

## **Wuppertal Conference Report**

### **Integrated Regional production and logistics management- a promising perspective for European Regions?**

**June 21<sup>st</sup>, 2004, Wuppertal, Germany**

This conference was funded by the Anglo-German foundation for the study of industrial society and was organised by Helmut Holzapfel (University of Kassel, Germany), John Whitelegg (University of York, UK) and the Wuppertal Institute (Oscar Reutter and Susanne Böhler). 25 people attended and there were 10 presentations from Germany, the UK, Austria and Denmark.

The conference explored a number of interrelated themes around the potential for local food production, the logistical implications of re-engineering supply links, the role of small local shops and supermarkets in controlling food sources, the potential gains for regions of increasing the amount of local food consumed locally and the significance for new forms of regional identity of increasing local food production and consumption.

Discussions were wide ranging and included summaries of key points from Helmut Holzapfel who presented a model region research project outline that would aim to give concrete expression to many of the ideas discussed during the day. John Whitelegg made an argument for new links with the industry itself (e.g. Migros in Switzerland and Booths in the UK) and for exploiting the potential of new forms of regional identity in delivering sustainable development and a EU wide spatial strategy based on sustainability principles. Alistair Kirkbride challenged the group to think through the question “Why is local good?” and to be a lot clearer about the meaning of concepts and terminology (local, locality, region, regionalism).

The main outputs of the 1 day conference were a much clearer specification and understanding of this research area, both conceptually and in its policy relevance and a strong desire to give it practical and empirical realisation through an EU wide funded project. The participants also established a virtual research group for the exchange of ideas and papers. The work of identifying funders for future research has now begun.

In the following pages the main conclusions or questions of the presentations are copied: They can just give an overview, the original files can be ordered from the authors.

## 1. Welcome, Prof. Hennicke, Wuppertal Institute: Key research questions

### Key research questions

#### 8. "How can state interventions support the switch from labour to resource-saving technical progress?"

- "Smart financing": National and regional efficiency funds (e.g. Hanover)
- Greening profits or green washing? From "Externalisation Machines" (L.E. Mitchell) to "Responsible Entrepreneurship" ( WSSD: "Accountability")
- A new type of "State impulse policy" is needed: Reducing material and energy costs, raising competitiveness and creating jobs (e.g. "German Impulse Programme: Material Productivity");

Source: Hennicke, 2003

## 2. Integrated regional production and logistics management – a promising perspective for European Regions ? Introduction to the workshop

### Helmut Holzapfel, Kassel

In central Europe the development of logistics within the last 20 years was in a rapid process of change. Around 1990 the classical supply chain analyses were produced by universities in Germany or Britain, today logistics is an integral element of the production in the industry. It may even influence the design of a product. While governments 15 years ago did not really care about logistics (in the main there were abstract political declarations by governments, often favouring, but not really supporting transport by rail) today there is an intensive policy. In this workshop we focus on integrated regional concepts of production and consumption. But what could be new ways of integrated regional concepts and what would be the advantages for the regional actors, the entrepreneurs and the consumers?

The relation of regional concepts to regional economy is quite obvious. If those concepts intensify the "internal relations" between factories within the regions, they directly support the economical basis: In many cases today (since distance has become very cheap) entrepreneurs and customers prefer products from distant areas, although similar or even

better alternatives in their own region do exist. As well there is an aspect of regional measures and concepts that is often neglected: The actors in a region know best about possibilities and needs of their region. In Germany the regionalisation of the railway subsidies (for the short distance travel) has led to a much higher efficiency in public transport. As well the people of a region who are having disadvantages (e.g. by the environmental problems) are much closer as well to the advantages.

### **3. Production and logistics of food: From the well travelled yoghurt-pot to standard apples**

**Stefanie Böge - Kassel**

In the recent decades, the food industry has experienced substantial increases in transportation distances. The tons per kilometre have almost doubled between 1970 and 1990. The transport of goods by road has increased threefold and nowadays accounts for 80 % of the total transport of goods in the food industry, as opposed to the 50 % of 1970. Despite these figures, food consumption has only slightly increased. Conversely, the quantity of the transported goods multiplied by the distance covered has rocketed.

So we can assume, that we eat more and more food from farther and farther away: The distances we consume are increasing.

What distance is currently covered by an apparently simple daily product such as a strawberry yoghurt (which includes milk, strawberry preparation, sugar, yoghurt-cultures, glass-jar, twist-off-cover, label etc.)? Production and distribution involve over 8000 kilometres. If we relate all these kilometres to the gross weight of a single yoghurt pot, we shall discover that for each yoghurt purchased in a store there are at least ten meters of truck transport. As we spoon down the nutritional value of the product, we are also symbolically consuming the distance covered by the transport vehicle.

But the increase in transportation distances is not only due to the dynamics of economy. It largely depends on our eating habits as well. Our society is undergoing structural changes which also include a pattern of consumption that brings about a different relationship with food. The consumption of highly sophisticated food is on the rise, such as ready-made dishes and industrially processed fruit and vegetables, easy to prepare, but very demanding in terms of production and transportation. At the same time, the needs of consumers are becoming increasingly personal and differentiated. We take it for granted that we can buy anything, whenever we like and wherever we are. Our relationship with the seasons and regional peculiarities has almost entirely been lost.

The increase in imports aims at widening the range of products offered. But since exporting countries are generally geared to selling their "best quality" products on foreign markets, the "quality requirements" of importing countries tend to increase. As a consequence, local producers have to compete with the quality (and the prices)

of imported products. Local products that still differ from the homogenous international model thus tend to be progressively discarded. Regional variety has been replaced by homogeneous products subjected to long-distance transportation and designed to meet consumers' requirements.

Apples are just one illustration of how an economy based on long distance transportation is inducing a reduction in product variety. In certain European regions there are still hundreds of varieties of apples which can be used for many different purposes, yet an ordinary German supermarket will stock no more than ten varieties in the course of a year. Apples come from eight different countries (Argentina, South Africa, New Zealand, Spain, France, Italy, the Netherlands, Germany). You will often find the same varieties produced by different countries. Usually they are common varieties of eating apples that cannot be used for any other purpose.

The long distances our food has to cover do not only have an impact on the environment, but also on the growing standardisation of products. The "variety" you can see on entering a supermarket is only apparent since the basic components are often the same. The only difference is in packaging and in the addition of flavouring and colouring. Fresh fruit and vegetables are of standard size and colour and the varieties on sale are very limited in number. Consumers nowadays can no longer experience certain foods since regional products are no longer available on the market. We have based our lifestyle on long distance transport believing that we thus benefit from a wide choice of products. In fact, top quality products stand out for their regional and seasonal features. Long distance transportation - though necessary for given specialities, like for instance the original Mozzarella buffala - is a drawback for most food, especially staple food. Long distance transportation is not a sign of quality, because trade activities associated with it have far-reaching negative effects on the variety of regional products. The fact is that quality is not guaranteed by the distance covered by products, but by their regional variety.

#### **4. Supermarkets and local shops**

**What is the difference?**

**John Whitelegg (York, UK)**

**Alistair Kirkbride (Lancaster, UK)**

#### **UK context:**

- Food retail dominated by supermarkets  
Supermarkets have become the default source for most foodstuffs for most people over local markets & local shops
- Supply chains increasingly globalised. Three main influences:  
Political & economic policies  
Dominance of food industry players  
Consumer expectations

#### **Specific Interventions:**

- Lorry taxation based on weight/distance
- Re-orientation of infrastructure and ERDF funds towards models of regional co-operation and organisation
- Euro level marketing of distinctive regional foods
- Specific financial assistance to small food producers and innovative marketing schemes
- Removal of bias favouring large producers especially in EC law

## **5. Delivery services for urban shopping: experiences & perspectives**

**Dipl.-Ing. Susanne Böhler**  
**Dr.-Ing. Oscar Reutter**  
**(Wuppertal-Institute)**

### **Structure and Questions:**

What is the linkage between shopping mobility, regional food production and delivery services?

Which relevance has shopping mobility in Germany?

How is the situation in the food sector business, one of the main partners for delivery services?

How are the experiences with delivery services in Germany for shopping activities?

Which logistical concepts for the distribution of food do exist?

Which distribution concepts are appropriate?

Do new distribution concepts and delivery services have the potential to improve accessibility and availability of regional products?

## **6. From localisation to “integrated regional logistic concepts”**

**Helmut Holzappel, Kassel**

On a regional level it is much easier as well to see, which reasons there are for the transport of products. One main rule of a successful policy in logistics is: Do not talk about transport only; talk about products and special regional relations. Transport is a derived demand.

To strengthen regional relationships some measures are adequate: More intensive advertising of regional products to the customers in the own region, regional logistics panels that exchange information about regional sourcing. Institutions and entrepreneurs have to collaborate intensively in this sector, institutions can foster the regional interchange.

Therefore in the case of freight-transport concepts the best actor is the regional administration and government in cooperation with the regional economy.

But do we at all need the regional administration to act?

It should act definitely because the individual decisions of the firms obviously lead to a situation, that endangers the function of the transport- system as a whole. Thereby it is at the end not only a problem of the regional firms, because a lacking function of the regional transport-system is a disadvantage for competitiveness - it as well is a problem for the citizens and their health and quality of life.

Integrated regional transport-concepts for freight transport have four advantages:

- They can be adapted to the special situation of the environment and the transport system
- They can lead to a much better understanding for the necessity of measures and increase acceptance by the population and by firms
- They serve as a catalytic of the regional economy and competitiveness
- They lead to a broader use of regional products.

In this conference we will discuss further aspects, not only of transport. I hope this will lead to a better understanding of the role of the regions in a global economy as a whole, but as well of the role of consumers and the advantages they may gain.

## **7. Mass Balance Analysis of Food Consumption in the UK**

**Dr. John Barrett**

**Stockholm Environment Institute at York**

### **Conclusions:**

- Out of all the household expenditure classifications, food has the greatest impact
- The intensification of agriculture is the largest concern in relation to CO<sub>2</sub> emissions and footprints
- Impact of food transportation is small in comparison
- The potential growth in the organic market will be too small to make a difference
- Diets have a major effect on environmental impact
- Current policies will fail to bring about any reduction in environmental impact

## **8. Food sector and material flows – a short contribution**

**Michael Ritthoff; Wuppertal Institute**

Analysing agriculture we have to ask:

What is the best we can produce from the land?

What is the best way to do it?

Traditional agricultural is integrated in biology, climate and culture of the region.

And often the traditional agricultural products are the best way to use the land.

But only a system wide analysis can show these advantages.

## **9. Short paths to efficiency – an ecological and economical approach for a regional food supply**

**Martin Demmeler**

Chair of Agricultural Economics and Farm-Management  
Technical University of München

### **Conclusions:**

Special **encouraging of consumer participation**

Political strategies for **reducing transport distances**

Supporting the formation of **regions with increased production capacity**

Financial assistance for **regional merging of agricultural producers and processing enterprises**

Realizing food prices **including external costs**

Regional food supply **needs special efforts**

**10. What can be the effect of regional sourcing patterns in an extended Europe?**

**Per Homann Jespersen**

FLUX – Centre for Transport Research

Roskilde University, Denmark

What can be the effect of regional sourcing patterns in an extended Europe?

- BAU: A further decoupling of freight transport and economy
- To reduce environmental impact
  - European freight transport network with rail & ship as backbone
  - Limitations on supermarket size
    - Focus on 'crazy supply chains'

