

Integration in a bio-based economy

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## Where are we heading?

There is a growing gap between our visions of the future and reality....





#### A brand new world....





#### ...and the old one... Or?



Foto: Anna Tärnhuvud



#### Economic growth vs. resource base?



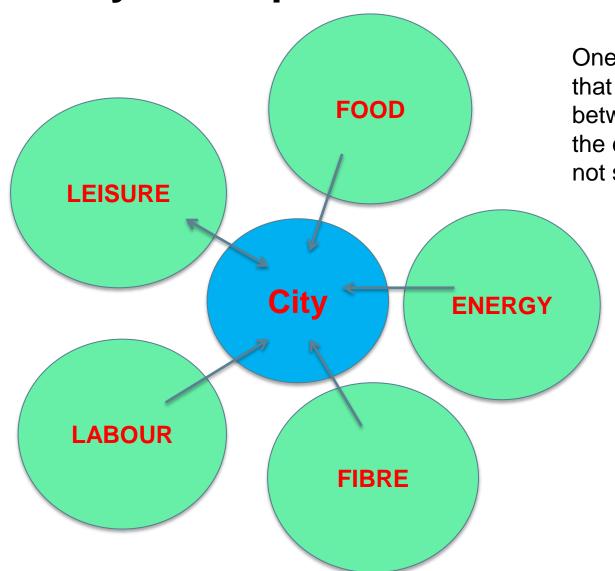
http://www.axess.se/tv/program.aspx?id=3005

In a report from the consultancy McKinsey it is argued that 600 megacities will account for 60% of the global economic growth in the future.

Where will the capital generated from rural resources be invested?



## Mainly linear processes



One might argue that the relations between the city and the countryside are not sustainable



#### The rural production landscape

#### Trends and contradictions

- Specialization vs. Multi-functionality
- Intensification vs. Extensification
- Global competitiveness vs. Local integration
- Market-based solutions vs. Structural reforms
- Private funding vs. Public funding (or Public-Private Partnersh.)
- Incremental development vs. Leaps of change
- Agricultural policy vs. Rural development
- Top-down technological fix vs. Co-production/-innovation
- Authority vs. Accountability
- Reductionism vs. Systemic approach



#### Conclusion

What does it take to navigate development towards a sustainable development of rural (and urban) areas?

Is this a democratic issue for all citizens or is it an issue for markets and private ownership?

What does it take to change direction in policy and action? And how will the landscape change?



Foto: Tony Danninger



# NEW POTENTIALS FOR RURAL AREAS, OR "IT TAKES TWO TO TANGO..."



Bild: Länsstyrelsen VG-län



# Can the rural entrepreneurs be the heroes of tomorrow?

Businesses will be much more affected by the state of the ecosystems in the future:

- Deficit of ecosystem services
- Unforseen changes in resource availability
- Decreased quotas
- New laws and increased fees
- Expensive insurances
- New consumer demands (margins)
- New demands from investors

Investments in sustainable development would mean less risk, improved reputation and new business opportunities





## **Creating stronger bonds**

New customers are asking for bio- and ecosystem-based resources - but can rural areas satisfy these?

Food **Fuel** 

Feed

**Fibre** 

Green innovations have a strong potential to create economic growth

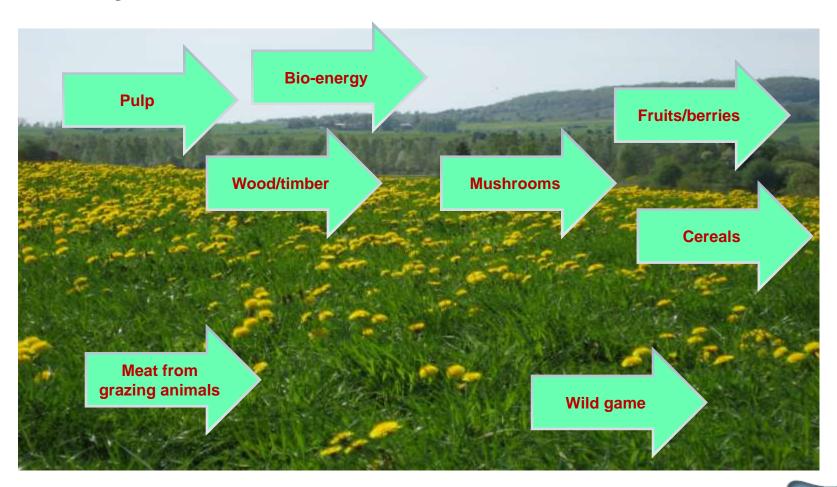
> New actors enter the countryside and see the new potentials – is there a risk that the capital generated will not be re-invested locally (compare with the mining industry)?

of inventing in the green sector, but not moving from invention to innovation

There is a tradition



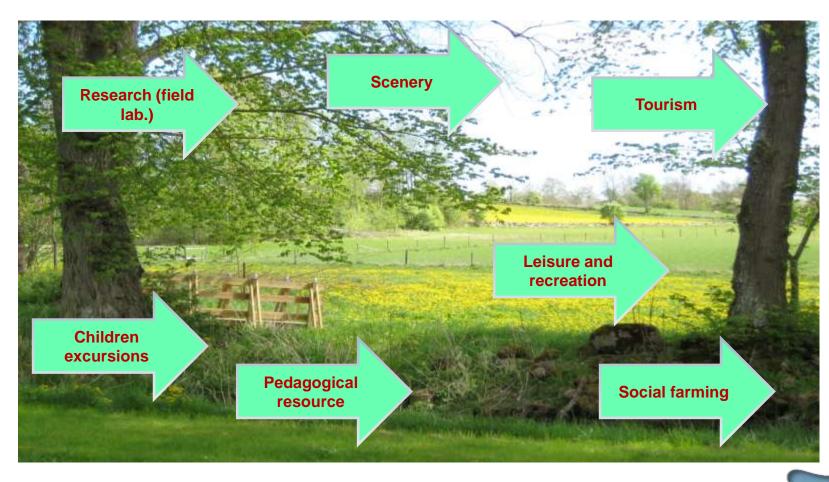
# Future business opportunities through ecosystem services - PROVISIONING



In this area it is easy to identify new business opportunities!



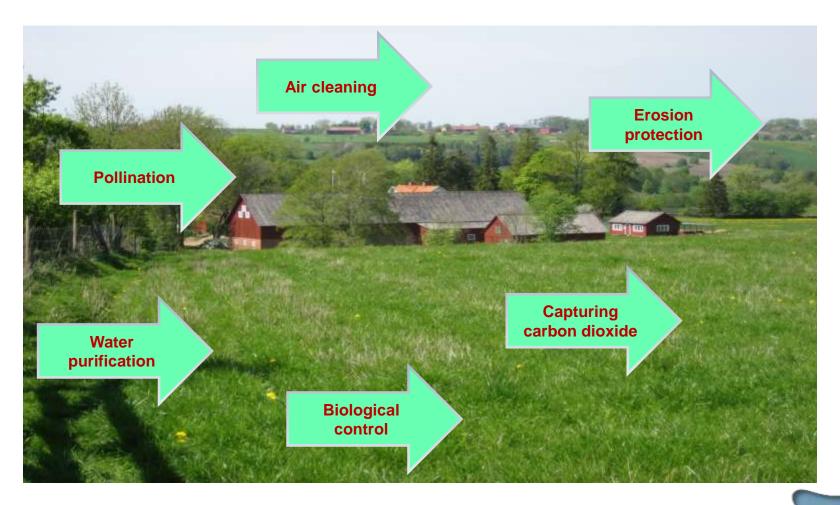
### **CULTURAL** ecosystem services



We new and strong businesses develop in these areas today!



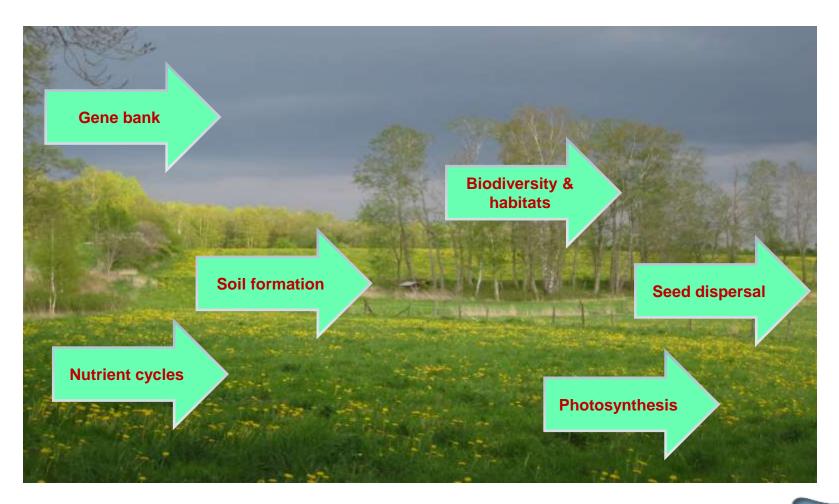
#### **REGULATING** ecosystem services



In the near future we will probably see many new business models develop in these areas!



#### **SUPPORTING** ecosystem services

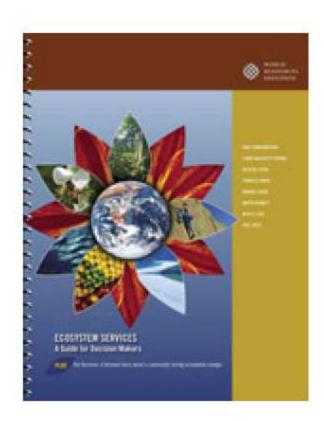


Is market based business models possible? The economic value of these ecosystem services are more or less infinite...



#### What does it take to succeed?

- The rural landscape has today a broader <u>societal mission</u> – it is not only about food, fibre and environmental values, but all the ecosystem services that a sustainable society must depend upon
- An <u>entrepreneurial approach</u> and new business models are necessary to realise the new opportunities
- Public actors have an important role in transformational change and in creating incentives for a sustainable transition





# The challenge: To create sustainable bonds between rural and urban areas



"Urban areas must take more responsibility for the ecosystems which they are dependent upon" (UN General Secretary in "Cities and Biodiversity Outlook", CBD, oct. 2012)



## An increasing international interest



Sustainable
Rural and Urban
Ecosystems: Design,
Implementation
and Operation

Peri-urban futures:
Scenarios and
models for land use
change in Europe

Manual for Practice and Study

2 Springer

Agriculture and the city: a sustained interplay





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