UDRŽITELNÝ ROZVOJ VE VYSOKOŠKOLSKÉ VÝUCE

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UR VE VÝCHOVĚ A VZDĚLÁVÁNÍ

UN Decade of Education for Sustainable Development (DESD, 2005–2014), handled by UNESCO, which has the goal to integrate the principles, values and practices of sustainabledevelopment (SD) into all aspects of education and learning.

KONCEPT – ROZŠÍŘENÍ – APLIKACE

Mezi „lidem“ stále velmi vágní pojem

Prvotní definice WCED (Brundtland 1987)
Dnes >100 definic - zájem utuchá/neutuchá?
UR – „mezi námi“ velmi známý a probraný koncept

„Filosofie“ pojmu (tři, čtyři, …x pilířů)
„Filosofie“ obsahu (potřeby dneška; potřeby zítřka; více než potřeby?)
„Filosofie“ střetů (obnovitelné zdroje x práva organismů)

Bios Rights – A pivotal concept in environmental policy

Since its inception, the Biopolitics International Organisation promotes bioethics and the protection of "bios rights" as pivotal concepts in environmental policy. As outlined in the *Bio-Syllabus*, published in 1990, in addition to the protection of human rights, it is essential to make explicit reference to the protection of the rights of all forms of bios in the laws, constitutions and regulatory codes of states, international organisations and all legislative bodies concerned with social welfare and civil society.

Animal rights

The cruel treatment of animals, part of laboratory routines in the past, was abolished in most laboratories of the world after the introduction of new legislation in the 1970's and 80's. Detailed protocols concerning humane rules of animal research were developed worldwide. Numerous powerful movements of animal friends and defenders of animal rights took shape in different countries, some of them identifying themselves with bioethics, the issue, which the struggle for animal rights undoubtedly represents.

Plant rights

Besides their unsurpassed beauty, plants are very sensitive to the slightest perturbance in their environment. They, for example, serve as reliable bioindicators of heavy metal contamination and provide thousands of natural remedies for the cure of many diseases including cancer. Plants form a sophisticated network interacting with the biosphere. The oxygen released by the global flora is vital for the survival of all forms of life. Oxygen molecules (O_2) are converted to ozone (O_3) in the upper layers of the atmosphere, which

The protection of the rights of all forms of bios must be enforced in the laws and regulations of all states and international organisations.

is very effective at absorbing ultraviolet rays. The thin layer of ozone that surrounds the earth acts as a shield, protecting the planet from harmful UV light irradiation and enabling organisms to develop and live on land. This ozone layer, so important in making terrestrial life possible, is currently endangered by human arrogance and oversight. **The enhancement of plant rights can help humanity overcome the problems of global warming and climate change.**

Microbial rights

Microorganisms are performing extremely important functions in pharmacology, in food production, in plant protection against insects and weeds, in energy production, and in pollution prevention and clean-up. The advances of microbiological genetics has enabled biotechnologists to establish real "bio-factories" with the aid of some microbial species. Bacteria have been engineered to produce a number of human proteins, such as insulin, and other important molecules, and help in the prevention and treatment of many diseases. Also, many microorganisms digest harmful pollutants in the environment, thereby aiding efforts for environmental clean-up.

Declaration of Plant Rights

On December 10, 1948 the General Assembly of the United Nations adopted and proclaimed the Universal Declaration of Human Rights (UDHR). On December 10, 2004, in Caracas Venezuela, the 56th anniversary of the signing of the UDHR was celebrated with another important document, symbolically "baptised" with the green leaves of a fern tree. Signed unanimously in the auditorium of Fundacion La Salle (Caracas) the Universal Declaration of Plant Rights (UDPR) was developed by the Asociacion Venezolana de Palmas (AVEPALMAS) and has been approved by representatives from the Venezuela botanical gardens in, the Venezuelan Natural Sciences Academy (Sociedad Venezolana de Ciencias Naturales), Friends of the Trees Society (Sociedad Amigos del Arbol - SADARBOL), the Caracas Garden Club, Centro Excursionistas Caracas (CEC), AVEPALMAS and other associations

The enhancement of plant rights can help humanity overcome the problems of global warming and climate change.

and will be presented to the UNESCO Venezuelan representation in Caracas. The complete text follows below.

It is very encouraging to see that the B.I.O. efforts to raise awareness of the importance of bios rights and to sensitise people everywhere on the crucial need to protect all forms of life on our planet are gradually being rewarded. However, time is of the essence. As more and more people acknowledge the urgency of saving bios, the hope is for environmental protection to become part and parcel of economic and social policy on a worldwide level and for every individual to actively engage in the race to save the environment.

Universal Declaration of Plant Rights

Preamble:

Whereas: Due to the immense and alarming disappearance of vegetation in the world, especially in the tropics, where there is a marked abundance of life, we humans, having mental capacity and ability to reason, have to speak up in the defense of all living beings on earth, particularly on behalf of plants, which is at the same time in our own interest.

Whereas: Individuals of the animal kingdom, including humans, live mostly on plants, even if they are not 100% vegetarians.

Whereas: Plants are beings that respond to a variety of stimuli, are capable of perceiving light, and have developed their wonderful harmonious workings in close connection with their environment. These extraordinary

Article 11. Encourage the cultivation of nourishing, medicinal, ornamental and other useful plants of all types and protect them against insects and other animals, preferably in a way that is non-damaging to the environment.

Article 12. The botanist researcher should work together with people who take care of living plants. Scientific institutions, universi-

rules of the UN Convention to Combat Desertification (CCD) and ban the uncontrolled exploitation of timber for firewood and over-grazing by animals.

Article 18. Use preferably organic fertilizers for growing plants. Dead plants ought to be used in compost instead of burning them and dead trees left in place as habitat for other species.

Article 19. Plants for scientific use may be cultivated in special nurseries or

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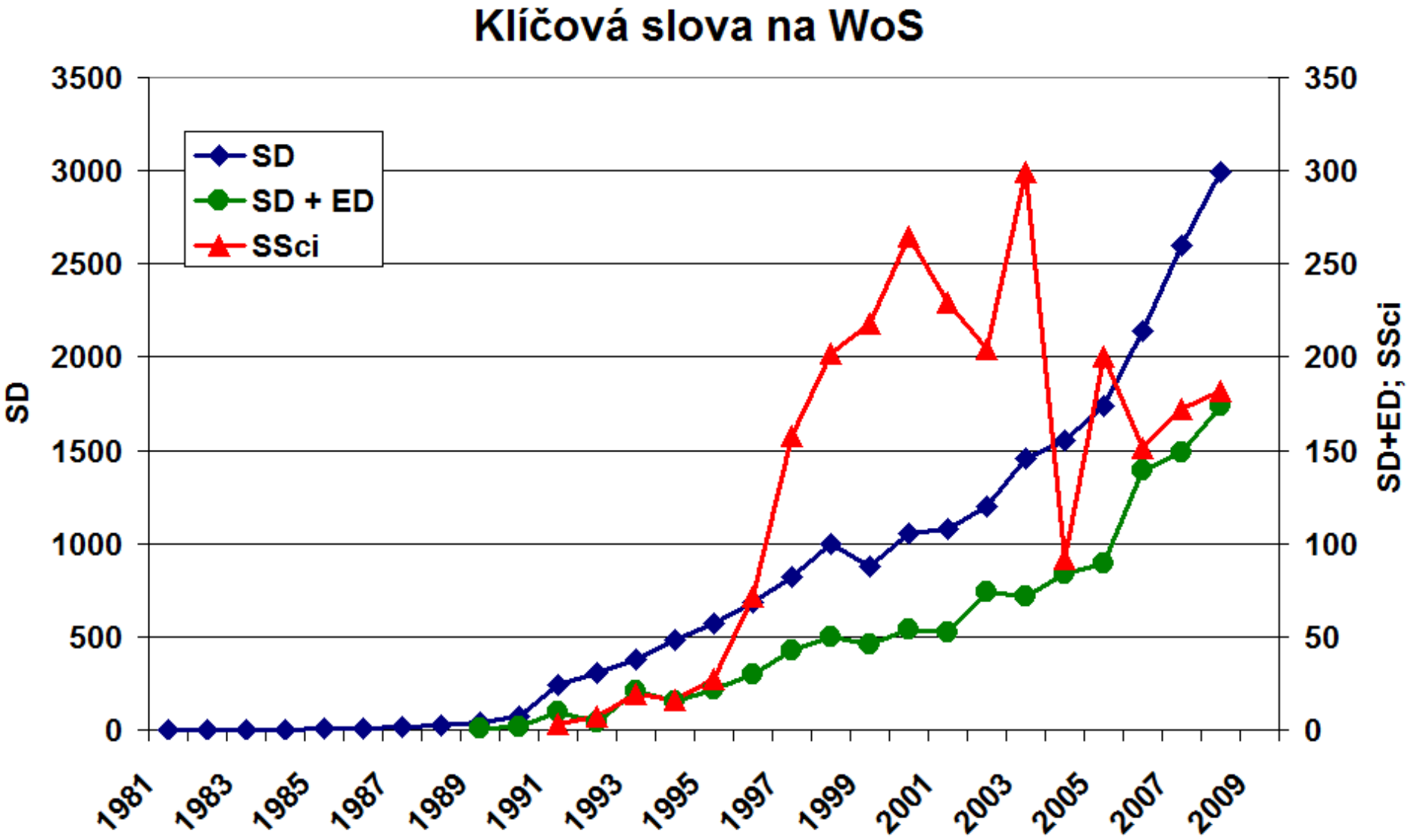
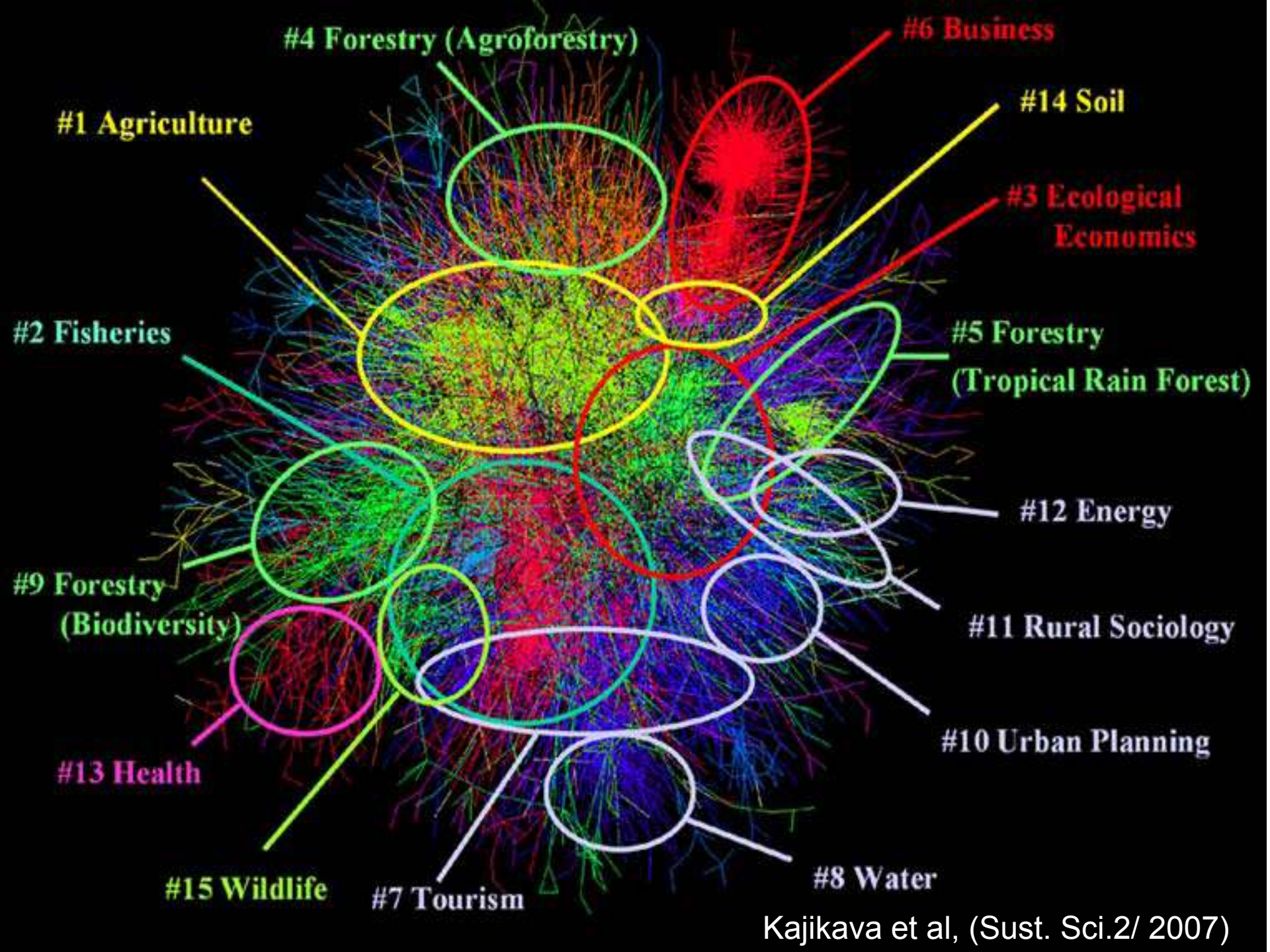
„Filosofie“ střetů (obnovitelné x neobnovitelné zdroje)

Strategie
Indikátory

Zájem o koncept SD



Journal of Sustainable Agriculture	1990
Journal of Sustainable Forestry	1993
Journal of Sustainable Tourism	1993
Sustainable Development	1993
The International Journal of Sustainable Development and World Ecology	1994
Renewable & Sustainable Energy Reviews	1997
The Journal of Sustainable Product Design	1997
International Journal of Sustainable Development	1998
Journal of Sustainable Development in Africa	1999
Environment, Development and Sustainability	1999
International Journal of Agricultural Resources, Governance and Ecology	2000
International Journal of Sustainability in Higher Education	**2000**
International Journal of Environment and Sustainable Development	2002
International Journal of Technology Management & Sustainable Development	2002
International Journal of Agricultural Sustainability	2003
International Journal of Sustainable Energy	2003
World Review of Science, Technology and Sustainable Development	2004
Agronomy for Sustainable Development	2005
Sustainability: Science, Practice, & Policy	2005
Sustainable Humanosphere	2005
Sustainability Science	2006



Kajikava et al, (Sust. Sci.2/ 2007)

1) Identification of a real perceived impact

Cluster	Key words
#1 Agriculture	Soil, Crop, Biodiversity
#2 Fisheries	Fish catch, Marine, Ecosystem
#3 Ecological Economics	Natural capital accounting, Sus. index, Ecological footprint
#4 Forestry (agroforestry)	Nutrient,Soil, Nitrogen-fixation
#5 Forestry (tropical RF)	Tropical forest, Timber and non-timber forest, Harvest
#6 Business	Sust. Compet. advantage, Env. performance, Nat. Res.
#7 Tourism	Eco-tourism, Coastal management, Tropical country
#8 Water	Water ressource, Waste water, Water cycle
#9 Forestry (biodiversity)	Forest manage., Biodiverzity, Ecosystem management
#10 Urban Planning	Sustainable city, Landscape planning, Regulation
#11 Rural Sociology 271	Developing country, Rural development, Local knowledge
#12 Energy	Hydrogen, Biomass, Photovoltaic
#13 Health	Health program, Intervention, Community
#14 Soil	Fertile soil, Organic matter management, Cultivation
#15 Wildlife	Wildlife, Hunting, Forest mammals

0 industry; 0 social equity; 0 poverty; 0 environ. justice; 0 mineral resources!!! (?)

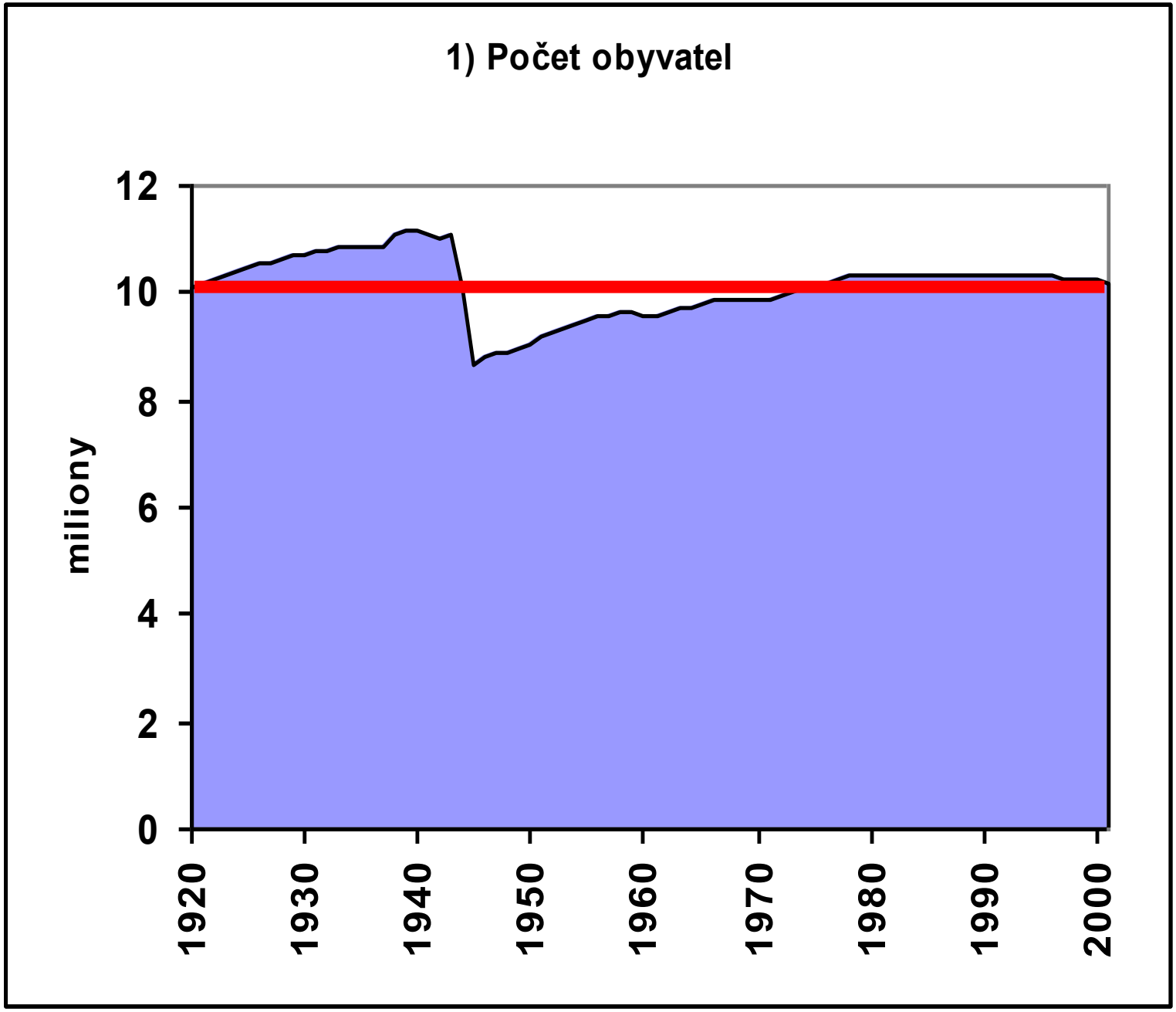
TRENDY VE SVĚTĚ / A U NÁS ?

Řešení problémů:

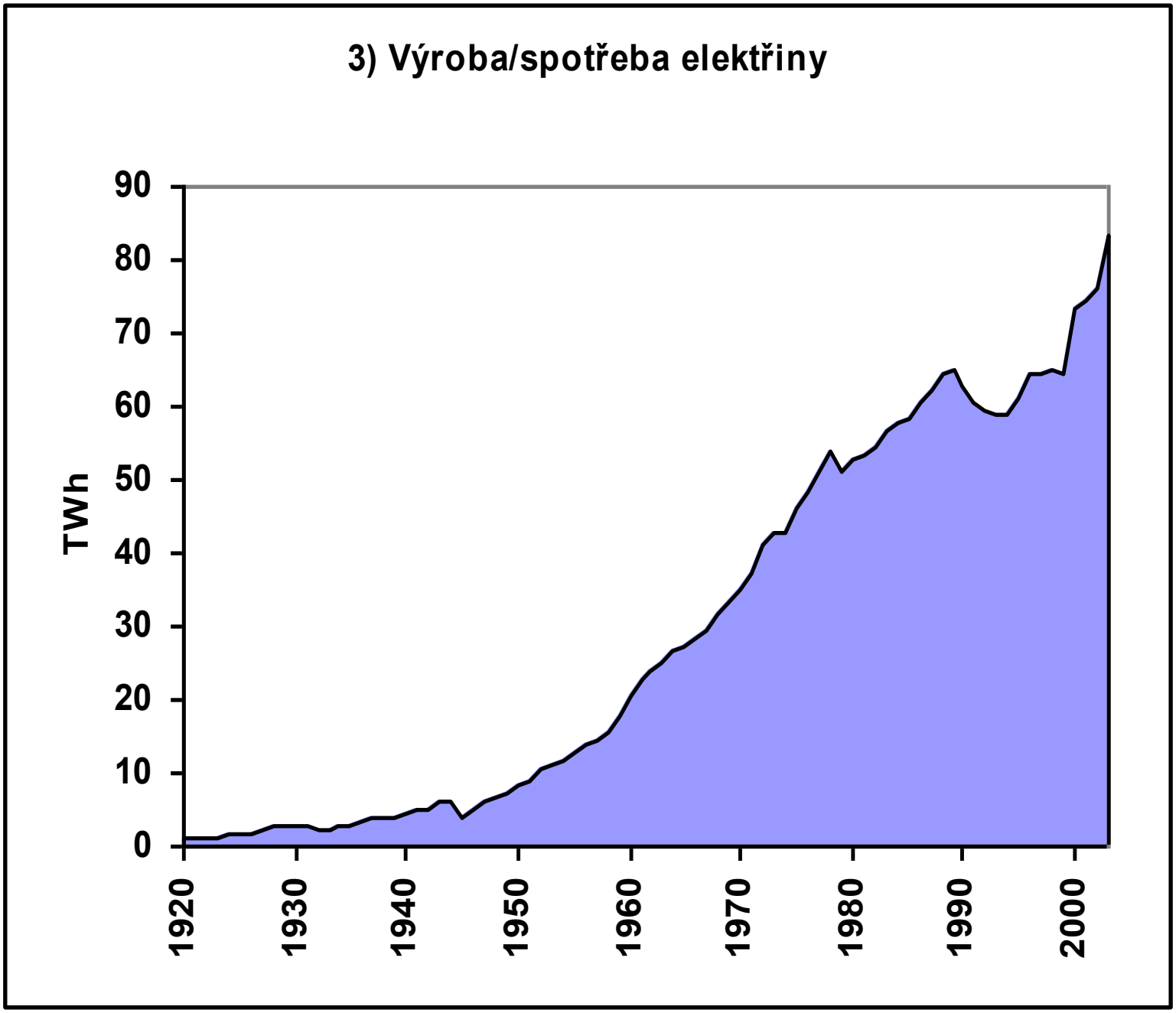
Technologie
Územní plán
Sociální situace
Ekonomie
Životní prostředí

Týmová práce (+ poradce, konzultant)
Zveřejnění výsledků
Diskuse (i s laiky/veřejností)

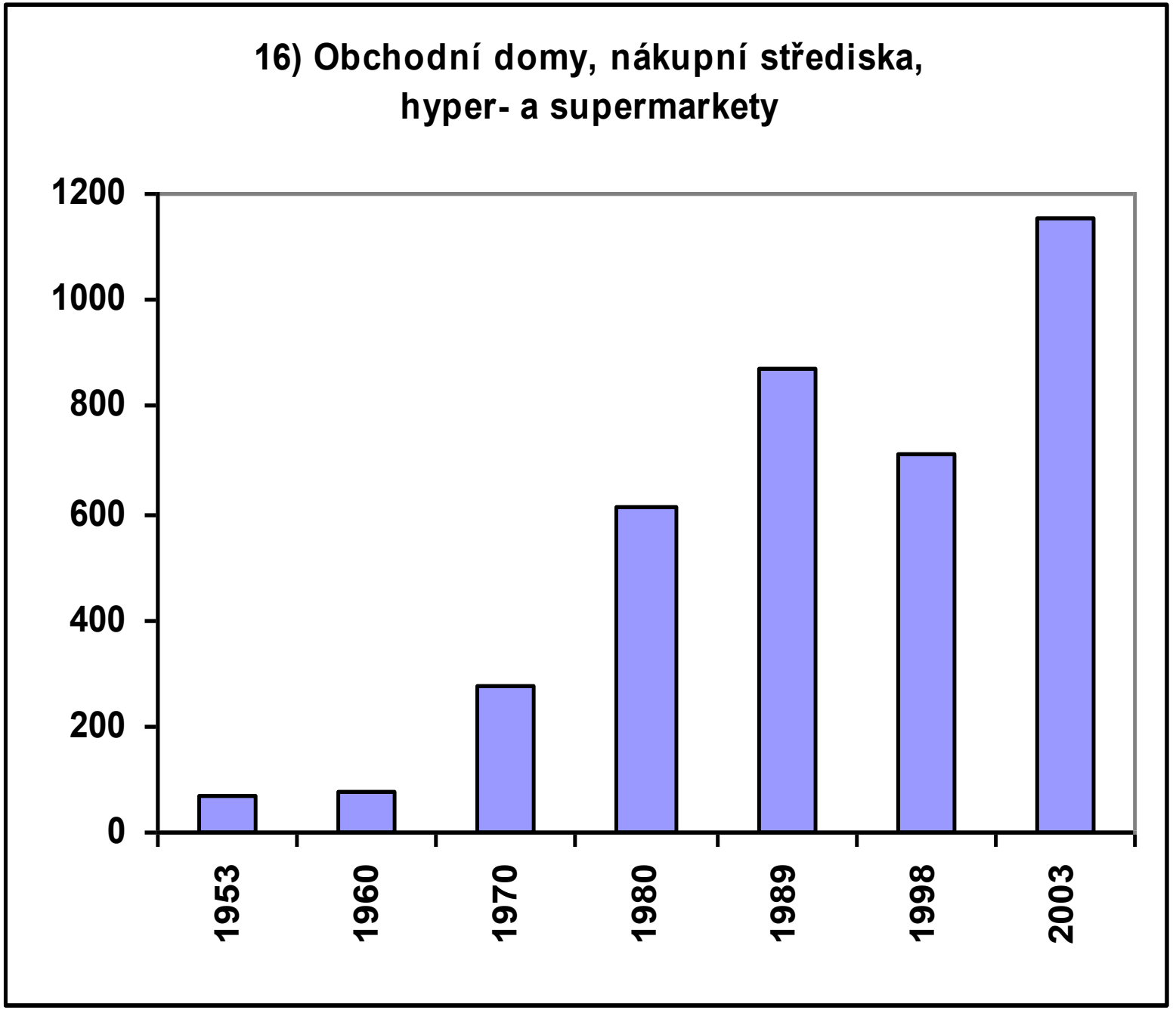
Příklad s uspokojováním potřeb generací

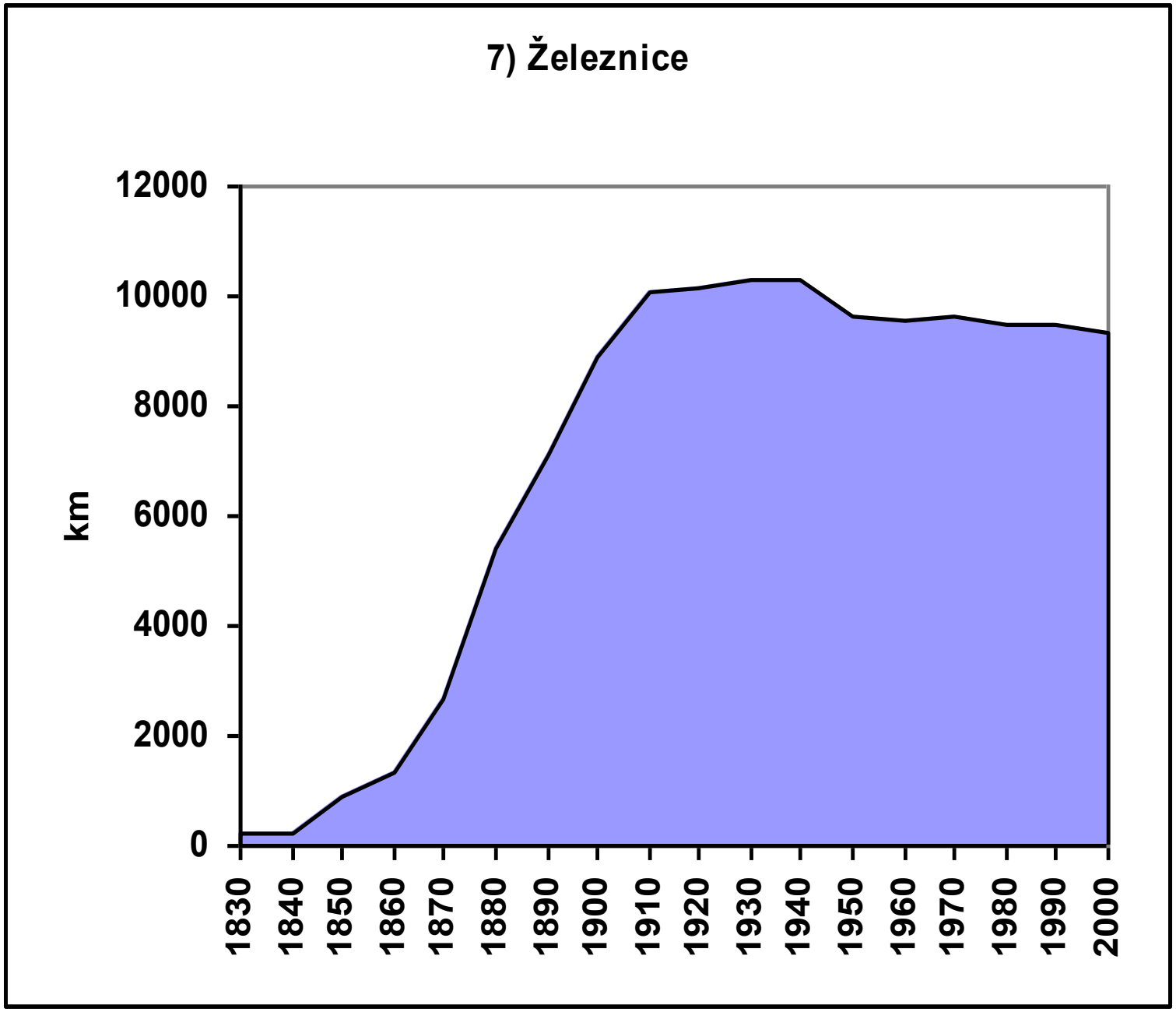

1) Počet obyvatel
miliony
12
10
8
6
4
2
0
1920
1930
1940
1950
1960
1970
1980
1990
2000

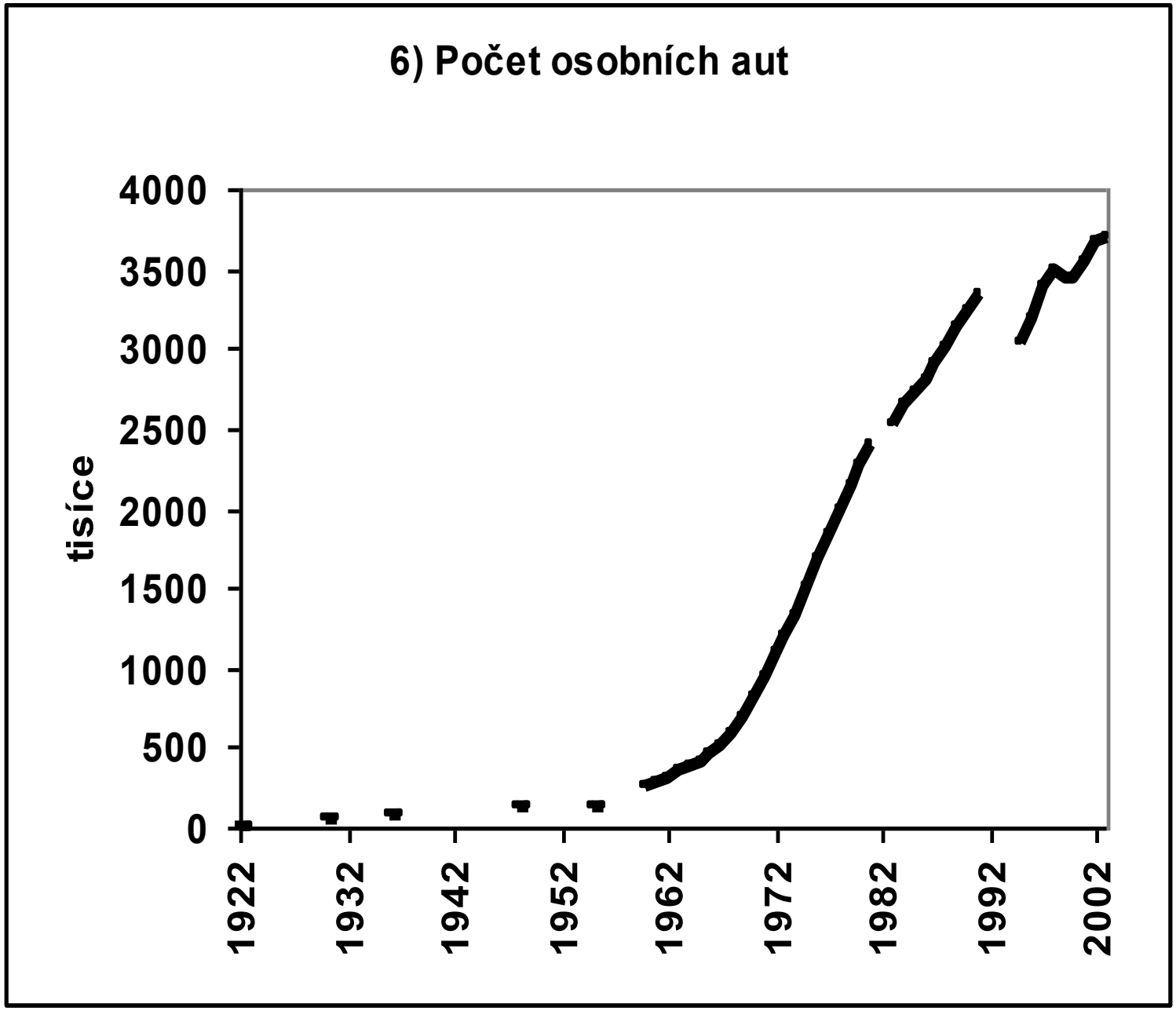
3) Výroba/spotřeba elektřiny



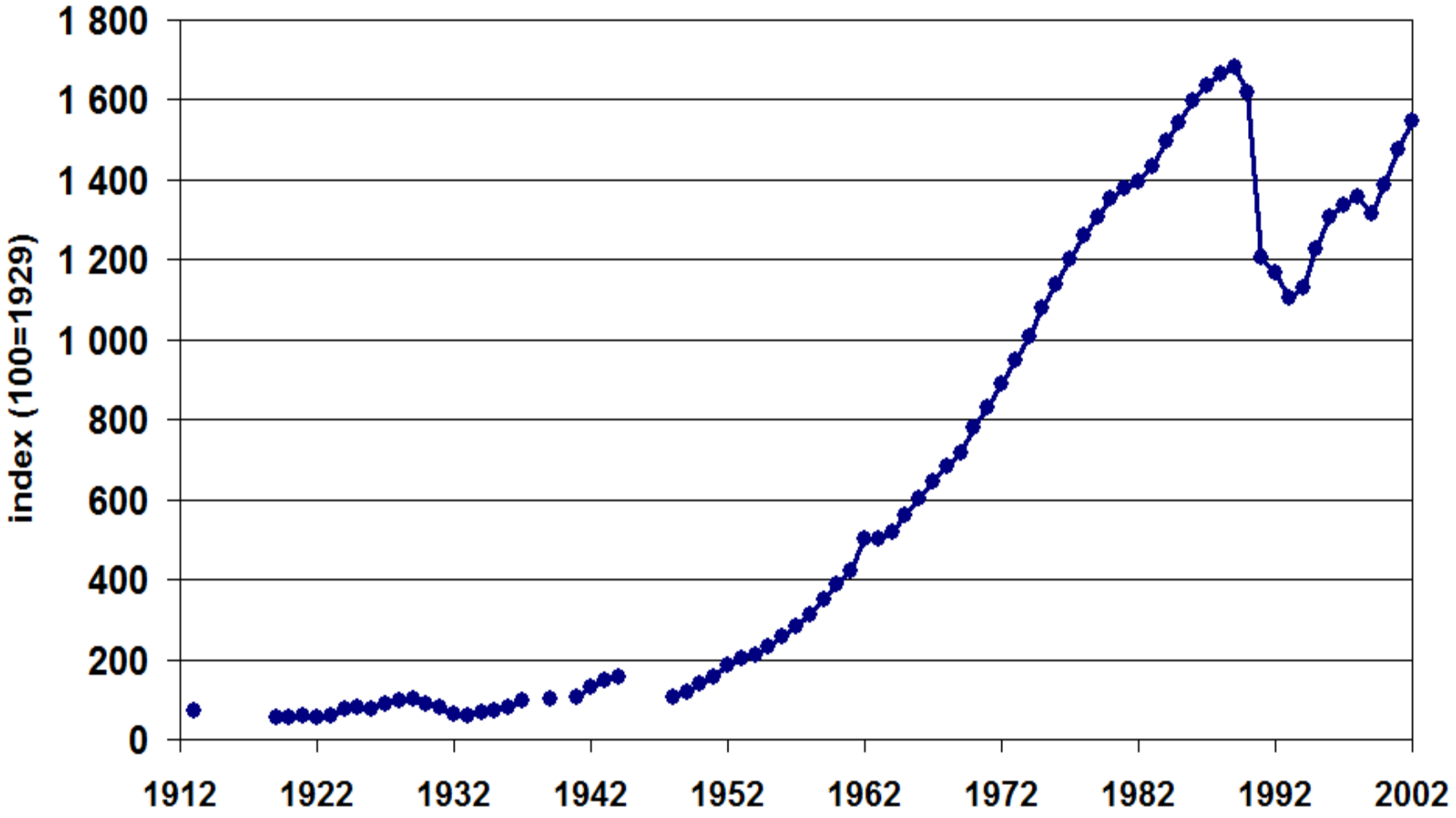
16) Obchodní domy, nákupní střediska, hyper- a supermarkety



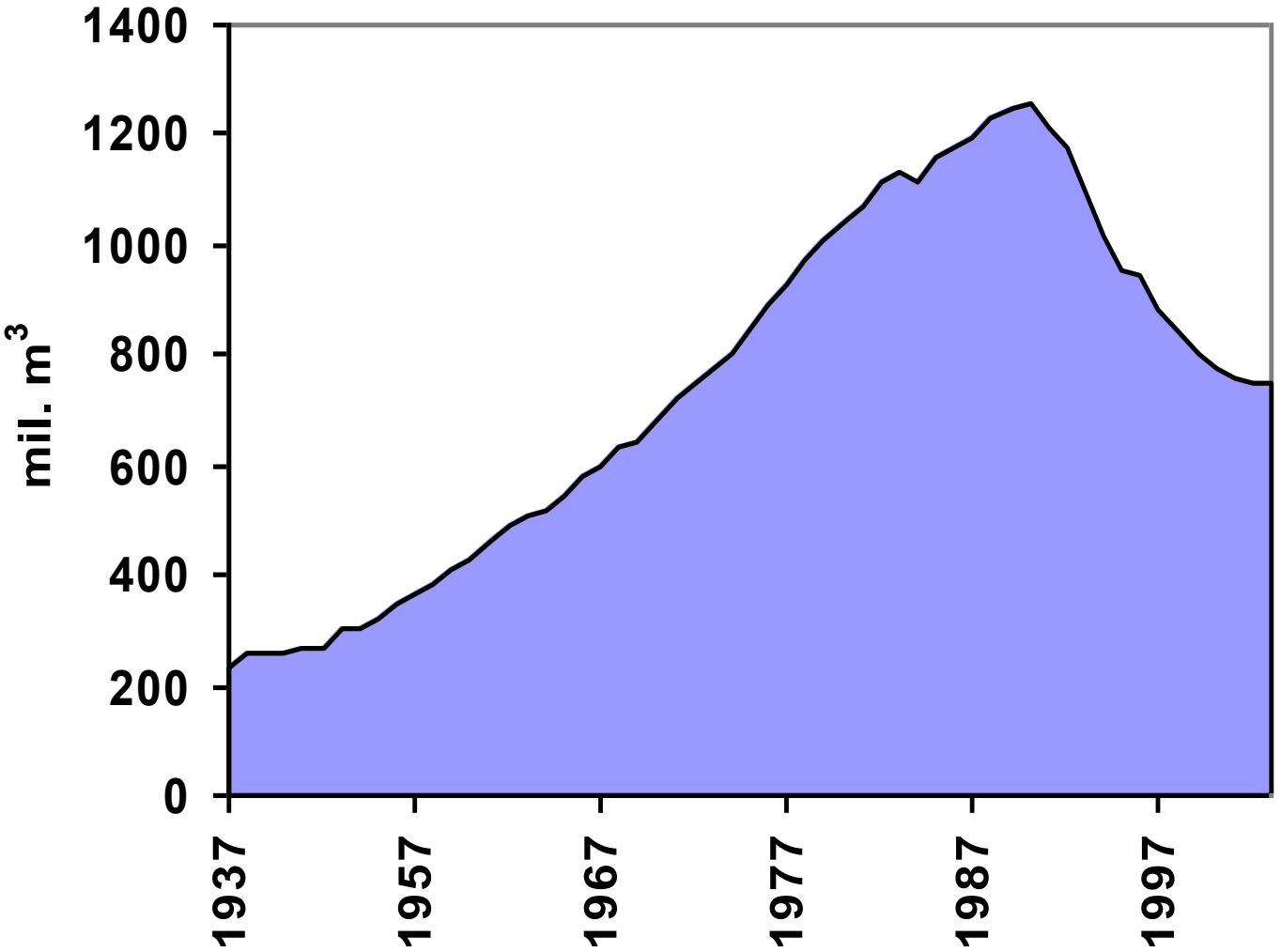

7) Železnice
12000
10000
8000
6000
4000
2000
0
km
1830
1840
1850
1860
1870
1880
1890
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000


6) Počet osobních aut
tisíce
4000
3500
3000
2500
2000
1500
1000
500
0
1922
1932
1942
1952
1962
1972
1982
1992
2002

Vývoj průmyslové výroby v Československu a ČR



5) Voda pitná z veřejných vodovodů



DĚKUJI ZA POZORNOST

(A HODNĚ RADOSTI)