

In the course of this century the world population will increase to ten billion and reach its highest number, that after a demographic change is expected and the population will either stabilize or decrease. This is suggested by sinking birth rates in most countries of the world.

Our goal must therefore be to create the conditions that make a **happy life possible for 10 billion persons**, which means that the basic needs are satisfied and that there are enough resources for the realization of individual potentials and talents.

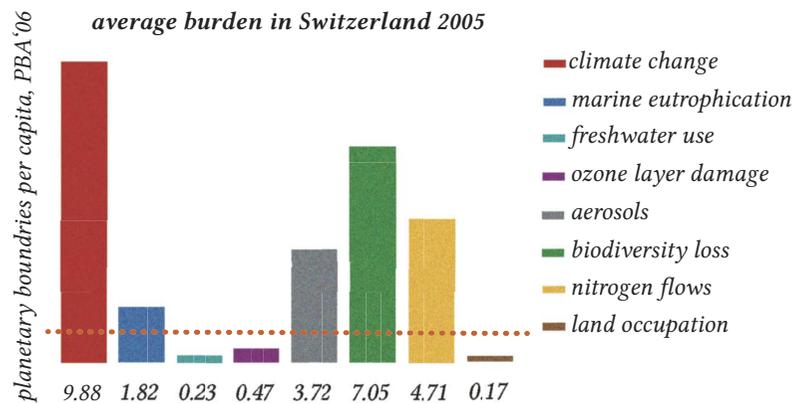
Limits and challenges

In order to define a lifestyle for all the ten billion humans the following aspects must be considered:

- ecological limits
- economic limits
- individual development and social comfort

Ecological limits

Recent research suggests that our current lifestyle transcends the planetary boundaries in at least five categories of environmental damage (according to the Stockholm Resilience Centre).



The dotted line represents the planetary ecological limits. The most critical categories are climate change and loss of species.

As the creation of functional neighborhoods in rich countries can easily be financed within the usual investment fund, we'd only need extra funds (i.e. the resources provided by them) for the poorest 30 %, 2.5 billion persons, or 27 trillion dollars. Spread over a period of 20 years, this means 1.35 trillion per year, which seems feasible.

- In the year 1972 the rich countries agreed to contribute 0,7 % of their GDP to development aid, which they never did. 0.7 % of the global GDP is 560 billion dollars.
- In the year 2016 the global expenditures for the military forces equated 1.686 trillion dollars.
- The Iraq-war cost 3 trillion dollars.
- In 2015 development aid was 131.59 billion dollars.
- According to World Bank estimates, remittances totaled 585.1 billion dollars in 2016, of which 442 billion went to developing countries.
- In the year 2006 the net reflux from the planetary south to the north was 658 billion dollars.
- A worldwide Tobin-tax of 0.01 % on financial transactions would yield about 125 billion dollars.
- At least 18.5 trillion dollars is stowed away by wealthy individuals, representing an annual tax loss of more than 156 billion dollars worldwide.
- At present there are more than 2000 billionaires living in 20 countries. An annual wealth tax levied at just 1.5 % of their net worth would raise 74 dollars billion each year.

The fact that we, the 99 per cent, own only half of the global assets may sound scandalous, but it can also be seen positively: since we own half of the assets it's about time that we did something useful with them. We do not need to expropriate or tax the billionaires in order to finance our transformational plan. Some of the 99 % actually receive decent wages and could well afford to contribute to the financing.

Take Switzerland as an example: 1.35 trillion correspond to 9.045 billion (francs or dollars), proportionally to the 0.67 % that Switzerland contributes to the global GDP. The Swiss workers earning 400 billion per year, this would result in 2.26 %, or 142 francs of the median monthly wage of 6300 francs. Not too much to save the world, really!

Initiatives to implement the proposal can be started on all levels/modules at the same time.

Growth is a systemic necessity of the current economic system but overstretches the ecological capacities of the planet. A sustainable economy cannot be based on growth. Its material impact should be shrinking, and shrinking fast.

Digitization and automation will reduce paid jobs to 50% compared with the current level, which could mean good news if our incomes did not depend on jobs. Production approaching zero marginal cost indicates the collapse of a price-wage determined market economy. Vital, but unpaid work (60%, mainly in households, agriculture and care) needs a suitable social framework to be useful to those who perform it.

Inequality is rising globally and creating huge risks for democracy. Quantitative easing and cheap money from the central banks maintain a precarious equilibrium.

Is there a plan B, when the bubble finally bursts?

A really viable economy is defined by ecological and social goals, based on common resources and common needs. It makes sure that everybody benefits from technological advances. It is determined by the democratic will of its members, organized in functional territorial modules. A rational household economy is based on the following principles:

- Everybody contributes what they can, everybody gets what they need.
- Sharing and distributing instead of trading and marketing.
- Cooperation instead of competition.

Such an economy calls for new forms and sets of rules.

Self-governed regulation (democracy) can function according to the following rules (Elinor Ostrom):

1. Define clear group boundaries.
2. Match rules governing the use of common goods to local needs and conditions.
3. Ensure that those affected by the rules can participate in modifying the rules.
4. Make sure the rules set up by community members are respected by outside authorities.
5. Develop a system, carried out by community members, for monitoring members' behavior.
6. Impose graduated sanctions for rule violators.

<i>Module</i>	<i>Public services</i>	<i>Cooperative/private</i>	<i>Household/food</i>
Planet (glomo5)	Fuels, minerals, energy, weapons, seed banks, pharmaceuticals, medical technology, machines, vehicles, airplanes, globonet, research+development, emergency aid, bank	Software, music, film, art, spirits, wine, luxury goods, haute couture, literature, toys, salts, cosmetic products	coffee, tea, cocoa, tobacco, nuts, beans
Territory (glomo4)	Energy, trains, boats, medicines, medical technology, industries, engines, research, bank, universities, glass, paper, paints, cooperatory, water, emergency funds, media, army, police/courts	Wine, circus, spirits, sausages, cheese, algorithms, watches, clothes, chocolate, matches, knives, spices, bicycles, coffee machines, music, opera, grand hotels	Salt, oils, preserves, beer, wine, sugar, seeds, agrocenters
Region/ big city (glomo3)	Energy, water, public transportation, streets, hospital, theatre, building materials, light industries, bank, textiles, museums, education, stadiums, police/court, sports facilities, cooperatory	Fashion designers, restaurants, cinemas, bars, cabarets, theatres, galleries, cigars, shoes, bags, cutlery, ceramics, furniture, hair stylists, hotels, cosmetic products	Agrocenters, dairy products, fish, sausages, honey, fibers, chocolate
Borough/ small town (glomo2)	Energy, water, public transportation, primary and high school, vocational college, kindergarten, health center, ABC, police, cooperatory, makersplace, cemetery, libraries,	Clothes, hats, accessories, restaurants, bars, cinemas, computers, lawyers, jewelers, furniture, books, hair dressers, small hotels	Globonex (fair trade store), beer, wine, vegetable gardens, herbs, berries, chickens, flowers, pigs, bees
Neighborhood (glomo1)		Workshops, bars, yoga	Food processing, microcenter, housing, laundry, furniture, tools, repairs, building maintenance, simple care, intranet, library

To achieve these new ways of life, manifold forms of housing, for singles, couples, families and communities of all sorts must be available as well as adaptable to changing personal conditions so that nobody is forced to leave their neighborhood and to lose their friends.

And above all: democracy makes happy.

5 universal functional territorial modules (glomos)

To face the present ecological, economic and psycho-social challenges, we propose to organize the 3,5 billion households of the planet by means of these five global modules (glomo):

1. 16 million neighborhoods (glomo 1)
2. 400'000 boroughs or small towns (glomo 2)
3. 4000 big cities and regions (glomo 3)
4. 800 territories (glomo 4)
5. 1 planet (glomo 5)

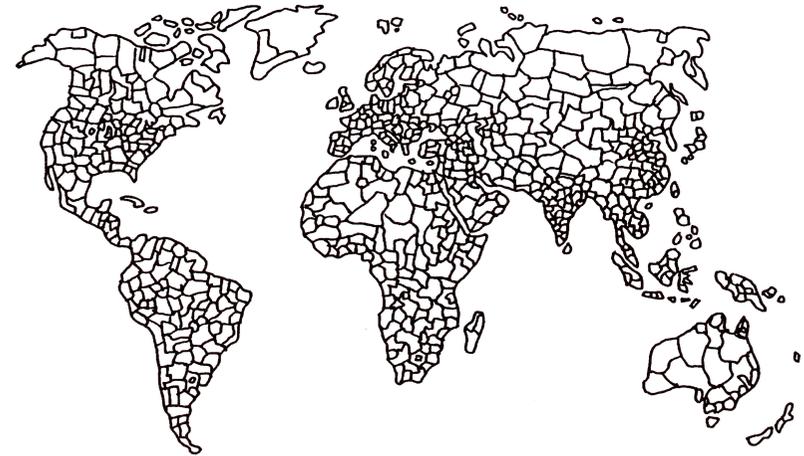
Comparable forms and sizes of organization are essential for global equality and for fair exchange. The global household requires universal modules with clear boundaries and rules.

The modules are purely functional, no specific lifestyle or cultural identity is implied. They form spheres of subsidiarity, i.e. larger modules kick in, where smaller ones are in trouble. Any function should be performed on the lowest or closest possible level (relocalization). Autonomously run digital servers and networks can be helpful.

1. Ecologically and socially integrated neighborhoods (glomo1)

The following features are characteristic of them:

- life-style within the PBA (Planetary Boundaries Allowances, see above)
- 500 persons, approximate demographic mix
- democratically structured (cooperative, association)
- compact buildings in an urban context (short distances)
- link to a nearby agricultural basis of 60 to 80 ha
- internal household and care economy
- microcenter
- broad choice of housing: single rooms, family flats, co-housing; respect of privacy



A world of territories might look such as this (borders are random).

stations, dams), train networks, advanced research and study facilities, justice/police, banks, security (army), construction, pharmaceutical and other vital industries. They are big enough to create resilience, to guarantee emergency interventions and to serve as pools of social solidarity for individuals, neighborhoods and the other modules. As autonomous macroeconomic units they manage their own currencies, central banks, borders (socio-osmotic membranes), and establish ecological and social regulations.

Most places in a territory can be reached by train within two hours, which makes everyday synergies and communication efficient. Their size is suitable for transparent democratic processes and institutions.

Being large enough for a certain material autonomy and smaller than the big old nations, they diffuse political power disparities and are the basis of globally balanced institutions of cooperation.

Territories can ally themselves with other territories in bilateral or multilateral partnerships and federations (such as CERN, continental train networks, power grids, industrial components, medical products).

product	processed	person/ week	500 pers./wk.	per year	surface	pasture
vegetables		3 kg	1500 kg	75 t	4 ha	
potatoes		0.8 kg	400 kg	20 t	2 ha	
cereals	flour, flakes, semolina, pasta	1 kg bread = 700 g flour	350 kg 50 kg 50 kg 150 kg	35 t	10 ha	
legumes, soya, lentils	tofu		20 kg	1 t	1 ha	
oil seed pumpkin, linseed, sunflowers	kernels oil		20 kg 20 l	1 t 1000 l	2 ha	
fruits, berries	juice, jam, compote, dried fruit	1.5 kg	750 kg	39 t	2 ha	
milk	yoghurt cheese butter	0.5 l = 0.5 l 0.5 kg = 0.5 l 0.3 kg = 3 l 0.1 kg = 3 l	250 l 250 l 1500 l 1500 l	30-40 cows 182'000 l	10 ha	15 ha
eggs		2-3	1250	65'000 260 hens	2 ha	
meat	beef, veal, pork, mutton, sausages	0.3 kg	150 kg	7.5 t (15 kg per person/ year	pasture, cattle 3 ha legumes for pigs 1 ha	9 ha 1 ha
total					37 ha	62 ha
animal					16 ha	41 ha
plant					21 ha	21 ha

(If only 7.5 kg of meat per person and year are consumed, the necessary surface is reduced to 56 ha. A part of the meat production is linked to dairy production. The amount of dairy products shown in this table does not correspond to the ecological menu example above.)

3. Regions and big cities (glom3)

Living and working together in big cities forms the core of a sustainable and enjoyable life style on this planet. Inhabitants of dense inner cities live longer, healthier and happier lives than inhabitants of suburbs. Big cities are ecologically efficient and offer access to the scientific and cultural resources of the planet. A typical big city has around 500,000 inhabitants, situated in a metropolitan area of another 1 million, and offers services and resources for a region (6000 to 10,000 km²) that correspond to the requirements and potentials of this area. With a density comparable to Paris, most places can be reached on foot in half an hour or by bus in 10 minutes. The big cities typically offer the following public services:

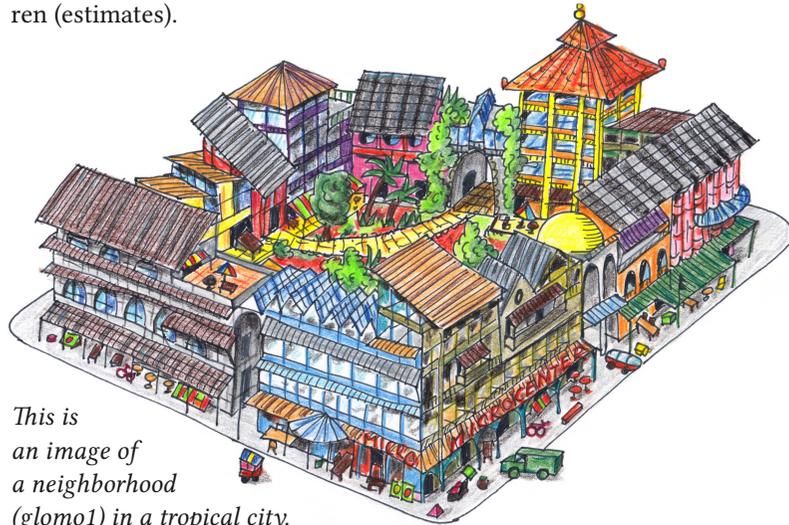
- university
- hospital
- energy
- water
- bank
- public means of transportation (bus, train)
- regional court and administration
- theater/opera
- sports facilities
- essential industries
- platform for cooperative enterprises (cooperatory)
- **metrofoyer** (a generous meeting space for guests, social initiatives and organizations, and participatory processes of all sorts)

Services with frequent provider-client contacts are clustered in the city center. Adjacent to this center other cooperative or private enterprises such as gourmet restaurants, cabarets, fashion stores, luxury shops, bars, cinemas, lawyers, cosmetic surgeons, and electronics shops can contribute to the quality of life. The region integrates town and country, connected by public means of transport. Most places are accessible within half an hour by bus, train and tram, or within an hour by bicycle. Regions manage their natural environment, such as rivers, lakes, coasts, forests and moors. In scarcely populated areas with no large cities, public service centers would evolve in an appropriate geographic location without dense urban settlements.

In Switzerland 7,9 billion hours of paid work, and 9 billion hours of unpaid work, mainly household and care work, are performed per year. Calculated over an average lifetime (incl. sleep), paid work amounts to no more than 12%.

Currently paid work amounts to 22 hours/person/week, unpaid work to 24 hours, altogether 46 hours (65, in households with children).

Living in a glomo-neighborhood, paid work amounts to 14.5 hours, unpaid 24 (including agriculture), a total of 38.5 hours, 44.3 with children (estimates).



This is an image of a neighborhood (glomo1) in a tropical city.

A neighborhood defined in this way (glomo1)

- offers the comfort of a 4-star-hotel
- can fulfill needs flexibly by the sharing of goods (particularly food)
- can reduce private housing space by the communal use of spaces (an essential ecological necessity)
- can, due to its size, distribute household work flexibly and according to everyone's liking
- is particularly friendly to parents and children
- can run a small pool of means of transportation (bikes, cars, rickshaws, small buses)
- provides a sense of belonging and conditions for individual self-realization

- enhances empowerment and democratic participation for its members
- is the ideal place for social games and spontaneous parties
- provides a broad range of forms of housing, and flexibility in the distribution of spaces
- is open for visitors (20 guestrooms)
- organizes a fair and ecological form of agriculture (no food waste)
- constitutes the first module for dense, manifold and enjoyable cities (there is a microcenter every 100 meters)
- guarantees a fundamental material sovereignty and a stable basis for bottom-up democracy

2. Boroughs & small towns as basic communes for public services (glomo2)

40 neighborhoods, or 20'000 persons, constitute an urban borough, or – in the country – a small municipal town, as a basic commune for a range of public services:

- primary and secondary schools
- state and security services: police, district court, social assistance, administration and political organs (town council)
- health center
- water
- energy
- public transport
- sewage, recycling, management of materials
- ABC civic center (hall, library, hotel, cinema, college etc.)
- a globex food depot for additional goods from all over the world (fair trade)
- a cooperative makerspace for small industries and workshops (textiles, wood, metal, machinery, electric, electronics, leather etc.)

In big cities most of these services will be organized by city-wide agencies, whereas the role of boroughs is reduced to some specific and consultative functions.

Around these public functions diverse private or cooperative enterprises of all sorts can flourish: cigar shops, hat-makers, small restaurants, jewelers, lawyers etc.