❖ **Urbanisation**
- ❖ **Food & Agriculture**

9.1. Global Climate Change: Temperature Increases

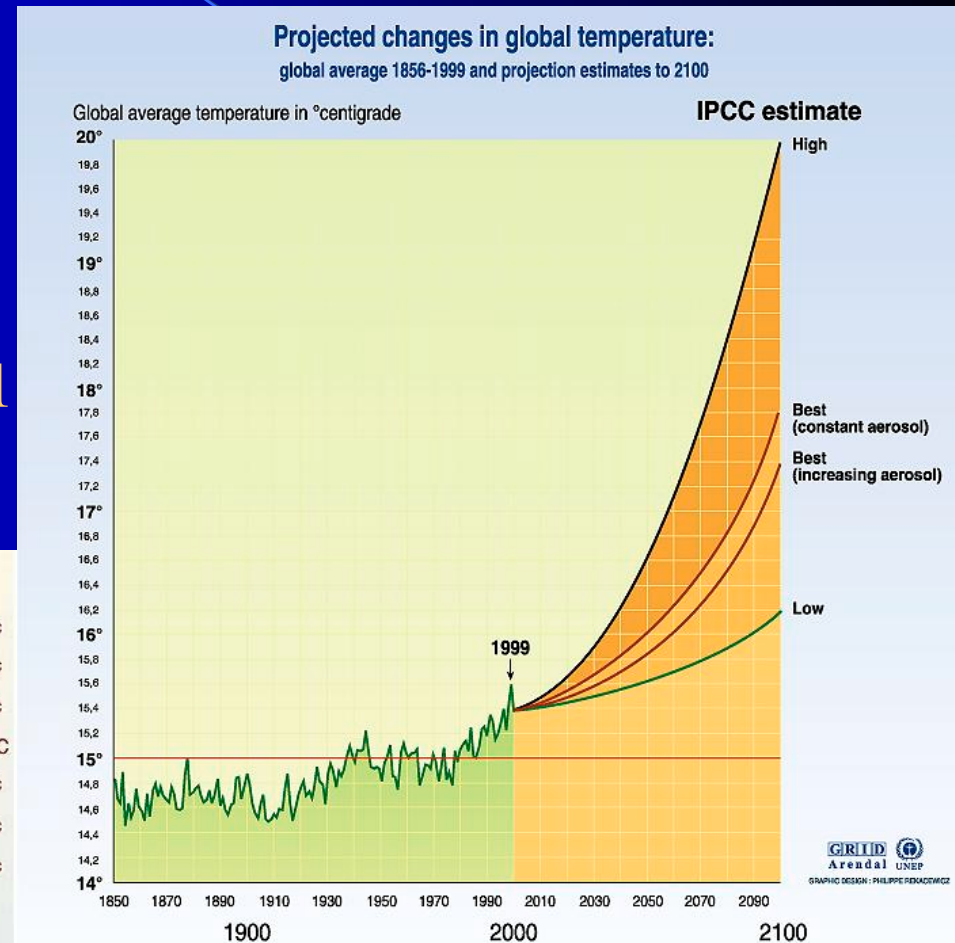
2 Climate Change Impacts: Temperature & Sea level Rise

- ❖ Global average temperature rise in 20th century: **+ 0.6°C**
- ❖ Proj. temperature rise: **1990-2100: +1.4 – 5.8°C**

Sources: IPCC 1990, 1995, 2001

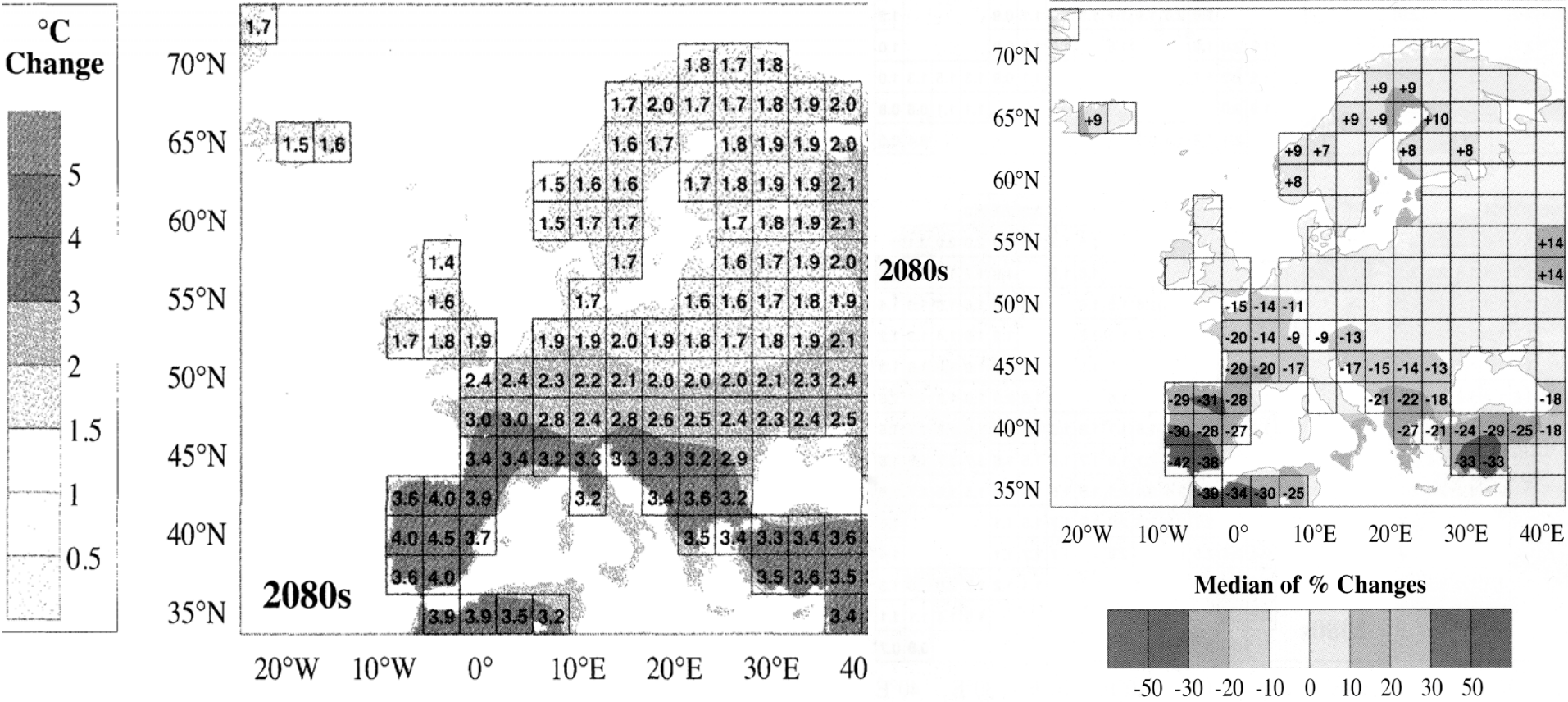


Source: School of environmental sciences, climatic research unit, university of East Anglia, Norwich, United Kingdom, 1999.



Source: Temperatures 1856 - 1999: Climatic Research Unit, University of East Anglia, Norwich UK. Projections: IPCC report 95.

9.2. Climate Change Impacts in Mediterranean



↑ Mean Temperature Change for Summer in 2080s (WG II, p. 651)
Mean Precipitation Change for Summer in 2080s (WG II, p. 652) ↑
Source: IPCC: Climate Change 2001, WG II: Impacts (p. 651-652)
No specific climate change models for South. & East. Mediterranean

9.3. Effects of Climate Change for Egypt & Nile Delta

Population: 3 800 000
Cropland (Km²): 1 800



Global Climate Change:

Sea level rise: 1860-2100

IPCC, TAR, WG 2 (2001):

Sea level rise 1860-2000: **0.1 – 0.2 m**;

Sea level rise: 1990-2100: **+ 0.09-0,88 m**

Population: 6 100 000
Cropland (Km²): 4 500



Climate Change Impacts: Egypt:

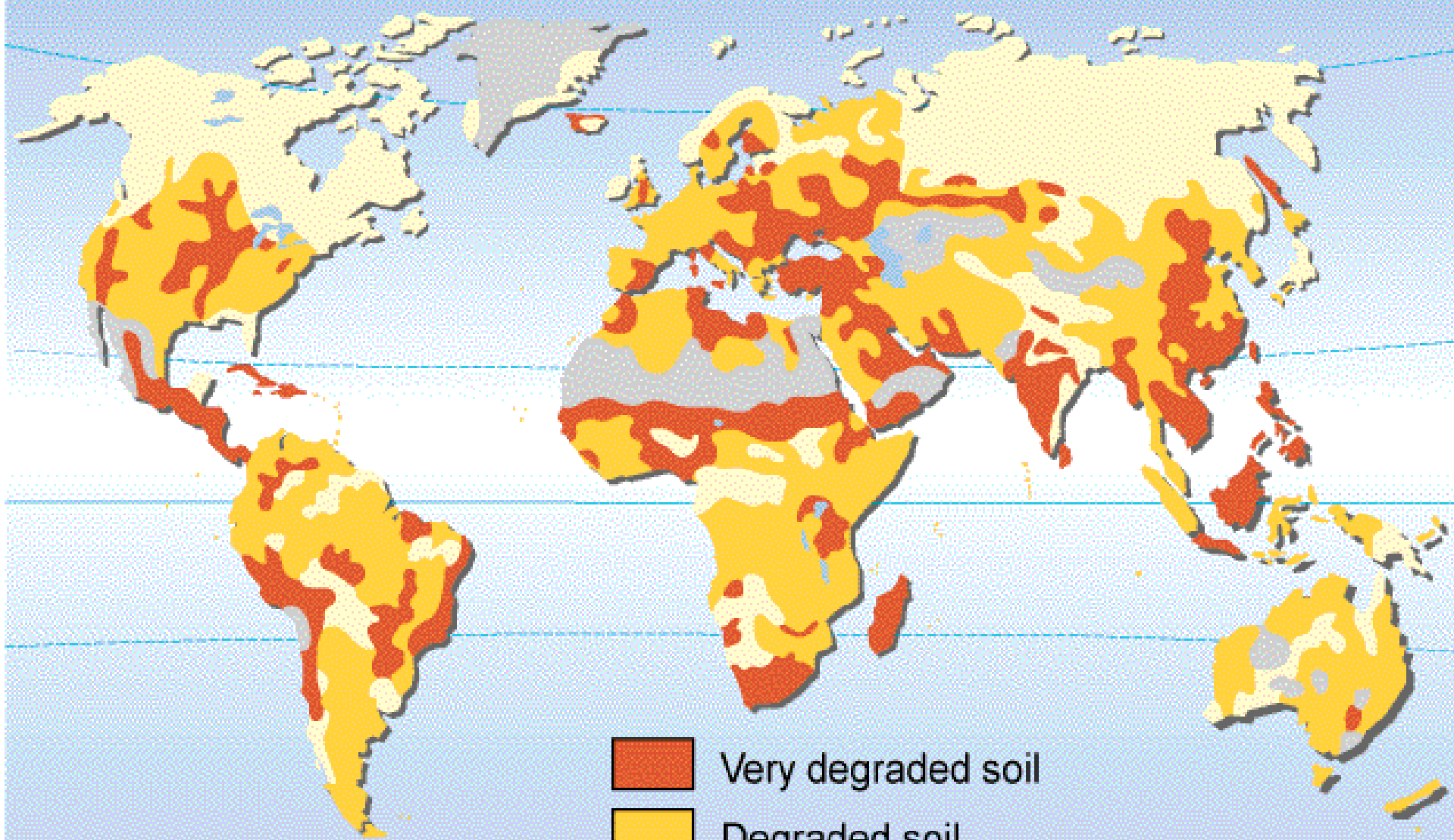
- Nil Delta: 50cm, 2 mio. persons, 214.000 jobs
- Temperature Cairo to 2060: **+ 4°C**
- SSR (cereals): 1990-2060: **60 → 10%**
- Yield decline for wheat: **2050: -18%**

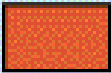

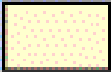
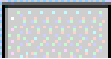
9.4. Climate Change Impacts on Precipitation

Precipitation changes: trend over land from 1900 to 1994



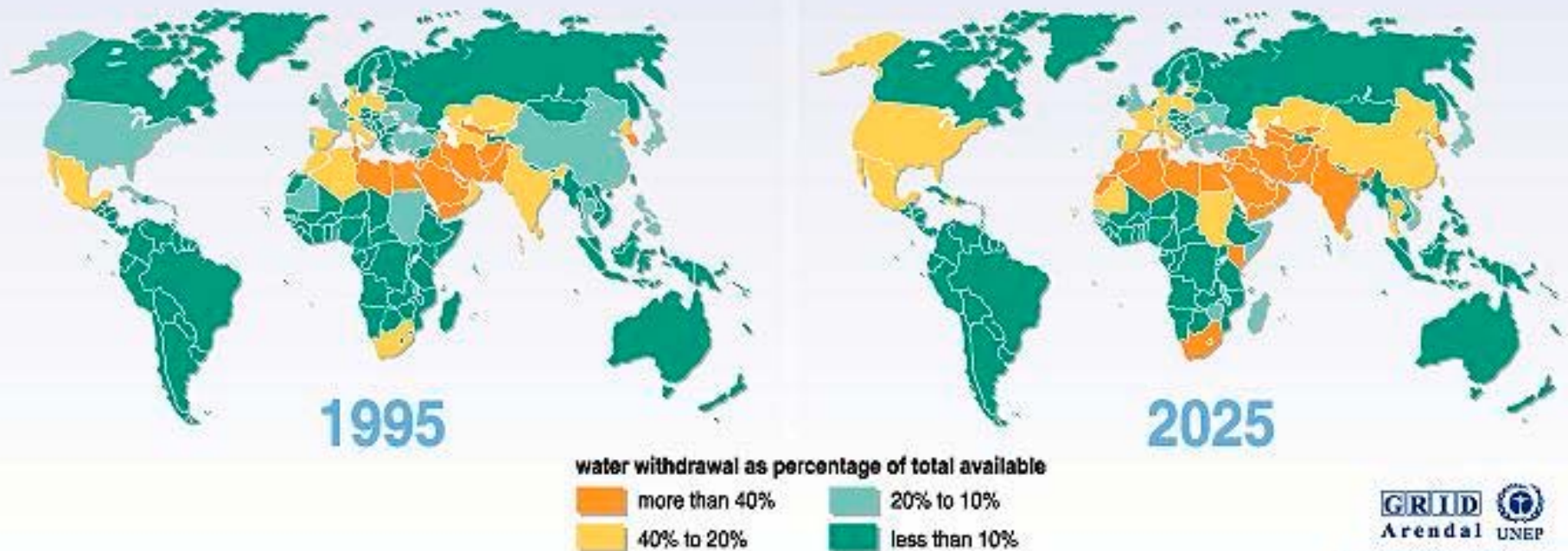
Soil degradation



-  Very degraded soil
-  Degraded soil
-  Stable soil
-  Without vegetation

9.6. Global Fresh Water Stress, 1995-2025 (UNEP)

Freshwater stress



Source: Global environment outlook 2000 (GEO), UNEP, Earthscan, London, 1999.

- The MENA Region has been and will remain the region with the highest water stress that will become even more severe due to population growth and climate change (temperature rise).

9.7. Mediterranean Population Trends

	Real population change					Proj. med. var.		Changes	
	1850	1900	1950	1980	2000	2025	2050	1950-2050	2000-2050
S. Europe (F,G,I, S, P)	83.0	103.5	132.9	167.3	177.3	172.5	154.1	21.2	-23.2
EU Cand.	0.28	0.42	0.81	0.94	1.17	1.32	1.31	0.50	0.136
Balkans Yug.&Alb.	7.75	10.3	17.6		26.34	26.32	23.99	6.43	-2.35
North Africa	13.1	22.3	44.1	91.4	142.8	199.8	239.4	195.3	96,6
Eastern Mediterr.	12.45	16.05	29.25	62.6	89.5	142.9	173.8	144.5	84.3
10 + Libya	25.55	38.35	73.35	154.0	232.3	342.7	413.2	339.9	180.9

Decline in Southern Europe, major population increase in MENA

9.8. Population Growth: Eastern Mediterranean

Table: UN Population Projection (Rev. 2000), mio.

Source: UN Populations Division: World Population Prospects. 2000 Rev.

	1850	1900	1950	2000	2025	2050	1950-2050	2000-2050
Jordan	0.25	0.3	1.24	4.91	7.19	11.71	10.47	6.80
Israel			1.26	6.04	8.49	10.07	8.81	4.03
OPT	0.35	0.5	1.01	3.19	7.15	11.82	10.82	8.63
Lebanon	0.35	0.5	1.44	3.50	4.58	5.02	3.58	1.52
Syria	1.5	1.75	3.50	16.19	27.41	36.35	32.85	20.16
Turkey	10.0	13.0	20.81	55.67	86.61	98.82	78.01	43.15
East. Med.	12.45	16.05	29.25	89.50	141.43	173.88	144.53	84.28
S. Europe	83.0	103.5	132.9	177.3		154.1	+21.2	-23.24

9.9. Urbanisation in the Eastern Mediterranean

Table: World Urbanization Prospects (Rev. 2001), % Source: UN Populations Division: World Population Prospects (2002)

	1950	1960	1980	2000	2010	2020	2030
Jordan	35.9	50.9	60.2	78.7	80.1	82.2	84.4
Israel	64.6	77.0	88.6	91.6	93.0	93.9	94.6
Palestine	37.3	44.0	61.1	66.8	70.0	73.5	76.9
Lebanon	22.7	39.6	73.7	89.7	92.1	93.1	93.9
Syria	30.6	36.8	46.7	51.4	55.4	60.6	65.6
Turkey	21.3	29.7	43.8	65.8	69.9	73.7	77.0
West Asia	26.7	35.0	51.7	64.7	67.2	69.8	72.4
Asia	17.4	20.8	26.9	37.5	43.0	48.7	54.1

9.10. Food Security in the MENA Region

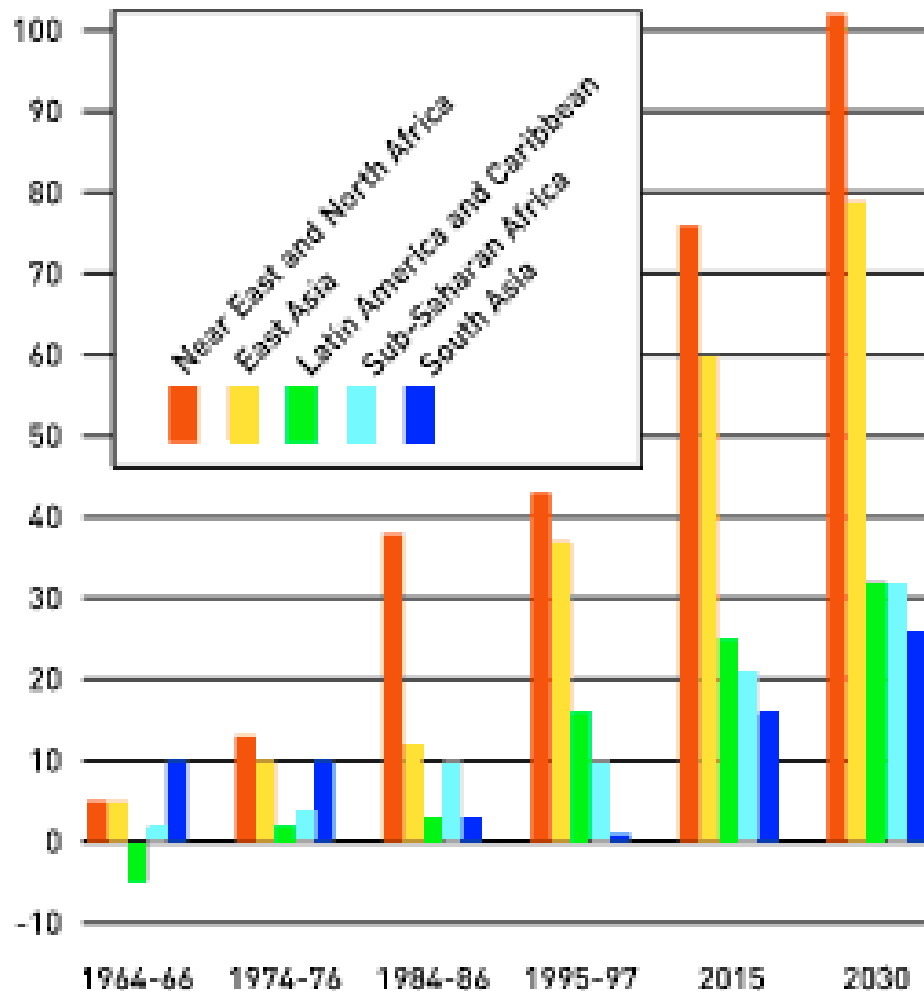
Table: Cereal balance for the MENA, all cereals (1964-2030).

19	Demand				Pro- duc- tion	Net tra- de	Self- suf- fic. rate %	Growth rates, % p.a			
	Per caput (kg)		Total (mio.tons)					Time 19... /20..	Dem and	Pro- duc- tion	Po- pula tion
	food	All uses	food	All uses							
64/66	174	292	28	47	40	-5	86	67-97	3.6	2.4	2.7
74/76	190	307	40	64	55	-13	85	77-97	3.1	2.7	2.7
84/86	203	365	56	100	65	-38	65	87-97	2.1	2.0	2.4
95/97	208	357	75	129	84	-43	65	'95- 15	2.0	1.4	1.9
2015	209	359	108	186	110	-85	56	'15- 30	1.5	1.2	1.4
2030	205	367	130	232	131	-116	54	'95-'30	1.8	1.3	1.7

9.11. FAO (2000) Increase in Cereal Imports

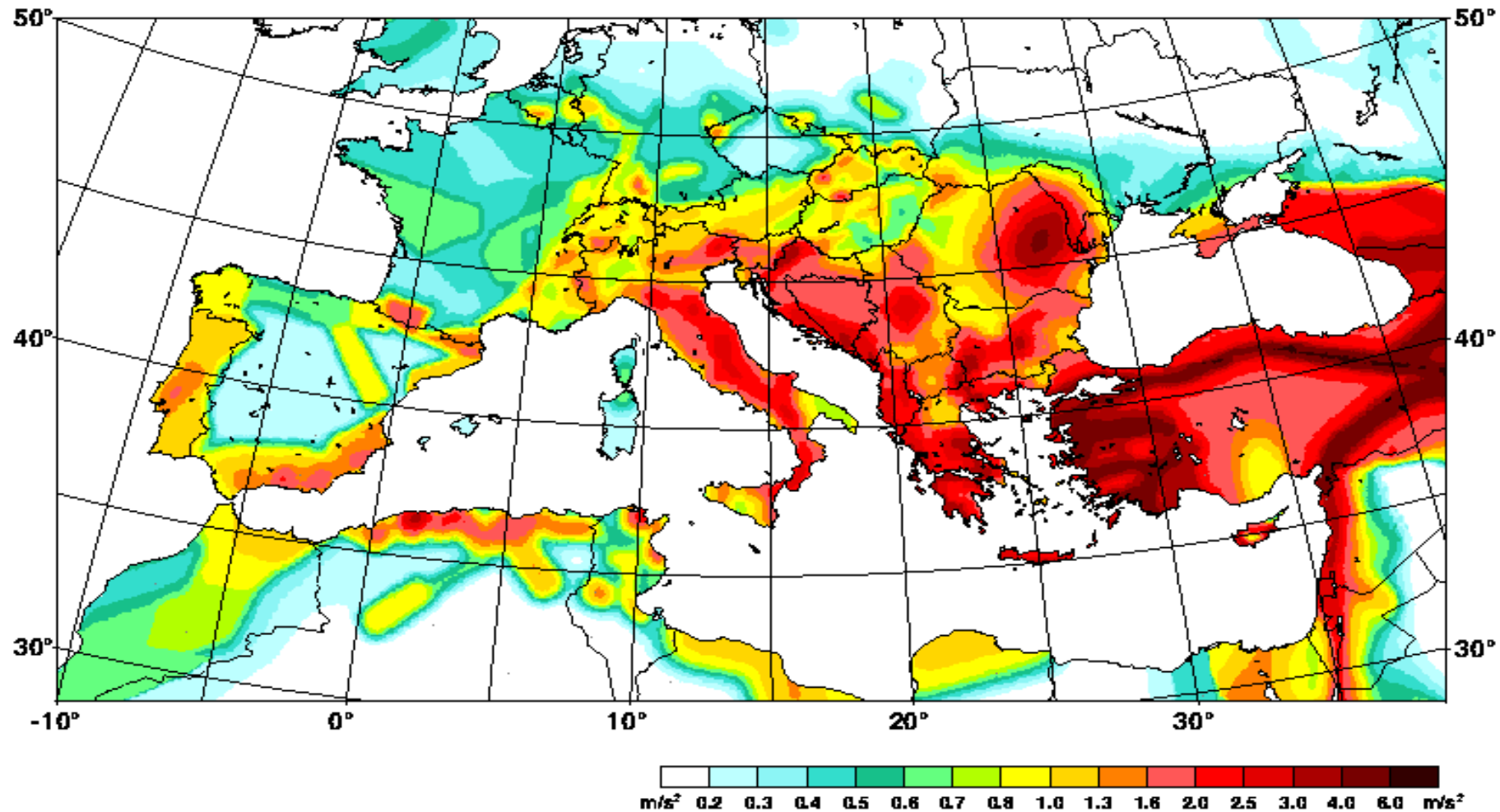
Net cereal imports in developing countries

millions of tonnes



- **FAO: 4 March 2003, Rome** World's population will be better fed by 2030, **but hundreds of millions of people in developing countries will remain chronically hungry.**
- Parts of South Asia may be in a difficult position and **much of sub-Saharan Africa** will not be significantly better off than at present in the absence of concerted action by all concerned.
- Number of hungry people is expected to decline from 800 million today to 440 million in 2030.
- **The target of the World Food Summit (1996) to reduce the number of hungry by half by 2015, will not be met by 2030.**

9.12. Fatal Outcomes: Earthquakes in the Medit.



9.13. Fatalities of Disasters in Eastern Med.

Table: Fatalities of Natural Disasters (1975-2001)

	Total			Drought		Earthquakes		Floods		Storms	
	Ev	Killed	Affect (000)	Kill.	Aff. 000	Killed	Affect (000)	Kill.	Aff. 000	Kil	Aff.
Israel	11	31	2,029	-	-	-	-	11	1	3	410
Jordan	11	47	349,0	-	330	-	-	17	18,0	11	200
Leban.	4	45	105,6	-	-	-	-	-	1,5	25	104,
OPT	1	-	943	-	-	-	-	-	-	-	-
Syria	5	115	662,2	-	658	-	-	27	172	-	-
Turkey	63	27,375	2,580	-	-	26,087	2,377	450	92,2	31	3
East M.	95	27,613	3,700	0	988	26,087	2,377	505	112,9	70	104,
Total M.	485	43,728	22,145	0	10 m	35,735	35,735	4374	2,153,	608	3,697

9.14. Vulnerability of Cities to Earthquakes

City	1950	1960	1975	1990	2000	2010	2015
Athens	1.8	2.2	2.7	3.0	3.1	3.1	3.1
Istanbul	1.08	1.74	3.60	6.54	9.45	11.84	12.49
Ankara	0.54	0.87	1.71	2.54	3.20	3.85	4.08
Izmir	0.48	0.66	1.05	1.74	2.41	3.01	3.20
Cairo	2.41	3.71	6.08	8.57	10.55	12.66	13.75
Alexandria	1.04	1.50	2.24	3.21	4.11	5.05	5.53
Tel-Aviv	0.42	0.74	1.21	1.80	2.18	2.52	2.63
Gaza	1945: 0.072	??	0.414	??	? 0.800	??	??
Amman	0.09	0.22	0.50	0.96	1.43	1.97	2.21
Beirut	0.34	0.56	1.06	1.58	2.06	2.37	2.47
Damascus	0.37	0.58	1.12	1.80	2.34	3.07	3.50
Aleppo	0.32	0.48	0.88	1.54	2.17	2.92	3.31

9.15. Migration Trends in the Mediterranean

Table: Net migration rates in the Med. (Zlotnik, 2003:599)

Region	1950-60	1960-70	1970-80	1980-90	1990-2000
	<i>Net number of migrants per year (thousands)</i>				
Mediterranean	-2,765	-4,097	-2,127	-839	369
NW Mediter.	-1,521	-761	1,079	337	2,124
NE Mediter.	-823	-1,162	-71	-162	-888
East. Medit.	576	-406	-1,295	-506	921
South. Medit.	-997	-1,769	-1,840	-508	-1,788
	<i>Net migration rate</i>				
Mediterranean	-1.1	-1.4	-0.6	-0.2	0.1
NW Mediter.	-1.2	-0.5	0.7	0.2	1.3
NE Mediter.	-2.4	-3.1	-0.2	-0.4	-2.0
East. Medit.	1.7	-0.9	-2.3	-0.7	1.0
South. Medit.	-2.0	-2.8	-2.3	-0.5	-1.4

10. Towards a Proactive: Environmental and Human Security Policy

- EU Barcelona process: framework for manifold cooperation EU and all MENA countries (no long-term focus yet!)
- NATO's Mediterranean Dialogue: important framework to involve American & Canadians (awareness, agenda-setting)
- Human Security Network: agenda-setting for humanitarian challenges (Ireland & Netherlands: EU presidency in 2004)
- Grotian multilateralism could & should become the basis for a new transatlantic consensus based on a wide human and environmental security concept & agenda.
- Environmental challenges must be early recognised, this requires joint agenda-setting and anticipatory learning and pro-active countermeasures to enhance coping capacity!
- Pro-active initiatives cheaper than reactive crisis managem.

Grotian Goals & Return of Mars to Venus



Encyclopedia Mythica
<http://www.pantheon.org/>



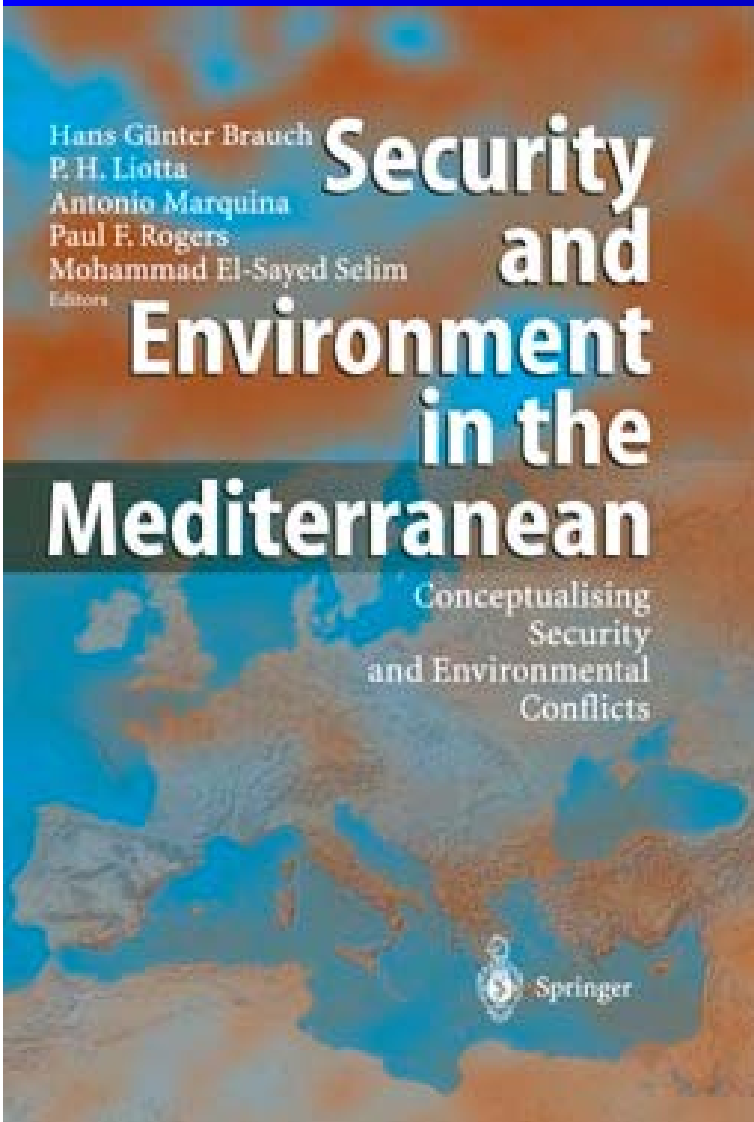
- In 21st century a Grotian worldview may again reunite Mars & Venus.
- Both cannot enjoy life alone.
- Neither can survive without the other.
- Thus, both need each other!

Thank you for your attention!

**Send your comments to:
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Sources

(http://www.afes-press.de/html/download_hgb.html)



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(http://www.afes-press.de/html/the_hague.html)