Consumer Behavior and Tourists Responses to Climate Change

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Living in Northern Germany
Some insights from our first study in 1995/99

“Coastal Tourism and Climate Change”

Küstenentourismus und Klimawandel

Entwicklungspfade des Tourismus unter Einfluß des Klimawandels

- Schlußbericht -

Kiel, 1999

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Some insights from our first study in 1995/99

“Coastal Tourism and Climate Change” (in Germany)

- **No simple relations:**
  There is no simple “physical” relation between °C of average temperature or mm of precipitation and the number of overnights or $ earned in a destination. Instead, we have to deal with a very complex phenomenon with an awful lot of parameters to consider.

- **Interfaces:**
  Climate Change can hit tourism through a multitude of interfaces.

- **Indirect impacts:**
  During the next three decades (seen from 1995), potential impacts of climate change on tourism will mainly be due to societies’ perception of and reaction to a future climate change. “Real” climate change effects (like e.g. rising sea level) will come into play later.
Climate change and tourism in a destination: Interfaces

Source: modified from Lohmann, 2001; Lohmann & Matzarakis, 2014 (in prep.)
Future Challenges for Global Tourism: A Delphi Survey

Nele Marisa von Bergner and Martin Lohmann

Abstract
Tourism is a complex system within a dynamic framework that is exposed to rapid and challenging developments. The existing tourism research does not fully address the nature of the global, intertwined challenges that may affect and shape the worldwide tourism system in the future with respect to both the industry and society. This article contributes to eliminating this knowledge gap using an exploratory Delphi survey that seeks to identify the most prominent challenges to global tourism through 2020 and to understand their nature, drivers, and effects. The five proposed meta-challenges demonstrate the complexity of the interrelations and interdependencies affecting the future of the global tourism system. These meta-challenges may also be regarded as constituting a strategic road map for global tourism in a complex and dynamic world.

Keywords
Global tourism system, tourism future, Delphi survey, challenge, sustainability

Introduction
Global tourism has encountered and will continue to confront great challenges. In the past, most visible challenges have arisen from shocking events such as terrorist attacks (e.g., September 11, 2001, in the United States), natural disasters (e.g., the tsunami in Thailand in 2004), the tsunami specific orientation to cope with challenges responsibly. We argue that the development of such an orientation requires the identification of challenges, their drivers and effects, and their interrelations.

Such information can be obtained using qualitative research methods in an exploratory approach. The results
The most prominent challenges for global tourism 2020 – on a meta level

**BALANCE:**
Using and safeguarding destinations' core values

**CONTRIBUTION AND EFFECTS:**
Tourism's impact on nature, society and economy

**GLOBALIZATION:**
Dealing with a changing market situation in tourism in a globalized world

**ADAPTATION:**
Adapting to and getting the most out of changing framework conditions

**SELF-CONTROL:**
Managing tourism assets with respect to market conditions

Source: von Bergner & Lohmann, 2013
Climate Change is considered to be one example of “mega”-challenges for future tourism

- We all know about the challenging nature of climate change, industry & consumers & politics
- Mitigation and adaptation needed; but, with respect to the last two decades:
  - Mitigation: Despite of efforts e.g. in the transport sector, close to nothing has been achieved with respect to reducing the total greenhouse gas emissions
  - Adaptation: some small steps (e.g. higher dikes)
- Consumers show concern, but only small behavior changes.
Deeply concerned, but…

Why don’t we (consumers) act? Some suggestions:

- I can’t change it anyway.
- Other things are more urgent.
- It’s easier to do nothing.
- “Fairness”: Others don’t act, why should I?
- The turn away - climate change as a cognitive and an emotional challenge:
  - Cognitive: difficult to understand, complex, slow and long, huge variability, unclear, especially on a regional level
  - Emotional: unpleasant; frightening; concerns
  - Holidays are not meant for cognitive work-outs or unpleasant emotions….
Avoidance!
Climate change and tourist responses

- Climate change impacts on tourist behavior:
  (How) will consumer behavior in tourism change under climate change conditions?
- Adaptation

- Tourist’s behavior impact on climate change:
  Are tourists aware of their contribution to climate change and their options to reduce their footprints and are they ready to use these options?
- Mitigation
Mitigation:
Climate-friendly tourist behavior – taking the sustainable choices
Tourisms is in focus as an area for mitigation strategies. Two basic directions:

- Changes in technical appliances used in tourism, e.g. in transport or accommodation, resulting in lower emissions per pax and/or in total.

- Changes in consumer behavior in tourism towards different behavior patterns, resulting in lower emissions per pax and/or in total.
You know what “Sustainability” means. It’s important, not really new.

Sustainability is a **buzzword** (a core part?) of many development strategies (master-plan etc.) in tourism. Less impact, smaller footprints: sustainability seems to be at least a very good idea.

One of the main success factors is the **consumer**. Most sustainable objectives would be reached easier if tourists shared the basic ideas of sustainability.

Do they?
Climate-friendly tourist behavior
= lower emissions = sustainable

- **Changes in** consumer **behavior** in tourism, resulting in lower emissions per pax and/or in total.
- **Less impact**, smaller footprints.
- Sustainability is a **buzzword** (a core part?) of many development strategies (master-plan etc.) in tourism.
- One of the main success factors is the **consumer**. Most sustainable objectives would be reached easier if tourists shared the basic ideas of sustainability.
- **Do they?**
The Consumer and the Tourist

- **Sustainability at home**: People (consumers) see the focus of their sustainable (responsible; climate-friendly etc.) behavior in their everyday-life [e.g. save energy at home, use your bicycle for the way to the office]

- The majority of **tourists** does not take a vacation in order to safeguard the environment and nature, or to show social responsibility to foreign waiters. Instead, they **have** a bunch of **holiday motives**.

- Thus, sustainable **tourism** is not about not to travel at all and not about a new marketing idea to sell yesterdays products. It’s about **shaping tourism** in a way that minimizes negative impacts and helps to generate positive effects.
So, let’s have a closer look at:

Sustainability as a consumer attitude and as a choice option in the travel decision process
So, let’s have a closer look at:

Sustainability as a consumer attitude and as a choice option in the travel decision process
RA Reiseanalyse – Tourism Demand in Germany
Study profile (www.reiseanalyse.de)

Reiseanalyse (Travel Analysis) 2014

» Research tool for the demand side of German holiday tourism since 1970.

» Yearly survey

» Covers holiday trips, short breaks, trip preparation and trip behavior as well as tourism related motivations, attitudes and preferences.

» Randomly selected face-to-face sample (some 7,500 respondents) + online survey with n=5,000 respondents with two waves in May and November.

» Non-commercial project, carried out by FUR an independent association of organisations interested in tourism research in Germany.

» Partners include tourism marketing organisations of destinations on different levels (from regional to international), tour operators, carriers, media, etc.
Sustainable (eco-friendly) as an attitude (Germany, January 2014)

„My holiday should be as far as possible ecological, careful with resources and environmental friendly.“

Basis: Pop. German, 14 years+
RA face-to-face 2014, n = 7,795
### Sustainability as a tourism attitude

<table>
<thead>
<tr>
<th>Population</th>
<th>Agree (1,2)</th>
<th>Somehow (3)</th>
<th>Disagree (4,5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>100</td>
<td>32</td>
<td>35</td>
</tr>
<tr>
<td>Million</td>
<td>70</td>
<td>22</td>
<td>25</td>
</tr>
</tbody>
</table>
## Sustainability as attitude – 3 groups

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*Somehow (3) is approximately between Agree (1,2) and Disagree (4,5).*
### Sustainability in the travel choice process

<table>
<thead>
<tr>
<th></th>
<th>All holiday travelers</th>
<th>Impact of sustainability on travel choice</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Very high (central criterion)</td>
</tr>
<tr>
<td>%</td>
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<td>2</td>
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<tr>
<td>Million</td>
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<td>1</td>
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<th>Medium/low</th>
<th>No impact at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>100</td>
<td>2</td>
<td>41</td>
<td>57</td>
</tr>
<tr>
<td>Million</td>
<td>55</td>
<td>1</td>
<td>23</td>
<td>31</td>
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**Sustainability in the travel choice process**
### Sustainability in the travel choice process

#### Sustainability as a tourism attitude

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Sustainability as an Attitude

- Many tourists have a **positive attitude** towards sustainable travel.
- Attitudes have a **behavioral relevance**, but you can never predict behavior out of a single attitude. Instead, behavior is driven by a bunch of aspects, e.g. other attitudes, motives, social norms, habits…
- People with a sustainable attitude / sustainability as decision criterion
  - have a higher travel propensity and make **more trips**.
  - are demanding customers
  - show higher spending and
  - longer trip duration
  - higher share of long-haul trips
  - More sustainable options chosen in details like….
    - Tour operator specialized in environmental friendly travel
    - Information about social situation in the destination
    - Eco accommodation
    - Paying compensation for flight CO₂ emissions

The idea of sustainability is stronger with tourists traveling a lot.
Barriers and facilitators for sustainable tourist behavior
I would like my holiday trips to be sustainable. It would be helpful for me, if …

- 55%: … this would not include additional cost
- 49%: … my holiday needs are still fulfilled
- 43%: … I could access more information
- 32%: … the offer for these holidays would be bigger
- 20%: … if my travel companion would also like it

Basis: German-speaking population 14-70 years, who would like their holiday trips to be sustainable
Source: RA online 11/2013, Question by FUR, funded by BMUB
Acceptance of climate friendly behavior options.
Customer-orientation with product development and distribution is a must!

Stick to behavior - Pay for it

Change travel behavior

Travel less

Potentials for Change
How to get (part of) the others?

Customer-orientation with product development and distribution is a must!

Climate-friendly tourist behavior options (sustainable tourism products) should…

• Fit into the tourist’s **motivational** set
• Be easily **accessible**, convenient
• Be **affordable**, not expensive
• Close to tourists **usual** behavior
• Perceived as being **fair**
• Perceived as being **efficient** with respect to the proposed aim (mitigate climate change) (no cheating!)
• “**Sexy**”
Keep in mind:
The success of vegetarian restaurants depends largely on the richness and the taste of the food offered, not on the absence of meat!
Understanding tourist behavior in the climate change context
We react (adapt) to actual weather.
Proactive Adaptation

Beach at Bournemouth.
Source: The Sun, May 31, 2011
Proactive Adaptation
Tourism demand

Influencing Factors

- Environment
  - Policy
  - Disasters
- Economy
  - Energy prices
  - Economic crisis
- Demographic change
- Technology
  - Web 2.0
- Tourism industry
- Consumer Attitudes
- Multi-optionality

Examples

- Economic crisis
- Energy prices
- Climate change
- Multi-optionality
Fundamentals of Tourism

Climate Change may hit

Climate Change may hit

Climate Change may hit

Lohmann: Climate Change & Tourists

UNWTO, Legazpi (Phil.), May 2014

Climate Change may hit


Basic Structure

- Person
  - Ability
  - Motivation
- Potential Tourist (Demand)

Region

- Assets
- Amenities
- Accessibility
- Potential Destination (Offer)

Filter

- Communication
  - Image

Result

- (Re-) Action

Tourism
Climate change and tourism demand: Interfaces

Source: modified from Lohmann, 2001; Lohmann & Matzarakis, 2014 (in prep.)
Possible impacts of climate change (destination)

climate change → tourism demand for a destination:

(1) vanish completely; **no more tourists**

(2) severe damage with no reasonable possibility to keep the destination in the tourism business, **no more tourists**

(3) changed situation leading to a **decline of demand** with no possibility to attract new target groups; reduced opportunities in tourism (e.g. due to unfavourable weather conditions)

(4) changed situation with possibility to attract new target groups when adapting to the new circumstances, **constant volume** of demand

(5) changed situation with possibility to attract **additional** target groups when adapting to the new circumstances

(6) changed situation with possibility to attract **additional** target groups without any adaptive efforts

Source: modified from Lohmann, 2001
“Climate” is a **construct**. What you see and feel is the weather.

As climate in a given region is seen as the weather in general (i.e. the **average weather** in a time span of 30 years), climate change necessarily involves a change of weather parameters like temperature, precipitation, hours of sunshine etc.

Tourists respond to **climate** (general weather) in their pre-travel decisions and to **weather** during the vacation in their day-to-day choice of activities, places to visit etc.

With respect to weather, important aspects are:

- What is the relation between weather and tourist behavior?
- Are tourists weather sensitive?
- Are tourists weather responsive?
- Will a change of weather have an impact on behavior?
- How and how far can humans adapt to new climate conditions?
“Climate” is a construct. What you see and feel is the weather.

As climate in a given region is seen as the weather in general (i.e. the average weather in a time span of 30 years), climate change necessarily involves a change of weather parameters like temperature, precipitation, hours of sunshine etc.

Tourists respond to climate (general weather) in their pre-travel decisions and to weather during the vacation in their day-to-day choice of activities, places to visit etc.

Tourists are weather sensitive and weather responsive, but the relation is not a simple one. And they have tremendous adaptive skills and a lot of flexibility.

Simple projections of future tourism flows based e.g. on temperature changes may be a good tool for thinking. But how customer behavior will really develop in the long run is depending on a large number of factors.
Climate/weather

- may be a driver to leave the home area for holiday travel
- influence timing of travel
- define partly the level of attractiveness of a destination
- determine the suitability of a destination for different forms of travel.
- drive seasonality of tourism
- influence individual’s actual or planned behavior in situ,
- have an impact on satisfaction of the overall holiday experience and on return intention.

Weather as a facilitator and resource of tourism

- Destinations’ Product Feature
- Central Image Factor
- Basis for Activities

(Climate*) Change expected!

* Climate in a given region = the weather in general (i.e. the average weather in a time span of 30 years),
The model (next slide) offers a structure that examines the relationships among the weather/climate that is experienced at home, the weather that is experienced during the stay at the destination, the climate of the destination, pre-travel weather preferences, weather perceptions, and experiences at the destination, in-situ tourist behavior (planning, travel and activity), and re-visitation intention.

The white squares refer to weather and climate in physical terms, with climate at home and climate at destination offering a framework for the customer's motivation, choice and decision process and with weather during the stay functioning as a variable with which the customer must contend at the destination. Light-grey ovals mark psychological concepts and processes. These are the important “authorities” and form the basis for reactions. Finally, dark-grey ovals identify factual behavior.
Weather, Climate, and Tourist Behavior. Conceptual Model

Source: Lohmann & Hübner, 2013
Conclusions
There is room to move, **sustainable holiday behavior can be a mass phenomenon!**

- A lot of tourists love the idea of sustainability in tourism.
- Consumers accept their own **responsibility**, but they also see the obligations of the tourism industry and the state.
- What makes tourists travel is their **holiday motivation** not their sustainability attitude. Sustainable products must meet the tourists’ holiday needs. Perfectly.
- Tourists are not ready to pay more just because you communicate your product as being sustainable. In order to turn a **sustainable** product into a **perceived customer value** you have to mark its holiday relevance.
- Higher prices for non-sustainable tourism products would be a strong driver.
- The tourism industry has to take responsibility, it’s their chance and opportunity: To develop smart and convenient products and convincing communication strategies with respect to climate-friendly tourism is a necessity.
Climate change affects tourist behavior:
- Possibilities to travel, economic situation
- Motivation to travel
- Attractiveness / assets of destinations
- Amenities
- Accessibility

Climate change will hit tourism demand in different stages.
The impacts will partly be masked by dynamics in other factors.

We have to expect: a “flexible response” of a multi-optional, highly adaptable customer.
Different stages of climate change impacts

- Societies’ perception of and reaction to (expected) climate change
- + gradual “real” changes
- + fundamental “real” changes

Consumer Behavior Dynamics in Time

Situation and changes and impacts will vary depending on destination or sector.
Competition with other sectors

- With respect to climate change, **transport** will always be a key factor.
- **Tourism** is transport.
- One may imagine, that someday we have to decide whether we **allocate** our limited **resources** to the transport of **goods** around the globe or to the transport of **people**.
- Tourism is not only a business for destination and other suppliers (often SMEs). It is a **beneficial experience** for those traveling, the tourists.
- Perhaps, we should consider where we **position tourism** in such a debate?
Appendix
RA Reiseanalyse – Study profile

Reiseanalyse (Travel Analysis) 2014

» Research tool for the demand side of German holiday tourism since 1970.

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» Covers holiday trips, short breaks, trip preparation and trip behavior as well as tourism related motivations, attitudes and preferences.

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Thank you.

Ascona, Ticino, CH; Photo: Lohmann, Aug. 2011