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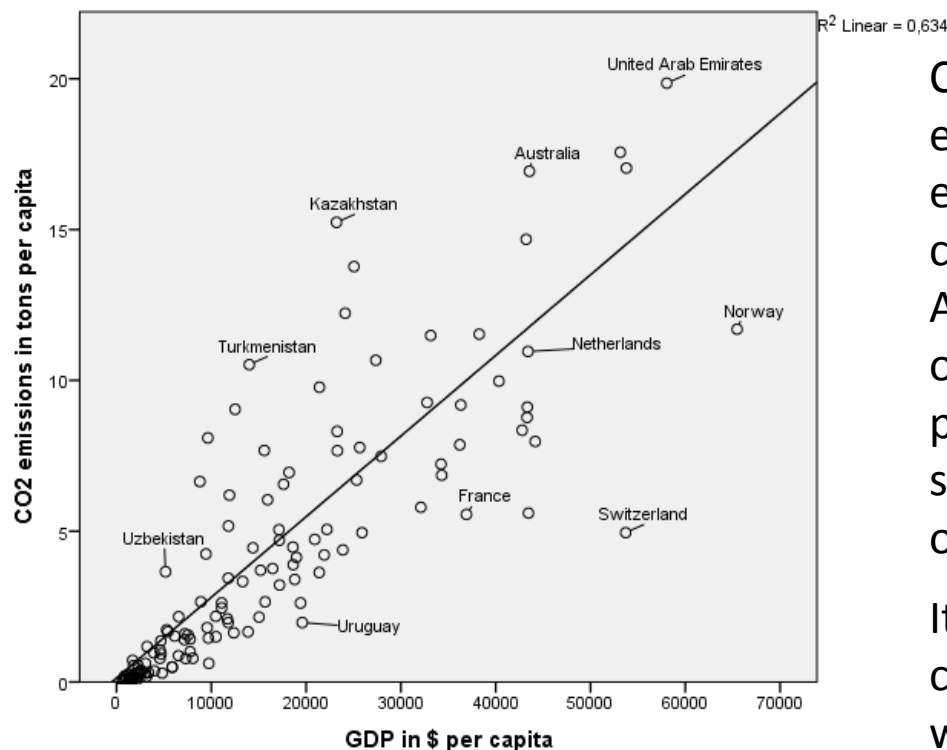
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# Mapping human prosperity: Ecological sustainability, social inclusion and the quality of life around the globe

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## Research problem

*Prosperity* is commonly conceptualised in socio-economic terms: distributive issues within growing economies in terms of GDP



Climate change, resource depletion and environmental degradation cannot be effectively addressed under conditions of continued economic growth:  
As yet **no evidence of an absolute decoupling** of material resource use and CO2 emissions in particular and GDP growth: Western welfare standards cannot be generalized to the rest of our finite planet

It is a theoretical and empirical challenge to comparatively identify potentials for 'prosperity without growth' (Jackson)

# Theorizing dimensions of prosperity:

## 1. Sustainability and the economic cycle

- In Daly's 'steady-state economy', the economy is not synonymous with a science of prices and the growth of monetary value
- Instead, a physical system where the stock of physical wealth and the population should ideally be held constant in order not to erode the environmental carrying capacity of the earth over time
- Growth is not generally abandoned but viewed as a process to be politically monitored

## 2. Social and political inclusion;

## 3. Individual wellbeing and quality of life

- Happiness and consumption research, psychology of wellbeing and philosophical approaches of the living standard and capabilities suggest that people in egalitarian and politically inclusive societies are better off and report greater amounts of wellbeing than in more unequal ones, where status competition is particularly pronounced
- Most of Nussbaum's list of 10 central human capabilities require few, if any, material resources, allowing for a surplus in prosperity for one person / generation while leaving room for others

## Researching prosperity

- In a global degrowth perspective, prosperity will need to grow on some dimensions and in some parts of the world, while it would need to shrink in others. On which dimensions and where exactly?
- Economic development should aim at improving living conditions. Can other aspects of living conditions be improved with less ecological damages? What are these other aspects?
- Knowledge on the degrees to which existing societies promote 'prosperity without growth' may facilitate institutional learning processes
- Which are the contemporary 'regimes of prosperity'? Which are the potentials and policy challenges that these regimes and countries face?

# Dimensions of human prosperity and how they are measured

Dimensions	Concepts	Indicators
<i>Ecological sustainability</i>	climate change	CO2 emissions
	human appropriation of ecosystems	Ecological footprints of consumption and production
<i>Social inclusion</i>	social <i>equity</i> : distribution of incomes	Gini Index
	social <i>cohesion</i> : crime	Homicide rates
	Civic <i>participation</i> : functioning democracy	Democracy Index
	political rights and civil liberties	Freedom in the World Index
<i>Quality of life</i>	objective living conditions	Life expectancy, Literacy
	subjective satisfaction	Wellbeing
<i>Economic development</i>	level of material living standard	GDP per Capita, ppp
	dynamic of economy	GDP growth
	labour market situation	Unemployment

## Analysis

Using these prosperity indicators for 138 countries we ran statistical analyses to classify similar countries into “prosperity regimes”

Hierarchical cluster analysis

With squared Eukclidean distances as measure of similarity

And the Ward criterion for merging countries in clusters

## Results

Cluster 1: LDCs		Cluster 2: free, developing countries	Cluster 3: authoritarian, developing countries	Cluster 4: rich and unsustainable	Cluster 5: degrowing crisis states	Cluster 6: free and lucky but massive lack of cohesion	Cluster 7: superrich states
Afghanistan	Madagascar	Albania	Algeria	Australia	Bosn. & Herz.	Botswana	Kuwait
Angola	Malawi	Argentina	Azerbaijan	Austria	Bulgaria	Brazil	Qatar
Bangladesh	Mali	Armenia	Belarus	Belgium	Croatia	Colombia	Saudi Arabia
Benin	Mozambique	Bolivia	China	Canada	Greece	El Salvador	Singapore
Burkina Faso	Myanmar	Chile	Cuba	Czech Republic	Hungary	Guatemala	Trinidad and Tobago
Burundi	Nepal	Costa Rica	Egypt	Denmark	Latvia	Honduras	U.A. Emirates
Cambodia	Niger	Dominican Rep.	Iran	Estonia	Lithuania	Jamaica	
Cameroon	Nigeria	Ecuador	Iraq	Finland	Macedonia	Mexico	
Central African Rep.	Pakistan	Georgia	Jordan	France	Portugal	Namibia	
Chad	Rwanda	Guyana	Kazakhstan	Germany	Romania	South Africa	
Congo, Rep.	Senegal	Indonesia	Kyrgyz Republic	Ireland	Spain	Venezuela	
Cote d'Ivoire	Sierra Leone	Lebanon	Libya	Israel	Ukraine		
Ethiopia	Sri Lanka	Malaysia	Mauritania	Italy			
Ghana	Tanzania	Mauritius	Morocco	Japan			
Guinea	Togo	Moldova	Russia	South Korea			
Haiti	Uganda	Mongolia	Sudan	Netherlands			
India	Zambia	Nicaragua	Tajikistan	New Zealand			
Kenya	Zimbabwe	Panama	Tunisia	Norway			
Lao PDR		Paraguay	Turkmenistan	Poland			
Liberia		Peru	Uzbekistan	Slovak Rep.			
		Philippines	Vietnam	Slovenia			
		Thailand	Yemen, Rep.	Sweden			
		Turkey		Switzerland			
		Uruguay		United Kingdom			
				United States			



## Results

Country clusters	CO2 emissions in tons per capita	Ecological footprint of production in gha per capita	Ecological footprint of consumption in gha per capita	GINI	Homicides	Democracy	Freedom House Index	Life Expectancy	Literacy	Well-being	GDP in \$ per capita	growth	Unemployment
1	0,3	1,1	1,3	41,1	8,6	4,2	2,6	59,3	59,5	4,3	2641,2	5,5	5,4
2	2,6	2,6	2,6	43,5	7,8	6,4	4,3	73,8	94,0	5,6	12469,7	4,5	8,1
3	4,7	2,1	2,2	35,8	4,8	3,1	1,3	70,4	87,5	5,0	11816,9	4,9	10,6
4	9,7	6,2	5,8	30,0	1,3	8,4	5,9	80,6	99,1	6,9	38835,4	0,7	7,5
5	5,5	3,6	4,2	34,4	2,4	7,0	5,0	76,2	98,8	5,0	19733,0	-0,7	17,2
6	3,0	2,4	2,3	54,5	37,1	6,6	4,0	68,8	89,1	6,0	11678,6	2,4	10,8
7	24,9	6,7	6,8	40,8	5,6	4,1	2,1	76,2	94,1	6,7	73070,3	4,5	3,4

The least developed countries:  
small economies, low environmental impact, but also low quality of life and low social inclusion

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The superrich states:

Extrem high GDP, huge environmental impact, also low social inclusion (even less political freedom than in LDCs) but relatively good quality of life

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Degrowth „by disaster“: The crisis-ridden states despite negative growth and high unemployment, moderate quality of life and high social inclusion but still huge ecological damages

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The rich countries:

High material standard of living, best quality of life and highest social inclusion but no ecological sustainability!

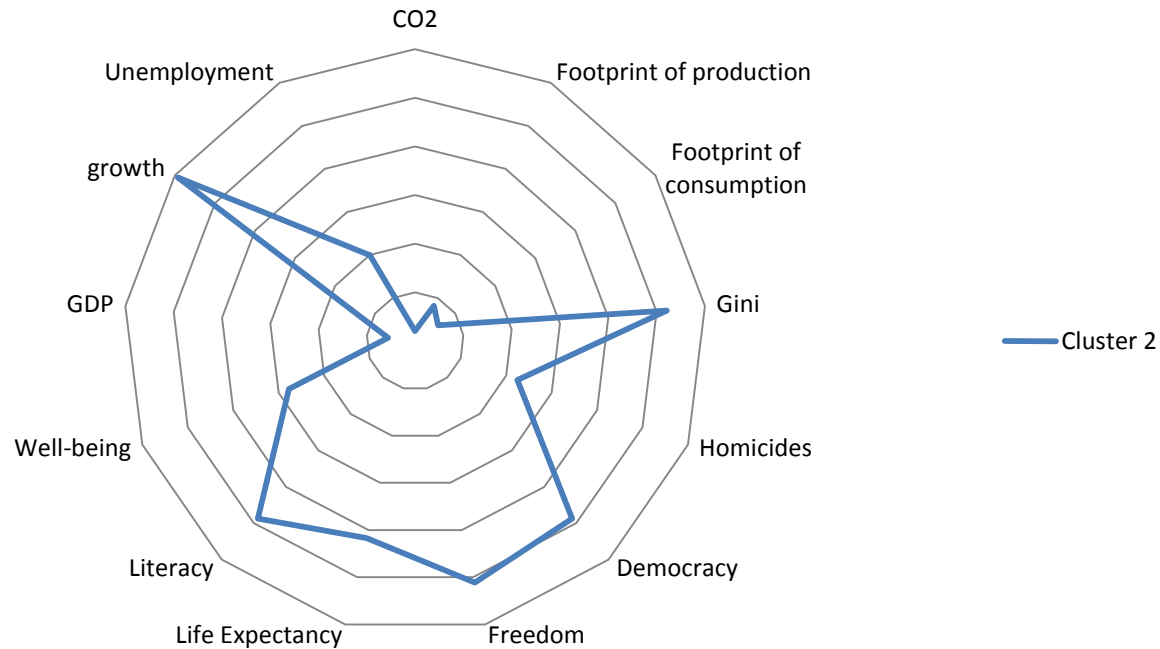
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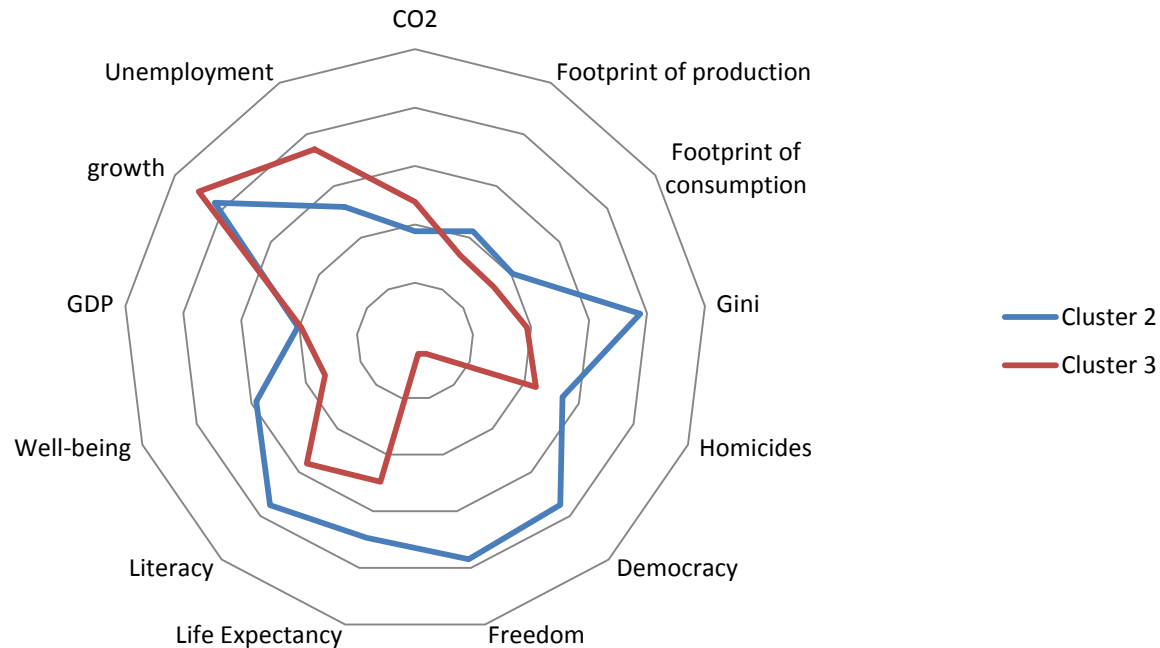
Three remaining clusters:

similar economic development but differences in other dimensions of human prosperity

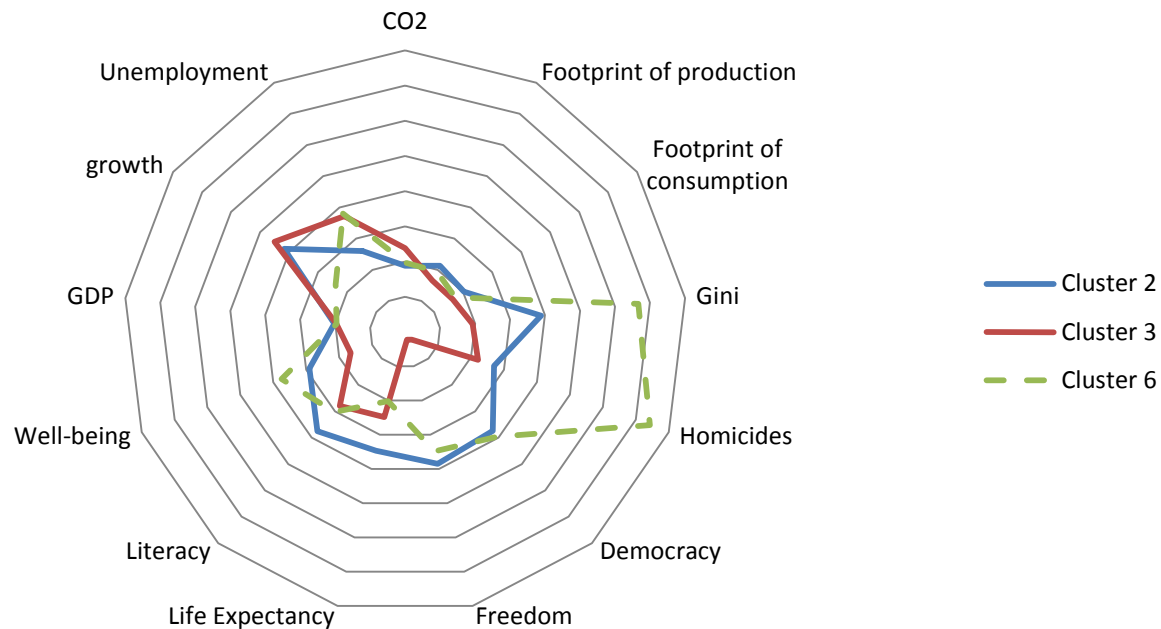
→ take a closer look and compare details...



Cluster 2: Developing countries with political freedoms, very low ecological damages, suffering from inequality

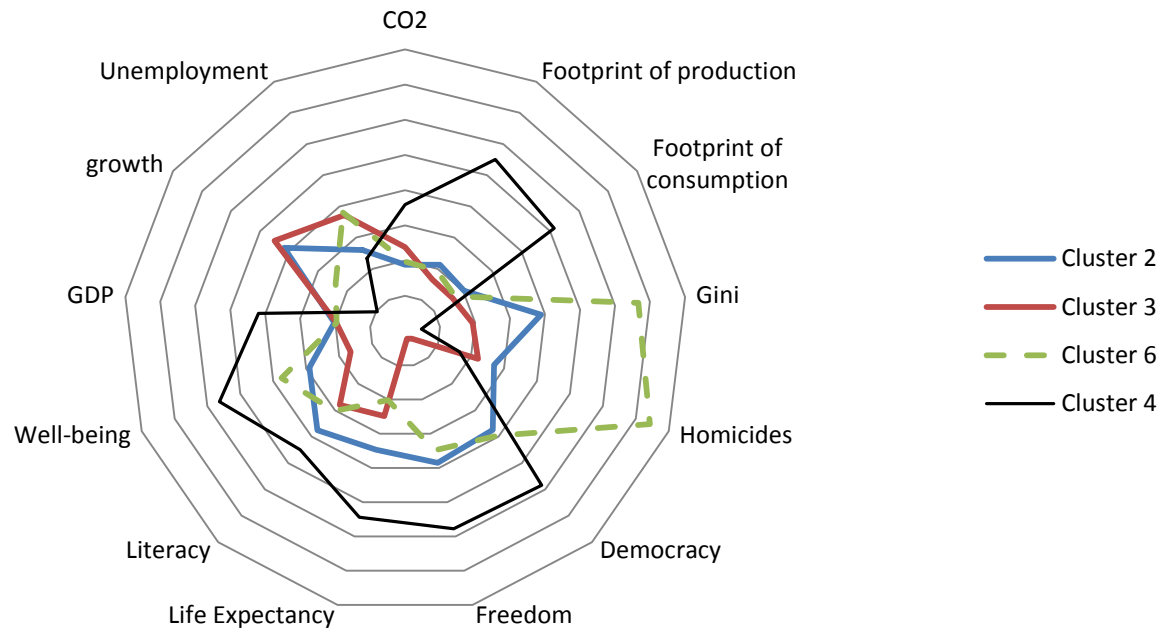


Cluster 3: developing countries lacking political freedoms (authoritarian regimes), also low ecological damages (but emitting more CO2), lower quality of life



Cluster 6: developing countries with political freedoms, very low ecological damages, suffering from serious social problems and a lower objective QoL (although: people are more satisfied...)





Just for comparison: cluster 4, 'us' the rich and unsustainable countries

## Conclusion: Different prosperity potentials and policy challenges for different world regions

Prosperity regimes / clusters	Potentials	Policy challenges
1. Least developed countries	Small environmental impact	Enhance objective and subjective quality of life, political participation and social inclusion
2. Developing countries with established political rights	Small environmental impact, medium objective and subjective quality of life, medium possibilities for political participation	Enhance social inclusion, further improve quality of life and political participation
3. Developing countries lacking political freedoms	Medium environmental impact, high social inclusion	Enhance political participation and the quality of life

Prosperity regimes / clusters	Potentials	Policy challenges
4. Rich OECD countries	High material standard of living, social inclusion and quality of life	Enhance sustainability without undermining quality of life and social inclusion
5. Crisis-ridden EU states	Despite degrowth „by disaster“: comparatively high social inclusion and quality of life	Transition to degrowth „by design“: redistribute work and wealth and respect ecological limits
6. Developing countries with political participation and huge social problems	low ecological damages, good subjective quality of life and political participation	Enhance social inclusion and objective quality of life
7. The „superrich“	Highest material standard of living, good quality of life	Degrow economically, enhance social inclusion, political participation and ecological sustainability