Sustainable City in Romania – from Vision to Reality

Assoc.-Prof. Dr.-Ing. habil. Ildiko Tulbure

University "1 December 1918", Alba Iulia, Romania

PD at the Clausthal University of Technology, Germany

The Club of Rome

E-mail: ildiko.tulbure@tu-clausthal.de

Sustainability 2014: Future Urban Develoment at Different Scales
06-09.05.2014, ITAS, Karlsruhe

CONTENT

1. Sustainable Development and its operationalisation

2. Urban Sustainability – Methodological Aspects

3. About Decoupling - The Club of Rome

4. Sustainable cities in Romania. Examples

5. Sustainable Development Strategy of the
Romanian Alba Region - AIDA

6. Conclusions

1. Sustainable Development and its operationalisation

• Raised as a result of existing recognition of global problems.

• Basic discussions about global problems, called as "World Problematique", started already in 1972, with the first report to the Club of Rome "The Limits to Growth".

• „World Problematique" is a concept created by the Club of Rome, in order to describe the set of crucial problems – political, social, economic, technological, environmental, psychological and cultural ones - facing humanity.

World problematique (Club of Rome)

• The complexity of the *World problematique* lies in the high level of mutual interdependence of all these problems on the one hand, and in the long time it often takes until the impact of action and reaction in this complex system becomes visible.

• Long-term, interdisciplinary and holistic approach

• Contribution to *Resolutique* with concrete requests and proposals for solutions - projects
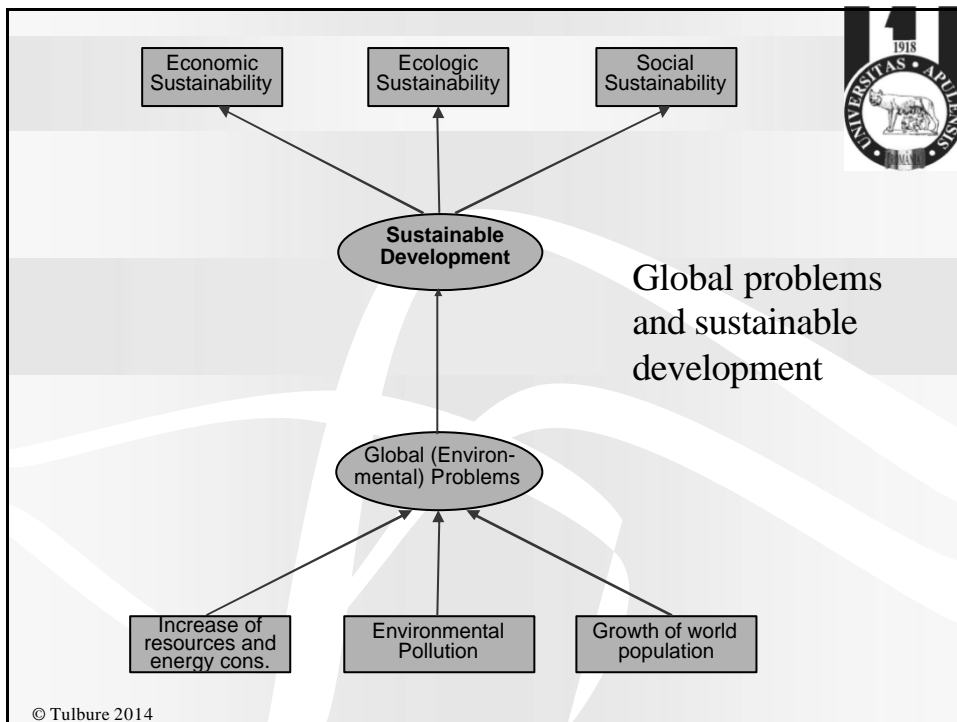
Issues related to the World Problematique

- Environment
- Demography
- Development
- Values
- Poverty
- Governance
- Work in the Future
- Information Society
- New Technologies
- Education
- The New Global Society
- World Economic and Financial Order

© Tulbure 2014

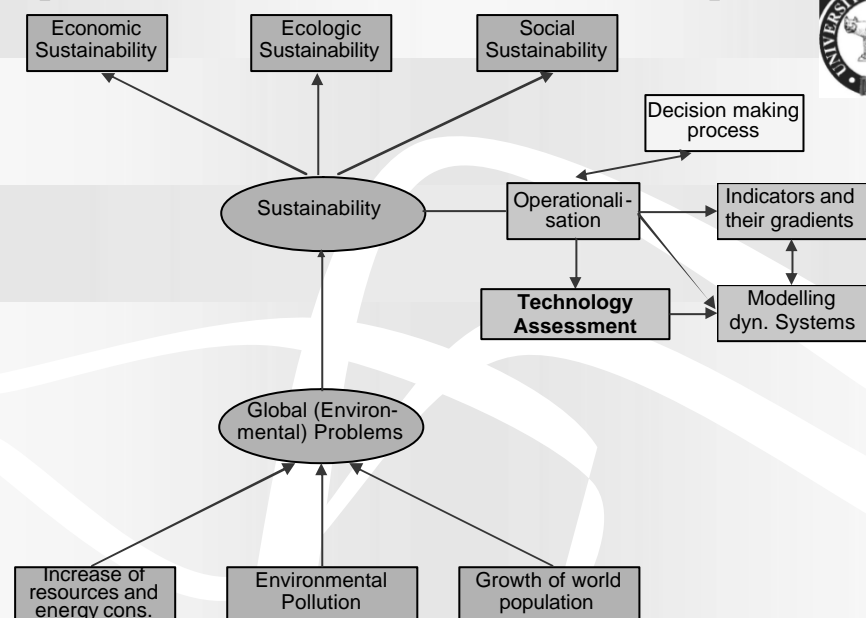Global problems and sustainable development

© Tulbure 2014

Operationalisation of Sustainable Development

- Means the transformation or translation of sustainable development goals in political measures and controlling instruments.

- Sustainable Development is to be achieved on local or regional level by taking into account specific regional conditions .

© Tulbure 2014

Operationalisation of Sustainable Development

© Tulbure 2014

2. Urban sustainability – Methodological Aspects

- "No sustainable development without sustainable urbanisation"

  Dr. Joan Clos, UN-Habitat Executive Director

- The vision of having in the future *sustainable cities*, by taking into account regional differences, is presently a pretty discussed topic, worldwide, also in some Eastern European countries.

- In order to get in the future *sustainable cities*, also in Romania started discussions in this field, especially on scientific level, regarding establishing a general methodology for developing *sustainable cities.*

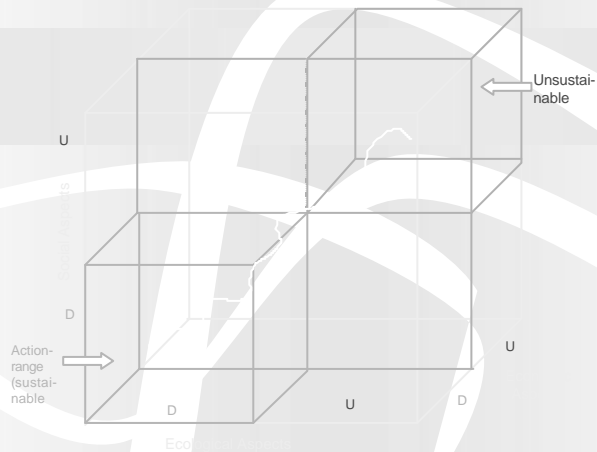## Methodological aspects: Sustainability systemic analysis

A general methodology for *sustainable urbanisation* can be materialised in the following steps:

- Defining the sustainability problem on local/regional level;
- Establishing specific space and time scales;
- Establishing concrete aims for the studied case;
- Systemic approach of the region by modelling the interactions;
- Developing concepts and measures by establishing priorities;
- Developing evaluation and control instruments;
- Verifying the possible results, which could be obtained after introducing the proposed measures – developing scenarios;
- Applying into the practice the developed concept.

Sustainable urbanisation means a transformation process under changeable frame conditions – Correction of development with measures – Urban sustainability management

© Tulbure 2014

Methodological aspects/difficulties

- Complexity and uncertainties

- Integrating quantitative and qualitative aspects

- Designing Indicators for Urban Sustainability

© Tulbure 2014

3. About Decoupling - The Club of Rome

- A pretty new initiative, officially started during the
  Club of Rome conference in Ottawa, Canada, sept. 2013

- Decoupling – understood as a Response to the multitude of global
  problems recognised and debated already in the first
  report to the Club of Rome, "Limits to Growth", 1972

  - the goal is to maintain the same life quality, but with
    decreasing resource consumption and less environmental
    impacts

  - *a viable strategy for assuring the sustainability of our
    society (?)*

Decoupling (2)

- The idea behind it is that the "binding knot " can and must
  be broken, this means it is possible to register an increase of the
  life quality without necessarily having a growth of the natural,
  unrenewable resource consumption.

- The discussion came up in order to rejuvenate the global debate on
  Limits to Growth, and connected with this, on sustainable
  development, on climate change and on the equity questions.

- Has relevance both for developing and developed countries,
  allowing to release well-being from the consumption of the limited
  treasures of the Earth.

Decoupling (3)

- Improving the rate of resource productivity ("doing more with less") faster than the economic growth rate is the key notion behind "decoupling".

- That goal, however, demands an urgent rethink of the links between resource use and economic prosperity.

- This can be supported by a massive investment in technological and social innovation, so that at least the per capita energy and resource consumption in developed countries will not increase anymore.

- On the other side it is important to support developing countries in following a more sustainable developing path.

4. Sustainable cities in Romania. Examples

- Regarding the concrete situation in Romania, the question is nowadays how to transform a city in Romania in a model of local sustainability.

- After joining the European Union in 2007, new opportunities for people to explore and learn from Western European countries were suddenly opened - the word "sustainability" started to be heard more frequently in Romania.

- Small steps have been taken since then, sometimes because of bureaucracy, sometimes because of other priorities, and sometimes because of lack of knowledge and lack of financial resources.

Sustainable cities in Romania. Examples (2)

- Nevertheless some progress in the field of *sustainable urban development* has been registered.
- In this direction the Romanian Government approved 2009 a program for the rehabilitation of residential urban buildings built up in the time 1950–1990. And there are plenty of those.
- There were four major benefits from this action plan:
  – increasing the energy efficiency of the buildings
  – changing the facades
  – protecting the environment by reducing emissions
  – reducing the amount of money spent by building owners, because by specific programmes it was possible to get funding for the rehabilitation by national and local governments.

© Tulbure 2014

Sustainable cities in Romania. Examples (3)

- Beside Sibiu, selected 2009 to become the European Cultural City, especially the five biggest cities in Romania made in the last time some progress to become *sustainable cities*:

  – Bucharest, Timisoara, Cluj-Napoca, Iasi and Constanta.
- For this goal, the local authorities recognised some common needs:
  – to get an urban regeneration
  – to reduce energy consumption
  – to use new transportation possibilities, other than cars

© Tulbure 2014

Sustainable cities in Romania. Examples (4)

- Also the need to materialize "green buildings" came into discussions.

- For instance, in 2012, in the city of Cluj-Napoca was materialized the first so-called "Green School" in Romania:
  - Energy Savings: 30%
  - Water Savings: 50 %
  - Waste Savings: 50 – 90 %

- Starting in 2013, the construction of so-called "green" buildings has been encouraged by local authorities, by reducing local taxes for them by 50%.

Sustainable cities in Romania. Examples (5)

- In order to get sustainable cities – need to rethink mobility, maybe to use alternative transportation possibilities.

- Using more frequently bycicles in the cities - the big problem relies on not having an adequate infrastructure in this field, especially cycle paths.

- The largest bike-sharing projects in Romania were launched:
  - in Bucharest, 2010
  - in Cluj-Napoca and Constanta, 2011
  - in Timisoara, 2012

- There is a need for developing the adequate infrastructure for cyclists.

5. Sustainable Development Strategy of the Romanian Alba Region - AIDA

- The **Alba Iulia Association for Intercommunity Development (AIDA)** is a Romanian NGO, representing the interest of several communities: 3 urban and 8 rural communities.

- This association of 11 local administrative units represents the interests of more than 120 000 inhabitants.

- AIDA has the goal to get an economic and social development on a regional level, based on different actions.

Sustainable Development Strategy of the Alba Region – AIDA (2)

- The most important city of the association is Alba Iulia, having about 66,000 inhabitants, a city which constitutes a hystorical symbol for Romania.

- The Strategic Development Plan is to address issues related to improving the quality of pedestrian areas and of public space areas and also to improve the accessibility in the historical part of the city, which is pretty relevant for the History of Romania.

- The environmental policy of Alba Iulia is targeting especially transport issues, as the tourism activities are pretty developed in this city.

Sustainable Development Strategy of the Alba Region – AIDA (3)

Strategic Objectives of AIDA:

1. Developing the local and regional infrastructure

2. Economic progress by developing new jobs

3. Capitalization of the anthropic and natural touristic potential of AIDA

4. Promotion of so-called "green energies"

5. Promotion of the local cultural values as well as of traditions

6. Improving the educational, social and health infrastructure

7. Building partnerships, as well as regional, national or international cooperations

---

6. Conclusions

- 6.1. The need of transnational cooperation for getting a sustainable urban development

- 6.2. Holistic Education for Urban Sustainability

- 6.3. Establishing a general profile of a _Romanian sustainable city_

6.1. The need of transnational cooperation

- Network for Sustainability Strategies, Monitoring and Management in South Eastern Europe, NESSEE (http://www.uab.ro/cercetare/retele_nessee/prezentare.htm)
- The kick-off conference took place in the time

  February 23-25, 2006 at the University „1 December 1918" in the city Alba Iulia in Romania.
- There are 2 NESSEE-projects :
  - 1. Sustainability monitoring and strategies in South Eastern Europe
  - 2. Education for Sustainability on university level in South Eastern Europe

---

TU Clausthal

Stabilitätspakt für Südosteuropa
Gefördert durch Deutschland
Stability Pact for South Eastern Europe
Sponsored by Germany

DAAD Deutscher Akademischer Austausch Dienst
German Academic Exchange Service

University "1 Decembrie 1918" Alba Iulia, Romania, 23th - 25th February, 2006

Kick-off conference of the Network for Sustainability Strategies, Monitoring and Management in South Eastern Europe (NESSEE 06)

6.2. Holistic Education for Urban Sustainability

- Changing people mentalities, thinking ways...
- Education - key issue for Sustainability !
- In his book "Continuity, Innovation and Change", HRH Prince Hassan, former President of the Club of Rome, pointed out the need for education as a key issue for achieving the three human goals: *continuity, innovation, and change*.
- These are the fundamentals of sustainable development of our society, by taking into account regional differences.
- Three dimensions of education are recognised: *infrastructure, methodologies and values*.

6.3. Establishing a general profile of a Romanian sustainable city

- Sustainability has to be defined for each concrete situation on regional level.
- For applying this concept there is a need to evaluate systems in an integrated way, from technical, economic, environmental and social point of view.
- There are different major problems regarding urban sustainability in different parts of the world – specific regional conditions have to be taken into consideration.
- There is a need to develop *a general profile of a Romanian sustainable city*, by taking into account specific conditions.

Outlook

- It would be appropriate that Romanian cities become partners in international networks of sustainable cities, just to learn about experiences of other cities in other countries.

- There is a real need for interdisciplinary working way, for instance engineers with social scientists.

- The Club of Rome, by its great innovation potential, is globally supporting the assurance of Sustainable Urban Development, by taking into account specific regional conditions.

- If correctly applied in the future, decoupling could be the viable strategy for assuring the sustainable development of our society.

- Education - the driving force for assuring a Sustainable Urban Development – changes in people mentalities...

© Tulbure 2014

Thank you

for your attention !

Ildiko Tulbure
University "1 December 1918", Alba Iulia, Romania