Value Chain Analysis
on mid-range and luxury hotels on Koh Chang

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Table of Content

Introduction

With over 26 million international arrivals in 2013 (Immigration Bureau, Police Department, 2013) and more than the double amount accounting for domestic tourism, the size of Thailand's tourism sector earned the country a place on the global top 20-list of the most popular travel destinations (OBG, 2013). Consequently, Thailand has witnessed a path of rapid tourism growth, which has not been without scrutiny. Several issues have emerged as a destination, according to the World's Economic Forum (WEF); the country has been affected by uncertain property rights, red tape on business formation and poor environmental protection record (Ibid). Particularly the latter is the main focus of this study. Looking at how the mid-range and luxury hotels could better benefit from the growth of the tourism industry in Koh Chang, Wageningen University, NHTV University of Applied Sciences Breda, and The Designated Areas for Sustainable Tourism Administration (DASTA) (which has pioneered the path of sustainable tourism implementation on Koh Chang), embarked on a mission of assessing on how well these actors deal with sustainability.

The initial stages included to form a research team and develop a cooperation agreement to support equitable teamwork. Under Wageningen and NHTV Breda University's expert guidance the team worked through the following steps: i) selection of the value chain, ii) analysis of the value chain, iii) initial

assessment of priority, and possible interventions that address value chain constraints, iv) methods to apply in the field and v) several project activity planning sessions (including peer evaluation sessions).

First presented is the reflection on the background of the research plan, including the objectives, team and work plan. Later, this report incorporates the steps taken to properly select and analyze value chains (industry sub-sectors), and determine the appropriate facilitation activities which can potentially support private-sector development in the industry, and create positive impacts for the destination as a whole.

The data collection took place in Koh Chang, Thailand from April 30th to May 16th of 2014. Given the successes of tourism development in White Sand Beach, Klong Prao, and Lonely Beach in Koh Chang, these areas were selected for the data collection.

Following is the completion of the value chain selection. The team continued to conduct a thorough analysis of two of the priority sub-chains (e.g. water value chain, and energy value chain). This involved in-depth interviews with market actors, visits to local communities and local media. Tourists were inquired via a survey, and furthermore, discussions with government officials were conducted. Given the information gained during this phase of the research, the constraints on sustainable practices within the value chain which impacted the entire range of market actors were identified. Moreover, a stakeholder meeting took place on the 16th of May, of 2014, and helped the team to validate the preliminary solutions/interventions before the conclusion of the field visit itself.

Later in this report, the final value chain selection process is presented (including a VC graphical representation), followed by a more detailed description of the value chain actors involved directly and indirectly in regard to the bottlenecks, entailing constraints and corresponding solutions. Subsequently, the intervention design is proposed. During this step, the team conducted a preliminary assessment to determine the capacity and intrinsic interest of the different actors involved. An elaboration on obstacles that prevent these actors of taking action follows, and an evaluation of strategic interventions options that address these obstacles and strengthen the capacity of the actors involved to jointly take action and to address the selected bottlenecks, is demonstrated.

Finally, a number of recommendations for DASTA on how these interventions could be effectively put into practice are provided. A brief conclusion on several aspects of this study and readdressing the research questions will complete the report. In essence, the aim of the present research is to ensure

adequate direction for a genuine attempt to meet sustainability on the region's tourism sustainable development. Further successes here could lead to replication elsewhere.

Research Team

The Research Team members were:
- Carole Pottier, (French) - WUR/NHTV
- Kathrin Dischereit, (German) - WUR/NHTV
- Márcia Gonçalves, (Portuguese) - WUR/NHTV
- Malena Hesping, (German) - WUR/NHTV
- Michèle Schiermann, (German) - WUR/NHTV
(Contact information is available in appendix 1)

A. Research design and limitations

Based on the study intentions mentioned in the research plan and unforeseen happenings at the research site, it is of necessity to reflect upon initial plans in order to critically evaluate the project and its outcomes.

1. Introduction to the research project

1.1. Goal

The goal of the study is to analyze the performance of the mid-range and luxury accommodation value chain on Koh Chang in order to define feasible interventions to reduce carbon emissions in this value chain and contribute to the development of Koh Chang as a low carbon destination.

1.2. Research Questions

General research question: How can the mid-range and luxury accommodation value chain contribute to the development of Koh Chang as a low carbon (tourism) destination?

I.   *What are the features of the mid-range and luxury accommodation value chain and which stakeholders are involved?*

i.   *Which larger contextual features influence the value chain?*

II.   *Which criteria and corresponding indicators can be defined in order to enable measurement of the performance in terms of carbon emissions with respect to <u>energy efficiency</u>?*

i.   *Which feasible strategic intervention options can be developed?*

III.   *Which criteria and corresponding indicators can be defined in order to enable measurement of the performance in terms of carbon emissions with respect to <u>water management</u>?*

i.   *Which feasible strategic intervention options can be developed?*

IV.   *What are current bottlenecks of the value chain in terms of carbon emissions? How can these bottlenecks be addressed?*

i.   *How can the capacity of the stakeholders be strengthened in order to address these bottlenecks?*

ii.   *What are potential obstacles that prevent the involved stakeholders from taking action?*

1.3.   Purpose

The purpose of the study is to generate knowledge to assist DASTA in developing intervention strategies to reduce carbon emissions in the mid-range and luxury accommodations value chain in order to establish a sustainable tourism destination, which is of great importance for the long-term competitiveness of the island, and to contribute to the quality of life on Koh Chang.

1.4.   Intended end result

This study will deliver suggestions for strategic interventions and stakeholder action in the mid-range and luxury accommodation value chain. These suggestions aim to give advice on how to reduce carbon emissions in the domains of energy efficiency and water saving on Koh Chang by means of a value chain analysis supported by empirical evidence gathered by the research team on field. Eventually, these interventions will induce Koh Chang to becoming a low carbon destination.

The data collection phase on Koh Chang was finalized by presenting the intervention options to the stakeholders involved. A meeting was set up in which representatives of involved stakeholders were present and invited to take part in a plenary discussion as reaction on the proposed interventions.

Final end product is a value chain analysis, thus a more extensive elaboration on the research findings, including an analysis and interpretation of findings and concluding intervention options and recommendations.

1.5. Outcomes

This value chain analysis report will contribute to the quality of life in Koh Chang by supporting to implement sustainable tourism. The development of Koh Chang as low carbon tourism destination is initiated. The research team delivers an analysis and assessment of the performance of the mid-range and luxury hotel value chain on Koh Chang regarding carbon emissions in energy efficiency and water management in order to identify bottlenecks.

Knowledge about several subdomains is gathered. Included in this are information on the larger contextual setting of the value chain, the stakeholders involved, the criteria and indicators for measurement of the performance and bottlenecks which can be defined during the assessment. Furthermore, potential obstacles which prevent stakeholders from taking action will be identified and accordingly, possible intervention strategies, based on the findings during the data collection phase, are suggested.

These interventions and recommendations can serve as a tool for local authorities and DASTA to actively initiate improvements in the suggested areas, providing that they are communicated to the involved stakeholders.

1.6. Beneficiaries

- This research will assist the *Designated Areas for Sustainable Tourism Administration* with developing strategies and intervention options to develop Koh Chang as a low carbon tourism destination. With this project the organization follows up on the successful sustainable development of Koh Mak. Due to a lack of knowledge about the performance of the mid-range and luxury accommodation value chains in which this research, as part of a larger study conducted by BSc Tourism students from the Netherlands, investigates.

- *NHTV University of Applied Sciences Breda & Wageningen University* are universities in the Netherlands offering the joint-degree bachelor program BSc Tourism whose students will conduct this research and represent the universities abroad, particularly among stakeholders of the mid-range and luxury accommodation value chain on Koh Chang.

- *Managers and owners of mid-range & luxury hotels;* by suggesting feasible intervention options, supported by empirical evidence, carbon emissions and accordingly costs can be reduced. It will be up to them whether and to what extent they follow the suggestions, but they will get the information and can decide what to do. Furthermore they benefit from a 'green' destination image, which might attract more, and/or a different type of tourists.

- Other stakeholders in the mid-range and luxury hotel value chain, such as *energy, water and food suppliers*, can benefit in the same way as hotel owners, depending on how they choose to use the provided information.

- *Supply companies of technical equipment* (e.g. companies selling and installing solar panels, companies selling water efficient appliances such as low-flow shower heads) could get more jobs when actors in the value chain decide to start using improved, more efficient and more sustainable technologies regarding water and energy use.

- *Local authorities* can use the information provided by the final report and the stakeholder meeting by including it in their decision-making and development of possible future plans to implement policies in order to develop Koh Chang as a low carbon destination.

- Through our project awareness about sustainable use of energy and water will rise on the island, which could benefit the *local community* when acting more sustainable and enjoying to live in an environment which is being cared for.

- Similarly, *tourists* benefit from the environmentally improved situation on the island and can enjoy the island's beauty in a sustainable way.

- Additionally, the *National Park* located on Koh Chang and surrounding areas, and its representatives, will be supported in preserving the nature.

- The *Green Leaf foundation* is presented as a prototype for awarding eco-friendly tourism businesses. This certification program will gain popularity among mid-range and luxury hotels and resorts and will be strived for.

- Last but not least, *we as students* will benefit from this project, because we have the possibility to apply our theoretical knowledge in a real research and experience all kind of obstacles which go along with working in a group, cooperating with real life stakeholders and being involved in an intercultural environment.

2.   Reflections on the research design and limitations

2.1   *Reflection on the risk analysis*

The risk analysis was an important tool that helped to decrease the chances that something will cause a problem in schedule, report, outcomes, etc. In the present case, only a limited number of risks factors occurred during the whole project (before, during, after being on Koh Chang) (Fokker, 2014). Consequently, the team has always managed to fulfill tasks on time. Besides, the members have been well prepared to manage risks that may appear during the fieldwork and applied the strategies elaborated in advance in the research plan to avoid a situation where deadlines are not respected and where the team members are not able to work together anymore. Several risks that came along during the fieldwork are the following:

1.   Tensions within the team

One of the main internal risks and which was likely to occur within the team were potential conflicts between the members as this team is composed of students from three different nationalities with diverse cultural backgrounds. During the fieldwork we have encountered one issue relating to 'working in group'. After spending three weeks 24/7 together, the team members expressed some difficulties to deal with each other. Then, it was of necessity to take some time alone.

Furthermore, small tensions occurred while discussing about content or methods during the research process. However, the impact was limited as we promised in advance to be honest towards each other and to give the opportunity to everyone to express his opinion. Communication is a crucial point for an efficient work together.

2.   Language barrier / cultural shock

During two interviews, one with the National Park office and one with the municipality, the team required the help of Google translator to forward the questions and to understand the answers of the interviewees. Eventually, this method is time consuming and leads to the use of several inaccurate words or sentences.

3.   Willingness of stakeholders to participate

To avoid the risk that stakeholders deny participating in the research, the team has contacted some hotels by email during the early stage of the research plan in order to clarify whether or not they show interest to participate in our research. However, this method was only partly successful. Consequently, the team had to come up with a new strategy that consisted in approaching the hotels directly on-site (e.g. to enter all potential mid-range or luxury hotels).

4.   Unacceptable working environment (e.g. climate/weather conditions)

Another external risk that occasionally occurred was the difficulty to cope with the climate. The extreme weather conditions such as storms impacted the team slightly from doing the fieldwork. Hence, the team had to postpone one interview due to heavy rain.

2.2   Reflection on ethical issues

- **Language**

As predicted in the research plan, language barriers among some Thai informants occurred. Even though it differed per institution, people directly involved in tourism were more likely sufficiently English skilled. However, misunderstandings led to miscommunication among both parties. Especially by the use if Google Translator which intended to be the intermediary between interviewers and respondents, sentences were not accurately translated and the actual sense got lost.

- **Mentality**

The assumption that Thai people think less analytic and systematic got due to conversations occasionally confirmed. It often seemed as they did not understand the deeper sense of the question/study – even though it was formulated very easy already. It appeared as they were not familiar with environmental issues and their consequences. However, this revealed the lack of knowledge and education among several stakeholders.

- **Objectivity**

Even though objectivity was one of the main principles when encountering stakeholders, certain statements about certain institutions (e.g. negative remarks on the government) evoked biases among the researchers. As questions were still asked in a non-leading way, it was possible to ask with a special intention.

- **Addressing research sample**

To ensure confidentiality and anonymity the informants were treated unnamed and with respect. The research purpose and universities were introduced to them, nevertheless and in contrast to the research plan, researcher's names as well as contact information were not handed out in the beginning of the study. Hence, the informants did not have the chance to contact us afterwards with potential additional information or to simply have the chance to withdraw what they have said in case it could harm then. However, it was reflected upon this on-site already that the team eliminated this limitation towards the end.

Besides, arranging appointments by means of short visits ahead and being situated in an open setting while having an interview created a trustworthy atmosphere. To show gratitude interview informants were sometimes invited for a drink.

2.3. Reflection on the initial project planning

The Gantt chart

A further project planning has been developed for the final report (see Fig. 1). The schedule here presented includes all the activities/tasks carried out throughout the entire research project. Tasks were added to the original Gantt chart during the fieldwork on a daily basis. Reason for this was that the team needed to adapt to 'present' circumstances during fieldwork. Hence, this could not have been part of the original chart presented on the research plan. The schedule was not subjected to change during field work, thus the team has managed to fulfill all tasks on time with exactitude. The remaining activities are incorporated into the reporting phase of the schedule and a detailed task division is provided further on this report. Each activity is structured in a bar; the position and length of the bar reflects the start date, duration and end date of the activity. This allows you to see at a glance:

    i.   What the various activities are

   ii.   When each activity begins and ends

  iii.   Duration of each activity

  iv.   Overlap with other activities, and by how much

   v.   The start and end date for the whole project
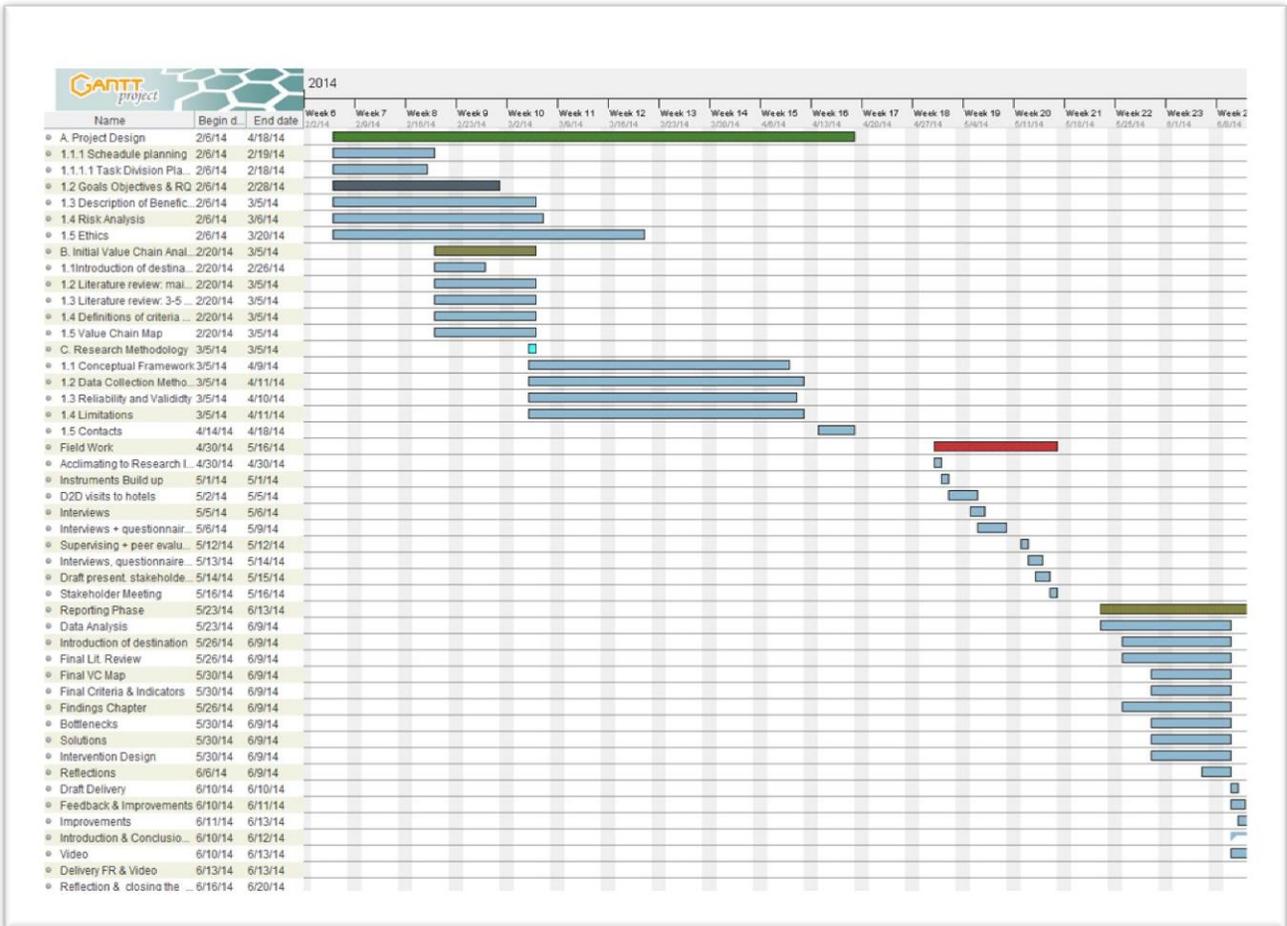
Figure 1 – Gantt chart

2.4.   Reflection on the task division

A further task division has been developed for the final report (see table 1). In italics are shown the tasks, which were not included in the research plan. The tasks were divided according to the team's decision to adapt to the present circumstances in the field such as location of hotels, weather conditions, stakeholders availability, etc. and besides, to the member's own preferences. Therefore, some members feel more comfortable to work within groups of three students while others prefer to work in duo or alone. That is the reason why the team had decided to split during the fieldwork (e.g. in two different locations during one week) in order to work more efficiently. However, everyone had to accomplish more or less the same tasks; handing out questionnaires and conducting interviews. Furthermore, the team discussed about each member's skills and came up with a more precise idea on 'who is going to do what'. Some members of the team have better writing skills while others are more

11

competent in organizing on field or structuring the report. Then, all tasks were assigned according to preferences and abilities to accomplish these tasks. Concerning the final phase (after the trip), the time schedule was tight and it was of importance that everyone could work on a task the student is already acquainted with. Some members of the team worked on the qualitative data analysis and the remaining members worked on the quantitative data analysis.

	1. Before the fieldtrip : Research Plan	2. During the fieldtrip : Collecting data and stakeholders meeting	3. After the fiedltrip : Value chain analysis & intervention report
Together/By small groups	- Definition of research goal, research questions, purpose, intended end result and outcomes - Resources (information of supervisor, resources on site, etc.) - Contacting potential informants/hotels	- Search for potential informants - Handing out questionnaires - Interviews - Observations and use of the checklist in hotels - Designing presentation for stakeholders meeting - Group meeting with teachers	- Transcript and coding of interviews - Filling questionnaires in excel document
Kathrin	- Definition of research goal, research questions, purpose, intended end result and outcomes - Description of beneficiaries of your project - Definitions of criteria and corresponding indicators - Presentation of different data collection and data analysis methods - Final review	- Expanding interview questions - Selecting items for checklist	- Restate the research goal, research questions, purpose, intended end result, outcomes and beneficiaries of your research project - Final definitions of the criteria and corresponding indicators - Methodology of the qualitative data - Intervention design - Final review
Malena	- Definition of research goal, research questions, purpose, intended end result and outcomes - Description of beneficiaries of your project - Introduction of destination area - Presentation of different data collection and data analysis methods	- Selecting items for checklist - Expanding interview questions	- A final introduction of the destination area - Reflection on the stakeholders meeting - An extensive description of the qualitative research findings - Intervention design

	- Final review		
Michèle	- Ethics - Motivation of choice - Literature review: main problem our research is going to address - Limitations - Final review	*- Designing questionnaire*	*- A reflection on ethical issues that occurred during the fieldwork.* *- A reflection on the methodology of the research plan* *- A final literature review of academic and professional literature* *- An extensive description of the qualitative research findings* *- Intervention design* *- Final review*
Marcia	- Introduction - The Gantt Chart - Value chain map - Presentation and explanation of research design and conceptual framework	*- Designing questionnaire*	*- Introduction* *- A reflection on the initial project planning* *- Final value chain map* *- An extensive description of the quantitative research findings* *- An elaboration on the different value chain actors* *- Methodology of the quantitative data* *- Bottlenecks and solutions* *- Recommendations for DASTA*
Carole	- Task division - Risk analysis - Literature review: 3-5 similar professional value chain studies - Reliability and validity	*- Designing questionnaire* *- Meeting with teachers about stakeholders meeting*	*- A reflection on the risk analysis* *- A reflection on the task division* *- A final literature review of 3-5 similar professional value chain studies* *- Bottlenecks and solutions* *- Selection of most critical bottlenecks and solutions* *- Recommendations for DASTA*

Table 1 - Task division before, during and after the fieldwork

2.5. A reflection on the stakeholder meeting

The last day on Koh Chang was rounded off with a stakeholder meeting, which was organized by DASTA and NHTV & Wageningen University. Different stakeholders from Koh Chang, invited by DASTA and the student research groups, were present. Students had the opportunity to briefly present their team's methodology, first findings as well as corresponding recommendations and in the end ask questions or initiate a discussion among stakeholders to gather more information and opinions which could be relevant for the research. For this research the team decided to give the audience a scenario:

In 10 years' time, tourism has increased tremendously. More hotels and resorts have been established which demand a high water consumption. Water has become a rare resource on Koh Chang.

→ *How would you deal with this situation?*

Four people from the audience, the manager of Amari Emerald Resort, a representative of DASTA, the owner of Kacha Resort and the local mail man, commented on this scenario and gave valuable input for this research regarding water management. Because of their relevance the comments have been treated like an interview, meaning that they have been transcribed and coded for the analysis and included in the findings. Thus, the stakeholder meeting was an important opportunity for the team to, at the one hand coming up with first findings and interventions, and on the other hand getting feedback about issues and feasibility by actually involved people. The comments of the audience during the stakeholder meeting will be elaborated in more detail in the findings part of this report.

2.6. Limitations of study with respect to reflection on methodology

Based on unexpected events, crucial information or other happenings, it is likely to adapt the actual research plan on-site. Hence, several changes were undertaken.

- **Research location**

Based on previous internet research three research locations were identified where it was likely to meet mid-range as well as luxury tourists. According to the research plan, the data got mainly collected in the areas of White Sand Beach and Klong Prao Beach, nevertheless, Kai Bae Beach was left out. The

satisfying response rate on the former two beaches and the location of the own accommodation did not consider Kai Bae Beach as an additional research location as necessary. Nevertheless, incorporating it might have represented a more diversified sample, especially in terms of tourists.

- **Preparations**

One week before departure 42 mid-range and luxury hotels on Koh Chang were contacted by means of an e-mail and asked whether there is interest for participating in an interview. The purpose, information of researchers as well as the assurance of confidentiality was communicated. However, only one hotel responded. Probable reason might have been that most of the hotels do not provide the contact details of managers on their webpage. Hence, the e-mails were send out to the reception and were most likely not understood by the receptionists.

- **Research design**

- The study design was kept as cross-sectional and many interviewees were approached by means of a snowball sampling. However, the applied methods got based on our progress adapted on-site. Hence, participant observation in form of sleeping over in mid-range and luxury hotels was cancelled. As it was first planned to do during the last days of field work, it did not appear very necessary anymore due to already gathered data and the adjusted target the research team was focusing on.

- To assess the environmental performance of hotels, several measurements were intended to be performed. Nevertheless, the Hotel Life Cycle Assessment (LCA) and water saving measure were due to missing consumption information and expenditures not be given full attention. Besides, also the Carbon Foot- and Foodprint were taken out since exact occupancy rates as well as the travelled distance of food were not available.

- **Eligibility**

Eligible sample – as decided in the research plan, only informants with a pro-efficient level of English were supposed to contribute to the research. Nevertheless, some interviewees were not sufficiently English skilled which might have harmed the validity and reliability.

Eligible hotels – as it was a criterion to consider the amount of stars per hotel (4 star mid-range hotels, 5 star luxury hotel) turned out to be irrelevant due to the fact that most of the hotels do not indicate any star ratings. Hence, we only based on the amount of Baht (>1000) paid per night.

- **Time availability**

According to the research plan it was due to the limited time availability on-site expected not being able to refer to a representative sample regarding a generalization of the energy and water consumption and

supply situation. However, 19 interviews gave sufficient insight in current circumstances. But still, deeper insights into consumption patterns were due confidentiality among hotels not possible.

- **Distinction mid-range and luxury hotels**

By cause of too little time available, no distinction between mid-range and luxury hotels has been made. Therefore, differences in operations and performances could not have been revealed. Hence, the solutions and interventions address hotels above 1000 Baht per night in general by ignoring implementation differences.

2.7. The completed research log covering the entire field research period

See appendix 2.

B. Final value chain analysis

In order to develop solutions and intervention strategies for mid-range and luxury hotels regarding the preservation of the social as well as natural environment on Koh Chang, this section is dealing with an insight into the destination and main concepts used in this study. Besides, it disclosures the applied methodology, findings and analysis as well as the derived solutions.

3.   A final introduction of the destination area

Introducing Thailand

Thailand is a constitutional monarchy located in South East Asia, bordering Myanmar, Laos, Cambodia and Malaysia. The country is known for its welcoming, friendly and smiling inhabitants, its cuisine and its unique culture with various religions and traditions. The Northern part is defined by a mountainous landscape while the Sothern part, with its 3219 km of coastline (CIA, n.d.) and numerous islands, offering wide white beaches and azure waters of the Andaman Sea and the Gulf of Thailand. Because of these beach and island destinations, Thailand is one of the world's most popular tourism destinations (Apa Publications, 2009; Bloomberg, 2012).

In Thailand's current economy the service sector is, accounting 46,5% of the country's gross domestic product (GDP), the strongest sector, while the industry sector contributes 41,2% and the agricultural

sector 12,4% to the GDP (Wirtschaftskammer Österreich, 2011). With international tourism revenue of about 7% of Thailand's GDP, the tourism industry is considered the country's best earning industry (Tourism Authority Thailand, n.d.a).

International tourist arrivals to Thailand are increasing rapidly and reached in 2012 for the first time the 20 million mark. The main source markets in 2012 with more than 1 million tourists each were Malaysia, China, Japan, Russia and South Korea. Domestic tourism numbers are increasing similarly and were expected to reach 116.80 million in 2012. The revenue received from international tourists was with 889.571 billion ฿ 17.39% higher than the year before. Domestic tourists spent with 556.925 billion ฿ 20.44% more than the year before (for figures and references see appendix 3).

Introducing Koh Chang

Koh Chang, called 'Elephant Island' because of its shape which resembles the head of an elephant and its trunk, is the largest of the 52 islands forming the Koh Chang archipelago. It is located in the South East of Thailand in the region Trat, directly at the Cambodian border and is Thailand's second largest island after Phuket. Until the 1980s Koh Chang was a restricted area for the military which denied public access to the island. Only in the late 1980s the first tourists arrived on Koh Chang and in 1982 the island became a National Park (Noltenuis, 2013; Halasz & Cowburn, 2014). The local population on Koh Chang subsists on coconut, fruit and rubber cultivation as well as on fishing and shrimp farming, but increasingly, people find jobs in the tourism industry. Counting only about 8,932 inhabitants, the island hosts 655,000 tourists of which about two thirds are Thai. They come for the sandy beaches, the rain forest and the mountains of the National Park (Halasz & Cowburn, 2014). Popular activities for tourists are elephant trekking, snorkeling and diving. Koh Chang used to be a backpackers' place before rapid tourism development started with the first ferry operating in late 2002. In 2003 the former Prime Minister Thaksin Shinawatra started promoting the island for rich tourists, following the example of Phuket, but taking more environmental responsibility (Dorling Kindersley, 2010; Koh Chang, n.d.).

3.1.   Contextual analysis of macro factors

Environmental

Thailand is one of the most popular destinations among tourists. Its extensive coastline and numerous islands with azure waters and white sandy beaches attract more tourists every year. The natural beauty and exotic scenery are important attraction factors (Apa Publications, 2009). Within the last 10 years

17

Thailand suffered from two major flood catastrophes, the tsunami in 2004 which hit the country's west coast and the flooding in 2011, caused by tropical storms and heavy rainfall, which has been the worst since half a century (Biggs et al., 2011; TAT, 2013; Thailand Integrated Water Resource Management, n.d.). Such incidences have major effects on the natural environment of the affected area, but also on its inhabitants and economies, including the tourism industry. Nevertheless, while the tourism industry on Thailand's west coast suffered from the tsunami 2004, Koh Chang, located at the East side and far from the disaster, benefitted from an increase in tourist arrivals (Noltenius, 2013). With the campaign 'Go Green on Koh Chang' the island is a flagship destination for the Tourism Authority Thailand's (TAT) promotion campaign for sustainable and responsible tourism in Thailand (Koh Chang, n.d.). There are several projects going on to practice sustainable tourism.

• *Organic Garden* projects in which resort cultivate local food in order to reduce their reliance on external suppliers are gaining popularity.

• Several hotels and resorts have been *labelled 'Green Leaf Hotel'* for adapting sustainable practices.

• A *cleaning day* unites locals, visitors, business owners and staff who spend one day together cleaning selected areas of the island.

• DASTA takes effort to follow the example of Koh Mak and develops a *low carbon destination* on Koh Chang, of which this research is part of.

Environmental-political

Many Thai private and public organizations have recognized the importance of a healthy environment for the tourism industry and work out plans and practices for sustainable tourism development. Additionally to DASTA, a public organization for sustainable tourism development, the Tourism Authority Thailand, short TAT, works together with local enterprises, such as hotel owners and managers, on a concept called '7 Greens' in which they develop and perform tourism activities which protect the environment (Ministry of Tourism and Sports Thailand, 2011, TAT, 2013). Koh Chang is regarded as a flagship destination for 'green tourism' (Koh Chang, n.d.).

Political

A major cause of increased domestic tourism is a government policy aiming to increase wages and decrease general costs of living to boost purchase behavior of Thai people. Next to the political effort to perform sustainable tourism development by formulating and implementing strategies and policies,

there are political threats to tourism. These include mainly political unrest, such as the ongoing mass protests in Bangkok since last year's November (Tagesschau, n.d.) and bombings in Bangkok and Songkhla's Hat Yai in July 2011 and January 2012 (TAT, 2013), which might cause travel warnings and lead to uncertainty among tourists. Furthermore, political policies which are not directly concerned with the tourism industry, such as the EU carbon tax or a charge on air passenger duty can affect the industry negatively (TAT, 2013). Koh Chang is politically divided into two districts but in fact the local governments have insufficient power to achieve initiatives or changes, because they operate for a higher government on the mainland.

Economic

A major threat to the Thai tourism industry has been the worldwide economic crisis which begun in the United States in 2008. This can be seen in the decrease of international tourists arriving in Thailand in 2009 (see appendix 3). Nevertheless, the world economy is recovering from the crisis and the economy in Asia is growing which leads to a general increase in travels. Increased regional travel within South East Asia is expected to go along with the establishment of the ASEAN Economic Community, short AEC, in 2015 for the liberalization of trade and tourism flows (TAT, 2013). The mid-range and luxury hotel owners and managers on Koh Chang realize that the market shifted towards a more Asian, especially Chinese one.

Socio-cultural

Next to the natural beauty, the welcoming unique Thai culture is a main pull factor for international tourists (Apa Publications, 2009). American and European tourists tend to prefer long-haul travels while the Asian trend goes to more regional travel, which is the most profitable mix for the Thai tourism industry. Domestic travel increased amongst others due to longer holidays and weekends (TAT, 2013). Furthermore, the Tourism Authority Thailand (2013) wants to focus its marketing on up-market tourists such as married couples and honeymooners, medical and beauty tourists, golfers, other sport tourists, who are likely to stay in mid-range and luxury hotels and resorts and bring revenue to the island. Furthermore, eco-holidays are promoted to increase the island's green tourism image.

Technological

The rapid development of the tourism industry on Koh Chang started rather recently with the availability of electricity and landline phones in 2000 and the first ferry in late 2002. With the ferry, more and larger

equipment was brought to the island which led to the development of a functioning infrastructure (Halasz & Cowburn, 2014). Along with globalization and increasing interconnectedness, the seemingly unlimited field of information communication technology (ICT) offers room for innovations, which affect the tourism industry and therefore also hotels on Koh Chang. Several researchers have studied the potential of the internet in tourism and found the increasing importance of social media, online booking and smartphone application software for marketing and communication of tourism businesses (Buhalis & Law, 2008; Hays et al., 2013; Höpken et al., 2010; Dickinson et al., 2014). When looking at ICT innovations and pointing out the benefits, one should not ignore the threats which the increasing interconnectedness and open accessibility and sharing of information can bring to the hotel industry. Internet networks such as *couchsurfing* and *airbnb* offer tourists the possibility to find alternatives to hotel accommodation which are oftentimes cheaper than hotels and resorts and not necessarily less luxurious and comfortable. Not only are the internet innovations affecting the hotel businesses on Koh Chang, but also innovations regarding energy and water efficiency and sustainable energy generation (Chan & Lam, 2003; Gössling et al., 2012; UNWTO, 2011; Zografakis et al., 2011,). Implementing new technologies like solar panels or low-flow equipment in bathrooms require investment of the hotels, but in the long-term they will benefit in terms of reduced energy and water costs and a contribution to the sustainability of the destination.

4. A final literature review of academic and professional literature

4.1. Concept of luxurious hotels

According to Harrison (2014), nowadays everything has luxurious components, from coffee filters to furniture. However, due to globalization and the increasing wealth among the Western population, travelers become more experienced and demanding, thus the expectations on the accommodation increase and the term 'luxury' is underpinned by a specific meaning. Star-ratings, here 4- and 5-stars, describe a hotel as luxurious and above standard regarding facilities, service and maintenance (see appendix 4).

However, luxury once demanded by the minority is now becoming a mainstream phenomenon. The accumulation of wealth stimulates the constant search for self-actualization and self-esteem, derived from tangible as well as intangible goods and services. Moreover, the tourists specifically target their expenditure on those products in order to improve their quality of life (Yeoman et al., 2007). Wellness

offers, conventional food (western-oriented) and full time-service are assumed self-evidently. However, especially coastal located hotels have led to fast growing enclaves of mainly foreign investors (Brenner & Aguilar, 2002). According to the modernization theory, the establishments of luxurious hotels increase the economic growth in terms of employment generation, multiplier effects of earning plus receiving foreign currencies (Brohman, 1996). On the contrary and referring to the dependency theory, luxurious oriented accommodation causes underdevelopment which fosters inequalities among first and third world countries. Capitalist hotel firms exploit the economies and the natural environment of dependent nations in order to increase profit and wealth. Thus, the created turnover does not specifically add up to the development of the country or region, here Koh Chang (Dos Santos, 1970; Drakakis-Smith, 1996). Basically, "the more consumer-service oriented a place becomes, the more it will cause demographic, occupational and cultural transformations" (Brenner & Aguilar, 2002, p. 502).

4.2. Carbon footprint

The term 'carbon footprint' gained especially among media, governments and businesses popularity and reputation. It describes a concept which addresses the ongoing process of climate change and treats global warming as threat on public debates. Nevertheless, there is no universal definition due to different point of views among stakeholders. However, after an extensive literature review and investigating several definitions, Wiedemann and Minx (2007) suggest a joined definition: "*The carbon footprint is a measure of the exclusive total amount of carbon dioxide emissions that is directly and indirectly caused by an activity or is accumulated over the life stages of a product*." (p.4.). In other words, carbon footprint stands for the emission of gaseous particles which are significant for climate change and simultaneously correlated with human production and consumption processes. However, there is no common way of measuring these emissions. While the 'footprint' itself actually describes a way of measurement in area-based units, Hammond (2007) determines the carbon weight by means of kg and tons. Eckel (2007) claims that the "*Assessment of a business' carbon footprint is … not just calculating energy consumption but also with increasing every scrap of data from every aspect of the business practices*." (in Wiedemann & Minx, 2007, p 4.). All in all and according to the Global Footprint Network (2014), the carbon footprint is used as a synonym for the demand on the planet that results from burning fossil fuels. Hence, measuring the footprint brings advantages and refers to the ecological footprint (Wackernagel, 1996) which investigates the human demand on earth's ecosystems within more spectrums. Thus, the ecological

footprint shows how carbon emissions interfere with other components of the individual needs, such as the tension on food resources, the amount of land providing space for cities and roads as well as the limited quantity of living resources which are vital for the production of goods we obtain. Besides and especially through tourism, the carbon footprint is rapidly growing and counts 54% of humanity's overall ecological footprint. Due to the fact that since 1961 the carbon footprint has increased 11-fold, it demands for quick actions and strategies on an international scope to reduce and end the overshoot (through deforestation, soil loss, overuse of fresh water etc.) and live within the boundaries of the planet. In consideration of this research, the aim is to find a way to keep the carbon footprint on Koh Chang low in order to operate hotel businesses sustainable. According to Wackernagel and Rees (1996), a destination's ecological assets count as underlying wealth and should be respected and appreciated. Using less ecological services than available also strengthens a firm's strategic position on any scope (Hunter & Shaw, 2007).

4.3. Carbon emissions and water usage in hotel industry

The ongoing process of global warming and climate change, derived from globalization issues, evoked public awareness and increased concerns about water usage, carbon dioxide emissions and energy consumption (Teng et al., 2011). The travel and tourism industry counts as the major global contributor for the Gross Domestic Product (GDP). However, negative effects on resources and the global environment got identified (Dubois & Ceron, 2006). Despite the fact that more than 90% of tourism related carbon emissions emerge from aviation, about 5% of the emission are based upon hotel operations (Stohl, 2008). Accommodation providers produce high amounts of greenhouse gases (GHG) and negatively influence the environment by means of an increasing demand for assets, such as water, energy and non-renewable resources. Thus, especially hotels are, among other factors, an essential part of tourism value chains (later explained) (Sloan et al., 2009).

Nevertheless and according to Xuchao et al. (2010), the forecast that fossil fuels are soon going to be depleted, raises questions and challenges concerning sustainable development strategies. International actions need to be undertaken in order to improve the energy efficiency and explore alternative ways to produce energy. However, not only the issue about energy supply is endangered, also the fact that the burning of those fossil fuels itself causes disastrous impacts on global warming and its costs involved. Thus, the Kyoto Protocol makes clear that these internally concerned problems can only be solved collectively, sector as well as nation wise. Since these topics are also an issue in the hotel industry,

Erdogan and Baris (2007) suggest an effective energy and environmental management which actively regulates and determines sustainable energy and water behavior. What many accommodation providers do not know, facilitating energy saving instruments and strategies can lower the carbon emissions tremendously and simultaneously, save considerable costs (Butler, 2009). Hence, hotels are encouraged to implement effective energy conservation and carbon reduction (ECCR) practices (Teng et al., 2011). However, according to the World Travel and Tourism Council (2009) especially hotels in developing countries, such as Thailand, do not dispose of sufficient skills and knowledge required to enhance their ECCR performance. To clarify upon those factors, a set of accessible and feasible indicators is essential in order to motivate accommodation operators to utilize proactive ECCR methods. While these indicators are meant to help hotel managers evaluating their sustainable performance, they also boost the corporate competitiveness considering the trend of green products and growing energy prices (Teng et al., 2011).

Given the objective of this research, the following key dimensions are considered as most important.

Energy

Swimmingpools, minibars and restaurant are one of the most common power consumption facilities in hotels. Besides and especially in tropical located areas, air conditioning forms the greatest demand for electricity since it is needed all year long. A dangerous feedback loop (see fig. 2) has involved, namely, the process of an increasing temperature will increase the use and intensity of air conditioning facilities and vice versa (Xuchao et al., 2010).
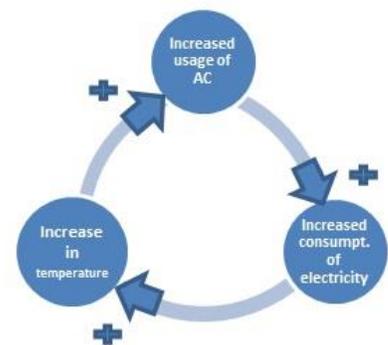
Figure 2 – Positive feedback loop of energy consumption and global warming

According to Graci and Dodds (2008), it is feasible to reduce energy utilization by 20-40% without interfering with the hotel functionality. Installing energy-saving lamps is one of the most simplest and universal methods.

Water

Especially five-star accommodations consume due to recreational activities enormous amounts of water (Kasim, 2007). Noteworthy is that eating and drinking requires only 5% of a hotel's water stock, while the major part is utilized for cleaning (including showering and laundry services) (Webster, 2000). Simple technologies, such as installing water saving advices will decrease the overall costs and protect resource scarce destination (Sloan et al., 2009).

Food and beverage

Food and beverage suppliers should be informed and actively reduce their carbon footprint (explained later) by means of adopting self-sufficiency techniques, containing local and organic aliments (Green Restaurant Association, 2011). By means of integrating exotic and native meals, this shift can be seen as refinement of the competitive position of a hotel. Furthermore, the inclusion of local food also creates additional employment and involves more actors in the tourism sector.

Priyadarsini et al. (2009) revealed based on their research that there are 'secondary drivers' causing the energy use in hotels. The drivers with the biggest Pearson correlation are the following.

- Worker density (0,669)

- Number of years after the last major retrofit (0,529)

- Number of workers on the main shift (0,473)

- Number of floors (0,437)

- Presence of laundry facilities (0,366)

- Five-star hotel (0,354)

- Four-star hotel (0,166)

- Three-star hotel (-0,673)

Besides, the article states that electricity consumption does not show a well correlation with occupancy. Moreover, the research claims differences among hotel types regarding driver and energy consumption. It is of interest that a five-star hotel is more than the double amount correlated with energy consumption than four-star hotels. As mentioned earlier, this is caused by the extensive offer of recreational activities and services.

4.4. Consumer's willingness to pay extra for green activities

Within recent years, especially the world's leading hotel companies adjusted their operations to the process of climate change and invested in green activities. The United Nation Conference on Environment and Development, 1992, claimed that by means of installing visible eco-friendly technologies not only the environmental impact gets decreased; it also evokes thinking and reflecting current circumstances among the guests (Kang et al., 2012). Thus, while saving great amounts of money, also a social change gets initiated (Ryan, 2002). Nevertheless, hotel managers remain skeptical to bigger investments in affairs which do not have an immediate effect on the quality of stay and hence, might

not be financially beneficial (Bird et al., 2007). One way to erase those hesitations might be the idea of charging fees/premiums for green methods. Already conducted research on traveler's willingness to pay extra revealed mixed results and consequently supports the skepticism among hotel operators (e.g. Deng et al., 1992; Manaktola & Jauhari, 2007). A study of Lonely Planet (2007) states that 88% of the tourists recognize sustainable holidays as relevant, while others in turn consider extra costs as the responsibility of hotels (Gustin & Weaver, 1996).

Another point of view suggests evaluating green activities as intangible benefits (Manaktola & Jauhari, 2007) and a hotel's recreational offer as tangible comfort. However, the former is unconsciously responsible for the satisfaction of a guest's emotional desires, such as self-esteem (Christy et al., 1996; Sen & Bhattacharya, 2001). Consequently, satisfaction causes more likely willingness to pay extra for sustainable installations.

Deriving from the social identity theory (Tajfel and Turner, 1986) and the means-end theory (Gutman, 1992), a person's individual set of norms and values is responsible for final decision-making and purchasing behavior in terms of hotel products. Hence, if a traveler shows high concerns about the environment, he or she is more likely willing to pay extra. Going into more depth, the concept of affected-based complementarity (Strahilevitz & Myers, 1998) and the framework of corporate social responsibility (Bhattacharya & Sen, 2004) reveal that the willingness is also dependent from the type of hotel. A last important theoretical view comes from Kelley (1972) and his attribution theory, saying that in case consumers identify profit as the hotel's objective of going green, the customer is less likely willing to spend more since this background is not in alignment with the guest's norms and values (Becker-Olsen et al., 2006).

Hotel types and willingness to pay more

That the willingness to pay premiums for sustainable activities varies according to hotel types (e.g. guesthouse, mid-priced and luxury accommodation) was already mentioned before. Luxurious products have a greater influence on a traveler's emotions than utilitarian ones, simply due to that fact that "pleasure and guilt can be mitigated by engaging in socially responsible activities" (Kang et al., p. 566) (Strahilevitz & Myers, 1998). Therefore and in consideration of this research, the more luxurious a hotel, the higher the willingness to pay additional for green initiatives.

Interestingly, the willingness also varies among the customer segments. The research of Erickson and Eckert (1977) revealed that guests within higher priced accommodations (luxurious hotels) embody a higher self-esteem than lower price-oriented travelers. To sum up and according to the above information, the more luxurious the accommodation, the higher the self-esteem and the greater is the

chance that there is an interest to actively counteract to global warming and lastly, the bigger the willingness to pay extra.

4.5.   Value chain analysis

"*Value-chain analysis looks at every step a business goes through, from raw materials to the eventual end-user. The goal is to deliver maximum value for the least possible total cost*" (Investopia, 2014).

Hence, a value chain focuses on a product or service which is determined by its planning and production, distribution, marketing as well as the final disposal. However, a value chain analysis (VCA) specifically assesses those kinds of series of interactions and intermediate processes which are vertically, horizontally and diagonally oriented (Ashley & Mitchell, 2008). In contrast to traditional economic and social approaches, VCA focuses on the inter-linkages within the producing sector, mainly examining the way in which countries and firms are globally integrated (Kaplinski & Morris, 2003). Crucial components of a value chain are stakeholders who are independent from each other but at the same time should work together in order to co-create a good governance. The latter concept is characterized by efficient and effective working processes, reducing costs and risks as well as identifying on an early stage potential changes in a tourism product (Weiermair, 2005; Yilmaz & Bititci, 2006).

To summarize, a VCA provides a tool for mapping essential domains of public and private policy (Kaplinsky & Morris, 2003). Furthermore and according to Fearne and Martinez (2012), environmental as well as social concerns get neglected, mainly due to the strong focus one economic instead of environmental or social sustainability. They encourage a broader perspective on events and its consequences.

4.6.   Forms of intervention

The following five forms (Bejerot & Hasselbladh, 2013) of intervention describe problem treatments by means of the utilization of different methods. It is of importance to recognize that they also interrelate in terms of a mutual support and strengthening.

1. *Political intervention*: entails formal sanctioning of programmes which are declared as laws and regulations for government institutions, committee governances, development plans and financial incentives. Political interventions contain explicit objectives as well as several forms of 'soft control' (e.g. formally stated intentions within local and regional boundaries). This intervention is about power

constitution due to the fact that e.g. the government has the force to set up new topics and guidelines, the city has to follow.

2. *Intervention by laws and regulations*: besides laws, this intervention also covers all forms of regulations from governmental institutions.

3. *Intervention by audit and inspection*: especially public services become progressively the target of evaluations, often organized by national agencies. According to Power (1997), the audit is seen as the core of governance. Rules and regulation constitute the goals which are addressed by them, particularly through statistics which are related to measurements and indicators as well as being compared with other organizations.

4. *Intervention by management*: Traditional professional governed activities (social services) are characterized by managerial knowledge and change management. In contrast to the previous form of intervention which tends to look backwards regarding problems (cybernetic), management interventions address the future and work according to decontextualized logic. An essential way of management intervention is the remodeling of hierarchical structures of public organizations, developing or centralizing and establishing responsibility, issues which are often correlated with actions such as centralization or decentralization. Bejeroth and Hassellbladh (2013) consider this form of intervention as especially important due to the integration of firm specific knowledge that fills the gaps of political ambitions and supports the relationships between control and work regimes.

5. *Intervention by rationalizing professional practices*: the involvement of professionals enables compromises among the present work regime. It entails evidence-based knowledge, induced generalization of certain professional activities in order to make them more accessible and a constant comparison of outcomes. IT-based terminology, models and professional vocabulary play among other things a crucial role.

5. A final literature review of 3-5 similar professional value chain studies

As mentioned previously, value chain analysis' (VCA) main role is "to deliver maximum value for the least possible total cost" (Investopia, 2014). Hence, the focus is mainly on economic interests. In the present case, it might be more efficient to look at the environmental outcomes with a focus on accommodation sector as the aim is to provide strategic interventions to reduce carbon footprint in mid-range and luxury hotels in Koh Chang. In order to develop a comprehensive understanding of the value chain of mid-range and luxury hotels, other tourism value chains analyses in the existing tourism

literature have been analyzed. A look at the literature of actual case studies within the tourism industry that have been used VCA shows that the majority is focused on pro-poor tourism development. Many of these studies also focus on the tourism sector as a whole and then identify the different service sections such as accommodations, restaurants, transport, excursions etc. and analyze them. For the present research, the focus will be on the accommodation service sector and more specifically on the "mid-range and luxury hotels". The goal is to increase the sustainability of the mid-range and luxury hotels, to reduce the carbon emissions and to increase the participation of all stakeholders. Therefore, the VCA's studied below are mostly pro poor tourism value chain studies (the three first case studies) while the last study is more environmental-oriented. They address some characteristics which are relevant for the study of our VCA such as the research methods used, the way of mapping the value chain, the choice of strategic interventions or actions and the main challenges related to the accommodation sector. The first study, written by Vignati and Laumans (2010), is a value chain study as a "Kick Off for Tourism Destination Development in Maputo City". This paper focuses on the clusters for pro-poor tourism development and the involvement of major stakeholders. The VCA process was conducted 29 in a participatory way meaning that stakeholders had the possibility to debate and to engage in a joint action implantation. That might be useful for the present research as the aim is to collaborate with multi actors of the value chain and to succeed in a joint action plan (e.g. interventions) integrating all of them. Also, this study defines VCA as a range of activities which are required to bring a service from conception, production to the delivery to final consumers (Kaplinsky, 2001). Interesting is that VCA is used here not only to look at the activities in itself but also at the interactions between the stakeholders and their implications for development such as sustainability. Thus, this might be relevant as the focus is mainly on sustainability. Furthermore, this study describes a typology of value chain interventions at destination level. Some of these types of interventions used in the Destination Development in Maputo City seem to be applicable for the present case study (adapted from Giuliani, 2005): - *Upgrade processes*: Better coordination and communication within, and between stakeholders - *Add value*: through the diversification of product and service offers, sustainable development, reduction of transaction costs through technology and clusters development. - Strength Innovation: Through public-private partnerships, private cooperation and investments in research. - *Increase Local Linkages*: By fiscal stimulus packages to enhance private sector buy from local suppliers and invest in local work force. At last, they mention that they used an approach – collecting people's capacities – that first introduces the idea of the VCA to the Ministry of Tourism and second gives an opportunity to promote dialogue among local stakeholders. In the present research, it may also be needed to contact local

authorities to make sure that the results from our VCA lead to the implementation of concrete actions (e.g. avoiding obstacles such as local rules, legislations). The second study of Mitchell and Phuc (2007) is a report on participatory tourism value chain analysis in Da Nang, Central Vietnam. This VCA is interesting for the present research because Da Nang, Central Vietnam and Koh Chang, Thailand are two destinations both located in South East Asia. Therefore, they address common characteristics regarding the demand of the tourists. This VCA gives a more detailed insight in the demand/supply relationship while opting for a practical and quick appraisal that is compatible with the local mindset. It is also used to develop practical ideas to stimulate the local or regional economy. Indeed, rapid participatory method as a research method is more efficient and comprehensive for local stakeholders than slower approach to research (e.g. many proposals). For this reason, this paper might help to conduct the present research based on 30 identifying the attitudes and motivations of stakeholders for action as a crucial task of a participatory rapid diagnosis. The value chain that was mapped out for this study shows the tourism product as combinations of services where the tourism market (tourists) have to move to the products (destination). It was used to represent the production stages and identify the opportunities for interventions. The figure below (Fig. 3) shows the representation of the value chain. At last, this study aims to give an estimation of the accommodation expenditures in Da Nang, Vietnam. Accommodation service sector represents $14,1m from the $41m Da Nang tourism value chain. It highlights that Da Nang failed in attracting upmarket tourists and that it had seriously restrained growth of the tourist value chain in Da Nang. The study also reveals that hotel preferences differ significantly between domestic tourists and international tourists. For example international tourists have more demand for luxury hotels. Collecting data about segment markets might be relevant for the present research because it is needed to know which tourists are coming to mid-range and luxury hotels in Koh

Chang in order to adapt the potential interventions according to their specific demand. The third study of the Foreign Investment Advisory Service (FIAS) (2006) called "The Tourism Sector in Mozambique: A Value Chain Analysis" is a performance assessment of the hospitality and tourism industry in Mozambique. Its principal purpose is to identify the opportunities and constraints of each sub-sector of the tourism value chain in order to meet its economic and social potential and how to use VCA for pro-poor development. Concerning the accommodation sector, it is said in this paper that "In addition, the lack of reliable ancillary services (e.g. local service providers for ground handling, laundry services, landscaping, transportation to islands, and so on) places additional burden on hotels to provide these services themselves – mostly at higher costs because they cannot take advantage of economies

Figure 10 Tourism as a service value chain
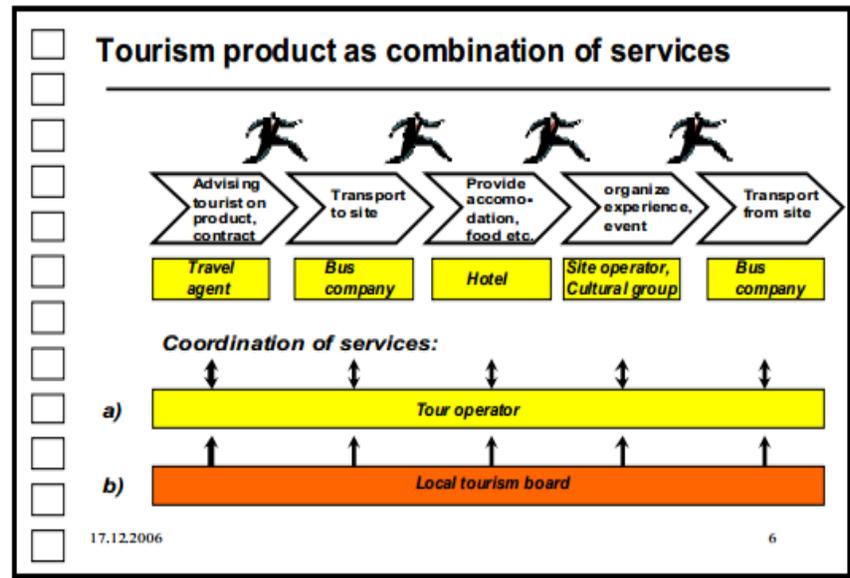
Source: Andreas Springer-Heinze (2006-2)

Figure 3 – representation of value chain

of scale in sourcing, production, and distribution". For example, hotel expenditure on electricity in Mozambique is very high because hotels must use their own electricity using solar energy as it is a very accessible natural resource. However, it costs a lot to import the duties on solar energy equipments. There might be a chance that Koh Chang's hotels face the same problems about outsourcing, unavailable local food products, and difficulties in water and energy supply as it is isolated from the main land. FIAS develop in this paper a list of policy recommendations called 'Action Plan Matrix – High Priority Initiatives' that has four main components: Action, Responsibility/Coordination, Time Frame, Monitoring indicators. That could be a good example of a tool to use to assess the hotel expenditure, the resources available, etc. within the present value chain analysis. The last study, written by Faße, A., Grote, U. & Winter, E., is a Value Chain Analysis Methodologies in the Context of Environment and Trade Research. Unlike other papers discussed above, this VCA is not analyzing the tourism sector but is assessing the different methodologies in the context of environmental value chain (EVC) analysis;

bringing up the idea of "greening value chain" (Irland, 2007). As the present project is focused on reducing carbon emissions, it might also be interesting to look at the methods and the intervention plans used in the context of environmental study. Indeed, the EVC could provide a good basis for understanding the environmental impacts within the tourism sector. This paper points out that the sustainable use of natural resources (e.g. water, etc.) are based on the results of a value chain analysis. The authors distinguish two main steps to follow while doing a value chain analysis: 1. *Mapping* the value chain which includes the actors, their relationships, and economic activities. *2. Accounting of flows* through the use of frameworks as value chains are characterized by input-output structures. Examples of methods for accounting of flows might be the input-output analysis or the Life Cycle Assessment. Mapping the value chain and accounting of flows give an insight into the distribution of the benefits. That can be used during the fieldwork in Koh Chang as the will is to know if the potential changes are possible to carry out financially and if there might be equilibrium between environmental impacts – potential change of price – demand of the tourists.

6.   Final definitions of the criteria and corresponding indicators

In order to assess the value chain *mid-range and luxury hotels and resorts* in terms of carbon emissions, it is crucial to gain a more comprehensive understanding of the operational domains provided by DASTA. The definition of criteria and corresponding indicators for each domain provides a useful framework to assess actors and processes within the value chain and consequently discover and develop strategic interventions to reduce these.

6.1.   Energy efficiency

Energy usage in the value chain under study is a substantial contribution to greenhouse gas emissions. According to Deng (2003), hotels are one of the most demanding energy consumers among all categories due to their 24h based operation and the variety of facilities and functions provided. The largest share of energy usage is held by operational activities as part of the primary activities within the whole value chain, with a contribution of up to 90-95% to the carbon footprint (Blengini, 2009). In order to assess operational activities within a hotel, several methods can be applied. Within our research, we focus on the LCEA (Life Cycle Energy Analysis) to assess the operational activities: LCEA (Life Cycle Energy Analysis) and the ECCR (energy conservation and carbon reduction) indicator approach to investigate

the management and HR aspects. The latter mentioned applies not only to the hotels themselves but also to outsourced suppliers within the value chain, such as often the laundry providers.

6.2. LCEA – Life Cycle Energy Analysis

The lifecycle energy analysis is a simplified derivative of the LCA (Life Cycle Analysis) and a useful tool to assess the impact of a product or service with special focus on energy and concomitant carbon emissions as measure of environmental impacts (Huberman & Pearlmutter, 2008). The approach is based on identifying energy flows within a system and quantifying these by converting the data into greenhouse gas emissions. The carbon footprint is determined by investigating operational energy composed by the following operational domains:

Refrigeration

Air Conditioning

Ventilation

Water heating

Lighting and other electric appliances

Elevators

Building (Insulation)

Cooking

(Outsourced) Laundry

Mobile Fuels

6.3. ECCR (energy conservation and carbon reduction) indicators

According to the study of Teng et al. (2011), it is additionally important to assess the active performance of the senior management with regard to *corporate environmental management* (incl. resource reduction strategies, evaluation of systems and strategies by continuous monitoring). As part of Human Resources within supporting activities of the value chain, *staff involvement,* is a crucial aspect of assessment. Environmentally friendly measures depend on employee recognition and acceptance and can be transferred via e.g. (human capital) trainings and proper communication. Next to staff involvement, tourist involvement reached by *guest information* is another ECCR indicator. Tourists represent one of the main actors within the value chain and can be substantial contributor to carbon offsetting actions. Often this happens unconsciously as they do not realize their effect on the broader

environmental context. As part of procurement, *purchasing* behavior is an additional indicator to assess carbon emissions. This refers not only to food and beverage but according to the Green Restaurant Association to several products such as printing/toilet/tissue paper, energy efficient computers, air conditioners, employee uniforms and kitchen devices (e.g. EnergyStar qualified equipment) (2011).

6.4. Water saving

Water management in the value chain mid-range and luxury accommodation is another operational domain prone to contribute to sustainability. Especially in the products/services function of the value chain water management is a predominant issue. According to Hamele and Eckhardt (2006), five star hotels are the biggest water consumers due to swimming pools, cafés, bars, kitchen and suite bathrooms. Additionally, excessive guest behavior as "pleasure approach", including increased showering, bathing and generally higher water consumption of guests (Eurostat, 2007) increases the total water usage of hotels. Especially the guest- and awareness-related indicators to assess water management can be covered by guest information and staff involvement practices similar to the ECCR approach.

Within the products/services function of the investigated value chain, especially the departments of laundry, guest rooms and spas have a high potential to increase water saving. Laundry is often not part of the operations of the hotel but outsourced to specialized companies. In both cases, the water saving can be enhanced by following some principles, e.g. ensuring machines are fully loaded, which should be communicated to the staff or even implemented as internal policy (International Tourism Partnership, 2013). Several other simple techniques within departments of the hotel can lead to long-term water saving (see checklist appendix 5). Water management plans serve as useful tools for the hotels to decrease their water consumption. First step of this is to measure consumption and set some tangible targets (International Tourism Partnership, 2013). Included in the water management plan is a water audit and monitoring, which includes checking which water outlets provide potential to be reduced, e.g. regular maintenances on the pool and always cover them to decrease evaporation. Additionally important is the direct involvement of staff as well as guests. Human resource management incentives such as educational sessions and trainings are informing and motivating the employees in order to pursue more water saving (International Tourism Partnership, 2013). Due to the fact that guests are main outlet in water usage, a range of appliances in the guestroom, e.g. installing low-flow toilets and taps, reduces the water consumption immensely. Guest awareness is additionally important, thus guest

information papers on water usage might have substantial impacts on the overall water usage, as well (example of guest information sign see intervention 1).

6.5. Green leaf certification

An additional indicator we came across on field, was the Green Leaf award handed out by the Green Leaf foundation. It is a program supporting the development of environmental quality for the tourism industry based on several activities. According to a checklist, the hotels, after successful application, will be assessed, graded and awarded. The assessment incorporates eleven sections, which are: *environmental policies, waste management, efficiency in energy and water conservation, procurement of green products, indoor air quality, air pollution, noise pollution, quality of water, management of fuel, gas, toxic and hazardous materials, ecological impact and collaboration with community and local government* (Green Leaf Foundation, 2009).

Initially planned was to make use of Carbon footprint, Water footprint and Carbon FOODprint to gather more factual outcomes and a possibility to compare different hotels' energy and water efficiency. However, due to the fact that this is a very time-consuming activity and did not contribute much more to our research goals, we decided to focus on the LCEA and ECCR approach. To calculate the carbon footprint can be very valuable in case of a higher quantity of hotels participating in the research, therefore we suggest further research to apply carbon footprint calculations, as this is a useful tool to receive more extensive data outcomes.

7.   Final Value Chain Map

Following the desk research on similar professional value chain studies through which the team has defined and described the characteristics of the mid-range and luxury hotel value chain under study, this section presents the final value chain map. Since the informants often provided us with contact details of further value chain actors, it was able to incorporate diversified sources.

Figure 4 below shows a map of the mid-range and luxury accommodations value chain. Three types of accommodation are identified which are providing services at a regional/local level. Mid-range a luxury accommodation appeal to both the international as well as domestic tourist markets, but significantly

more to the international tourists. The supplier's inputs though, hired and directed by other external organisms also have a significant influence on the products and services guests enjoy.

| |
|---|
| *The **red linkages** in the graph represent the tourist choices in terms of accommodation through internet based booking platforms.* |
| *The **blue linkages** in the graph represent independent travelers who option to bypass intermediaries when choosing an accommodation (e.g. mid-high hotels, International and Regional)* |
| *The **black linkages** in the graph in black represent the interrelations between relevant market actors to the VC at a macro, and meso 'scale'.* |
| *The **green linkages** in the graph illustrate the different supply sources concerning water and energy supply.* |
| *The **red circles, and letters a), b), and c)** represent the value chain bottleneck, within each circle the actors directly involved in the bottlenecks are highlighted **in gold,** the actors and activities involved indirectly are not highlighted in the map.* |
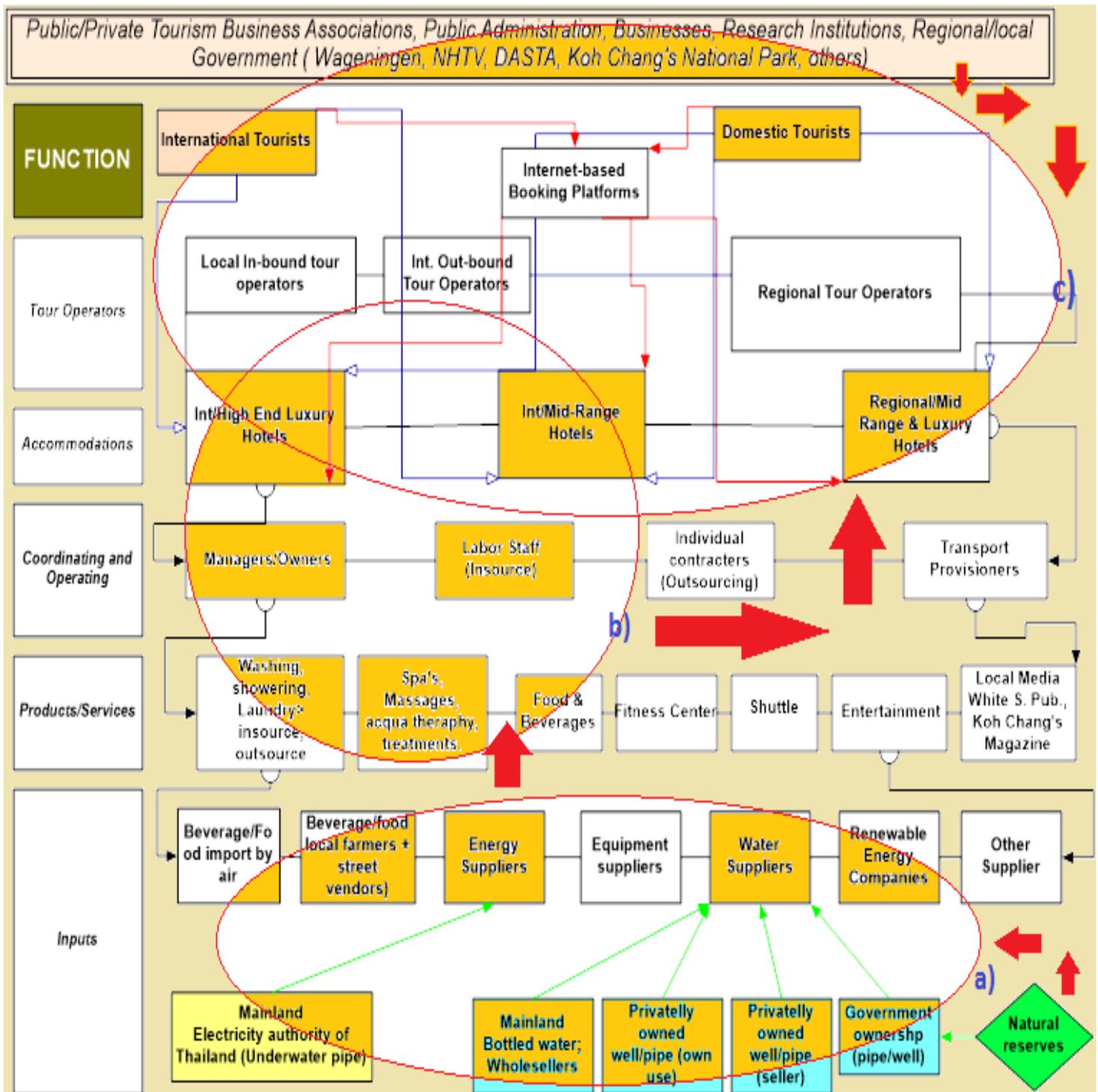
Figure 4 – value chain map

7.1. Value Chain Actors Involved Directly and Indirectly

This section presents an elaboration on the different value chain actors involved directly and indirectly in the accommodations value chain. It is important to note that this description is based on the team's

own analysis of the primary data collected during fieldwork and secondary data collected during desk research. Furthermore, the elaboration here presented consists on the actor's relevance to the study. Therefore, not all actors illustrated in the value chain map are described in this section.

7.1.1. Description of Supporting Services to the Sector

National Park Headquarter Office:

The National Park on Koh Chang plays an important role in the conservation of the natural resources. Koh Chang National Park with an area of 250 square miles, covers more than 52 islands (TAT, n.d). In these areas, tourism developers are not allowed to build. Furthermore, 80% of the land capacity in the island is under protection of the National's Park Headquarter Office.

DASTA:

DASTA is a governmental organization established in 2003. Its main aim is to promote sustainable tourism development by managing tourism supply as well as the carrying capacity of tourist areas in Thailand. DASTA currently includes Koh Chang archipelago in their mission and work. It aims to reduce carbon emissions in tourism related activities, in several domains (Sangsnit, 2003).

Thailand Tourism Authority:

The Tourism Authority of Thailand (TAT) was established in 1960 by the Royal Thai Government to be specifically responsible for tourism promotion (TAT, n.d.)

7.1.2. Description of End Markets

There are two major groups of end consumers for the mid-range and luxury accommodations – *international tourists and regional tourists*. On Koh Chang, regional tourists are not considered as the main market segment. However, domestic tourism exists and is well present at the destination.

7.1.3 Description of Value Chain Actors

Accommodations

The number of mid-range and luxury hotels on Koh Chang has been growing exponentially over the past 10 years. This growth is mainly answering the demand side for rooms during the high season and the

Thailand's monsoon season, particularly between October and December ("Thailand Tourism Report", 2012).

Tour Operators

Local tour operators on Koh Chang deal mostly with activities such as snorkeling and scuba-diving. *International tour operators,* such as TUI, are operating in a growing tourism industry. However, the industry is dominated by *Internet based platforms* (e.g. Booking.com, and Agoda.com), and independent travelers that option to bypass all intermediaries.

Coordinating and operating services

Managers and owners are usually Thai, but most of them are not originally from Koh Chang. A number of foreign hotel managers (Europeans) were also interviewed.

At the various *staff* levels, the main manpower constituting the hotel staff is Thai, and originally from the island. However, most of them perform low skilled jobs. Several Cambodians are also part of the labor force in the hotels, but mostly perform jobs concerning the laundry, and/or housekeeping.

From the *transport provision,* public taxi drivers play an important role on Koh Chang in terms of tourist transportation within the island. These drive through the coast on a regular basis and are well available at any hour. Both domestic and international tourists made use of taxi drivers on Koh Chang. There are two main entrance gates to Koh Chang. One is located at the east and the other on the west side of the island. These are piers which harbor the ferry boats from the mainland. Both domestic and international tourists make use of ferryies to visit Koh Chang.

Products and Services

Laundry services are both insourced and outsourced, this depends largely on the hotel size and capacity to wash the bed sheets and towels themselves. A number of hotels stated to hire external laundry services for the towels and bed sheets concerning the guest use, while the towels which are used for staff activities (e.g. cleaning activities, housekeeping, etc.) were washed by the hotel's staff.

Tourists are also demanding *spa's* massages and other related treatments. These are usually provided on a daily basis within the hotel. In regard to *food and beverages*, the tourists demand more variety in the dishes and drinks. As a result, hotels and restaurants are seeking greater variety in the market, often depending on mainland purchases from *wholesalers* (e.g. large supermarket chains such as macro). *Local*

production is not sufficient enough to meet the demand needs on Koh Chang. Mass production purchases are used to supplement what is available from local growers. Furthermore, several hotel managers also stated that the locally produced food is more expensive than the food purchased from the mainland wholesalers and imports.

Inputs

The inputs are a crucial part of the value chain under study, to both the demand and the supply side. *Water and energy* inputs are of most importance to the study. The energy supply derives from one source to the island, the *Electricity Authority of Thailand.* The energy distribution is made throughout a submarine cable extension which comes from the mainland, and further distributes the energy within the island ("Provincial Electricity Authority", 2008). In regard to the water supply, several issues and complexities are identified on Koh Chang. There are several different water sources and suppliers. More information can be found the finding sections.

8.   Methodology

8.1.   Methodology   for   Qualitative   Data   Collection   and   Analysis

In order to analyze the value chain mid-range and luxury hotels and resorts on their sustainability with respect to water management and energy efficiency, a qualitative data approach was chosen. The leading intention of this research is to identify the bottlenecks and accordingly find solutions to overcome these. The complexity of this topic requires gathering of in-depth knowledge by a variety of key informants, incorporating a range of stakeholders taking part in the value chain.

8.1.1. Population and Sampling

The scope of the qualitative data collection was all involved actors of the value chain mid-range and luxury hotels and resorts on Koh Chang. Aim was to gather data of experts in the field, individuals who are involved in decision-making but also actors in less influential positions, such as employees of hotels and laundry or locals, in order to get all-embracing outcomes. Two sampling techniques were applied within our data collection, namely simple random sampling, in order to find initial interview respondents

(e.g. hotel owners or managers), and snowball sampling, receiving referrals of other potential interview respondents involved in the value chain under study by the initial respondents.

The initial phase of the qualitative data gathering took place in the Netherlands. A predefined list, containing all hotels and resorts on Koh Chang belonging to the category "mid-range or luxury" (determined by a guest room price above 1000 Baht), was created and served as sampling frame. For reasons of efficiency, all hotels belonging to the before mentioned category were contacted via mail in order to get them acquainted with the research purpose, team and find their attention in participating in the research.

Due to a low response rate, a random sample of these hotels in the area of White Sand Beach, Klong Prao and Lonely Beach was drawn and approached personally. The chosen sampling technique gave all subsets of the frame an equal probability and increase representativeness of the outcomes (Adler & Clark, 2011). This method scored a higher response rate, resulting in several interview appointments or personal email addresses of respective hotel managers to contact and arrange appointments.

During the interviews with the hotel managers, the method of snowball sampling was applied. Further influential actors of the value chain were identified during the interviews and names and/or contact details were gathered. Accordingly, next to hotel and resort managers and employees, the following actors were interviewed; laundry service provider, representatives of the National Park and municipality, local bar and supermarket owner and magazine publishers.

8.1.2. Instruments: Secondary and Primary Data

Secondary data collection and analysis before being in the field served as initial preparation to gather knowledge necessary to investigate on the value chain under study. Literature reviews on the theory of value chain analysis, carbon emission as well as corresponding criteria and indicators to actively identify and evaluate performances were supportive preparations to begin fieldwork. Furthermore, a theoretical underpinning of Koh Chang provided us preliminary information on the area of research to support quick orientation.

On field, the main aim was to collect primary qualitative data, consisting of around 10 semi-structured interviews with key informants of the value chain and a checklist serving as tool for observation and assessment of water management and energy performance of the hotels.

The semi-structured interviews were conducted based on a set of questions and key words, relating to the secondary data collection and corresponding research questions. The questions asked were mostly related to sustainability, more specifically water management and energy efficiency, perceptions and actions undertaken relating to these subjects, collaboration with other stakeholders as well as perceived obstacles. The semi-structure of the interview basis provided enough flexibility to modify the questions according to the different interviewees.

The checklist consisted of several elements covering the domains water management and energy efficiency. Appliances such as water-efficient taps or energy efficient light bulbs were checked upon in a range of hotels in order to assess their performance (see appendix 5 for checklist). Intention of this measure was to generally assess the performance of the hotels' operations and find potential weak points.

8.1.3. Data treatment and analysis

In total, nineteen interviews with different actors within our value chain were conducted. As initial preparation for analysis, the recorded interviews and the stakeholder meeting were transcribed. In order to find patterns among responses a theoretical coding was undertaken. A predefined "sorting scheme" served as tool for this and the procedure of analysis required investigation with an open eye.

The predefined codes were: Future prospects, Facilitating power, blocking power, Thai mentality, Drawbacks for institution, Food and beverage, Tourism development, Working environment, Governmental issues, Intervention strategies, Collaboration, Energy issues (supply, costs), Water issues (supply, costs, scarcity) and Others to leave room for unexpected but potentially important findings. These codes were identified with the software *Maxqda 11* and then summarized.

The subsequent phase was to sort and elaborate on these patterns in order to define bottlenecks and come up with solutions, interventions and recommendations.

8.2. Methods for Quantitative data Collection and Analysis

In this chapter, the set-up of the quantitative research is explained in detail. The quantitative study makes use of data collected on the island of Koh Chang at three different areas which are: (1) White Sand Beach, (2) Klong Prao, and (3) Lonely Beach. From the latter, it was not possible to gather data from tourists due to the fact that there were hardly any mid-range and luxury tourists. These research

locations were chosen by the team because these were areas which had the majority of mid-range and luxury hotels/resorts based on the island. The data collection took place on the 6th, 7th, 8th, 9th, 13th and 14th of May, 2014.

The context has been dedicated to creating an understanding of the tourist's attitudes, awareness, and willingness to participate in possible sustainability related intervention/initiatives which could be undertaken in the mid-range and luxury hotel sector. Reason for this is that environmental awareness influences the ability of hotel managers to create social environmental value. Therefore, it was necessary to understand the perspectives and needs of the tourists, since they are also subjects of the study.

8.2.1 Population and sampling

For the research, it was relevant to have a sample which reflects a population of tourists which are guests from mid-range and luxury hotels. However, due to the amount of questionnaires being filled in (65) and the lack of time, the choice was made to work with the amount of questionnaires collected. This also influenced the range of the sample selected.

The sampling method used is purposive sampling. The non-probability method is a technique which does not ensure a random sampling. It does not allow each respondent to have an equal chance to complete the questionnaire. Tourists were approached based on some predefined characteristics, such as being nearby a luxury and mid-range accommodation, being 18 years of age or older, having a good English level, and being able to give informed consent.

In order to verify our assumptions, before the tourist started to fill in the questionnaire he/she was verbally asked by the researchers in which hotel/resort they were staying. In this manner, the team made sure that the approached respondents were in fact guests of a mid-range or luxury hotels. One question on the questionnaire also asked to indicate the amount paid for a hotel night for further clarification of the guest type (paying 1000 baht per night is to be categorized as staying in a mid-range or luxury accommodation).

Furthermore, purposive sampling will not make it possible to draw generalizations with the information received from the sample in regard to the population, but in regard to the sample. Nevertheless, the

results contain valuable information to provide evidence which serves as support for the interventions incorporated further in this report.

The opinion of tourists is sought after. Both male and females were approached as possible respondents. The sample consists of 65 respondents (valid). Most of the respondents were between 30-49 years of age (mean=2.89, SD=.86), 60% of the participants were male and 40% were female. Furthermore, 96.9% of the tourists were international tourists whilst 3.1% were Thai (i.e. domestic). The reason for the low participation rate was their insufficient level of English. Moreover, a number of questions included in the questionnaire contained difficult academic language, which made it difficult for the respondents to understand what it was asked.

8.2.2 Instruments: Secondary and primary data

This research is a social science research. It was conducted using the methods and techniques of social sciences. The research also deals with people and their social behavior. According to Veal (2006) there are three types of research: descriptive research (i.e. finding out, describing what it is), explanatory research (i.e. explaining how and why things are as they are), and evaluative research (i.e. evaluation of policies and programs). The focus of this quantitative section is rather descriptive.

Instruments used consisted of secondary data and primary data. The secondary research was used to create a conceptual framework in which the quantitative research is built upon. The literature review has provided in-depth information about the tourist's willingness to pay more for green accommodation.

Conducting secondary data analysis enabled the team the opportunity to make a strong foundation to design the questionnaire. The databases used for accessing the literature were: ScienceDirect, Scopus Google scholar, Emerald and databases provided by the Wageningen University and Research Center, and NHTV Breda University of Applied Sciences. It also made evident what has and what has not been researched on. The information collected by means of primary research is provided in order to answer several issues identified as bottlenecks further in this report.

The quantitative instrument used in the primary research is a questionnaire (see appendix 6). It allows quantitative information to be gathered from respondents in a structured manner. The questionnaire

enables informants to anonymously answer the questions which reduced the pressure to provide a socially acceptable response. The information that was extracted is dealing with the respondents' willingness to participate actively in sustainable initiatives, demographics, CSR initiatives concerning social development, nature conservation, green energy implementation, and attitudes while on a vacation in regard to the hotel services.

Attitudes and opinions are a more complex aspect of questionnaire design and were more difficult to obtain. In order to extract the information necessary, both attitude and opinion questions have been incorporated into the questionnaire. The combination consists of attitude statements in which a 5 point Likert scale is used to obtain information about the respondents' attitude towards the statement made.

8.2.3 Quantitative data treatment and analysis

All the information collected through the questionnaires was analyzed. In order to achieve this, the data derived from questionnaires was inserted into SPSS. Through applying different techniques such as producing different tables and graphs, it becomes possible to research the different variables and look at relations between the variables. The most important tool for analyzing the output of the questionnaires will be through creating frequency tables. Generated frequency tables create a clear view of how many people selected a certain answer. It draws a distinction between the number of participants counted and the percentage they represent. Analyzing these frequency tables will show patterns on which responses were selected most of the respondents. In other words, which opinions and attitudes are held by the tourist population regarding sustainable practices within the mid-range and luxury hotel value chain.

To compute whether two variables were potentially related to each other, cross-tabulations were applied. The different variables used for this research consisted of various demographics such as gender, age and nationality, but little attention has been paid to it by the team since the sample size is too small and biased on European respondents.

The other variable which is used is opinion. For the cross-tabulation the independent variables are: self-awareness on the respondent's ecological status measured through the level of agreement with statements about the respondent's concern about environmental issues when on a holiday and when not on holidays, in other words the opinion. The level of desired luxury was measured through a set of statements and questions about the use and importance of specific hotel facilities and services combined with their ecological status, as well as the respondent's willingness to pay extra for green accommodation. As dependent variable (see Fig. 5) the choice has been made for the variables measuring the respondent's actual attitudes when on holidays regarding water usage and energy usage. This was used as a preconception that attitudes and behavior are not only functionally related, but that there is a "natural" direction of causality between them: attitudes and beliefs should cause behavior (Bem, 1967).
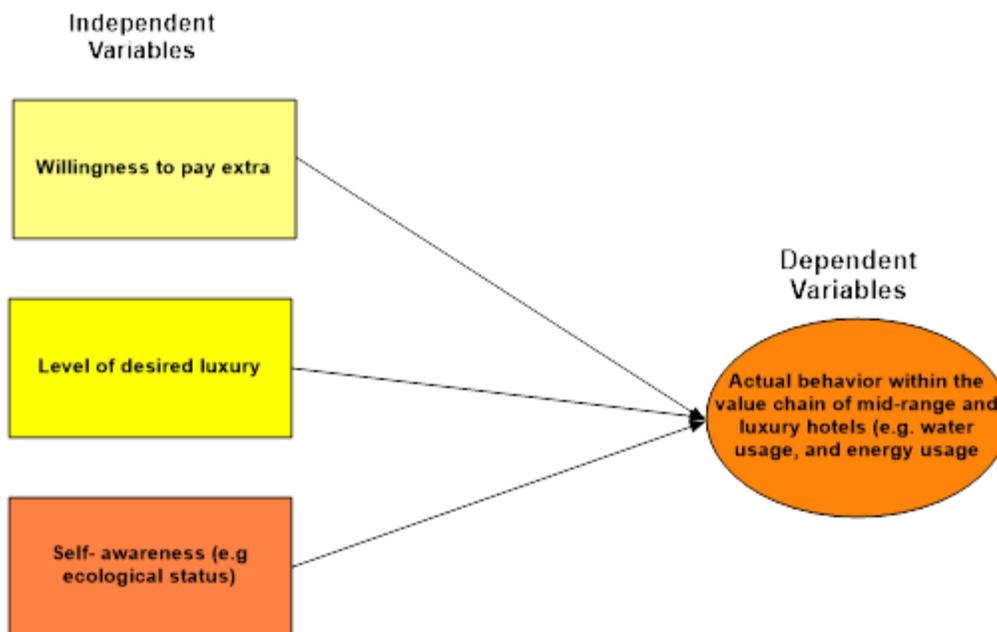

Figure 5 – Conceptual framework

While the numerical values obtained from the tests and tables provide useful information concerning the sample and variables, some aspects are better explored visually. Bar charts, pie charts, histograms, are examples of the graphs used.

9.   Findings

In this chapter the findings of the field research are briefly described before displaying results which will give deeper insight into bottlenecks, solutions and interventions. The findings are based on the analysis of primary qualitative (interviews and observations) as well as quantitative (questionnaires) data, which has been collected in the field. Our research questions served as orientation in this phase and findings are arranged according to the themes: *water issues, energy issues, awareness, contextual issues, other findings.* The themes are derived from the research questions in order to be able to make associations between the questions and the findings.

9.1.   Water issues

9.1.1. Water supply

Water supply on Koh Chang is a seemingly very complex issue. Due to the fact that there is no publically managed water supply there are different ways for water sourcing and distribution (see figure 6). Some people collect rain water on their property and save it in tanks, but usually the water comes from the mountains from where it either comes down in streams and waterfalls, which create natural pools, or it seeps into the ground water. The latter can be retrieved from the ground by drilling a well, which either belongs to the owner of the property, for example a hotel in which the water is used immediately, or a seller who sells the water to people who do not have own means of sourcing (sufficient) water. The former, water in waterfalls and streams, can be retrieved via a pipe by a private person or business, a seller, or a governmental institution. According to several private business owners, the government has been planning to build a dam to collect and store more water during the rainy season, but the project has not been realized yet due to financial reasons. Paradoxically, the office director and his assistant of

the SAO-Government Office Salak Phet have been talking about 6 dams on the island.
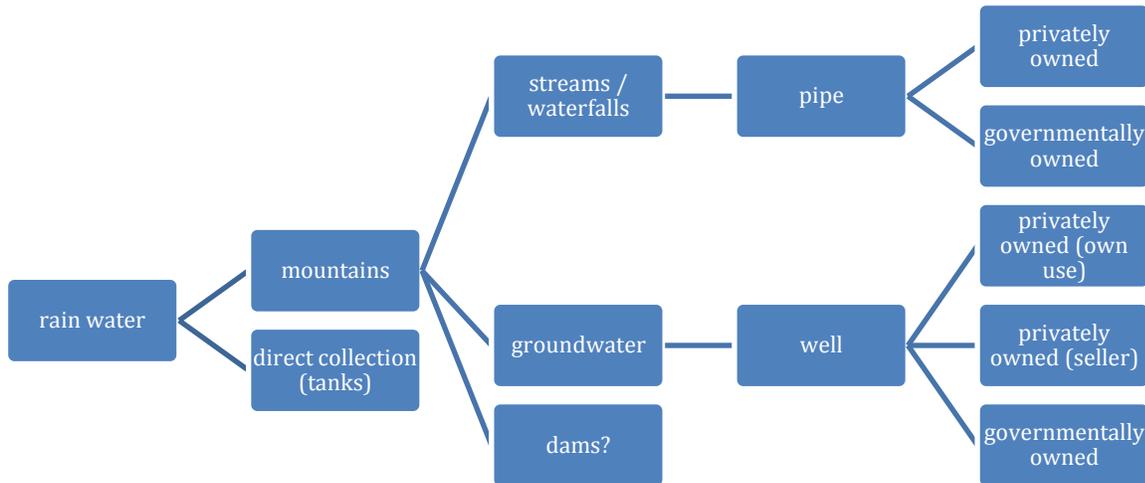
Figure 6 – water supply on Koh Chang

9.1.2. Water costs

There are different opinions about the costs of water, because for everyone who has their own pipes or wells, after the investment costs, the water is for free which results in cheap water in the long term. On the other hand, for people who have to buy their water or buy additional water in case of insufficient stocks, water is expensive, especially in the high (dry) season. Some interviewees pointed out that saving measures can have economic benefits. Saving water leads to cutting costs.

9.1.3. Water scarcity

The issue of water scarcity is seen controversial on Koh Chang. While some say water scarcity is not a problem (National Park), others say that there are sufficient water resources, they are just not managed effectively, and others again, say that water scarcity is one of the most serious problems on Koh Chang, especially during the dry season. When asking people about water and water scarcity they shared ideas with the team on how to solve the problem. These ideas will be presented in the section about intervention strategies. Striking is that there is no collaboration among hotels existing. Everybody is working for their own profit and even in emergency situations such as water scarcity, hotels do not consider collaborate with neighbors in order to collectively overcome the issue.

9.1.4. Waste water

While employees of the National Park Headquarter Office did not consider water scarcity as a problem at all, the more they were concerned about waste water. There is no wastewater treatment plant on the island, hence hotels which are located on the beach often direct their waste water into the sand or even into the ocean. The SAO Governmental Office Salak Phet officer points out that hotels "are encouraged to not litter into the sea" (Appendix 7), nevertheless, most waste water is dumped into the sea. The pollution of the water with chemicals is regarded as a huge problem as well as that fact that water is wasted instead of treated and reused.

9.1.5. Intervention options

The most common and easy to implement intervention is the placing of signs to raise the guest's awareness about water and energy saving measures such as asking them to hang their towels if they want to use them again and laying them on the ground if they want them changed. This saves laundry and therefore water, energy and detergent. Nevertheless these guest information signs are regarded controversial by interviewees. Some said it is an easy and cheap way to raise awareness and save water and energy, but others say that because guests are on holiday they do not want to care about saving measures and they want to consume what they paid for. Two interviewees even stated that signs cause the opposite effect (Siam bay & Bernhard). Furthermore, low flow toilets and shower heads can be used instead of ordinary ones and in general awareness about the limited amount of water resources on the island can be promoted. During the stakeholder meeting an idea from the audience (DASTA) was to limit the number of tourist in order to prevent water scarcity and another one raised "*the concern to our government to take a look and take care of this centrally managed water system on Koh Chang*" (Stakeholder meeting, see Appendix). In addition, the possibility of distilling sea water has been brought up, but the process is relatively slow and therefore the amount of water per day insufficient. Another concern about this was the low sea water level during the high season.

9.2. Energy issues

9.2.1. Supply

The island is connected to the mainland by two undersea cables which go through the ocean. Due to small population and no existence of an industry, it is not relevant and feasible to establish a power

station on the island. According to several stakeholders, the energy occasionally breaks down so that they have to rely on generators.

9.2.2. Costs

The energy itself is more expensive on the island with 4 Baht per kilowatt than on the mainland with 1,5 Baht per kilowatt. Businesses and private people receive their bills monthly. One mid-range hotel (1100 Baht per night) pays per month around 100.000 Baht for energy. One luxurious hotel explained that they started to actively reduce the costs by means of shutting down the electricity in some sections of the hotel. Besides, they even hand out a bonus to the team if they reduce their energy consumption by 10%. Another hotel announces weekly meetings in order to discuss with the staff how to save the energy, however, it is hold very informal. Besides that all of the hotels implement energy saving lamps even though not with the main purpose to save money.

9.2.3. Tourist behavior

In the questionnaire, statements number 10.a) and 10.b) dealt with behavior of tourists regarding the use of air conditioning. The statements were formulated as follows: 10.a) "I turn off the air conditioning when I leave the room", and 10 b) "I turn off the air conditioning when I go to sleep". The possible answers in which the respondents could rate their affiliation through a 3 point scale included: "yes", "sometimes", and "no". From the respondents and in relation to statement 10.a), 75%, which are 49 respondents said "yes" to the statement, 15% (N=10) said "sometimes", and a total of 9% which are 9 respondents said "no" to the statement. Moreover, in relation to statement 10.b), 16%, which are 11 respondents said "yes" to the statement, 35% (N=26) said "sometimes", and a total of 47% which are 31 respondents said "no" to the statement.

9.2.4. Intervention options

The most striking intervention regarding energy usage is the implementation of solar panels which, after investment costs, deliver free energy to the owner and would be suitable due to the tropical location, thus the amount of hours of sun. Nevertheless, the investment is still very high and therefore not affordable for many hotel owners. Additionally, in Thailand it is not possible to feed excess energy back into the grid like it is in Europe, meaning that a battery has to be installed to save the excess energy.

Furthermore, one assistant manager was concerned about the damage coconuts and lightning could cause.

"Solar panels, but it's very expensive. It's hard to maintain, because of the coconuts and the lightning it would be destroyed in one week (Laughs)" – Siam Bay respondent (Appendix 7).

Seasonality is another issue which complicates the realization of renewable energy. During the rainy season the sun is less shining, meaning solar panels will not capture enough sun to make it profitable. Further interventions to use energy more efficiently are the use of energy efficient light bulbs, LED lights or low watt lights, the use of tinted windows and thermal insulation in buildings to prevent air-conditioned rooms from heating, and the use of best quality (5 point) air-conditionings. A key-card system prevents lights and air-conditionings from staying switched on when not used and staff trainings can lead to a more sustainable working environment.

9.3. Awareness

9.3.1. Tourists' awareness

The questionnaire conducted dealt with the topic of tourists' awareness. The respondents were confronted with three statements (i.e. part A of the questionnaire): 1) "I am concerned about environmental issues", 2) "during my holidays I am less environmentally friendly than at home", and 3) "I make an effort to be environmentally friendly during holidays". From the respondents and in relation to the first statement, 20% considered that they were not at all concerned with the statement, or little concerned with the statement. Moreover, 16.9% feels neutral. A total of 63.1%, is quite a bit concerned, or is very concerned with the statement made.

Statement 1) was plotted against statement 2) (i.e. "During my holidays I am less environmentally friendly than at home"). From the respondents, a total of 44.6%, which are 29 respondents considered themselves as environmentally friendly on holidays as if they were at home, while at the same time considered themselves to be quite a bit concerned or very concerned with environmental issues. 9.2%, considered themselves to be concerned with ecological issues stated to be less ecological when on a holiday. A total of 16.9% remained neutral to both of the statements.

Statement 1) was plotted against the third statement 3) (i.e. "I make an effort to be environmentally friendly during holidays"). From the respondents, a total of 40%, which are 26 respondents consider to be making an effort to be environmentally friendly during the holidays, while being quite a bit concerned or very concerned with environmental issues. A total of 12.3%, have consider themselves as being quite a bit or very concerned with environmental issues also stated to make no effort or little effort to be environmentally friendly during holidays. A total of 10.7% remained neutral to both of the statements.

In a final analysis concerning these three statements, out of the 61.3% of the respondents which initially stated to consider themselves to be quite a bit, or very concerned with environmental issues (statement 1), 44.6% also considered themselves to be less environmentally friendly during their holidays (statement 2). 40% also considered themselves making an effort to be quite a bit, or very environmentally friendly during their holidays (statement 3).

To give an idea of the level of awareness of respondents on environmental issues/impacts a set of multiple response answers was incorporated into the questionnaire (question no. 7, part B). The question is as follows: "Which environmental impacts are you concerned about the most?" Possible answers included: Global warming, pollution, extinction of animals/plants, water scarcity, sea level rise, deforestation and harming vulnerable local communities. From the respondents, more than half of responses a total of 63.1%, which are 41 respondents, have selected pollution. Pollution had the highest score in this category. A total of 52.3%, which are 34 respondents selected the extinction of animals/plants. 36.9% (N=24) stated to be concerned with global warming, 33.8% (N=22) selected deforestation, 29.2% (N=19) water scarcity, 20% (N=20) selected sea level rise, and 20% (N=13) selected harming vulnerable local communities.

9.3.2. Hotels' awareness

Our findings reveal that most of the hotels are not aware of their consumption behavior and future consequences. There is a lack of knowledge and education among the businesses.

Furthermore, solar panels are perceived as too expensive and hotel owners or managers are not aware of the long-term benefits. The hotels' close location at the salty ocean could be disadvantageous for panels in terms of wear.

9.3.3. Green certification as intervention & Tourists' attitude towards it

General possible interventions which have been mentioned by interviewees include the spread of green certification, thus meeting the requirements and acting more sustainable, as well as issues of action in nature conservation. The 'Green Leaf' foundation equips hotels who engage in sustainability with a green certification, honoring their effort and respect to the environment. Since tourists value environmental responsibility among businesses, sustainable engagement could stimulate the traveler's decision-making.

The attitude of tourists towards green certification programs was also covered in the questionnaire. In the analysis of the quantitative data, the following variables were compared: - the ecological status (statement 1, 2, and 3) of the sample population with their preference to stay in accommodation with green certification if the price is the same as non-certified accommodation (question 16, part D of the questionnaire), and their willingness to pay extra for green accommodation (question 17, part D of the questionnaire).

From the respondents, 89%, which are 58 respondents, would prefer to stay in a green certified accommodation if the price was the same as non-certified accommodation (see Fig. 7). Out of the 89.2%, 55.3% (N=36) would be willing to pay more extra for green accommodation (see Fig. 8). A part of the respondents (23%), who stated to be neutral, not at all or less concerned with environmental issues (statement 1), as environmentally friendly as at home (statement 2) and making an effort to be ecological while on holidays (statement 3) stated to prefer to stay in a green certified accommodation if the price is the same as a non-certified accommodation.

9.4. Contextual Issues

9.4.1. Blocking power

There are several issues which create difficulties among institutions and simultaneously perform a blocking power regarding intervention strategies, in other terms there are problems which block the implementation of sustainable interventions.

Along with this goes the fact of a missing governmental involvement in businesses, infrastructure and environmental issues. Since there is no support and no incentives set regarding how to become more

environmentally friendly, hotels do not consider taking action and continue working for the profit. In alignment with his, also political instabilities contribute to an uncertain flow of tourists.

"The problem is about politics. We need sure. We need politics to be stable. We have to have security. We have to have a vote, the red one. I hope they will stop fighting. Fighting is like war. Everyone doesn't like it. They don't want it. The tourists like to come here to relax… and safety. It is important. The situation like this is not good. They have problems with each other." – hotel manager, Kereeleére (see Appendix 7)

Less tourists means a lower income, hence hotel managers do not see the necessity to invest in cost-intensive facilities. Due to the fact that getting work permission as non-Asian is linked to many obstacles, Thai owned hotels barely refer to a European or American management, which would have the knowledge and understanding to act environmentally responsible.

Furthermore, the island is missing a coherent management which ensures a compliance of certain rules addressing the natural as well as social environment.

"What I think is lacking, is a management in which the big hotels are also taking part. Everyone is just cooking their own soup." – "Koh Chang the magazine" publisher (Appendix 7).[1]

Another blocking power constitutes the absence of specialists for renewable energy technologies on the island. Hence, consultation or reparations are time-consuming and expensive from the mainland to organize.

Furthermore, since 51% of each property belongs to the Thai Marine, many hotel owners do not consider investing into renewable energy facilities due to a potential loss of the land.

The hotels' staff consists mainly out of Thai and Cambodian people. Because of language barrier, minimum wage and working permits, European people are barely employed. Many resorts prefer Cambodian workers since they are willing to do the less prestigious work and demand lower wages. Important to mention is also that many managers of the more professional hotels live in Bangkok, away from action.

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[1] Original: "Was mir fehlt ist ein Management, an dem sich die großen Hotels auch beteiligen. Jedes Hotel kocht seine eigene Suppe."

9.4.2. Tourism development

Most people agree that Koh Chang and especially its tourism industry has gone through a phase of immense and fast development in the last 5 to 10 years, which brought the development of infrastructure, more tourists and massive economic growth. The island used to be a restricted area used by the military and was only opened to the public in 1988. With the first ferry in 2000 the development of the island began slowly due to its rough mountainous terrain, but with the paved street the construction boom started in 2004. Nevertheless, as most interviewees mentioned, the development also brought problems along such as water scarcity, water pollution, unfair prices and a reached carrying capacity, which is limited by the fact that roughly 80% of the island is National Park territory. Next to that, many people criticize the fact that despite the intense growth and development of infrastructure, there is still no publically managed water supply on the island. Regarding the tourism development one interviewee mentioned that it is possible that tourist number would decrease. This estimation might resolute from the ongoing political instability in Thailand, which is regarded as drawback for the tourism development, because if *"our people is peaceful, it's going to grow. [...] But with the situation in Bangkok you just don't go to Thailand, you go to Vietnam, which is not so different"* – Siam Bay respondent (Appendix 7).

9.4.3. Food and beverage

The majority of the interviewed hotels obtain food and beverage from both, the mainland as well as island. Hence, there are many small suppliers directly located on the island who receive the products from the mainland. It is most practical to purchase the food on the island itself since otherwise you have to either go by vehicle off the island or order cost-intensively a delivery. Besides, beverages are often offered to the same price. Due to spatial issues the island does not operate in farming, hence vegetables and meat come exclusively from the mainland. Furthermore, even though there is a fish supply close by the coasts, the hotels obtain their seafood, 80% from the mainland region, from different salesmen, who each have their selling points. Moreover, hotels on Koh Chang also offer European food which is purchased on the mainland. One hotel mentioned that they receive their products only from the mainland since they prefer stocking food and beverages as it is not possible from island salesmen. While

the majority of the hotels obtains food externally, one hotel has an own organic garden with vegetables used in the restaurant.

9.5. Other findings

9.5.1. Facilitating power

According to several hotel managers and owners, financial support of the state in form of subsidies or tax reduction would support their engagement in the implementation of renewable energy, e.g. solar panels. Also the National Park facilitates power in terms of maintaining the quality of flora and fauna in order to attract tourists. The natural scenery is a decisive factor choosing a destination. A lack of responsibility shown by businesses would lead to a loss of visitors in the long-term. As DASTA has built the basis for environmentally friendly acting, it is important to consolidate those ideas. Nevertheless, it is of importance to have an authority who is ruling the development of sustainability.

9.5.2. Future prospects

Concerning the future, interviewees see further growth as in more tourist arrivals and business expansions, but at the same time seek for more environmental awareness through CSR and green certification of businesses. Furthermore, going in line with an increasing number of tourists, the increasing demand for water is being recognized a lot. It is discussed controversially though, because some expect serious water scarcity, especially towards the end of the dry season (February, March), while others "think the demand will grow, but not in such a huge pace to scare us" (Stakeholder meeting, Appendix 7) and are confident that there will be ways to generate more water and to use it more efficiently

9.5.3. Tourists' willingness to pay

A further issue covered in the questionnaire was tourists' willingness to pay. More than half of the respondents (55.3%, N=36) would be willing to pay more while 44.7% (N=29), would not be willing to pay (see Fig 7). 33.9% of the respondents (N=22), that initially stated that they would prefer to stay in a green hotel they were not willing to pay extra for green certified accommodation (see Fig. 6).

Q16. Accommodation with green cert. (1=yes, 2=no)
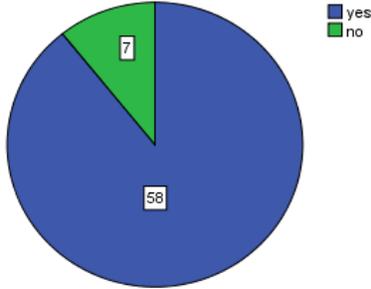
Q.17Willing to pay extra (1=yes, 2=no)
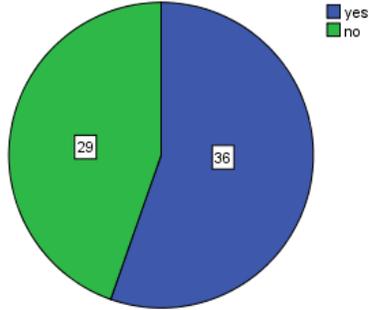
Figure 6 – Preference green certified accommodation

Figure 7 – Willingness to pay more

of the extra money (in case they would be willing to pay more for green accommodation), respondents were confronted with another multiple response set in Part D (i.e. Question number 19 of the questionnaire). The question was as follows: "In which way(s) would you like this extra money to be used?" The possible answers included: renewable energy implementation, development of local communities, water saving measures, and nature conservation. From the respondents, a total of 55.3%, which are 21 respondents would like to use the extra money for nature conservation. A total of 47.4%, which are 14 respondents would like to use this extra money to be used for water saving measures implementation, 42.1% (N=16) for development of local communities, and lastly 36.8% (N=14) would like to use this extra money for renewable energy implementation in the hotel.

9.5.4. Tourists behavior / preferences

Moreover, the questionnaire covered questions on tourists' behavior and preferences when on holiday. Question number 12) of the questionnaire dealt with the wants/needs of the tourists (see Fig. 9), the question was formulated as follows: "How often do you want towels to be changed?" The possible

Q12. How often do you want your towels to be changed?
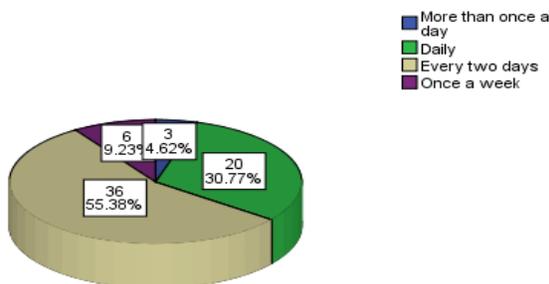
answers in which the respondents could rate their affiliation through a 5 point Likert scale included: "More than once a day", "Daily", "Every 2 days", "Once a week", and "Never". From the respondents and in relation to question 12), a total of 64%, which are 42 respondents answered every two days or more. A total of 30%, which are 20 respondents answered daily, and a total of 4%,

Figure 9 – preference change of towels

which are 3 respondents answered more than once a day to the question.

10. Bottlenecks, solutions and indicators

Based on the value chain analysis, the team identified a number of bottlenecks and solutions affecting the various stakeholders throughout the value chain. Additionally, interview results, the stakeholder meeting discussions and a questionnaire survey administered to tourists served input. Some of these constraints were already communicated to some stakeholders who were present in the stakeholder meeting (that took place on the 16th of May, 2014) and validated.

The team has identified the bottlenecks and solutions based on the following three steps:

1ST- We have used the aforementioned criteria and indicators in order to assess actors and processes within the value chain. These included:

- "Green Leaf Certification"

The manual of the Green Leaf Certification Program elaborated by a private association 'Green Leaf Foundation' is a simple document featuring three types of questionnaires, which cover all areas of a hotel's operation from guest rooms and restaurants, kitchen and laundry, etc. It is presented as an environmental audit. Then, according to the audit results, a number of Green Leaves (from 1-5) will be awarded to each hotel, reflecting the hotel's environmental achievements in management and resource efficiency (e.g. water and energy saving)(Green Leaf foundation, 2009).

- LCEA – Life Cycle Energy Analysis

We have used a simplified derivative of the LCA (Life cycle analysis) to assess the impact of a product or service with special focus on energy by means of a checklist based on observations, which included the operational energy composed, by following domains:

- ✓ Air conditioning
- ✓ Ventilation
- ✓ Building (Insulation)
- ✓ Lighting and other electric appliances
- ✓ Water heating (swimming pool)

- ✓ Laundry (insourced/outsourced)

- ECCR (energy conservation and carbon reduction) indicators

To assess the active performance of the management levels with regard to corporate environmental management (incl. resource reduction strategies, evaluation of systems and strategies by continuous monitoring). Besides, staff involvement and tourist involvement reached by guest information were used indicators.

- Water saving

Water management was considered to assess the water consumption of guests in several parts of the hotel (i.e. guest room and public spaces). Accordingly, water management in this value chain is one of the most important domains to contribute to sustainability.

However, the following indicators were left out during field work due to time constraints and lack of information, these included: (1) Carbon Footprint calculation, (2) Carbon FOODprint, and (3) Water Footprint.

2nd We have looked at the findings derived from the qualitative and quantitative data analysis gathered during field research by means of interviews, checklist and questionnaires. The interviews with various stakeholders of the mid-range and luxury accommodation value chain have been analyzed by means of coding. Each code described in the findings of the interviews have been analyzed and clearly linked to the findings of the questionnaires/checklist and to the criteria and indicators. Consequently, the team came up with five main constraints regarding the value chain of mid-range and luxury hotels on Koh Chang:

- ✓ Lack of awareness in all domains
- ✓ Contextual constraints
- ✓ Water constraints
- ✓ Energy constraints
- ✓ Market-based constraint

All bottlenecks are substantiated by the research data. Afterwards, by combining the bottlenecks to the sector's ability to become more sustainable, the team worked through an exercise to identify the

corresponding solutions to the main bottlenecks. Table 2 below shows the constraints and the corresponding solutions for this specific value chain.

3rd The last exercise was then conducted to select the most realistic solutions for further assessment and eventual interventions. These were selected by considering the solutions with the greatest potential and a high degree of feasibility to increase sustainable actions in the industry while creating a positive impact on the targeted populations – specifically additional or improved water distribution systems and energy efficiency for all stakeholders, increase environmental awareness for staff, hotel managers and owners, local communities, and decrease (in the long-term) costs in the hotels.

Bottlenecks	Solutions
Lack of awareness in all domains	**Awareness solutions**
1. At the destination level, limited awareness about environmental issues amongst stakeholders has been identified; more specifically about water scarcity and energy use.	1. More implementation and promotion of green certification awarding on the island. Increased collaboration of green associations, local media, DASTA and hotels in order to achieve the green image destination Koh Chang. 2. Increase number of organized public meetings/seminars to exchange information about sustainability.
2. Hotel managers perceive tourists as not aware or not willing to participate in environmentally friendly activities carried out during their stay in the hotel. Hotel representatives state that tourists want to consume the hotel resources as much as possible during their holidays in order to justify the money paid for their stay in the hotel. There is a gap between what tourists actually think or do and what the hotels managers think the tourists want/need.	3. Make use of possible research projects findings carried out on the island and elsewhere. Further successes in other destinations could lead to replication on Koh Chang. Increase tourists' awareness on water saving (by e.g. use of towels, bedsheets, shower), while saving costs for the hotel.
3. The hotel's management level: communication/training within the hotel between staff and management levels about water saving measures and energy efficiency is limited. 4. Lack of information for hotels.	4. Restructure the current management style. Give appropriate training to all staff levels. 5. Create brochures for the hotel management levels (e.g. future-oriented brochures focused on sustainability)

Contextual constraints	Contextual solutions
5. Insularity costs are too high. Indeed, most of the products (e.g. Food & beverage) and services (e.g. Electricity) are being supplied by mainland operators.	6. Promote locally produced food such as vegetables, seafood/ beverages (e.g. coconuts). Implementation of methods used in Koh Mak to transform waste into energy.
6. High number of low qualified workers causes language barriers and a lack of knowledge about environmental issues.	7. Raising awareness through school programs.
7. Financial and political issues that prevent stakeholders from taking action. Environmental initiatives are at the bottom of the political agenda.	8. Increasing awareness of politics about environmental issues.
8. The government does not intervene in the tourism sector as a guardian of the natural resources and information provider. Lack of involvement and policy frameworks regarding the water supply.	9. Considering the carrying capacity of the Island and limiting the number of tourists to better manage the natural resources. A centrally managed water system on Koh Chang might be an option.
Water constraints	**Water solutions**
9. Low level of collaboration between the value chain actors is a constraint. As an example: the transport of water to the several consumption sites (i.e. hotels) from few natural reserves (e.g. waterfalls) is not efficient. Meaning that, the distribution of the water is organized individually.	10. Creation of multi-stakeholder platforms of collaboration.
Energy constraints	**Energy solutions**
10. Most of the renewable energies are perceived to be costly and difficult to obtain. Nevertheless, most of the actors recognize the long-term benefits (e.g. hotel managers). Actors are aware about possible alternative (e.g. solar cells, energy saving light bulbs), but are not conscious about the return on investment related to it.	11. Creation of policy instrument such as tax deduction and subsidies in order to encourage the implementation of renewable energy such as solar cells. 12. Provide more information about renewable energies through collaboration between DASTA and hotels. Increase awareness about the use of renewable energy (e.g. incandescent light bulbs)
Market-based constraint	**Market-based solution**
11. Shift in the main market segments (e.g.	13. Longitudinal research could be

| more tourists from BRIC countries, less tourists from Western countries). Meaning that new approaches are needed to deal with the "new tourist" behavior. | applied to the destination through DASTA in order to measure differences in attitude and behavior pattern between different nationality groups. |

Table 2 – Bottlenecks and solutions

→ **Note that value chains are constantly shifting due to broader economic, social and environmental change. This VCA of luxury and mid-range hotels in Koh Chang provides only a snapshot that can help identify possible points of intervention.**

10.1. Evaluation of the most critical bottlenecks and most realistic solutions

Basically, if the capacity of a bottleneck in a value chain improves, the throughput will increase. It is then of necessity to identify the most critical bottlenecks of this value chain in order to better manage the water and energy within the hotels and to work towards a more sustainable destination. It is needed to get an overview of where in the value chain the main opportunities and constraints (bottlenecks) lie. However, the most critical bottlenecks (5, 6 and 7) remain difficult to change because they touch upon complex issues such as political involvement, education system and high insularity costs. Therefore, it seems to be "out of our hands" and challenging to propose a solution to those bottlenecks. Besides, as it is highlighted in the interview findings part, hotel managers as well as owners revealed that Thailand as a state is not involved in tourism at all, meaning that there are no tourism policies or regulations touching upon environmental issues. Furthermore, the team is aware that some solutions (9 and 11) are not feasible and manageable by DASTA. Thus, instead of focusing on most 'critical bottlenecks', the team decided to focus on most realistic solutions.

In order to choose which solutions are the most realistic, the team has elaborated a matrix which includes two axes. The first axe measures the **feasibility** to implement the solutions including financial aspects, level of involvement of stakeholders, number of stakeholders involved and the second axe measures the **potential impact** that the solutions might have on a more efficient water and energy use. See table 3 below.

Feasibility *to implement*

	Low	Medium	High
High	5	13	3 , 12
Medium	2	1 , 4 , 10	
Low		9 , 6	7 , 8 , 11

| | Low | Medium | High |

Potential to impact the

Table 3 – Implementation and impacts   *efficiency of water and energy use*

This matrix helped the team to identify the most realistic solutions with regard to water and energy to implement in the value chain of mid-range and luxury hotels on Koh Chang. The following paragraph describes the two solutions chosen and links them to the aforementioned findings obtained while collecting and analyzing the data.

First, one of the main bottlenecks of this value chain is the controversial issue about water scarcity. As it is acknowledged in the interview findings part, the issue of water scarcity is seen controversial on Koh Chang. While some say water scarcity is not a problem (National Park), others say that there are sufficient water resources, they are just not managed effectively, and others again, say that water scarcity is one of the most serious problems on Koh Chang, especially during the dry season. It seems that there is a lack of awareness about water and energy issues amongst all stakeholders, and also

amongst tourists. These findings match with the findings of our checklist observation and with the results of the questionnaires regarding water saving and energy use. As mentioned in the table 2, there is a gap between what tourists actually think about water/energy use and what the hotel managers think the tourists want. In the questionnaire, it has been found out that 34% of respondents prefer the towels to be changed and washed daily while 65% prefer to have it changed every second day or later the main issue on Koh Chang. Besides, the findings of the checklist reveal that only 5 out of 10 hotels implement 'guest information signs' (towels/shower/bedsheets) in their guest rooms. Raising awareness of tourists about water saving and energy use through the use of 'guest information signs' seems to be a realistic solution as it is easy and cheap to implement. Some interviewees pointed out that saving measures could have economic benefits. Saving water leads to cutting costs.

Second, the lack of knowledge and information about renewable energy, energy saving and water saving is identified as an important bottleneck in this value chain. To start with, it is said in the interview findings part that the government does not provide the tourism businesses with information regarding sustainability. Also, none of the hotels are cooperating with DASTA and they are not yet obtaining information from them. Another blocking power mentioned in the findings part is the absence of specialists for renewable energy technologies on the island meaning that hotels always have to consult operators from the mainland. Along with this goes the fact that most of the hotels are not aware of their consumption behavior and future consequences. There is a lack of knowledge and education among the businesses. Solar panels are perceived as too expensive; however they are not aware of the long-term benefits. Further solutions to use energy more efficiently would be the use of energy saving light bulbs and LED lights, the use of best quality (5 point) air-conditionings. Since there is no support and no incentives set regarding how to become more environmentally friendly, hotels do not consider taking action and continue working for the profit. According to the findings of the checklist, only 1 out of 11 hotels apply solar panels, 7 out of 10 hotels refer to energy light bulbs in the rooms and 1 out of 7 hotels has a light movement sensor. Also, 2 out of 5 hotels do not use water efficient shower heads. Referring to those results, it seems that hotel managers are missing information about the potential of renewable energy and water saving measures. One of the reasons that might change their minds and drive them to take action is the opinion of tourists about it. From our questionnaire results, it is remarkable to notice that a total of 63.1% of the respondents is quite a bit or very concerned about environmental issues and the percentage of respondents increases (89.2%, N=58) when it comes to their preference to stay in a green certified hotel. Furthermore, when it comes to pay extra money to stay in a green certified hotel, 52% of total respondents are willing to pay extra and to the question: "In which way(s) would you like

this extra money to be used?", A total of 47.4%, which are 14 respondents would like to use this extra money to be used for water saving measures implementation, 42.1% (N=16) for development of local communities, and lastly 36.8% (N=14) agreed to use this extra money for renewable energy implementation in the hotel. Nevertheless, those percentages are related only to tourists who are willing to pay extra for green certified accommodation but not the ones who do not want to pay more but are still willing to stay in a green certified hotel.

Accordingly, the realistic solution to counter the lack of knowledge and information about energy and water saving within the luxury and mid-range hotels might be the implementation of an "information package" including documents which help hotel managers to calculate long term benefits of alternative energies and to find suppliers, some trainings to inform the staff on water/energy saving measures and the development of meetings including all stakeholders to discuss about sustainable interventions.

By evaluating the main bottlenecks, the team selected the following solutions for further assessment and eventual interventions:

❖ **Intervention 1: 'Guest information signs' (e.g. towels, bed sheets, shower)**

Goals:

➢ Involving guests in saving water and energy
➢ Saving costs for hotels
➢ Participating in the promotion of Koh Chang as green destination

❖ **Intervention 2: 'Information package'**

Goals:

➢ Informing hotel managers and the staff about alternative incentives
➢ Encouraging the implementation of renewable energy (e.g. solar panels, saving light bulbs, movement sensor, etc.)
➢ Raising awareness of green energy and its long term benefits
➢ Encouraging the collaboration between DASTA and hotels

C. Intervention design

Derived from the above mentioned solutions, it is of importance to clarify why those actions have not been taken place among the hotels yet. Furthermore, the solutions aim to lead to feasible detailed intervention strategies which are practical and realistic to implement.

11. Solution providers

11.1. Solution: Raising awareness by involving guests

To involve guests in the form of giving them the freedom to decide themselves when they want to have their towels and bed sheets changed, and at the same time raising the guest's awareness about environmental impacts of mass laundry, several stakeholders will benefit from implementing the solution. In the following paragraphs the interests and capacities of the different benefitting stakeholders will be elaborated as well as the obstacles which prevent the stakeholders from taking action.

11.1.1. Directly involved

Mid-range and luxury accommodations

Managers and owners of mid-range and luxury hotels and resorts have an interest in implementing this solution, because guests can decide to not have their towels and bed sheets washed every day so that hotel has less laundry per day. Results from the survey, which was conducted as an integral part of this research, give empirical evidence that the majority of guests of mid-range and luxury hotels do not want their towels washed every day. 64.6% of the 65 respondents want to have their towels changed every 2 days or less. Not changing the towels and bed sheets every day and therefore having a smaller amount of laundry provides an economic opportunity for the hotels to reduce their expenditure for laundry service, if outsourced and for water and energy supply and detergent if they have an internal laundry. Furthermore hotels have the chance to save future resources and become more sustainable when implementing the solution, which might satisfy their own values and go along with their attitudes while attracting and satisfying the market of responsible travelers, which is growing extensively (Center for Responsible Travel, 2013).

Competences

The solution does neither require large investments nor much effort and can therefore be implemented even by smaller hotels with less investment capital and less staff so that all hotels have the capacity to take action and implement the corresponding intervention, which will be elaborated in the intervention options.

Challenges

Some hotels on Koh Chang, 5 out of 10 which were involved in our study, are already taking action in form of information signs or folders to involve the guest in the decision of changing or not changing towels and bed clothes. Nevertheless, there are concerns about the usefulness of those signs. As a Thai resort receptionist stated, some tourists just ignore the signs or even do the opposite of what is asked from them. This goes along with the lack of information among hotel owners and managers about the positive environmental and economic impact the solution has. Many do not think about how much water, energy, detergent and waste water could be saved by such a small intervention.

Tourists

Tourists expect a clean beach and sea when visiting a beach destination such as Koh Chang, which is why they have an interest in sustainable actions of hotels. Furthermore many tourists are concerned about the environment and are willing to act environmentally friendly. In our survey among guests of mid-range and luxury accommodations on Koh Chang 63.1% stated that they are concerned about environmental issues (a lot: 20%; quite a bit: 43.6%). Only 16.9% replied that they are less environmentally friendly during their holidays than at home (a lot: 3.1%; quite a bit: 13.8%), while 56.9% stated that they make an effort to be environmentally friendly on holidays (a lot: 35.4%; quite a bit: 21.5%) (Appendix 8).

Competences

When implementing this solution, tourists are the performers, meaning that they are the ones determining the success of the intervention since they are given the choice to cause less laundry. The increasing demand for sustainable, responsible or environmentally friendly tourism leads to the assumption that the general awareness about (negative) environmental (and cultural) impacts of tourism on the destination is increasing among tourists. As underpinned by our survey, tourists are likely to implement the solution due to their personal attitudes towards environmentally friendly travel.

Challenges

According to the qualitative data, there are cultural differences among tourists with regard to environmental awareness and the willingness to act environmentally friendly. As stated by several respondents, Thai tourists are less aware about environmental issues and also act less environmentally friendly compared to Western tourists. Furthermore egoism and ignorance can be seen as an obstacle. "Thai people just don't care about that, they if they paid money they should use everything and that's it" (Appendix 7). A third reason is the language barrier. Not all tourists understand Thai or English.

11.1.2. Indirectly involved / affected

Laundry businesses / water and energy suppliers

Laundry businesses do not have an economic interest in implementing the solution since it would result in a decrease in workload and income for them. Nevertheless they have an interest in a preserved environment with clean beaches and seawater. The same applies to water and energy suppliers.

Locals and National Park

Similarly to laundry businesses and resource suppliers, these stakeholders have an interest in a preserved and clean environment, while they do not have losses or disadvantaged caused by the implementation of the intervention.

11.2. Solution: information package

During the fieldwork and the data analysis a lack in knowledge about possible actions and opportunities to become more environmentally friendly was found. To achieve more environmental action of hotels the awareness and knowhow of hotel staff, including not only managers, but also lower positioned employees, has to be increased. Several stakeholders are involved in performing or affected by the performance of this solution.

Mid-range and luxury accommodations

With the implementation of this solution hotels and resorts will benefit from increased skills and know-how of their managers and employees. At the same time costs can be cut in the long term, despite a necessary investment in the beginning, when saving water and energy or use alternative sources. Next to saving costs and increasing knowledge the hotel can achieve a 'green' image, which attracts the growing market of responsible travelers.

Competences

Usually, mid-range and luxury hotels and resorts are large enough to have the financial capacity for (small) investments, especially for those, which lead to a reduction of costs in the long term. Also due to their luxurious status, they are more likely able to invest than smaller budget hotels or family businesses. Furthermore, especially in the higher management, partial awareness and knowhow might already be present and only small incentives or practical information is missing to make them take action. Additionally, skilled employees can provide trainings for less skilled employees.

Challenges

The biggest challenge for the hotels is the lack of knowledge regarding the investment costs and payback times of larger investments such as installing solar panels. Most interviewees explained that installing solar panels is too expensive, but they did not know about the return of investment.

Furthermore, the hierarchical mindset in the staff layers of the hotels is a challenge. Each staff unit thinks of itself as primarily as part of a specific hierarchy, which has less power than other units (e.g. managers). Moreover, orders traditionally flow from higher to lower units. Higher staff "directs" lower staff, they don't collaborate.

DASTA

In this solution DASTA is one of the main actors, because they are supposed to provide the hotels with the information. This is one step to achieve their goal to make Koh Chang a sustainable tourism destination and to raise awareness about environmental issues. Furthermore it will increase the popularity of the organization, which is necessary, because many interviewees had, if at all, only heard the name, but did not really know what DASTA was doing.

Competences

Since DASTA is a governmental organization, they have authority and connection to the government, which means that they can bring issues to governmental level. Furthermore they have financial capacity to support the solution and they have a large network of stakeholder which can provide information.

Challenges

Based on our qualitative data, we found that DASTA is not very known among stakeholders on Koh Chang, which is a challenge when trying to implement their goal, because they need the cooperation of businesses on the island. Also former projects, which were initiated by DASTA, were not very successful according to several stakeholders. Furthermore, it is not certain, if DASTA has the staff capacity in terms of numbers and skills to perform the solution.

Additionally, the governmental situation in Thailand is a challenge. The mindset is focused on hierarchical structures, which complicates collaboration. Each local government body thinks of itself as primarily as part of a specific hierarchy, which has less power than other units (e.g. Bangkok Main Government). The steering model delegates traditionally from higher to lower units, which creates tensions between the actors.

11.2.2. Indirectly involved / affected

Tourists

The general growing demand of sustainable holiday and environmental awareness among tourists puts pressure on the tourism industry, including the hotel and resort businesses, to adapt to the changing market and become more sustainable. Nevertheless, some tourists are also bothered if their towels are not changed every day or if the shower stream is soft, so that hotels and resorts might face complaints use low flow showers for example.

Energy- and water suppliers

If hotels and resorts make an effort to consume fewer resources or switch to alternative sources, water and energy suppliers will face losses in their sales. The latter mainly applies to energy resources, because many hotels and resorts already have their individual water supply in form of wells and thus are not relying on external water suppliers.

Equipment suppliers

Suppliers of equipment for sustainable interventions such as solar panels, low flow shower heads, toilet tanks and taps, will benefit from the increasing popularity of their products and their businesses when they appear in the list of providers given to the hotels and resorts. Furthermore, in case of actual implementation among hotels the demand for the products grows and their sales increase.

National Park & local community

Increased awareness about the importance of environmental issues and thus a cleaner environment will benefit the local community and the National Park.

Tour operators & local media

Due to the newly increasing demand for sustainable tourism, tour operators and local media can market the island as green holiday destination if more hotels and resorts make an effort to become more environmentally friendly.

12. Intervention options

12.1. Intervention 1

Guest information signs

Solution: Based on the study's findings and according to the bottlenecks it is of importance to increase the awareness of the utilization of resources among hotel managers and owners. Besides and by means of addressing another big stakeholder group, it is of necessity to involve the tourists as decisive stakeholder group concerning active contribution to environmental issues.

→ **Create guest information signs in hotels**

Explanation / illustration:
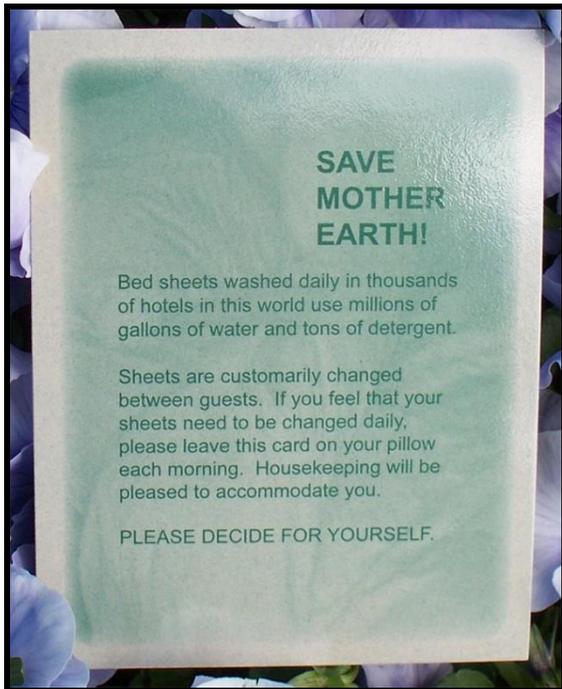
a) Bed sheet information sign

b) Towel information sign

a) A sheet-changing card tells housekeeping that "if the card is left on your pillow in the morning, your sheets should NOT be changed that day".

b) A towel card tells housekeeping that "a towel on the rack means "I'll use it again", and a towel on the floor or in the tub means "please exchange".

Let guests decide whether and how often they want to have their bed sheets and towels to be changed. According to this study, there is evidence that tourists of mid-range and luxury hotels on Koh Chang do not require a daily exchange of their towels. 65% of the respondents state it is sufficient and still satisfactory to change towels every second day or even later. Why? Tourists become more aware of environmental issues and prefer contributing positively to natural as well as social destination surroundings. Our survey revealed that 63% of the informants are concerned about the environment.

Thus, they expect hotels to be part in protection and conservation programs regarding the global and local environment. Therefore, by means of a small investment, namely printing the cards/signs, the hotel is covering many interest stakes (see beneficiaries below).

Guidelines:

In order to get the attention of the hotel owners, it is important to refer not only to the environmental benefits but also to cost-savings. To make the guest information signs itself as comprehensible and thus effective as possible, it is important to formulate wisely and sensitively. The information should be easy to understand and not too complex and long. To use Thai as well as English and provide reasons for doing it will support comprehension. It is also of importance to communicate the program properly to the staff since

> **Design of guest information signs**
> - ✓ Easy to understand
> - ✓ Not too long and complex
> - ✓ More languages
> - ✓ Explanation of importance of acting environmentally friendly
> - ✓ DASTA logo

they are seen as assistance. Monitoring results over a longer period of time will lead to a cost analysis and estimation for the future.

A logo of DASTA should be displayed on the sign in order to represent seriousness and competence of the hotel.

Beneficiaries:

By means of a small investment in linen signs, the hotel is…

- **reducing operating costs** tremendously through less expenditure on energy, water, detergents, utilities and labor.
- **reducing the impact on the environment** by lowering CO_2 emissions, saving water, detergents and produce of waste water.
- actively **involving the guest**. Tourists have become more sophisticated in their understanding and became more aware of environmental and social responsibility over the past decade. Leave the freedom of choice up to the guest.
- simultaneously **addressing the staff** and acting within their interests. Many of them already save energy and water at home. Seeing that their employer is committed as well will improve motivation and collaboration.
- washing less frequent, meaning **less wear on fabrics** which prolongs their lives.
- giving the housekeeping more **time to spend on other tasks**.

12.2. Intervention 2

Information Package for hotels

Solution:

The solution to several bottlenecks is to increase the knowledge of the hotel staff (not only management but eventually all employees of the hotel) on specific aspects and tools of energy and water management. Knowledge about alternative "green" options of energy extraction, e.g. solar panels, was not recognizable enough among the hotel managers.

Information on rather simple adaptions within the hotel operations were lacking, such as for example installing low-flow shower heads or toilets to save water consumption. To address these obstacles in becoming more sustainable, the following intervention is suggested:

➔ **Create and distribute an information package for hotels on Koh Chang.**

GREEN KOH CHANG–

save costs and the environment!

A guideline for hotels to cut costs while saving water and energy.

Contains:

1. Useful Information
2. Cost-Benefit analysis tutorial (incl. pay-back calculations of solar panels)
3. List and contact details of providers
4. Tips to save <u>energy</u> and <u>water</u>

The information package is providing the hotels on Koh Chang the necessary information to coming one step further of achieving the island's common goal of becoming sustainable (with special focus on how to save energy and water). The information package contains an information sheet on the issue of sustainability and what it means in the broader context; a tutorial on how to calculate the costs and benefits, as well as payback time of certain investments (e.g. solar panels); a list with name and contact details of renewable energy suppliers nearby; practical tips to save energy and water in the daily operations of the hotel business.

Possible content/formulations

- **Information on Sustainability and how energy efficiency and water saving play a role**

This part provides the hotels basic information on the issue of sustainability. Main aim here is to display the importance of sustainable actions in tourism. By giving the picture of how they are affected by global warming in the future and what they contribute to it by applying insufficient energy and water management in their hotels. Important here is to provide descriptive examples, which are good to understand and Thai people can relate to (e.g. impacts of mismanagement on Phuket). Supporting the information by giving possible scenarios what could happen to Koh Chang, its community, the nature and animals, livelihood as well as businesses and build-up existences would be highly effective.

- **Cost-Benefit calculation tutorial**

Basic steps of calculating the benefits against the costs of certain investments, reaching from as simple as installing low-flow shower heads to as complex as investing in solar panels as energy source, will provide the hotels the know-how to make future decisions based on financial returns. By this, the hotels will be more likely to dare to initiate investments to become more sustainable.

Energy & Water

List and contact details of suppliers of energy-efficiency / water saving appliances

In order to save the hotels one step of researching nearby suppliers of the praised appliances and initiate quick possible implementation of these, contact details of potential providers should be listed in the information package.

Practical tips to save energy and water within the hotel's operations

Due to the fact that becoming more energy-efficient often does not involve spending a lot of money and time, the following basic tips will provide the hotels some ideas on how and where to save energy.

a) Tips to save energy

b) Tips to save water

Guidelines

In order to make it this information package as comprehensible and thus effective as possible, it is important to formulate wisely. The information should be easy to understand and not too complex and long. To use Thai as well as English and provide enough descriptive examples / scenarios will support comprehension. In order to get the attention of the hotel owners, it is additionally important to refer not only to the environmental benefits but also to cost-savings. A logo of DASTA as well as contact

details of DASTA representatives should be included to be recognizable for the hotels and to encourage further collaboration between the hotels and DASTA.

Beneficiaries

By means of providing the hotel information packages, …

- The hotel will **increase skills and know-how** of its managers and employees
- The hotel will experience long-term **financial benefits and savings**
- The hotel reaches a **greener image** and potentially the whole island as well
- DASTA will come one step closer to make Koh Chang a **sustainable tourism destination**
- DASTA will raise **awareness about environmental issues**
- DASTA will **increase collaboration** with hotels and increase their popularity
- Equipment suppliers will benefit by **selling more water- and energy efficient appliances**
- The National Park will be supported by **conserving the environment**

13. Preconditions – Recommendations for DASTA

13.1. Intervention 1 – « Guest information signs »

- First, DASTA could conduct an online survey based on photo elicitation techniques which will make possible to identify which design as the greatest potential to have an impact on tourist's behavior (e.g. colors of the signs, front and characters of letters and symbols/pictures used). This survey might also use elements from previous studies. Gathering data will help to come up with a standard model with an efficient design.

- DASTA should send an official letter to inform the mid-range and luxury hotels about the environmental linen and towel reuse programs and explaining the benefits for the environment but also financial benefits of using "guest information signs" by referring to examples in other destinations. They could *make use of possible research projects findings carried out on the island and elsewhere. Indeed, further successes in other destinations could* lead to replication on Koh Chang. The end of the letter would contain a paragraph that hotel managers could fill in. A few

questions would be asked about the interest of the hotels to participate (yes/no) and if though how many guest rooms are in the hotels (give a number) in order to provide the exact numbers of signs.

- DASTA should provide the "guest information signs" since it would contain their logo. Therefore, DASTA could play the role of the process facilitator and would make sure that the hotels receive the signs and make use of them.

- The "guest information signs" would be preferably in line with environmentally friendly practices. Therefore, the use of recyclable materials for the signs can create high value in this program while conserving the natural resources of the destination. As an example, glass signs could be used as they have a much longer lifespan than other materials. Furthermore, they are better recyclable.

- Several meetings between DASTA and hotels could be implemented to insure a good collaboration. Therefore, DASTA could visit hotels once in a year to make sure that the signs are applied in the rooms and that they are not damaged.

13.2. Intervention 2 – "Information package"

- An official letter from DASTA would be sending in which goals and objectives of the project are explained. This letter would also inform about the advantages of taking water/energy saving measures in terms of environmental and economic benefits. The contact details of DASTA representatives would be included.

- Together with this letter, the "information package" will be send. This package contains the aforementioned information as described in the previous part called "Intervention options – 2" such as *Useful Information, Cost-Benefit analysis tutorial* (incl. pay-back calculations of solar panels), *List and contact details of providers* and *Tips to save energy and water.*

This "information package" should be designed by DASTA in an attractive way including concrete examples, colors and symbols. The section *tips to save energy and water* could be written in a A4 page format in order to pin it on a wall and to facilitate its use.

- Furthermore, an extra document will be jointly send to request if hotel managers and staff members are willing to participate in a *workshop* in order be trained about sustainability and water/energy saving measures. The respondents would be asked if they are interested or not. Therefore, a standard training organized by DASTA will be providing during the *workshop day* and will take place in the facilities of the hotel who wish to be part of this training day (e.g. workshop day organized at least once a year). The hotel managers will have the possibility to send back their answers through a RSVP type envelop to make sure that DASTA is aware of the exact number of hotels who are willing to have a training program.

- DASTA may also provide *newsletters* every 6 months or once a year to update content, to give advice on new technologies and new green incentives.

14.   Conclusion

In order to ensure the sustainability of complex systems on the domains of water management and energy efficiency, we took into account regional and local realities with the purpose to enhance the destination's environmental quality. The research team has answered the research questions which were suggested through a guideline provided by the supervising team. Having taken into account the need to orientate long-term growth within the mid-range and luxury hotels and resorts value chain, we suggest the increase of the number of collaboration tools between stakeholders.

The team has created two main interventions such as the *Guest information signs*   and the *Information package* in order to generate awareness and multi-stakeholder collaboration for a more effective conservation of the island's resources. Two major problems regarding the effective use of water and energy were identified. To date, the achievement of a consistent water management has entailed high costs for the value chain actors, which have had an impact on the hotel's capacity to become more sustainable. New methods, such as the guest information signs and information packages seem to have the potential to address the value chain's bottlenecks.

It's the team's conviction that these tools will potentially raise awareness on various stakeholders and that this knowledge will be valuable in order to establish a stronger bond of collaboration between them. In addition, there is some evidence that, by spreading valuable information/knowledge throughout the value chain will make possible to distribute the water and energy more effectively, resulting in lower deterioration of the environmental assets.

The major evidence for this can be found in the neighbor island of Koh Mak. On Koh Mak, multiple stakeholders have managed to establish multi-stakeholder collaboration in order to better benefit from the utilization of their natural resources. With this in mind, the team has embarked on a mission on the island of Koh Chang in order to find out what were the obstacles and potential solutions which prevented the value chain actors to jointly take action. The results have shown us that end markets have demonstrated to be interested in contributing for green practices within the midrange and luxury accommodations value chain. Indeed, 52% of total respondents were willing to pay extra and a total of 47.4%, which are 14 respondents would like to use this extra money to be used for water saving measures implementation, 42.1% (N=16) for development of local communities, and lastly 36.8% (N=14) agreed to use this extra money for renewable energy implementation in the hotel. These findings have helped us to narrow the existing gap between hotel managers and tourists, regarding the manager's perception of the tourist overuse of the hotel's resources and the tourist's actual behavior, attitudes and opinions. These results lead to the conclusion that collaboration is a needed method to avoid resource depletion on the island.

This report, in which in its preparation fulfilled procedures provided by existing literature and research, is the result of an extensive and continuous reflection on different sections of society: the cultural, physical and socioeconomic features of Koh Chang. As a concluding remark, it is necessary in order to adjust the implementation of these interventions over time to assure that all stakeholders are aware and agree on changes.

In essence, the aim of the presented report is to provide adequate direction for a genuine attempt to meet sustainability on the region's tourism development. Eventually, this destination can enjoy both: growth and sustainability (growth + sustainability = development), (Fletcher et al. 2008).

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16.   Appendix

Appendices

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Fieldwork Lead Coordinator: Leen Fokker

Fieldwork Coordinator: Harald Buijtendijk

Appendix 2 - LOG – International Field Project 2014

Date	Tasks
Wed, 30.04.	- Arranging accommodation, acclimating, getting an overview of destination
Thu, 01.05.	- 17:00h, Group meeting with teachers - Designing questionnaire (Carole, Marcia, Michèle) - Expanding interview questions (Kathrin, Malena) - Selecting items for checklist (Kathrin, Malena)
Fri, 02.05.	- 11:00h, Visiting hotels along White Sand Beach for potential interviewees (everybody)
Sat, 03.05.	*Free time*
Sun, 04.05.	*Free time*
Mon, 05.05.	- Afternoon: Visiting two hotels along Lonely Beach for potential interviewees (Carole)
Tue, 06.05.	- Morning: Kathrin, Malena & Michèle moving to White Sand Beach - 11h00, Interview with hotel receptionist at Balian Beach Resort (Marcia & Carole) - 11:00h, Interview with hotel owner at Plaloma Cliff Resort, White Sand Beach (Kathrin, Malena, Michèle) - 12:00h, Interview with front office manager at Mercure Hotel, Lonely Beach (Marcia & Carole) - 13:30h: Interview with receptionist at Warapura Resort, Lonely Beach (Marcia & Carole) - Afternoon: Marcia & Carole moving to Klong Prao Beach - 15:30h, Transcription interview (Michèle) - 16:00h, Interview with hotel manager at White Sand Beach, Top Resort (Kathrin, Malena) - 18:00h, Search for potential laundry informants (Malena) - 20:00h, Group meeting with teachers
Wed, 07.05.	- 10:00h, Printing questionnaires (Malena, Michèle) - 10:00h, writing blog post (Kathrin) - 11:00h, Handing out questionnaires at White Sand Beach (Kathrin, Malena, Michèle) - 13:00h, Interview at the sub-district in Salak Phet (Marcia & Carole) - 14:30h, Interview at the Municipality (Marcia & Carole)
Thu, 08.05.	- Morning, Writing blog post (Marcia & Carole) - 11:00h, Interview with publisher of Koh Chang Magazine (Kathrin, Malena, Michèle) - Afternoon, Handing out questionnaires at Klong Prao Beach (Marcia & Carole) - 14:00h, Interview with laundry owner (Kathrin, Malena, Michèle) - 16:00h, Interview with National Park office (Kathrin, Malena, Michèle) - 20:00h, Interview with hotel manager, Kereleéere Hotel, White Sand Beach

	(Kathrin & Malena) - 20:00h, Writing blog post (Michèle) - 20:30h, transcription of Interview (Kathrin)
Fri, 09.05.	- 10:00h, Interview with resident manager, Amari Emerald Resort, Klong Prao Beach (Marcia & Carole) - 10:00h, Handing out questionnaires, White Sand Beach (Kathrin, Malena, Michèle) Afternoon: All group members moving back to Lonely Beach
Sat, 10.05.	*Free time*
Sun, 11.05.	*Free time*
Mon, 12.05.	- Afternoon, Internal group meeting - 17:00h, Group meeting with teachers
Tue, 13.05.	- Morning: Handing out invitation letters (Carole) - 14:00h, Interview Thai local, bar employee (Marcia, Michèle) - 14:30h, Interview with Supervisor at KC Grande and Room Observation, White Sand Beach (Malena, Kathrin) - 14:30h, Interview owner of budget bungalow next to Balian Beach Resort (Carole) - 15:00h, Interview Thai local, supermarket employee (Marcia, Michèle) - 15:30h, Observation Kacha Hotel (Malena, Kathrin) - 17:30h, Interview with Receptionist at Panviman Resort, Klong Prao (Malena, Kathrin) - 18:00h, Observation guest room and other facilities, Panviman Resort, Klong Prao (Malena, Kathrin) - 18:30h, Handing out questionnaires at Panviman beach side, Klong Prao (Malena, Kathrin) - Peer Evaluation (everybody)
Wed, 14.05.	- 10:00h, starting to prepare presentation for stakeholder meeting (Michèle, Kathrin) -Morning, Handing out questionnaires at White Sand Beach (Malena, Marcia & Carole) - 12:30h, Interview with journalist & owner of White Sands Publications (Malena, Marcia & Carole) - Afternoon, Handing out questionnaires at Klong Prao Beach (Malena, Marcia & Carole) - Evening, evaluating questionnaires, defining initial findings (everybody)
Thu, 15.05.	- 10:00h, Designing presentation for stakeholder meeting (everybody) - 15:00h, All group members moving to White Sand Beach - 16:00h, Dress rehearsal presentation (everybody) - 20:00h, finalizing presentation
Fri, 16.05.	- 09:30h, Stakeholder meeting (everybody) - 14:00h, Interview Front Office manager, Sea View (Malena)

Appendix 3 – Tourism Figures Thailand

International Tourist Arrivals to Thailand 1995 - 2012
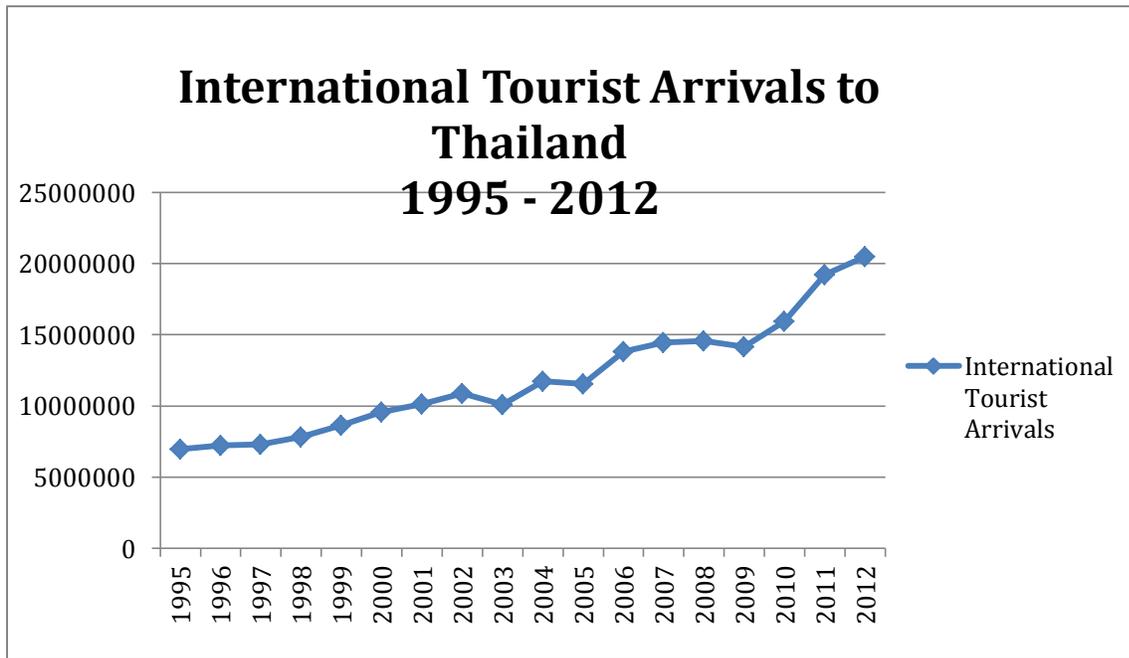
Sources: World Bank, n.d. & TAT, 2013

Main Source Markets 2012

จำนวนนักท่องเที่ยวชาวต่างชาติ
Number of foreign tourists

20	20.51	

ล้านคน / Million tourists — ภาพรวมชาวต่างชาติ Overview 20.51 — มาเลเซีย Malaysia 2.38 — จีน China 2.23 — ญี่ปุ่น Japan 1.18 — รัสเซีย Russia 1.18 — เกาหลี South Korea 1.04

Source: TAT, 2013

Domestic Tourists in Thailand 1998 - 2012
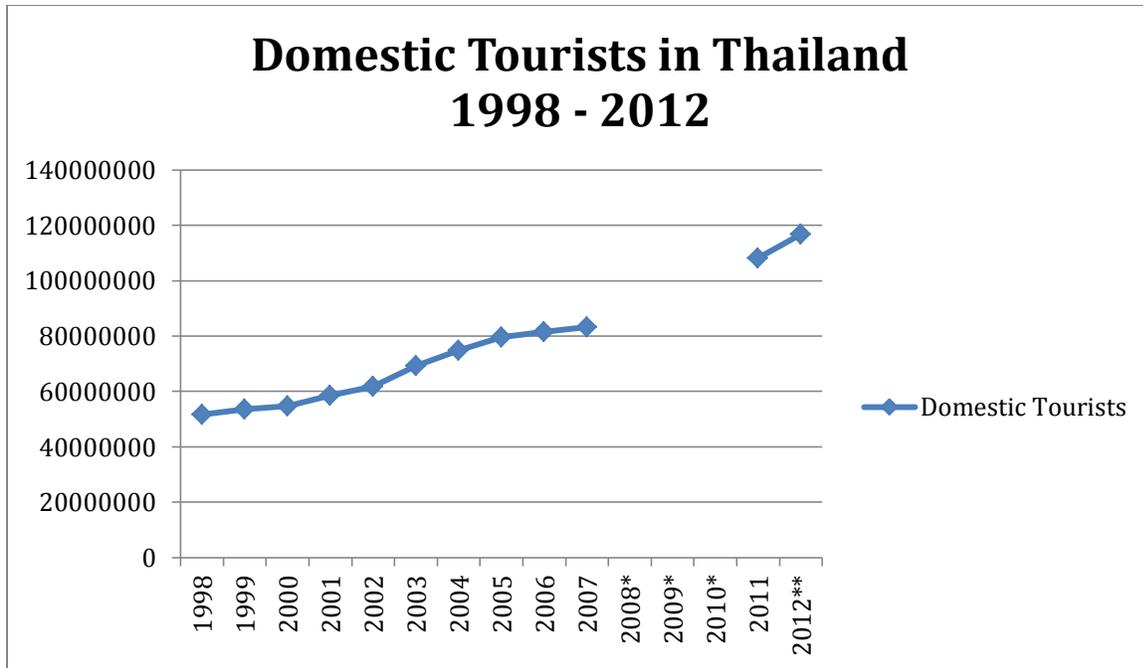
* missing data

** expectation

Sources: TAT, n.d.b & TAT, 2013

Revenue from Tourism 2011 - 2012
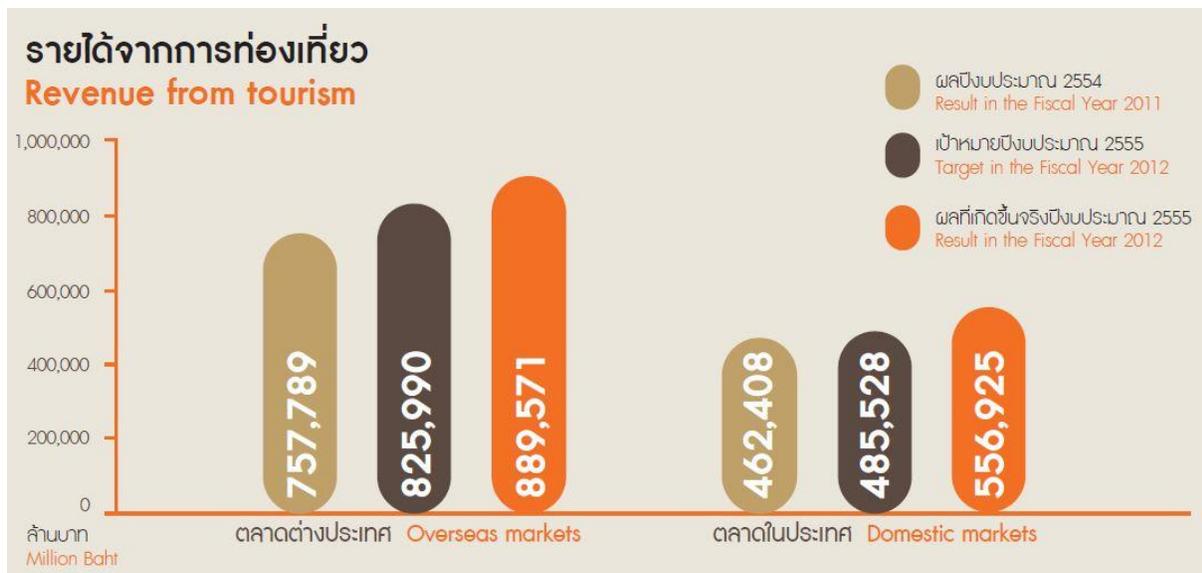
Source: TAT, 2013

Appendix 4 – luxurious criteria for hotels

Area	Luxurious aspects
Booking-Process	• Simple and 24h help guaranteed
Check-in & Check-out	• Express check-in/check-out • avoidance of waiting time
Luxurious room features	• consistent design, high-quality furniture • real plaster walls, quality paintings • king bed, high-quality mattress, cotton-sheets, variety of pillows • robes and slippers • adequate storage (closet space) • comfortable reading chair • working desk • room safe • good-size flatscreen TV • coffee maker, water cooker • heating/AC system • Wifi
Bathroom features	• ventilation system • bathtub for two • heated toilet seat • good water pressure in the shower • hygienic accessoires • fluffy towels • makeup mirrow
Service features	• nightly service • courtesy • housekeeping • gardeners and outdoor workers do not interfere with guests
Outstanding hotel dining	• attractive design • excellent service
Guest activities	• 24-hour fitness center with at least basic equipment • Pool, if feasible • Social lobby with couches and wifi • Laundry service • Babysitting, petsitting • concierge

Source: Harrison, T. (2014)

Appendix 5 – Checklist

HOTEL: _____   **OBSERVER:** _____

GUEST ROOM	YES / NO / COMMENTS
Are guest information signs (towels, energy saving, water saving) provided? (take a picture)	
Are guests able to lower / turn off air conditioning in their rooms?	
Water efficient shower heads/ toilet flushes: visible? Water volume per minute test outcomes →	
Are there any water leaks (toilets, showerheads, tap)?	
Are more than 50% of the installed light bulbs incandescent?	
Is a key card system for electricity installed?	
Are the air conditioned rooms protected from direct solar radiation? (curtains / location / trees)	

PUBLIC SPACES	YES / NO / COMMENTS
Are the air conditioned rooms closed / protected from heat influx?	
Are solar panels visible?	
Are more than 50% of the installed light bulbs incandescent? Are the light bulbs clean?	
Are lights in the public toilets only switched on when they are needed?	

Is a movement sensor installed?	
Advertisements/ Brochures for activities: organized by hotel / local suppliers / (international) tour operators?	
Decorative elements using water / energy?(e.g. fountain)	
What kind of vehicles are part of the hotel service?	

POOL / SPA	YES / NO / COMMENTS
Is there a high potential of splash-out due to a high water level of the pool?	
Are there systems to channel splashed-out water on landscape or back into the pool?	

Further observations:

Appendix 6 – Mid-range and luxury hotels guests survey

SURVEY OF MID-RANGE & LUXURY HOTELS GUESTS

<div style="border:1px solid black">

ONLY FOR THE INTERVIEWER

Serial number……………………

Name of the interviewer……………………………………………………………

Date of the interview (day/month/year)   /   /

Place of the interview…………………………………………………………

</div>

Dear visitor,

Thank you for participating in this research study. This study is a part of a research project that we
are conducting in the Netherlands for NHTV Breda University of Applied Sciences and Wageningen
University in collaboration with DASTA (Designated Areas for Sustainable Tourism Administration). Your
responses will help us to obtain a deeper insight into tourists' behavior as well as attitude towards
sustainable vacation in luxury hotels in order to identify feasible intervention strategies to reduce
carbon emissions.

The following pages contain requests for your opinions. Please read all instructions carefully and
respond to the questions on the basis of your first impression. There are no wrong or right answers.
If you volunteer to be in this study, you may withdraw at any time or refuse to answer any questions..
Answering to this questionnaire should take no longer than 10 minutes in total.
All responses are anonymous. Individual responses will NOT be identified. Data will only be
used for academic publication purposes.
Thank you for your assistance.

PART A – About your holiday

1. How many times did you go on vacation within the last 12 months? _____ times

2. What type of accommodation have you been choosing most frequently? Please cross.

- o Family/Friends
- o Camping
- o Hostel
- o Guesthouse

- o Apartment
- o Low-budget hotel
- o Mid-range hotel
- o Luxury hotel/resort

3. Which of the following are of most importance to you. One or more answers are possible.

- o Nightlife & entertainment nearby
- o Quality of the beach
- o Easy to reach
- o Beautiful nature nearby
- o Air conditioning
- o Price
- o Eco friendly management (i.e. wat
- o Proximity to tourist attractions

- o Hotel rating/stars
- o Facilities of the accommodation (laundry service, spa etc)
- o Available services (i.e. hotel transfer)
- o Hot shower
- o Swimming pool
- o Beach location
- o others _____

PART B – Your general attitude towards sustainability.

Which of the following statements apply to you. Please cross.

	Not at all	Little	Neutral	Quite a bit	A lot
4. I am concerned about environmental issues	◯	◯	◯	◯	◯
5. During my holiday I am less environmentally friendly than at home	◯	◯	◯	◯	◯
6. I make an effort to be environmentally friendly during holidays	◯	◯	◯	◯	◯

7. Which environmental impacts are you concerned about the most? More than one answer possible.

- o Global warming
- o Pollution
- o Extinction of animals/ plants
- o Water scarcity
- o Sea Level rise

- o Deforestation
- o Harming vulnerable local communities
- o Other _____

PART C – Your attitude about the environment and hotel/resort

8. What is your preference?   Air condition ☐   Fan ☐

	Yes	Sometimes	No
Food			
9. I make an effort to consume locally produced food and drinks instead of imported goods during holidays.	○	○	○
Room			
10. I turn off the air conditionning			
a) when I leave the hotel room	○	○	○
b) When I go to sleep	○	○	○

	More than once a day	Daily	Every 2 days	Once a week	Never
11. If your hotel has got a Wellness & Spa, how often do you make use of it?	○	○	○	○	○
12. How often do you want towels to be changed?	○	○	○	○	○
13. How often do you shower?	○	○	○	○	○

14. How long do you shower.
Please estimate.

- o   Less than 5 minutes
- o   Between 6-10 minutes
- o   Between 11-15 minutes
- o   Between 16-20 minutes
- o   More than 20 minutes

Facilities

15.How important are the following for you? Please cross.

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Shuttle service	◯	◯	◯	◯	◯
Warmed pool	◯	◯	◯	◯	◯
Cooled pool	◯	◯	◯	◯	◯
Laundry service	◯	◯	◯	◯	◯
24/7 lighting at the common spaces of the hotel	◯	◯	◯	◯	◯
Decorative Lighting/ Water fountains	◯	◯	◯	◯	◯

PART D – Willingness to participate

16. Would you prefer to stay in accommodation with green certification if the price is the same as non certified accommodation?

- o   Yes
- o   No

17. Would you be willing to pay extra for green accommodation?

- o   Yes
- o   No ⎯⎯⎯▶ Please continue with question no. 20

18. How much? Please give the amount in Baht_____.

19. In which way(s) would you like this extra money to be used? One or more answers are possible.

- o Renewable Energy in the hotel
- o Development of local communities
- o Water Saving Measures
- o Nature Conservation

20. Would you recommend Koh Chang to your family or friends?

- o Yes
- o No

21. Why/ Why not?

_____

_____

22. What is your nationality? _____

23. What is your gender?   o Male   o Female

24. What is your age?

- o Under 18
- o 18 - 29
- o 30 - 49
- o 50 – 64
- o 65 or older

25. How many nights will you spend on this holiday / trip on Koh Chang?   _____ nights

26. What is the price of your hotel room per night? _____Baht.

THE END!

THANK YOU VERY MUCH FOR YOUR PARTICIPATION AND ENJOY THE REST OF YOUR HOLIDAYS.

Interview transcription –SAO- Government Office Salak Phet - office Director and his assistant, Aor. 07-05-2014, 15:30

I: Interviewer; R: Respondent

I: This department here is where you tax the businesses on the Island is that correct?

R: Yes.

I: And, what kind of businesses do you tax here?

R: Homestay, hotels, everything that makes money in the area. My boss, he made a road plan, in case the people have a problem. We have 5 villages, in Koh Chang Thailand. My boss knows

I: 5 villages that you manage and get the taxes from?

R: Yes. This is SAO's Chiefs office administrator.

I: Which kind of taxes you are collecting from the business, on what is it based on?

R: In Koh Thain, that's the area.

I: Are the taxes for the land owners? Or only the business.

R: Is for the area. Is for the owner. They make a paper. They make a contract for the area

I: Do you make the contract?

R: No.

I: Who?

R: The owner of the land. But they have to make the contract.

I: But, to whom do you charge the taxes to the tenant or to the owner?

R: The owner has to make a contract and go to survey the area. I ask how many businesses you have here.

I: Do you tax according to their size or profit?

R: Calculate the size, and area. But, only the shops.

I: You also pick up the garbage in this area?

R: yes, for the shops minimum 60Bahts.

It: It also depends on the size?

R: yes, small, but big hotel pay every month they give 2000Baht.

I: What about the electricity?

R: Is not here.

I: And, the water?

R: also not.

I: Where can I find the water provider?

R: They distribute.

I: How do they distribute?

R: They have 6 Dams on the Island.

I: Who is doing this?

R: In Bang Bau, the locals, they are the ones responsible for the water management. Mr. Manop in Bang Bau.

I: And, the electricity?

R: EPA –Electric Power Authority at the Municipal office.

I: Do they work directly with the hotels and with you? Do you have a relationship with the Electricity Company?

R: The hotels pay directly to the electricity company not to us. But I am not sure.

I: Do you work with DASTA? Or with an organization for water saving or electricity?

R: Yes, for DASTA is when the water has a problem. For the garbage management as well, I travel to salak kok for the caiques.DASTA gives money to them and they do the activities. Can you put your questions on Google translator and we communicate like this, is it okay?

I: Yes. That is a very good idea.

I: Do you go directly to big hotels to give them information about water saving or energy saving?

R: No formal document, we speak with them, we have meeting for information once a month with the villagers, the restaurant operators.

I: Are you meeting also with the hotel managers?

R: We send a representative to the hotels.

I: Do you give information to hotels about sustainability?

R: I provide, to Mercure Koh Chang in Bang Bau. They separate the waste in Mercure.

I: Do you just provide this information to Mercure or do you provide information to others?

R: A technician checks on the property, to check if everything is in order.

I: And, do have a guideline or some kind of document which you could possibly distribute in the hotels about green initiatives?

R: No, but I know! I go to survey.

I: Why don't you have information books?

R: (No answer)

I: Do you promote conservation together with DASTA?

R: Yes.

I: How?

R: With the participants of the community. DASTA gives money for me. Not for the community. DASTA together with some villagers Bao Tao has support for the use of renewable energy, waste and energy efficiency.

I: Where? East side or West side of the Island?

R: Both sides.

I: Would you like to cooperate more with the big resorts and to show them how the east side of the island is more sustainable?

I: As an example, of course!

R: Yes.

I: Would you like to cooperate with anyone else besides the resorts?

R: Yes. We'd like to share with the Petroleum Authority of Thailand.

I: How?

R: Public Relations.

I: Who is doing the public relations?

R: SAO. I am doing the public relations (said the Director of SAO).

I: If you could change the hotels attitude in terms of the waste they produce how would you change it?

R: Through law enforcement, controls, rules. But there are many laws like the public health law, and DOA regulations.

I: Would you like to promote Koh Chang as a green destination?

R: Yes, but not the big hotels. They are encouraged to not litter into the sea.

I: Do you mean that you don't want to promote the big hotels?

R: Yes.

I: Why?

R: Destroying community life,

I: In your opinion, how the big hotels did change the community's lives?

R: Many people come here! They are confusing. It's busy. Many hotels bring a lot of social problems.

I: What kind of social problems?

R: Crime, too many people, they destroy the environment and the forest, everything!

I: How could you be more in harmony with the nature in Kohl Chang?

R: No pollution.

I: How to have less pollution? What could you do?

R: Green power, green energy.

I: Like what?

R: Solar cells, and maybe law enforcement, limit the size of the buildings.

I: Do you have laws that limit the constructions?

R: Yes, also many laws. But, if they have big money

I: What about renewable energy?

R: Only solar cells. In Salak kok

I: Only in Salak kok?

R: Yes. On the roads and they use for lighting.

I: Why not in big resorts?

R: Because people in sakak kok have the support of DASTA.

I: You said that maybe because of the cost the hotels are not using it?

R: The cost benefit… the investment is high and takes a long time to have benefit. Too expensive for them.

I: Do you think if DASTA and the government would give them money they would change their mind?

R: Yes.

I: Would you like to cooperate more?

R: Yes.

I: And, how?

R: By means of Public Relations. Through SAO.

I: I think we have enough information, and this will be very helpful to our study. Thank you very much for your time.

Interview transcription –Siam Bay Resort, Lonely Beach- Assistant Manager, 06-05-2014, 15:30

I: Interviewer; R: Respondent

I: For how long is this hotel open?

R: I think for 17 years.

I: Is the owner of this hotel from Koh Chang?

R: No, no. They are from Bangkok, then they bought the land here.

I: How many rooms do you have?

R: Now its 55 rooms.

I: How many employees?

R: Should be 30 to 40.

I: Do they work the whole year here?

R: yes, they work for the whole year here, low season and high season.

I: What are the main differences here in the hotel between the high season and the low season?

R: It's a big difference because in high season you have a lot of guests, and then you don't have enough time to do anything, most of the time you will spend it with your costumers. But in low season you have a lot of time, you have time to manage and maintain the hotel

I: Which management tasks are less crucial during the high season that you would postpone to the low season

R: When it's high season we still have to manage and maintain but not too much because guests will complain.

I: What are the biggest challenges?

R: I think it's our staff, our employees, because in my opinion, there are more important things in hotels/resort and that is your staff, we try to be good for them. In the Island is different from the big city

like Bangkok, there is very easy to find a job, there are a lot of hotels and every hotel experiences lack of staff.

I: Where does your staff come from?

R: They are from Cambodia, most of them.

I: Do you provide some training for your staff?

R: Yes. Sometimes it depends, if its low season you have time to train them, but in high season they have to work immediately, we have no time to teach but it also depends on their position.

I: Do you also include in your training how to save the water and the energy used?

R: Usually, the most important for us, our energy because the well water is very limited, and you have to take water from the ground. That water is very expensive therefore, we always to our staff to save water as much as possible. But sometimes they do not consider it as much as they should.

I: Do the tourists spend a lot of water?

R: I think it depends on the tourists. If they are from Europe, they don't spend that much. But Thai and Chinese they spend a lot of energy and water.

I: More than the Europeans?

R: Yes. A lot more, I think the attitude is different, they want to use everything before they leave.

I: How exactly do you try to save water?

R: For our staff we have a meeting every week, for every department. And then we just tell to save water and energy. But we don't have a formal procedure.

I: And, you like to have a more structured way to deal with these issues?

R: Yes, but we don't have any idea.

I: How did you find out about sustainability?

R: I don't think we a government that comes and teaches you about the environment but I think if you really want it you can go look for it for yourself. Many hotels have good ideas, in our hotel we don't have to do the same.

I: Which hotels are you talking about?

R: I am not sure, I cannot remember, but I watched on television. I just know that some hotels are very serious about the environment and that is possible to do it.

I: Do you think your guests would be happier if you sold them a green accommodation?

R: I don't think so. It depends on the way that you sell the hotel.

I: Do you work with any tour operators?

R: with many, Agoda, and Booking.com

I: Do work also with local tour operators?

R: Yes. Is the with Viamarketing group.

I: Where do you get the water from?

R: From the ground. From a well.

I: Is this your well?

R: Yes. It's in our land.

I: Is the water always enough?

R: Sometimes is not enough, until now, is still enough, we have to consider alternatives. When it's not enough, we have to buy it.

I: Which alternatives?

R: Not yet. Because until now is still enough, but I am not sure for long it will last.

I: Are you concerned by the fact that big hotels use a lot of water, and this water is not enough to sustain the island?

R: Yes. But I don't know where they get their water from, maybe from the waterfall, or maybe they have their own well, I don't know! But for here, we have our underground water already, them I think is from a different part.

I: If you use the water too much, do you think it will be less for others?

R: Yes, but in Thailand we have a lot of rain, when is winter or summer in Thailand we still have the rain all year.

I: How do you imagine tourism in Koh Chang in 10 years time?

R: This year is different from the years before, and a lot of Russian and Chinese people are coming here. In the past, we had a little from Scandinavia, from Germany, Switzerland, it thinks is more varied.

I: Do you think tourism is more likely to increase or decrease?

R: Our people is peaceful, it's going to grow. But if, the politics in Thailand continue like this it's a little bit tough. In Bangkok, sometimes is not safe for the tourists and then they look for a new place to spend their holidays. But with the situation in Bangkok you just don't go to Thailand, you go to Vietnam, which is not so different.

I: Is there any hotel association in Koh Chang?

R: No, I don't know!

I: If you had the opportunity to work together towards sustainability, with whom would you like to collaborate?

R: I have no idea. Because I think the difference between Thai people and European people is very very big. For example the way that you deal with the garbage is very different, you have to separate your garbage, you have to clean it very clean, here in Thailand people just don't care.

I: If you had a superpower to change what would you do then?

R: I think the first thing would be to change their attitude, because everything doesn't not have to come from the hotel, but it also has to come from the mind of, because you have to think about the future, think about your children in the future.

I: Do you know about any sustainable technologies that can be used in the hotel?

R: I heard that if you take the plastics of the food you can put it in this machine and make oil with it.

I: That's very interesting. What else?

R: Solar panels, but it's very expensive. It's hard to maintain, because of the coconuts and the lightnings it would be destroyed in one week (Laughs)

I: Do you have any guest information signs asking tourists to be environmentally friendly?

R: No. In my opinion, Thai people just don't care about that, they if they paid money they should use everything and that's it. For me, I think is very useful. Even if you ask them, they just do it worse.

I: That's a lot already, thank you very much for your time!

Interview transcription –Local, Lonely Beach – Bar Owner, 13-05-2014, 15:10

I: Interviewer; R: Respondent

I: How long have you been in Koh Chang?

R: 5 years.

I: What do you do in Koh Chang?

R: I am working with my friend in this bar, we work together, we both run the bar.

I: When you first came to Koh Chang and opened this bar how was Koh Chan like back then?

 R: We thought it was beautiful.

I: Was there many people here at that time?

R: Not many, just a little bit.

I: And tourists?

R: Not many.

I: And, when did it become more crowded? How many years ago?

R: I think... Every year changes.

I: Sometimes more, sometimes less? Or all the time more?

R: All the time more.

I: Do you like that? That more tourists are coming is that good or bad?

R: For me is good.

I: Why is it good?

R: Money, money!

I: Is there any bad points?

R: Many bad points, because if many more people come, it's really hard to control, because we are very small. We can see people.. Ooh, that guy, that girl! Sometimes when it's too much we don't know what they do, like in Pattaya there is a lot of tourists and many many dramas.

I: Did it ever happen that you had a bad situation with a tourist?

R: Yeah, Yeah! Because I work in a bar and everything is about alcohol. They come to the bar and say: „I want to have this!"- I give it to them and they give me money in return, and we are even! But many don't know how to use the money, they have to learn about how to use money. We have 20 Baht, we have 50, we have 500 and we have 1000. Sometimes, I am awake here and I know the money, but sometimes they don't know. They pay 20baht and they think they pay 1000, I want to show them that are wrong, but then I put already the money, now how to prove? We have a lot of problems with this. Other people just like to show off, big guys, they drink, and after they become stupid for a girl!

I: Did you ever had a violent situation here with a tourist?

R: Of course we are fighting all the time! (Laughs) I think that's normal for us, they have to learn about protection before they start fighting with us, and before we didn't learn how to deal with them. But we fix things before they do it.

I: Do you think in the lonely beach Thai people became more defensive because of the tourists?

R: That's, really important, I think things changed for me.

I: In what sense, can you explain?

R: Many things changed. For me, I think about, they let me learn about how to talk with the people learn about your culture, learn about his or her culture.

I: Do you think you lose your own culture?

R: Yeah a little bit. Because European culture and Thai culture is very different right, I think I didn't lose culture, my culture. When I see my family I am still the same, but here is different. When I talk to my friends, we do "Hey" (he raised his hand), but we never do it like this at home, we say: "Sawade Krap! " (He said, whilst putting both of his hands together). And, now we say: - " Hey man, Fuck!"

I: What do you think about that? Is that normal?

R: I don't mind, but I can't change how the world works. But when I am back to family, in my town, I say to the old people : - "Sawade krap! Where are you going?" Of course they changed me, but, I am 30.

I: How do you get your water?

R: We get from the mountains

I: Do you have your own well? How does it work?

R: The owner of the land they do about water, like.. Over there on the mountain they have big water! Do you want to see? (Laughs) Very far away.

I: The people that own the land are the ones distributing the water?

R: 20 years ago, no water and in Koh Chang itself only stone, we can drill for water. We can only lock the water.

I: Do you have to pay for the water?

R: Yes.

I: And, to whom goes the money?

R: To I think to the owner, something like that.

I: To whom do you pay the water?

R: To the owner of the land.

I: Is he from Koh Chang?

R: Yes, he is a local.

I: Is it expensive?

R: yes, of course.

I: How much do you pay?

R: I think, I pay about 4 Baht, and now maybe 6 for 1 cubic meter of water. They bring it here with a pipe in the ground.

I: Where do you live here on the island?

R: 100 meters from here, there I have my own home.

I: Did you ever experienced that you had less water because of large amounts of people on the island?

R: We have two seasons, high season, low season. In high season we have no rain. In low season we have a lot of water because of the rain. Before we use from the mountains, and its from the land owner.

I: Did it ever happen that you had no water?

R: If we have no water we are going to buy. From the locals, because they can drill on the ground for water, but here we cannot. Everybody buys from there, in Klong Praw.

I: In the high season do you have to use less water?

R: One time, but now we have a tank to save water. Me and my friend we made a tank. Do you want to eat?

I: We just did, but thank you very much! (Laughs)

R: I am really happy when I am talking more with Europeans, than when I am working. It's very different. When I work people just want to drink, and I want their money.

I: What about the electricity?

R: I think the same, the owner.

I: Do have any bills for the energy?

R: yes.

I: Can we see it?

R: My friend has it and he is not here.

I: Is it expensive?

R: Yes. Same, same. Same as the water. It's also 6 Baht. Per month I pay for both water and electricity I think 10.000 Baht. Per year 120.000 baht.

I: But do you earn enough here to have spare money from your business?

R: Yes.

I: This owner, who is this?

R: He lives over there. You never see him. He is always busy.

I: We would like to talk with him. Can you maybe tell us where we can find him?

R: I don't know if he will like that. You know Sea Flower? You can go ask for him there. I really have some respect for him.

I: Do you get along with him?

R: Sometimes Koh Chang is very different, we are not like a normal community. It is special. I don't know why, but for me sometimes they make me scared. Everybody is scared!

I: Why are people scared here?

R: I don't know... Because one day, they can just tell us to go away!

I: I think we have enough information, thank you very much for your time and collaboration.

This was very helpful, Kop Khun Ka!

I: Interviewer; R: Respondent

I: How long do you live in Koh Chang?

R: I live in Thailand for 8 years, I am the resident manager. My boss is not here, he is on holidays for four days, so I hope I can help.

I: Is Amari brand a Thai hotel chain?

R: We have 13 properties in Thailand, its a Thain chain. The owner of the chain is the owner of the Brand as well the management companies involved. There are also 4 other brands, 3 are being created right now and two are existing. Amari is also showing its face internationally. Some properties will be based on major cities around. We will expand in Bali and China. So the group is growing up, so we will probably have two properties by 2018.

I: How long are you working in this specific hotel?

 R: One and a half years, almost two. They're only 17 properties around the island.

I: When you say 17, do you mean really luxurious properties on this island?

R: Well, the real luxury goes... You can keep looking but you are not going to find it (laughs) on Koh Chang, this island is not a luxury destination. We as Amari, not only we are the best hotel on the island, but we strive to be where the competitive set helps us to stay and be number one, you know.. We don't have much of competitors.

 I: How does it work to compete to be best on the island?

R: Well, it's not easy. People put pressure on us due to the popularity, but we are lucky to be able to provide so, that's not a challenge to us, a challenge would be if the other 4 or 5 star chain would be an island within the same location, and then we would be facing the real competition, but for the moment not.

I: What is your biggest market segment nationality-wise?

R: Russian, German and Thai they share equally the top spots.

I: When the Amari brand decides to build a new hotel in Thailand, how do they proceed with the actual construction?

R: It depends, so Amari has both managed and equity properties. Some properties belong to the owner, some properties are managed like the one that we are into right now. Usually, they are flexible enough to be able to re-brand something into Amari, and that's not that a big of a deal, but it's just for instance an architectural element which has to be followed, in addition the brand can show its face latter on.

I: How many employees work in Amari Koh Chang?

R: 200, I mean this our average in low season we go down to 170.

 I: Are they mainly coming from Thailand or also other countries?

R: Yes. 99% are Thai, there are a couple of expats in management positions. We have a chef from Switzerland and a couple of staff, trainees from Russia and Bielorussia. But our main manpower is made up of Thai people.

I: How did tourism develop on the island since you are here?

R: It is positive in the sense that indeed, more people make more money, and the opportunities showing each an every month as the time passes, slowly the destination gains popularity. But it's also circumstantial, if there are political problems in Bangkok, our tourism goes up. A couple of years ago, there were floods in Bangkok, during that weekend this hotel as full and packed and looking very nice... It's picking up occupancy-wise, the room occupancy is still steady, not growing up too fast, so this gives to businesses a little bit volume during the years. The islands are pretty much the same size in Thailand, the difference is that in the other islands like Phuket the development is huge, we are somewhere in the middle. Here the pace is slower.

I: Did this development on the island had an effect on your personal life?

R: Yes affected me positively, I am progressing in my career and I am showing better results and that's a good thing, generates a motivational factor but also material support. Here certain segments that do not find their place in other places in Thailand, like family with kids, it's safer, is less crowded like Bangkok, it has a more local island atmosphere.

I: You mentioned that this island has a more local atmosphere can you say a bit more about that comment?

R: I think the traditions are very well cultivated, the way they are living, interacting, socializing is very basic, very Thai, very traditional, and this is good. Roughly 80% of the island is a National Park, so the development is not possible that is why everything happens on the coast and which focus the majority of the development on the west coast. Also the road on the south of the island is not continuous, this keeps the development on the East Coast in standby. People, for example based here on this island see the south as the fishing village from the other side you have to drive 45km so, it sounds close, sounds easy, but it's not, maybe later on when the infrastructure gets a little bit better it will be faster.

I: Do you already see some challenges?

R: Yes. The waste management on the island is not really well controlled.

 I: Who is controlling it?

R: The Municipality, which is collecting the garbage of each hotel, I suppose. For the rest, I hope others do, like we do, the waste management, water treatment because everything gets dumped into the sea. Normally, the waste water after the treatment once transformed into waste can come back to the production cycle and the rest dumped into the natural reservoir, but it's treated well enough does not represent harm in any ways for the ecosystem.

I: Do have some incentives within your hotel, for instance by economically saving this water which represents less cost?

R: No, right now we are working on a new irrigation system which will cost us more water. We would like to do some automatization in our gardens that gets back into the system through the sprinkler, in this way we don't need to hire that many people, it's not so good for the labor but it's good for us, it can decrease our fixed costs. But we are actually engaged in some environmentally friendly programs, I was reading an e-mail today about an event that will happen on the 5th of June at the corporate level where each and every company has to come with a plan for the whole environment, now we are trying to put together whatever we are doing and whatever we will do until that date to give our contribution. We are working on a new for cutting down the electricity for the garden by ourselves.

I: Did you hear about an Eco Koh Chang organization?

R: It might be that our director of HR is much more familiar with that.

I: And DASTA?

R: Yes, I heard about DASTA.

I: Do you work directly with them?

R: No.

I: What about the energy use in the hotel?

R: We are trying to reduce our footprint, we managed to get some bonuses for our team by reducing the electricity consumption by 10%. Now especially in the low season we strive to engage in several programs that cuts the electricity down, sections of the hotel can be closed, electricity shut down. That's pretty much it! But definitely still our main expense.

I: Did you consider using some kind of renewable energy?

R: Yes. Still the investments are quite high, but in consideration and there are going to be some changes with the whole hotel structure that allow this kind of energy implementation, we recently changed the lamps for energy saving, the whole hotel is now using these. Probably next month we were already able to have a clear indication of what savings we did, but replacing them for energy saving lights.

I: I have a last question about the water, because it remains a somewhat unclear topic for us, I know that the water is for free on the island you can get from the natural waterfall and mountains or even from the ground, but we also heard that there are 6 big dams where the water is coming from how is redistributed to all the hotels?

R: We buy it! And, we transfer it for ourselves, this costs us roughly 30/40.000 Baht a day and we only do it in the high season because in the low season is not the case because is too much water. We buy water during the high season. Its actually our main cost next to the electricity, and labor of course. During the end of the high season you can see a lack of water, one of our main attractions around here, which is a waterfall doesn't have much water as well. We get the water from there. Right before the waterfall, there is a big lake which is one of the reservoirs, one of the main accumulation.

I: If it was the case that the hotel could not afford to buy this water during high season, how would you get the water?

R: You probably can desalinize, definitely well water is the most common. Right now there is a little bit of investment on the water infrastructure as well, the Municipality is changing the main piping on the main road, the canal water at some point will be administrated a little bit better but it all depends on how the people connect with it.

I: Big hotels as this one, are using the biggest share of the water that comes from the waterfall, most of the natural resources available on the island are being consumed by businesses related to tourism. If you knew that, the water consumption of this hotel during the dry season is putting pressure on the local communities, what would you do?

R: There has not been the case so far, it has been very handled always! Cost-saving measures can always be implemented and sometimes we even raise awareness towards the guests, trying to make them understand why this, that, and that.

I: How do you do that? Through signs?

R: No, we have a very close relationship with our guests. People don't come here to stress, people come here to relax, to have fun, they like to mingle, they like the people who are running this place so we have a weekly management cocktail where we invite all of our guests for a wine, by the Jacuzzi pool we stay there for an hour and get some feedback as well. So it's easy for us to communicate certain programs or whatever we implement, and usually is well received. Some of our questionnaires include CSR and environmentally related issues. Unfortunately, they respond usually no when it comes to their interest.

I: Why do you think they respond "no"? As a manager how can you explain this gap, because as you know people are more and more aware of these issues, but when they are on a holidays they seem to become more distant.

R: For the moment, in certain challenging environment the focus is more to make a business run and keep the people happy instead of raising these new topics and collateral issues to be discussed, when I tell you about the" No" is what we read in the customer service questionnaires, and we wish to see a little bit more" yes", or a little bit more "maybe" or " in the future I will", or something like this.

I: Is there any hotel association in the island?

R: Yes, there are many in Thailand. There is the ranking hotel association, which rank the hotels according to the current star system. We are expecting their visit soon, for the confirmation of our status of five stars, five stars in Thai terms. The most independent one's their main focus is that they have turned their attention to the people with deficiencies, the goal is to have the hotel as handicapped friendly as possible, and their trend about the environment was I think of the past 2/3 years, they shifted towards handicaps I think this will be the trend for the next 2/3 years, and then another, and so on and on...

I: A trend?

R: It is, everybody comes up with a good idea and if they can develop it well we let them last.

I: Does this hotel have any CSR initiatives already in motion and implemented?

R: We are in collaboration with the local schools, some schools towards the borders with Cambodia, we are participating pretty much in every local fairs that are hopping here around the island, the Temple Fare, there are a lot of activities with different themes.

I: Would you consider to include in the future CSR programs related to the environment?

R: Absolutely, I mean we are already certified by the Green Leaf Association, because we are non-smoking hotel, we have one already and we need to fight for 2 more and this is an early task, and we are usually successful in accomplishing.

I: Do you know about the Shinta Mani resort and its foundations?

 R: Has anyone checked on that?

I: What do you mean?

R: I think there are like several opportunities when you are going for this kind of advertising you know?! It is a good initiative, but, it goes all the way until the end, but I would prefer to show something real, prone vegetation, fresh air, clean beach, improvement of the waste water, the economy of the water consumption when its dry season, I think these are real things. Instead of trying to track some money that you don't really know who is going to benefit out of this. It sounds good, but..

I: One last thing, we would like to invite you to our stakeholder meeting. Thank you very much for your participation, this was very helpful!

Thank you!

Interview transcription −Warapura Hotel, Lonely Beach- Receptionist 06-05-2014, 14:30

I: Interviewer; R: Respondent

I: How many rooms do you have in this hotel?

R: 20 rooms.

I: How people work here?

R: About 26 people work here.

I: Do you have a manager?

R: No, the manager is not here.

I: And, the owner does he or she lives here?

R: Yes, she lives here but I don't think she will come.

I: Does she have other businesses on the island?

R: Yes, she has restaurants and other hotels.

I: Where do the employees come from?

R: Some from Thailand and other from Cambodia. I am Cambodian

I: Do see any differences in low and high season?

R: Yes, very different in high season we are almost full, but in low season only 60%.

I: Is the staff employed the whole year?

R: Yes, we employ them the whole year.

I: How was tourism 5 years ago?

R: We just opened for 5 years now, since we opened a lot of people started to come, but there are more problems now.

I: What are the problems?

R: Some people, I don't know how to say, the money they pay they always want more.

I: On the island did, something changed?

R: I am here for 4 years, and a lot has change, now many resorts are here and there weren't here before 4 years ago.

I: what do you think about that?

R: For the economy is good, but some guests complain when they come back and say: Oh it changed, everything changed!"

I: What are the main problems on the island if you want to have a hotel?

R: It's difficult in low season.

I: Are there some challenges?

R: When they ask me to recommend a place with a lot of nature for me, then I have to recommend the other side of the island. They say that the beach is not good. Because the nature is down.

I: What do you think about the changes in the environment?

R: With more tourists, less quality.

I: In this hotel, do you have 'quality' to save energy or to save water, in other words to be closer to the nature?

R: Here we use the card for the air conditioning in the room so, when they are not there it turns off. And, the water for the garden we use it from the mountains which comes from the rain. Every day we send some people up to the mountain for water and they come down with it.

I: Who is doing it?

R: The Gardener.

I: And the water that we use in the shower, is it also coming from the mountains?

R: Yes. But we have to clean first.

I: Where do you clean it?

R: At this resort, we have a cleaning process.

I: And cooking?

R: For the cooking we buy bottled water.

I: Do the tourists use a lot of water?

R: They don't use that much, because they are always in the sea, the energy use Is not too high. The water is free only the cooking is with water that we buy. But to make the water clean is more expensive, because it's a lot of energy, every day.

I: Who do you do your laundry?

R: For the guest rooms we send to the company.

I: Do you change the towels and sheets every day?

R: No. Depends on the guests, usually every second day.

I: Are you part of a Hotel association?

R: No, only KLKL because the owner is the sister and brother of this owner.

I: Do know how much you pay for the energy?

R: I don't know.

I: What would be the most important thing to change, if you could change something in your hotel?

R: Only the towels, if they would like to change it, put it on the floor if not don't.

I: Is there something else? Like a new technology? Solar panels, for example.

R: Yes. The solar cell, we are not using it, but my boss told me we are going to use it in the new building.

I: Is it expensive?

R: Yes. But good for a long term

I: Do you feel that the government provides with enough support to the businesses in Koh Chang.

R: No. We have no support they are not involved with us.

I: If you had some kind of support from the government, what would you like to have?

R: Solar Cells, of course.

I: I think I have a lot already. Thank you!

I: Interviewer; R: Respondent

I : Do you have any phone number that we can use to contact the manager?

R : Yeah but I am not sure I am allowed to give it to you.

I : How much is the night here? The price?

R : Humm… There is 3 seasons here you know… The low season, the mid season and the high season... At the moment it is 2750 with the breakfast.

I : ah ok… And how long does this hotel exists?

R : hum… about 7 years

I ; Do you work for 7 years?

R :No, 3 years.. No, 4 years

I : what is your function in the hotel/

R : I do … hum… the reservations, the reception… yeah, anything!

I : What is your name?

R : Bee

I : huh, and the owner of the hotel is also the one who owns the land?

R : yeah

I : Is there also a manager?

R : no

I : only the owner and you?

R : at the moment yes. We are working the owner and the staff.

I : Do you know how many people work here?

R : now almost 30

I : and they are all from koh Chang?

R : no, most of them from Cambodia

I : Do you have in your hotel 'spa'?

R : no, only thai massage and swimming pool

I : During the high season… Is there a lot of difference between low and high season?

R : Yeah, it is a big difference! During the low season, all the prices are low… during rainy season here, it must be summer in other countries so people don't need to go to holidays.

I : and the number of tourists?

(Somebody interferes in the conversation – male voice)

R2 : do you do this for school?

I : we came with our teacher, we have to provide an academic research, we are a group of 30 students. In our group, we are 5 and we do a value chain analysis about luxury hotels. The goal of the study is to find out some interventions for hotel to become more green or eco-friendly; save energy and save water.

R2: like solar panels?

I : Yes, for example, but for now it is more to gain information and to know who is willing to participate. More or less…

I : Are you in holidays here?

R2 : yeah, she is my girlfriend.

(*maybe we continue the interview with her*)

I : who are the main suppliers of your hotel? Who are you buying water and energy from? Or food?

R : hum..

I : when you do your order on your computer, who are you working with?

R2 : they do the order and they buy everything from the main land.

R: the water we have our own well

I : is it the water only for this hotel?

R2 : for here and for maybe 5 other resorts.

I : and the electricity, you pay to the government?

R2 : to the government…

I : sorry, I still don't undertand about the water… is it a well which is shared by 5 hotels? But how do they pay for it, for the water?

R2: they don't pay for it.

I : but they pay for the electricity?

R2 : yes, they pay for it.

I : is the electricity a big budget for the hotel? How much percentage of the total cost of expenditures?

R : 70 or 80, depending of the month of course

Average?

Maybe 50, 60

Okay.. and do you use any other kind of energy that the one provided by the government?

No *(laugh)*

Only central electricity…

Do you see that now it is different that 4 years ago in terms of tourism?

Everything is changing really really fast. Even the hotel is much bigger. Before we had no pool and a very small restaurant here and now it is huge. Also in the surroundings, much more restaurants and buildings and resorts.

Okay…Is it because there is more and more tourists?

It is quite difficult to say there is more tourists because it is going maybe less..

Less?

I think so. I don't know because there is also more places…

Is there more competition?

R : I don't know but I think, I don't think there is more people, I don't know

R2: because of booking.com…. I looked at the statistics and there is 200% tourists more. Though, the booking become more. I don't think there is more tourists.

There is more available information?

They probably book from home..

And what time from your view the biggest challenge for hotels in Koh Chang? What are the main issues if you own an hotel?

Because it is an island, everything is imported. Electricity and food… everything they need, they have to import… they don't have a system as we have in Europe, like you have a stock. Here you have 10 pieces of this and 10 pieces of this and if he gets old then you have to order 5 new. It is not like, in the morning you call and you say "I need 10 breads'!

Do you also have the possibility to use local products?

Yeah, we do but there is not much. Maybe vegetables and fruits… *(laugh)*

And what is the most difficult to get here in terms of food? You said that vegetables and fruit you can get it here…

Hum hum

Do you still get it from the main land even though you can get it here or not?

Yeah because it is cheaper. Everything… if we need to stock something in the kitchen we will go to the mainland.. to buy vegetables… and even the seafood we buy from the mainland because the seafood from the island goes anyway to the mainland. Also to the restaurant here it is expensive too.

We also research on sustainability. Are you familiar with this term?

Sustainability means that you keep something to sustain in what context?

Everything… Social, economic.. It is more that you make the use of what you have now in order to provide to the future generation a good life as well… If you think about your hotel, do you think there are some challenges which can be related to that?

…

What we mean is that in sustainability when you are running a business you are also concerned about the impact of your business on the environment and the people and the local community…?

(laugh) maybe you can ask this to the owner…

I want to make clear that we won't communicate any names or negative aspects in our report, it is anonymous, it is more for average, and we would like to use positive aspects.

R2 : I don't think they have any green energy or solar panels…

But is it something you have heart about? Or is it something you really have no ideas about?

That's something we have heart about… from my boyfriend… he has some ideas…

R2 : Water containers, it can heat by the sunshine, solar panels they can use for the boiling water for cooking. I think they have heart about it. A big hotel has it on the roof… Sea view hotel.

Does it happen a lot that the electricity shuts down?

Yeah

Do you think it is an alternative to have a new kind of energy to compensate?

They have a generator here. They just put it to run for the day. I don't know they don't have anyone here to maintain. If you put solar panels, it takes maybe 20 years before…. You have to think in advance and in long term to make more profit… If it is not for tomorrow and for next week.. I mean they want to change something but if it is not that they can have numbers of what they save directly… Also, I would not know where to buy the solar panels..

Are you familiar with Dasta? Do you know them? It is a department of the Thai government and it means Designated Areas for sustainable tourism administration. They do training… for example, in Koh

Mak, they work toward sustainability and the hotels, most of them have a green standard, the whole island is pretty much green.

Yes, It is developed yet. I mean they get electric tank of power, they put gasoline inside and they generate electricity for the island… I don't know if that is sustainable… and how they get their water?

Where we went… where they put their garbage.. they separate all the waste.. and making compost, making oil with the waste..

Oh, really good. For soil?

For fuel, and for the thing you use to build the roads…

Do you also ask your customers for example in the room or do you use some signs to say for example 'don't shower too long'

(*laugh*) No, we don't have that signs… We don't really want to have signs like that, you know, they pay for the room, they need to have whatever they want..water… electricity…

Do you have the system of the card when you come in the room the electricity goes on and when you leave the room the electricity goes off?

Yes we have but only in the big bungalows. They did not make it yet for the small rooms.

Why?

It is because… huh… I don't know how to explain… the cable and stuff… it is not convenient at the moment to change, the system, the all thing. It saves some money the card system but some people they leave the card in and then they can have the air conditioning on. If we would switch off, then they would complain to us that they did not have air conditioning on. People they just don't really care.

Do you use in your hotel some save energy bulbs, you know? Low energy…it lasts longer and it costs less.

Humm…I don't really think so, I don't know

Do you leave the lights on in the hotel just in the common areas during the night?

Yes

Do you leave only lights in the common areas?

Yes in the walking area, on the paths where the people go but it is not really bright at night.

Do you have like the movement sensor? You know when you walk..

No, no, no but I think it is a really good idea!

It saves a lot of electricity

Yeah I think so…

And for the laundry, do you have a laundry service within the hotel?

Yes, yes we do, we wash the bed sheets and blankets.

And in the room how often do you change the towels?

Everyday

Once a day or more than once?

Just once a day

The cover for the bed sheets we change it every second day

Is it your own choice to do it or is it because customers want it?

Huh, before we did change the towels every second but the people were coming and complaining because it is very wet because of the shower then we just decided to change it everyday

And the pool, do you use the same water as in the room to shower?

Yeah

And you got the water for free as well?

Yeah actually we just pay electricity to pump the water in the pool

Do you also use a system to cool down the water? To make it cooler?

We do not cool down the water, no. But in the pool we do not change the water so often you know, we just use the system with the chloride

And do you cooperate with local associations?

I don't really know

For example, as a luxury hotel, are you working together with other hotels?

No, we don't, staying alone..

Do you know any associations on the island you could work with?

I don't think about that

From which countries are on average you customers from?

French, Dutch, German…everything! American, English

(Intervention of the german boyfriend)

They could do something with the water to reuse it, they thought about it but they did not do it. They think that their capability is not possible so they don't change it. If the possibility that someone would come and present the solar panels and say 'you can buy for this or this' or this amount… But the problem is that no one comes. There are so many possibilities to …. For example the air conditioning with hot water because they are using air conditioning anyway so if they use hot water…

Are the rooms with air conditioning protected from sun radiations? By means of trees? Or curtains?

Yeah, trees, there are enough…

Maybe a last question! Now we have discussed a lot about energy and water management etc. What action, according to you, would be the most relevant to take in your hotel if you had to change something?

Relevant, what do you mean? What is good for the hotel?

Yes

Solar panels probably because we already thought about it.

Would you take more actions in case of government involvement or subsidies?

Yes, if they would give us more information or prospects.

What is the missing the most? Money or information?

I think it is information

It is really good what you are doing. Finding out the problems and why they are not changing.

Interview transcription – Mercure Hotel – Personal Assistant of the General Manager – 06.05.14 / 13:00

I: Interviewer; R: Respondent

R: How many questions?

I: A few…

R: And how many hotels did you choose for interviews?

I: it depends how many hotels are willing to participate…

R: where have you been?

I: Balian Beach Resort

R: oh Balian. Ok let's start!

I: What is the hierarchy of the hotel? You are personal assistant of the general manager?

R: yes.

I: is the general manager also the owner of the hotel?

R: no, there is owner and general manager

I: Is the owner from Koh Chang? Local?

R: no, no local. He is from Bangkok, mhm

I: but Thai?

R: yes

…

I: How long do you work here?

R: Here for 5 months

I: how long does this hotel exist?

R: 6 years

I: How many rooms?

R: 96 rooms

…

I: how does seasonality affect your operation within the hotel and structure?

R: There are actually high season, low season and peak season. High season starts from first of nov. til 23th of dec, 24th of dec til 10th of January is peak season, then high season til 16th of april and then low season from 17th of april

I: How do you manage the hotel? Any differences in those 3 seasons?

R: Low season is low occupancy

I: How did tourism develop within the last 5 years? Decreasing or growing?

R: Growing

I: A lot more?

R: more hum hum.

I: Can you tell me in your own words how it was then? How different it is now?

R: difficult to compare with 5 years. It goes up and up.

I: Are tourists coming from the same country as before?

R: this year, a lot of Thai people: big groups from company, corporate. They come in low season because it is cheaper then. It is here number one for Thai people.

I: In your opinion, where are the biggest challenges?

R: actually it is to get people from Europe…

I: And according to you, what are the main issues to open an hotel in Koh Chang? What is more difficult to do in your position?

R: how to improve my task… it is always challenge

…

I: And is there something difficult on the island, not specific to this hotel?

R: hum hum, you mean challenge?

I: yes

R: the most challenge is the competition. For example Amari, Centara.

I: Those are the biggest competitors?

R: Yes

I: is it more difficult to have a hotel on Koh Chang than on the main land?

R: in Koh Chang

I: Why?

R: the location of the hotel. It is far from the pier, right? People compare distance from the pier of Amari and Centara and us and they decide where it is closer.

I: Is there other important criteria for tourists to choose a certain hotel? Or your hotel?

R: we try to have more promotional, my staff is visiting agencies in Bangkok

I: Does the owner from this hotel own something else as well?

R: no no no only one property here

I: Other businesses besides hotel?

R: Not sure hum hum

I: We research also about sustainability. Are you familiar with this term?

R: What do you mean?

I: it is about if you take some measures here in the hotel, if you save your electricity and water.

R: we work on the air co, how to save energy and then we promote in the guest rooms. For example bed sheets or towels.

I: How often do you change the towels?

R: ah, it depends to the guests. They have the card in the room, in the bathroom. They can choose the guests…

I: Do you have a system such as 'if you want your towel changed, just leave it on the floor'?

R: Yes

I: And where does the water and electricity come from?

R: We use a timer and for the water ???

I: but the water, where is it coming from?

R: under the ground

I: from here?

R: yeah yeah yeah

I: you have like container or well?

R: actually yes

I: is it at the hotel?

R: at the hotel

I: and for the electricity? To whom do you pay the bill?

R: mainland

I: do you pay every month?

R: yes

I: is it different or constant over the last years?

R: No sure, it might be pay more, it depends to the occupancy right?

I: Do you have signs in the common areas fro example toilets which say 'please turn off the lights when you leave'?

R: hum hum yeah.

I: Do you work in collaboration with other hotels? Common projects?

R: Alone

I: and what is your relationship with the locals?

R: I don't know

I: What about the food? The food you buy for the hotel, where is it coming from?

R: from the supplier

I: and where is he based?

R: from mainland

I: all from the mainland?

R: Yes

I: Why do you use suppliers from the mainland?

R: because we have credits with suppliers. We don't have to pay cash or each month. It is easier.

I: Do you know if there is already some thoughts in the hotel about new kind of energy? Solar panels or other? Or to save water, container?

R: not from the beginning..

I: and when did they start thinking about it?

R: not sure

I: and solar panels?

R: No no

I: And for the future?

R: maybe maybe, or for another hotel

I: any hotels associations you are part of?

R: no

I: is there any support from government to make a little bit more energy efficiency and water saving measures? Do they provide any support in this topic?

R: Not yet

I: did you hear about DASTA? Thai association which helps the tourism sector to develop a greener and environmentally friendly tourism

R: hmm hmm

I: By becoming green, you can also reduce your costs and there are benefits as well for the hotels. Is there any kind of water management more green?

R: I think it is not yet no

I: Let's imagine if the government would give some subsidies?

R: nothing planned

Interview transcription – Municipality – 07.05.14 / 15:35

(MOST OF THE INTERVIEW WAS IN THAI)

I: We would like to know what your function on the island is. Mayor?

(Thai)

R: assistants

I: Do you know about DASTA?

R: yes we know

I: Do you work together?

R: hmm hmm yes

I: In what kind of project do you work together?

R: environment

I: what kind of issues related to environment?

(Thai)

R: it is about the garbage

I: what about the water? What are the other main problems related to environment?

(Thai)

I: we would like to know if you are sensitive to some issues in Koh Chang related to environment and tourism.

(laughing) (Thai)

R: Can you write down your question? It is easier

R: I don't speak good English.

I: Better than our Thai

R: Can I have your name?

I: Marcia and Carole

I: Do you collaborate or cooperate with big hotels?

R: no

I: Do you sometimes speak or communicate with them?

R: no

I: why not?

(Thai)

R: the persons from hotels sometimes come here.

I: Do you also manage taxes for the hotels?

R: yeah

I: And energy? Electricity?

R: no no

I: Only taxes?

R: yeah

I: The electricity is not a public service?

R: It is not here

I: where can we find them? The name of the person?

R: it is not far, energy/power authorities.

I: Do you work with local communities? Projects?

R: what about?

I: related to tourism… with CBTI for example? Community Based Tourism

(Thai)

…

R: you want to know about the development of tourism in Koh Chang?

I: during the development of tourism in Koh Chang what were the main problems? And now?

R: hmm hmm

I: Problems with land ownership, problems in terms of environment at the beach and west side, problems with luxury hotels… what do you think about all these? What is your position as a government in relation to these issues? What about the future?

(Thai)

R: unfair prices

I: what do you mean? That the prices are going up?

R: yes

I: For the local in the villages as well?

R: hmm hmm, not much not much

I: You see the change over time… Do you think that the water that the tourists use in the hotels (showering, etc.) is too much?

R: Most of the water is coming from natural

I: But this water, do you think that this water, 6 water wells…

(laughing)

R: we have in Koh Chang for tourism many interest and a lot of waste. Tourism is also unfair price.

I: the unfair price, is it also for you?

R: Only tourism

I: And the waste?

R: in high season, we have many people coming to Koh Chang. Big waste, we have pollution in Koh Chang because we have 5000 visitors in Koh Chang. No, 50000.

R: It creates floods etc. all the chemicals cannot go ???

I: regarding environment and big resorts/hotels, are there any big issues?

R: hmm

I: Is there harmony with the environment?

R: not only big hotels but all. Many tourists because it is close to Bangkok, good location. Many hotels and all in the same areas.

I: Is there any law which not allows them to build to close to the sea side? Or you can just build everywhere?

(Thai)

R: it can be not on the beach

I: And, are you supporting some initiatives to become more green or sustainable on the island? Such as solar panels? Or saving bulbs? Reusing water? Would like to see this more in hotels?

R: We would like to support it but you cannot

I: but you like the idea? Or not?

R: I like

I: Why cannot you support it?

R: Because it is out of our control, mainland, we work for the government

I: if it is continues to grow on the island, meaning more and more hotels, do you think the island would have some problems?

R: more investors and more

I: do you control about the land?

R: yeah we control, we can control only about the rule of building

I: If DASTA would give you some prospects (information) about new energy and sustainability, would you go to hotels to distribute them?

R: yes

I: And implementing regulations in the hotels? For example, you can only produce a certain amount of waste, or separate your waste, or install solar panels. Or could perhaps the government give some tax deduction on solar panels?

R: good idea but we cannot do this. Only Bangkok, policies.

I: If you would have a 'superpower' and you could do it for sure, what would you change in the tourism field and luxury hotels to become greener?

R: green energy, I would do everything with big money

Interview Laszlo Koh Chang Magazine – 08.05.14 – 11.00 o'clock

I: Interviewer; R: Respondent

I: Kennst du Dasta?

R: Ja, über Dasta schreib ich. Interessant ist ja, Dasta wird unterstützt aus Deutschland .

I: Ja? Okay, also erste Frage: Was denkst du über Dasta?

R: Ich schreibe also ein schönes Magazin, ich berichte nur über die schönen Seiten. Ich könnte also ein Buch schreiben, dann würde ich wahrscheinlich aus dem Land verwiesen werden. Es sieht optisch alles schön aus, ich zeig euch nur die schönen Seiten. Die Problematik die ich kennengelernt hab in 12 Jahren, erstmal ist zu sagen, ich liebe diese Insel, ich würde mich als Botschafter bezeichnen. Ich wollte auch was ins Leben rufen damals, also so Inselmarketing mit den General Managern der großen Hotels, scheiterte aber daran, dass die Thais nicht wollten. Es gibt ein Problem in Thailand. Thais lieben Thais. Jetzt um auf Wasserwirtschaft und Stromversorgung zu kommen. Einige Hotels die fangen an, den Gedanken des Grünen, Wasser und und und, alles mit einzubeziehen. Top Resort auch, hat wieder nen neuen Brunnen gebohrt, ist nach wie vor ein Missmanagement mit allem. Es kann normalerweise nicht sein, dass wenn es so oft regnet, ein Wassernotstand herrscht. Die Leute müssen hier mit Tanklastzügen

Wasser kaufen. Es wär sicherlich überhaupt kein Problem innerhalb des Dschungels, die Wasservorräte sind da. Die Idee war mal da, wird aber nicht gemacht.

I: Woran liegt das denn? Mangelt es denen an Know-how?

R: Es ist wie folgt. Ich habe vor 2 Jahren ein Interview mit der Governourin von Trat geführt über mein Magazin. Wir sprachen nur über die schönen Sachen. Nach dem Interview hab ich gesagt „So ich komm jetzt mal als Laszlo". Dann hab ich sie mal gefragt: Warum ist Koh Chang so vermüllt? Diese Insel ist so schmutzig. Die Governörin ist zuständig für die Insel, hat aber überhaupt keinen Einfluss. Hier beherrschen große Familien die Insel, die verwalten diese Insel.

I: Auch das Wassermanagement?

R: Ja. Alles. Ihr müsst eins verstehen. Man versucht in Thailand in die Politik zu kommen… im kleinsten Bereich. Dann hat man Einfluss. Und nicht nur Einfluss in die Macht, aber auch Einfluss in Gelder. Es werden Gelder benötigt, auch in Bangkok, die fließen auch hier runter, aber die kommen einfach nicht an. Derjenige der das verwaltet, kommt von einem Resort. Koh Chang fehlt ein Marketingkonzept. Niemand in Europa kennt Koh Chang. Die Insel wird mehr von Thais besucht als normale europäische Urlauber. Es ist die Insel der Bangkoker, die am Wochenende runterkommen. Koh Chang ist ne tolle Insel, White Sand Beach hat sich entwickelt zum kleinen Pattaya. Ist ein riesen Nachteil. Die Insel hat an Charakter verloren

I: Um nochmal auf die Umweltfreundlichkeit zu kommen. Wie umweltfreundlich würdest du die Insel einstufen?

R: … Jetzt habt ihr DASTA dazubekommen, da fließen Gelder, das ist alles schön und gut, die Verwaltung ist auf der anderen Seite, die schreiben auch jeden Monat mal ne tolle Story, haben auch den Resorts vor 2-3 Jahren mal gezeigt wie man kompostiert, aber wer macht's? Keiner. Es verpufft einfach. Was mir fehlt ist ein Management, an dem sich die großen Hotels auch beteiligen. Jedes Hotel kocht seine eigene Suppe. KC Grande zum Beispiel, ist das größte Hotel auf der Insel, hat die meisten Betten… wunderschöner Laden… aber ist ne Thai Familie, die managen das für sich.

R: Jeder macht seine eigene Sache. Das ist das, was ich bemängele. Ich bin gerne bereit mit den Hotels zusammenzuarbeiten, aber da blockt jeder. Ich habe hier ein paar leere Seiten, die muss ich mit Content füllen.. ihr müsst mich auch unterstützen, das ist denen egal. Auch die Regionen, z.b. Lonely Beach.. ne das ist Lonely Beach, damit will keiner was zu tun haben. Ihr kennt Lonely Beach, oder? Das ist der größte Müllberg der Insel. Da wo die Affen heraus kommen.

R: Ich liebe den Strand, aber mir tut das in der Seele weh, wenn ich sehe, wie verschmutzt der Strand ist. KC Grande macht den Strand für sich selber sauber. Einmal im Jahr wird sone Initiative gestartet zum Saubermachen auf der ganzen Insel. Das sind dann aber Initiativen von uns, nicht vom Government.

R: Jetzt ab Juni kostet es 200Baht mit dem Boot herauszufahren. Da frage ich mich: wohin geht denn das Geld? Da sind tausende die jeden Tag rausfahren. Wenn das verwendet wird für bestimmte Geschichten, dann ist es okay. Ihr seid auf der falschen Insel, ihr hättet nach Koh Mak fahren müssen.

…

R: Koh Mak ist meine Lieblingsinsel. Die haben die Insel wirklich sauber, die haben eine richtige Mülltrennung, die versuchen alles Karbonfrei zu halten. Ist für mich ne Vorzeigeinsel. Koh Mak hat Koh

Chang schon längst abgehängt, die schaffen es vor allem auch ein höheres Preisniveau einzuführen. Der Gast zahlt 5000 Baht wenn er weiß dass es umweltbewusst ist.

…

R: Man versuchte hier auf Koh Chang vor ein paar Jahren Parkgebühren einzuführen. Das war innerhalb von vier Wochen wieder vergessen. Das war ne super Geschichte, du hast nicht ein Auto gesehen.

I: Und wieso ist das dann nicht durchgesetzt worden?

R: Dann meckert ein Thai der ein Resort hat und dann wirst du einfach nicht mehr gewählt, wenn du das nicht abschaffst. Auch die Stromversorgung zum Beispiel. Es kann doch nicht sein, dass so wie gestern einfach mal ein halber Tag der Strom ausfällt. Die großen Resorts, die haben alle einen eigenen Aggregat für die Notfälle. Also in der Infrastruktur müsste unheimlich viel verbessert werden. Die wollten zum Beispiel auch auf der Fähre schon die 200Baht als „Kurtaxe" oder so einsammeln. Guck dir zum Beispiel Sylt an, da siehst du wo das Geld hinfließt. Es ist so sauber dort.

…

R: Es gibt keine Rechtssicherheit für zum Beispiel Leute die in Hotels investiert haben. Morgen kann sich die Situation ändern. Das größte Manko dieses Landes ist, dass der König sehr alt ist. Der König stirbt, dann gibt es hier ein echtes Machtproblem. Den lieben sie alle, die gelben, die rote, da gibt es jetzt schön Kämpfe hinter den Kulissen. Das ist der größte Unsicherheitsfaktor dieses Landes.

R: Die holen hier Leute rein und dann wollen sie ihre Zimmer gefüllt haben, und wie, das interessiert niemanden. Das ist ne Geschichte, die ich in Thailand auch sehr verwerflich finde. Alle schimpfen über die Russen, aber die Thais holen sich die Russen rein. Die Russen werden ausgetauscht, kommen die Chinesen.

R: Wir wollen Qualitätstouristsen, kein Thema, aber dann muss ich auch Qualitätsstandards setzen. Die großen Hotels sind schon so… aber die kosten auch so 5000-6000 Baht die Nacht.

I: Wie stehen denn Einheimische zum Beispiel zu den ganzen Resorts?

R: Die jüngere Generation geht. Die Studierten. Die Insel gehört der Armee. Den Bauern hat man das Land teilweise überlassen um anzubauen, daraus sind die ersten Hütten gebaut. Das ist alles illegal, denen gehört das Land nicht. Das ist alles geduldet.

…

R: Die kannst auch nicht investieren. Die Ausländer können kein Land kaufen. Du gibst in diesem Land 100%, damit dir 49% gehören. Genauso wie meine Firma, meine Firma gehört meiner Anwältin. Hart auf hart hab ich nichts zu sagen. Das ist nicht so, das wird geduldet. Um mal auf eure Frage zurückzukommen: Es fehlt ein professionelles Management. Angefangen von oben, also von Bangkok. In Koh Mak funktioniert das. Aber nur, weil sich da diese fünf Familien zusammengetan haben. Und die sind sich darüber einig.

I: Und wieso funktioniert das auf Koh Samui z.b.?

R: Koh Samui hat funktioniert. Die Insel selber ist ne traumhaft schöne Insel. Ich war dort vor 15 Jahren und war ganz erstaunt darüber, wie paradiesisch es ist. Ich war da letztes Jahr wieder und hab die Hände

über dem Kopf zusammengeschlagen. Das ist total zugebaut, zubetoniert und das passiert hier auch. Man will die Insel schließen, dann kommt der Massentourismus, nicht gesteuert, nicht organisiert. Das ist die Problematik.

…

R: Ich komme immer wieder drauf her, man müsste ein Inselmanagement haben, in dem dann Vertreter der Hotels sind, Einheimische, dieser Bürgermeister oder so. Und die können was bewegen. Um nochmal auf DASTA zu kommen, das sind Regierungsgelder, Steuergelder, die hier verpuffen. Mehr muss ich da nicht zu sagen. Es hat einige Jahre funktioniert hier, Umweltbewusstsein wurde gefördert, Biogas wurde aus Kompost hergestellt. Ist vorbei. Kein Mensch.

…

R: Im Dschungel kannst du Millionen von Liter von Wasser kannst du abzweigen von den Wasserfällen. Es dauert noch 14 Tage, dann schüttets hier jeden Tag bis Ende Oktober. Das Wasser verpufft ins Meer.

I: Die Wasserverteilung wird von einer Familie geregelt meintest du, oder?

R: Das ist ein Geschäft. Die Problematik ist, die Ostküste: da gibt's n paar Fischer, paar Bauern. Die haben auch ne gute Stromversorgung. Hier, wo die Hotels alle sind, da bricht der Strom andauernd zusammen. Es wird einfach nicht zusammengearbeitet, das ist das große Problem.

I: Was glaubst du warum die Menschen nicht mehr zusammenarbeiten?

R: Das liegt im Blut glaub ich. Auf Koh Mak zum Beispiel, sind die Familien mittlerweile total zerstritten. Es ist unglaublich wie hier so die Thaimentalität ist. Sie sagen zwar sie findens toll, aber eigentlich mögen sies nicht.

I: Was mögen sie nicht?

R: Die mögen die Europäer hier in den Geschäften nicht.

I:Wie stehen die zum Beispiel zum Top Resort, ein deutscher Besitzer?

R: Überhaupt keinen Kontakt zu denen. Der Michael zum Beispiel, das ist ein totaler Einzelkämpfer. Auf der anderen Seite ist nun ein neuer Bürgermeister, die haben den dann mal eingeladen. Aber da passiert überhaupt nicht. Die müssten einfach mal ne Initiative starten. Okay, wir laden mal alle Hotels z.b. ein, auch die Thais. Das funktioniert schon nicht. Einfach mal alle Umweltprobleme ansprechen, warum ist die Wasserversorgung nicht gewährleistet? Warum ist die Stromversorgung so mangelhaft? Das ist zu lösen! Es wäre zu lösen, aber das geht ja schon in dieser kleinen Gemeinschaft los, der eine hat das rote Hemd an, … dieses Land ist gespalten. So richtig interessieren tut es keinen, dass Thailand da so in die Krisen reinkommt. Die sind da immer wieder rausgekommen… damals die Asienkrise, die einzigen die sich da ganz schnell erholt haben – das sind die Thais. Dann der Putsch, das war 1996, da wurde dann der Taksin rausgehauen. Halbes Jahr später war das Land wieder vorne drauf. Das ist phänomenal. Was mich am meisten fasziniert, geh mal nach Bangkok, Pattaya … da wird gebaut … unermesslich. Es wird investiert, das kann man sich nicht vorstellen. Die haben überhaupt keine Angst vor der Zukunft. Ich staune immer, wo die ganzen Thais das Geld herhaben.

…

R: In Bangkok schlägt das Herz, in Bangkok wird die Politik gemacht. Von dort wird alles gesteuert, alle Headquarters, auch von hier… Du brauchst mit den Resorts gar nicht zu verhandeln, ich kenn noch nichtmal die Manager hier. Ich mach die Geschäfte direkt in Bangkok, weil die haben nichts zu sagen hier. Es gibt unglaublich viele sehr reiche Leute. Man hat ein Hobby hier in Thailand, das Hobby hier ist ein Resort zu beziehen. Das Resort hat man entweder auf Koh Samui oder Koh Chang. Familie. Mein Hotel. Tatsache. Das sind zum Beispiel echte Drauflegergeschäfte, aber die Leute sind so reich. Dieses Hotel hier zum Beispiel, das gehört nem Polizisten.

…

R: Man kann Dinge rational nicht erklären. Die Erfolgsstories sind unglaublich. Die Leute haben nicht sone Studiengänge wie ihr… Das KC Grande wird gemanaged von dem Sohn. Der hat nicht studiert. Aber der Laden läuft… aber es könnte besser laufen. Man denkt sich: Geht doch.

I: Aber glaubst du dass in einigen Hotels hier Nachhaltigkeit überhaupt eine Rolle spielt dann?

R: Ja, die Ketten. Die Centara Hotels, die haben das in zwei Jahren nachhaltig bekommen. Mit europäischem Manager.. Das ist zwar ne Thai Familie, aber die Köpfe sind europäisch.

I: Aber sind das dann wirklich solche Leute wie Bernhard, die sich etwas erarbeiten wollen oder sind das irgendwelche Organisationen?

R: Nene. Man hat also gemerkt, diese Umweltfreundlichkeit kommt mittlerweile also richtig gut an. Das gehört dann immernoch ner Thaifamilie, das Management ist nur gewechselt. Die haben das total umgekrempelt. Die führen das Hotel aus Bangkok, die werben es weltweit. Unglaublich, wie man sich um den Gast bemüht.

R: Die gehen alle in die Schweiz oder nach Deutschland und kommen geschult zurück. Da kommt dann das mittlere Management aus Bangkok, Pattaya… und in einem Jahr schulen die dann ihre Leute. Wie gesagt, die Hotels gehören immer irgendwelchen Thai Leuten. Das Amari z.b. gehört nem Shrimpfarmer aus Chantaburi. Wenn du mal guckst welche Hotels auf der Insel erfolgreich sind, das sind immer die Hotels und Resorts von den Farangs (Farang bedeutet Ausländer). Die pflegen ihre Anlagen, die investieren wieder rein und alles.

R: Wo das Geld herkommt, das weiß immer kein Mensch. Aber auch die Thais bauen sich hier einen Wolf.

i: Wie sieht das mit der Wasserversorgung aus? Wie bezieht die lokale Bevölkerung das Wasser? Gibt's da Konflikte?

R: Ne, eigentlich nicht, weil Wasser ist im Prinzip genügend da. Die Wasserversorgung teilweise mit blauen Leitungen aus den Bergen. Ansonsten, hier auf der Westseite, hat schon jedes Grundstück nen Wasseranschluss. Es sind einfach lokale Leute die mit LKWs dieses Geschäft versorgen, das ist ne lukrative Sache.

I: Das Wasser kommt dann vom Berg?

R: Das kommt vom Berg, ja. Über einen Tümpel wird das abgepumpt. Es ist ein Witz, der Michael (Top Resort) hatte Wasserprobleme, hat dann eine Firma kommen lassen und nen Brunnen bohren lassen. Da fragt keiner nach, das ist Wahnsinn.

I: Was kostet so ein Brunnen?

R: Das sind schon so 150.000 Baht. Das sind dann immer so Rohre, die dann weiter nach unten geschoben werden. Der ist 60 m tief. Man unterschätzt das immer was so ein kleines Hotel jeden Tag an Wasser verbraucht.

R: Meine Freunde die haben Glück, die haben das Resort von einem Thai gepachtet, und da ist ein Wassertank hinter dem Resort, das wird aus dem Dschungel gespeist. Da werden Leitungen in die Wälder, in den Dschungel gelegt und dann zapfen sie sich das ab.

Interview – xx.xx.14 – Laundry owner

I: Interviewer; R: Respondent

I: We are from the Netherlands and we are doing a study trip and we want to see how environmental friendly the island is and especially the hotels. Are you working a lot with hotels actually?

R: Yes, I have to take care of the resort inside and for the service everything.

I: Do you work for hotels every day? Do you wash every day for them?

R: Yes, I have many hotels to wash.

I: So it is quite much.

R: By the end of this month it is the end of dry season, we have nearly 6 months for the high season and 6 months for the low season. In the high season we try to make a lot of money and in the low season we try to use the money from the high season.

I: Do you earn much from these hotels?

R: Yes.

I: So it is a better business then from the tourists?

R: I have many businesses, but for the laundry hotels are the best. Normally the hotels bring it from the tourists, that is why it is not so much to bring yourself.

I: So you like working together with hotels?

R: Yes, it is good.

I: Are all of them coming from White Sand Beach?

R: No, I only take this area. From Pon Sun area to Salak Pek.

I: Are you the only one here?

R: Yes.

I: How many working machines do you have?

R: I have 10 washing, small ones 5. And also 2 big ones and 4 dryers. I have to make more money in the dry season because the rent is very expensive right now. Everyone would like to buy, but it is very expensive.

I: Since when do you have this business?

R: Since 8 years ago.

I: Do you have employees working for you?

R: In the shop I have 7 people.

I: How old are the machines?

R: 4 years.

I: Where do you get those machines from?

R: From Bangkok.

I: How expensive are those machines?

R: Very expensive. The laundry machine here costs nearly 580000 Baht, for the dryer machine is only 380000. But this is a cheap one.

I: Where do you get the water from?

R: From the government.

I: So you have to pay for the water.

R: Yes.

I: Is it much?

R: Not so, 5000-6000 Baht per month.

I: And why do you get from the government and not from the well water?

R: I cannot make it. The water is also not clean and not enough.

I: Do you sometimes have not enough water?

R: Sometimes, but I can order. Private people have tanks for sale.

I: So it was never the case that there was no water at all?

R: No, because in Chantabuli we have a lot of water. Normally we have 3-6 months rain. It can happen that we don't have water for a few days, but then we have the tanks.

I: Do you actually have contracts with hotels that they wash only with you?

R: Yes, I have contracts with hotel.

I: For a couple of years or is it limited?

R: No it is for one whole year. But when it is low season they change the price for the tourists.

I: But when it is low season, do you also get less money for the laundry?

R: I charge the same price but it is less to wash.

I: In general, are more and more hotels coming to you or is it going down?

R: It is more and more. Every year, that's why we have to look for another place.

I: So you also have space problems, does it get too small?

R: Yes, I have to change soon, I think for the next high season.

I: Is it your own land?

R: No, no, I am renting. I cannot pay it. It is for sale 10 million. I don't have enough money.

I: So you think more tourists are coming, do you think it will be a problem that there is not enough water. Because now you say there is enough, but when more and more people are coming?

R: I think, they are thinking to make the lake bigger to save more water.

I: Who exactly?

R: The major. I met him last month and he said he will make street finish and then he work with the water.

I: Do you work together with other people from this village?

R: My partner is Swissland guy, he is my partner. Before he was my husband. We have nearly 15 houses to take inside also. To rent them out.

I: So you don't have a problem that more tourists are coming, you think its good?

R: I think no, I think it will be ok. I have bookings already for the next year. October starting, we are nearly full.

I: You get the water from the government. And the energy and power?

R: It comes from the mainland and they make the pipes through the ocean to the island.

I: Is the energy expensive?

R: More than on mainland. Nearly 4 baht per kilowatt. On the mainland it is something like 1,5.

I: So you use much water, much energy, do you also have much water for yourself in the end?

R: Yes, I also have gas for the dryer machines. Cheaper than electricity.

I: Where does the gas come from?

R: From the mainland, but the gasoline station is here now.

I: Since when do you work with tourism?

R: It started a bit later, 4-5 years ago. Before we just had only 20 houses. Now its nearly 100. It is growing a lot.

I: Do the hotels pay you the same what I would pay you if I would come with my washing?

R: They pay less. I have to make special offers for them. They come every day, it would be too much. But the difference is not so big.

I: Are the hotels mainly owned by Thai or foreign people?

R: Many different. Half half. Many European people, but also many Thai.

I: What do you think of the European people coming here?

R: It is good, it means more business.

I: So there is nothing negative about it?

R: No.

I: Do you think the Thai culture gets lost through all the Western tourists?

R: Yes.

I: In what sense?

R: I think, when they bring a lot of money, more than Thai people. The come to the location and they go back again.

I: What would happen if there were no more tourists?

R: I don't think so. I think 90% now are from European countries.

I: What do you think about the government?

R: Have to be good, have to be stronger now.

I: Is the government doing much in tourism?

R: In Thailand we are safe, but here on Koh Chang many accidents happen, especially in the mountains. It is wrong to give everybody a motorbike. Many people die.

Interview transcription – White Sand Beach - Hotel xxx – 06.05.14 / 11:00

I: Interviewer; R: Respondent

History of hotel

R: Ein Jahr haben wir gebaut und nach sechs Jahren war die Bungalowanlage schon auf und da war sie noch ganz anders als jetzt, da hat sie ganz anders ausgesehen. Aber da haben wir Strom gemacht mit Generatoren. Nur nachts dann.

I: Verstehe. Das war schon mal eine gute Einleitung. Und dieses Hotel hier, wann wurde das gegründet und wann sind Sie dazu gekommen?

R: Nee, nee von Anfang an. Du konntest hier nicht mal gehen, von hier bis zum Meer waren nur Steine und Gebüsch, eine verwilderte Kokosnuss Plantage. Die kleineren habe ich gepflanzt, aber die größeren, das war die Kokosnuss Plantage hier.

I: Also haben Sie das Hotel auch mitgeplant?

R: Ja, ja, ja, aber alles das geplant war ist schon wieder abgerissen.

I: Wie kam das?

R: Wir haben gebaut da war noch gar keine Straße hier. Wenn du das Baumaterial was du jetzt hier hast übers Meer bringen willst, dann geht das nicht. Deswegen mussten wir extrem leicht bauen, sowas wäre unmöglich gewesen.

I: Seit wann existiert dieses Hotel?

R: Seit 1991. Das Baumaterial konnten wir nicht über die Straße bringen, deswegen mussten wir mit dem Schiff, einem Fischerschiff, denn große Boote gab es nicht, das Baumaterial hier rüber gebracht. Und dann hier mit dem Floß rangebracht. Das ging auch nur bis Anfang Mai, da jetzt die Wellen kommen.

I: Interessant, klingt nach harter Arbeit! Um jetzt ein bisschen auf unsere Arbeit zu kommen, wir untersuchen die Nachhaltigkeit der Hotels…

R: Was heißt Nachhaltigkeit?

I: Das bedeutet, dass Ressourcen genutzt werden, jedoch nicht ausgenutzt, sodass man in einigen Jahren nichts mehr davon hat. Sprich dass man nachhaltig für die Zukunft lebt, aber trotzdem noch seinen Profit macht, sodass das Verhältnis Ressourcen und Profit ausbalanciert wird. Verstehen Sie was ich meine?

R: Ja, ja, ja. Das ist natürlich so ein Gebiet hier, da macht jeder was er will. Die Regierung macht ja was sie will, bzw nicht was sie will, denn sie hat überhaupt keine Macht. Die Polizei arbeitet in die eigene Tasche, also deine Ideen sind hier überhaupt nicht durchzusetzen. Um sowas zu machen da muss die Regierung Auflagen setzen, anders geht's gar nicht. Sagen, wer jetzt was verschmutzt kriegt eine Strafe, aber das können sie ja nicht sagen, weil dann müsste die Regierung ja erstmal eine Kläranlage bauen.

I: Also gibt es auch keine Tourismusbestimmungen?

R: Nein, es gibt überhaupt keine Koordination. Der Ministerpräsident damals hat gesagt, wir brauchen Straßen und Strom, also nicht auf Koh Chang, in Thailand. Das andere kommt automatisch. Aber hier ist

nichts geplant, wenn ich dann mal so einen Film sehe, wie die in China zum Beispiel eine Stadt oder Schule planen, davon hast du hier nichts. Hier in Thailand wird einfach gebaut und wenig geplant. Und wenn mal was geplant wird, dann wird's öfter nicht durchgeführt, weil die Regierung keine Macht hat, wie bei uns.

I: Und da wird sich in naher Zukunft auch nichts ändern?

R: Nee, da wird sich nichts groß ändern.

I: Sagt Ihnen die Organisation DASTA etwas?

R: Schon gehört.

I: Ja das ist eine Regierungsorganisation, die in Trat sitzt, die haben so einige Gegenden in Thailand die sie sich aussuchen, um nachhaltigen Tourismus zu entwickeln. Um das voran zu treiben. Auf Koh Mak zum Beispiel haben die vorangetrieben kaum Autos zu haben und mit Sonnenenergie zu arbeiten. Noch mal eben zu diesem Hotel hier, das ist ja ganz interessant wir das organisiert ist. Wie viele Abteilungen gibt es hier, wie zum Beispiel die Essens- oder Serviceabteilung.

R: Du meinst jetzt Managementabteilungen?

I: Ja genau, zum Beispiel.

R: Es sind eigentlich so 3,4 Hauptabteilungen, das eine ist so Buchhaltung und Verwaltung und das andere Restaurant und dann so technische Sachen. Aber bei uns ist das alles recht primitiv geführt. Die Hierarchie auch relativ primitiv. Unprofessionell und primitiv.

I: Und warum unprofessionell?

R: Es klappt so, die Leute die hier sind, mich mit inbegriffen, die haben alle nicht viel gelernt hier. Also die Buchhalterin hat nicht Buchhalterin gelernt. Und das ist generell ein Problem in Thailand, keiner hat was gelernt, also bei uns in Europa, da ist der Maler Maler. Jeder hat eine Ausbildung und hier weiß keiner Bescheid. Jeder macht einfach irgendwas.

I: Sehen Sie Schwierigkeiten bzgl. Miskommunikation unter den Mitarbeitern?

R: Aber ja, hier hat keine was gelernt. Aber ich klinge natürlich jetzt sehr negativ wenn ich hier spreche. Einer der hier her kommt sagt, oh wie schön hier, das ist das Paradies. Aber wenn du hier lebst, so wie ich jetzt 26 Jahre, dann siehst du auch viel negatives.

I: Verstehe. Und die verschiedenen Abteilungen, haben die Abteilungsleiter oder geht das ineinander über?

R: Ja, das geht so ineinander über, aber wiegesagt, wir sind weit entfernt von einem professionellen Hotel.

I: Aber dieses Ziel verfolgen Sie auch nicht?

R: Doch, da kommen schon Änderungen, aber das ist auch gar nicht so einfach das durchzubringen.

I: Und warum bevorzugen Sie dann die thailändischen Arbeitskräfte und suchen sich nicht Europäer?

R: Also europäische, da gibt's drei Hauptprobleme. Das größte Problem ist die Sprache, und dann ein Riesenproblem wäre der Monatslohn, wie viel jemand so verdient. Das dritte ist, dass es sehr schwer ist eine Arbeitsgenehmigung für einen Ausländer zu bekommen.

I: Haben Sie also nur thailändische Mitarbeiter hier?

R: Nur Thailändische. Bei uns ist jetzt, da will ich aber nicht drauf zu sprechen kommen, bei uns ist jetzt ein Umbruch im Gang, der ist jetzt ganz neu, aber da will ich nicht drauf eingehen.

I: Das ist in Ordnung. Aber aus Kambodscha…

R: Aaah Kambodscha, ja aus Kambodscha haben wir sehr viele. Kambodschaner sind bei uns über 70%.

I: Wieso ist das so?

R: Also die schlecht bezahlten Arbeiten wie servieren, Putzfrau, Garten, da findest du gar keinen Thai mehr. Fast unmöglich. Das ist auch extrem schlecht bezahlt.

I: Und die Kambodschaner, die leben dann hier?

R: Ja, die leben dann hier. Weit über 50% der Angestellten auf Koh Chang kommen daher. Thais wollen die Jobs wie Putzfrau nicht.

I: Wie viele Angestellte haben Sie hier?

R: Etwa 40.

I: Gibt es da einen Unterschied zwischen low und high season? Werden viele zur Pause geschickt?

R: Ja, da werden gewisse Leute, die nicht zum Stammpersonal gehören, nach Hause geschickt. Dass man denen sagt, die waren nicht so gut in der Hochsaison. Es ist überhaupt ein Problem, man hat kaum mehr Arbeiter in der high season gefunden.

I: Wie viele Mitarbeiter haben Sie in der low season?

R: Wir haben immer noch 30 Leute. Ich könnt natürlich in der low season auch mit 20 auskommen, aber da krieg ich natürlich keine Leute für die Hochsaison mehr.

I: Verstehe. Wie viele Zimmer haben Sie hier?

R: 80 Doppelzimmer in verschieden Kategorien.

I: Was ganz interessant für uns ist betrifft die Lieferanten. Wer liefert das essen, wo beziehen Sie Strom und Wasser? Fangen wir mit dem Essen mal an.

R: Die Lieferanten sind hauptsächlich kleine oder auch größere Läden hier auf der Insel und die schaffen das Essen ran und wir kaufen es dann auf der Insel.

I: Also gar nichts vom Festland?

R: Wir kaufen auch vom Festland, aber nicht so viel. Vielleicht eine andere Bungalowanlage kauft mehr als wie oder eben gar nichts. Du musst ja auch immer mit dem Auto rüberfahren, was auch sehr aufwendig ist. Ich meine, wenn du dann aufs Festland gehst, dann musst du dahin um Gemüse zu kaufen

und dorthin für das. Das wäre viel aufwendiger. Die Getränke, ob es Wasser, Bier oder Cola ist, die sind zum Beispiel hier zum gleichen Preis angeboten. Wenn du jetzt also rüberfährst und deine Coca Cola drüben holst, da gibst du mehr Geld für Benzin aus als wenn du es jetzt hier kaufst. Bei Bier auch. Was dann teuer ist hier, das ist Gemüse und Fleisch.

I: Wird das auch hier angebaut?

R: Nein, hier wird nichts angebaut. Das Lustige ist auch, nicht mal der Fisch, den wir haben, ist von hier.

I: Warum ist das so?

R: Stell dir einfach vor, ich nehme 7 Fische, der andere 11, der andere 3 Fische. Der Fischer muss das zentral irgendwo hin liefern. Kleine Händler kaufen das bei großen Händlern. Und der kleine kauft 400, und kauft 150 große, 150 kleine Fische etc. 80% der Fische kommen vom Festland. Der kommt mit dem Schiff rüber, zu einem Händler, der nächste ist ungefähr 2km weiter oben. Besonders mit Gemüse, da braucht man nur ein bisschen von dem und dem, da kaufst du nur ein halbes Kilo von irgendeinem Gewürz, ein halbes von dem und von dem, aber wir kaufen dann 30 verschiedene Sachen in der Hochsaison.

I: Sie haben jetzt gerade asiatisches Essen erwähnt und sich sehe hier ein paar europäische Touristen, verlangen die denn europäischen Essen, dass es hier auch eben Pommes und Nudeln gibt?

R: Ja, wir haben auch ein paar europäische Gerichte.

I: Und wo beziehen Sie die her?

R: Gibt's alles in Thailand, da kaufst du halt Nudeln und die Soße machst du selber. Alles von den Händlern hier. Fast alle Anlagen kaufen das auf den Inseln. Dann gibt's ja noch so speziellere Dinge, wie zum Beispiel Putzmaterial, das holen wir dann schon mal mit dem Auto und packen dann ein Auto eben voll mit Waschmittel und Weichspüler etc.

I: Gutes Stichwort, wie waschen Sie?

R: also wir waschen seit einem Jahr nicht mehr hier, vorher haben wir das noch gemacht. Das würde man auch jetzt noch machen, aber das Problem ist, wir haben hier keine Wasserversorgung. Jedes Hotel muss sein eigenes Wasser bohren, manchmal kommt es von der Quelle am Berg, man muss tief bohren. Ich habe hier 3 Brunnen die ungefähr 45m tief sind. Du bekommst hier kein Wasser geliefert von der Behörde oder Gemeinde, ist nichts.

I: Und das Wasser kommt dann auch aus der Dusche heraus?

R: Ja genau.

I: Und das Wasser wird auch für den Swimmingpool verwendet?

R: Jain, jetzt bei mir nicht mehr. Nein, das ist aber ein Spezialproblem. Es ist aber so, das Wasser hier aus dem Tiefbrunnen, die Erde ist sehr eisenhaltig, was dem Wasser eine rotbraune Farbe gibt. Natürlich Verschmutzung. Wir haben eine Filteranlage.

I: Und das Wasser wird auch nie ausgeschöpft? Ich kann mir das schwer vorstellen, denn so ein Hotel verbraucht ja viel Wasser.

R: Dieses Jahr sah so aus, als hätten wir kein Wasser auf der Insel. Im Februar jedoch haben wir nochmal Starkregen gehabt, ungefähr eine Woche. Wir hängen natürlich vom Regen ab und natürlich der Berg dahinten, der ist natürlich ein ideales Wasserbecken. Da kommen Milliarden über Milliarden Liter herunter und das geht dann in den Berg hinein und sickert langsam hinunter. Also ohne den Berg hier, hätten wir auch kein Wasser. So wie wir jetzt.

I: Hat es Ihnen bis jetzt schon mal an Wasser gemangelt?

R: Vor zwei drei Jahren gabs weniger Wasser und dann wird es auch umso brauner, das ist aber eine natürliche Umweltverschmutzung.

I: Was würden Sie tun, wenn es mal ein Jahr kaum regnet?

R: Also im Extremfall müsste ich die Bungalowanlage schließen, weil ohne Wasser geht's nicht. Und wenn ich kein Wasser mehr hab, dann haben die anderen auch keins, denn du kannst ja kein Wasser kaufen. Das müsste dann vom Festland kommen und das ist nicht zu organisieren. Du brauchst so viel Wasser, über den Berg könnten die ja gar nicht fahren. Die Regierung plant, hab ich vor 20 Jahren das erste Mal gehört, plant die einen Staudamm hier auf der Insel. Den kriegen sie nicht hin. Und wie gesagt, dann wechselt die Regierung wieder und es kommt eine neue, da geht nichts.

I: Wo würde der hinkommen?

R: Klong Prao, der Standpunkt, alles ist schon definitiv.

I: Woran mangelt es jetzt genau?

R: An der staatlichen Durchsetzung und an Geld.

I: Das würde dann wie finanziert werden?

R: Staatshaushalt, Steuern.

I: Gibt es irgendwelche Gruppen die dagegen sind den Staudamm zu bauen?

R: Nein, gibt's nicht. Die dagegen sind, müssen ihre Zelte packen und von der Insel weg. Wenn das Geschäft zusammen bricht, kann er hier nicht leben.

I: Interessant. Und Energie und Strom..

R: Kommt alles vom Festland. Da sind 2 Kabel unterm Meer, die kommen von drüben. Glaube das nächste Elektrizitätswerk ist 200-300km weit weg, wahrscheinlich in Rai Jong. Hier unten sind keine Werke.

I: Woran liegt das?

R: Wenig Bevölkerung und keine Industrie. Trat und Chanta Buri haben keine Industrie.

I: Also versorgen die beiden Leitungen die ganze Insel?

R: Ja, das ist staatlich.

I: Ein bisschen weg von diesem Thema und generell, was ist die größte Hürde eines Hotels hier. Gibt es gewisse Dinge die es einem schwerer machen als wo anders?

R: Ja, ja, ja. Also das sind verschiedene Dinge, die hier viel schwerer sind. Also ein Ding jetzt grad auf so einer Insel ist, wenn du eine Fachkraft brauchst, ist die normal nicht da. Computer umstellen zum Beispiel könnte ich nicht, auf der Insel gibt es keinen der das kann, in Trat auch nicht. Chanta Buri auch wahrscheinlich niemanden. Dann vielleicht in Pattaya oder auf jeden Fall in Bangkok. Dann musst du jemanden kommen lassen. Und wenn du dann ein Problem hast, das du lösen musst, dann ist der auf der Insel gar nicht hier. Die großen Hotel, die dann professionell geführt sind, nur zwei eigentlich, das sind Samari und das Zentara, das sind professionelle Hotels. Und mein Nachbar zum Beispiel, das ist sehr gut geführt, der ist auch sehr reich, da spielt es gar keine Rolle, der sagt ich will meinen Computersystem, da soll einer von Bangkok kommen. Früher war es so, da war dein Kühlschrank kaputt und da war keiner auf der Insel. Da haben wir den Kühlschrank hier übers offene Meer transportiert, ein Riesenaufwand. Heute haben wir Leute, die können schon den Kühlschrank reparieren. Und dann ist ein Problem auf der Insel hier, die ist zu klein und das wird noch länger zu sein, zu klein für eine Infrastruktur, die viele Leute benötigen. Ich gebe dir jetzt ein Beispiel, angenommen ich brauche jetzt einen Hotelmanager und der kommt aus Chang Mai oder Bangkok, der muss ja hier herkommen. Der hat vielleicht Frau und Kinder, dann wird der sagen, wo gehen meine Kinder zur Schule. Die Schule hier ist schlecht, und so weiter. Wenn du hier herkommst zum Arbeiten, die lokale Bevölkerung, das ist eine Gemeinschaft für sich. Sonst ist das ziemlich langweilig hier zu leben. Wenn du sagst, hier kannst du gut Fisch essen, das ist für einen Angestellten viel zu teuer, der kann da gar nicht hingehen, nirgendswohin.

I: Sie haben grad gesagt, die Einheimischen sind eine Gruppe für sich? Haben Sie denn Kontakt zu denen?

R: Ja, ja, ja, haben wir. Bei mir ist es ja so, ich war der einer der ersten Ausländer, die hier her ausgewandert ist. Ich bin mit Abstand der Ausländer, der hier am längsten lebt. Und damals gabs ja hier auch noch keine Straßen. Alle Leute die aufs Festland wollten, die haben sich auf dem Schiff getroffen. Ich kenne also fast alle Einheimischen. Man kennt die alle.

I: Wir haben vorhin kurz über Nachhaltigkeit gesprochen. Wie ist Ihre Meinung dazu?

R: Das wäre hier schon alles interessant. Hier zum Beispiel die Sonnenenergie ist relativ teuer. Du kannst deine Anlage wahrscheinlich gar nicht komplett über Sonnenenergie laufen lassen. Ich geb dir jetzt mal ein Beispiel, ein Freund von mir, der relativ wohlhabend ist, ein Schweizer, der hat sich jetzt ein Haus gebaut hier auf der Insel, kein Hotel, und der sagte, du ich mach grad Sonnenenergie, und der Preis war so hoch, ich weiß es grad nicht mehr, aber der Preis war so hoch, das wäre teurer gewesen als das ganze Haus, das er gebaut hat. Und dann noch was, wenn du Sonnenenergie hast, wenn du ein Hotel hast und schlechte Saison ist, dann musste viel zahlen. Wie können wir die Angestellten bezahlen, wie können wir die Bank bezahlen, und so weiter. Du musst gucken, dass du überhaupt deine Rechnungen bezahlen kannst, wenn die Saison nicht so gut ist. Wir haben nicht 100.000 Euro mal eben hier und hier. Und noch was, wenn du so eine Anlage hättest und ich sag, du jetzt geht der Strom nicht mehr, du hättest keinen der dir das mal eben repariert. Ich kanns auch nicht und meine Angestellten auch nicht, du müsstest also einen Mann hier haben, der dafür zuständig ist.

I: Ist das also auch einer der Gründe, weshalb es für Sie nicht in Frage kommt?

R: Der Hauptgrund ist ganz sicher der, dass es extrem teuer ist im Vergleich zum staatlichen Strom.

I: Würden Sie überlegen, wenn es beispielsweise gefördert werden würde? Dass man Zuschüsse bekommt, so wie in Deutschland?

R: Ja staatlich gefördert, ja sowas wäre attraktiver. Denn so wie es jetzt ist, der Strom kostet ja mehr. Und so nah am Meer, ich wüsste jetzt nicht wie das mit dem Salzwasser ist. Denn bei vielen Geräten, gerade bei Strom, ist hier in der Nähe vom Meer die Abnutzung viel größer als weiter weg vom Meer.

I: Abgesehen von den Solaranlagen, wie umweltfreundlich ist dieses Hotel gestaltet? Haben Sie zum Beispiel Aufkleber in Badezimmern, die auf das Waschen der Handtücher oder Licht hinweist?

R: Nein, haben wir nicht.

I: Energiesparlampen haben Sie ja schon.

R: Ja, die haben wir.

I: Haben Sie schon mal darüber nachgedacht das ein bisschen umweltfreundlicher zu gestalten? Wenn wir jetzt mal auf die Handtücher zurück gehen, wie oft waschen Sie Handtücher?

R: Täglich.

I: Sind das nicht enorme Kosten?

R: Ja, enorme Kosten.

BREAK

R: Ja was ich auch noch sagen wollte und was viele nicht wissen, das hier ist eine glückliche Lage, aber ne unglückliche Lage ist der Sandstrand für Abwässer. Es ist so, hier sind Steine, Erde und Sand. Bei uns ist es so, die Abwässer, nicht nur bei uns, es gibt nirgendwo eine Kläranlage. Da müsste das Hotel eine private Reinigungsanlage haben.

I: Wo geht das Dreckwasser dann hin?

R: Ja eben, wir haben hier Glück und die, die Pech haben liegen am Strand. Alles was Erde und Steine ist, ist gut und alles was höher gelegen ist, ist noch besser. Das heißt bei uns geht die Toilette in eine Sickergrube. Jetzt haben wir hier auf dem Gelände ungefähr 20 Sickergruben, nur hier unten. Und das Wasser, dadurch dass hier Bäume und Erde sind, ist das ein mehr oder weniger natürlicher Prozess. Also ich hab gestaunt, das wird hier nicht stinken, wegen des Untergrunds. Das geht 3-4 Meter runter und das stinkt nicht. Und noch was, wenn du Palmen hast, die saugen dir unglaublich viel davon weg, das ist wie Dünger. Aber im Sandstrand, ganz eigenartig, da hast du relativ weit oben, da steht das Wasser und beginnt zu stinken. Der Sandstrand kann das nicht richtig verarbeiten, aber Erde kann das verarbeiten. Viele der großen Hotels leiten das Wasser direkt ins Meer hinein.

I: Nun wächst der Tourismus ja, meinen Sie damit würde die Entwicklung kommen und der Staat würde anfangen zu agieren?

R: Die müssten ja eine Zentrale fürs Abwasser einrichten, das sehe ich nicht kommen, nein. Dass die Abwasserreinigung machen. Da wo ihr seid am Lonely Beach, da müsste das Wasser mittels Pumpen zentral gesammelt werden, mit riesen Leitungen. Das Wasser kilometerweit zu pumpen wäre extrem aufwendig. Sowas müsste gemacht werden bevor hier die Hotel gebaut werden. Im nachhinein extrem schwierig und teuer.

I:Würde das für Sie Vorteile bringen so eine Zentrale zu haben?

R: Bei mir persönlich jetzt wenig, bei uns ist Erde und wir sind etwas höher. Das Problem ist vorne am Sandstrand.

I: Um noch mal zum Pool zurückzukommen. Wird der gekühlt oder geheizt?

R: Nein, nein, nein, kühlen wäre viel zu teuer. Und wärmen sowieso nicht.

I: Auf der Ostseite der Insel, wie ist es da mit den Gegebenheiten bzgl. Energie und Wasser?

R: Das Selbe wie hier, nur die andere Seite ist frei von Tourismus. Der Grund, da sind fast keine Sandstrände. Hier ist der Sonnenuntergang, und wenn dann Sandstrand, dann keine schönen. Und wenn man reingeht, ist das Wasser grün, aber keine Umweltverschmutzung.

I: Wir haben auch von einer Organisation gehört, sich aktiv die lokale Bevölkerung mit in das Arbeitsgeschehen mit einbezieht und Ausbildung gefördert haben. Aufgrund dessen sind viele Touristen gekommen, um aktiv Beitrag zu leisten.

R: Die Projekte machen öfters teure Hotels. 99% der Hotels müssen gucken, dass sie überhaupt über die Runden kommen.

I: Also jeder für sich selbst?

R: Ja genau.

BREAK

I: Kooperieren Sie auch mit anderen Hotel zusammen, wenn es z.B. um Wasserknappheit geht?

R: Nein, nein, nein. Wenn ich jetzt Wasserprobleme hätte, hätte der andere auch Probleme. Das hängt mit dem Grundwasser zusammen.

I: Könnte das Wasser ein Problem werden in der Zukunft?

R: Das Wasser könnte ein kleines Problem werden in der Zukunft, ja. Aber nicht jedes Jahr. Wiegesagt, alle 10-15 Jahre ist mal wenig Regen. Unser Glück ist ja der Berg dahinten und da ist ja auch National Park, sprich da darf nichts gebaut werden. Die Insel ist 1982 zum National Park erklärt worden. Da wo kein Landeigentumsrecht war, da wurde National Park draus gemacht, das sind über 80%, die dem Staat gehören. Und dann die anderen 20%, 7 oder 8% das ist Land mit Landeigentumsurkunde. Die restlichen 12% das ist kein Landeigentum, das gehört auch dem Staat Thailand, ist bevor es National Park wurde, abgerodet worden und sind meistens Stellen die nicht steil sind und z.B. Kokosnusspalmen oder Gummibäume gepflanzt. Und 80% sind National Park, das heißt da drin wird meiner Meinung nach in 50 Jahren nichts stehen. Und der Raum hier ist privat oder halbprivat hier, und da werden dann die Hotels stehen. Aber innen drin nicht. Das ist übrigens einer der besterhaltendsten Urwälder in Südostasien.

Interview transcription Kereeleére Hotel – 08.05.14 – 8.00 pm

I: Interviewer; R: Respondent

I: What is your position in this hotel?

R: I am a Manager here. I am checking, I am looking and I work.

I: How many managers work here?

R: Just one. Just me

I: And the owner?

R: The owner is Thai People.

I: And they are not living on the island?

R: They are from the mainland. They are from Trat, but they have a business here. They have something like 3 hotels and resorts. Family business. But he has one resort in Lonely Beach and Koeh Baie Resort. Not far from Lonely Beach.

I: This hotel, since when does it exist?

R: This here since 5 years.

I: How big is it? How many rooms do you have?

R: We have something like 69 rooms. But we just want to sell like 60 rooms and then you have to keep the 9 rooms. We keep nearly 10 rooms because we have to be very careful, because sometime the room, the toilet or air condition you know, something maybe broke. Then we can move the guests to another room. That's why we want to sell maximum 60 rooms and then keep the rest.

I: How many people do work here?

R: Something like 20 people.

I: Is that enough in both seasons?

R: Yes. We need between 2-3 people, that's enough.

I: And the people in the low season, they stay as well? Or do some people go back home?

R: Depends.. If it is so quiet, actually in the low season, we also still run business. We are open all year 24 hours, but some months, some week, really quiet. You know why? Because it is the rain season. Strong wind, all day, rain, rain, strong, you know. Not fun, you know. But some time the weather is better. You can go swimming, be outside. Very bright, sunshine.

I: How did tourism develop here in the last 5 years?

R: You mean by economics or what? People come come come?

I: What is your impression of how did this place change?

R: I stayed here for a long time. I know a bit. I see some mission, everytime change change. From before, more tourists from Europe: Germany, Switzerland, France, … And now many Sowjet people, they like to come to Koh Chang. And they still come. But some years, two years ago, I saw so many Russians and

Chinese. And the Chinese they still come. The Chinese come in a big group, normally. For sure, they still come. Some people they like to go to Lonely Beach or Baie Lan area, you know, kind of backpack style. But here is more like the family style. There are the most tourists of family.

I: Are there also problems with so many tourists coming here?

R: From before, I feel a bit confused and strange a bit about the Russian and Chinese people. Because most of them they do not speak English. They feel like they have their own way. They are just travelling but some of them are also very nice and polite, but some of them I really like to kick them out. Sorry. I feel like that. Some of them are not respectful. They are not nice.. mhm. So when I have some problem with the guests or so I will talk to them directly and try them to calm down. Depends. If they don't respect me, I will not respect them. Sorry. Because we can talk in a direct way. Chinese people are really lousy. When they come like a big group, they do not respect and they eat, they do it their own way. They are really loud, you know, really messy. Sometime I have some problem with them. Because they make me much more work. But Chinese people they can speak Thai, that's very interesting about them. Some of them. Because they learn in Thailand. And that's nice, they have the education, they have the knowledge, they have respect and are polite.

I: In our study it is mostly about sustainability and especially about energy efficiency.

R: Energy efficiency?

I: Yes, efficiency. SO using energy clever.

R: Ah you mean about electric and water. Ah we pay mostly 100.000Baht a month for electricity for use in the hotel… everything. We pay for the electric office. And the government system, something like that. And for the water, we use the water from the underground. They have something like that for water. We have a tank, we can pump the water to the tank, keep it and send it around, everywhere.

I: So there Is a big whole in the ground?

R: Something like in the backside of the hotel.

I: It comes from underground. So it's a deep hole?

R: The water is not so expensive. But electric is very expensive.

I: Do you do anything to save energy?

R: You mean energy from the sun or what?

I: Do you have solar panels?

R: No. we don't use it.

I: Why not?

R: I don't know. They are not famous. It's not famous energy.

I: The light bulbs for example, are they energy efficient?

R: Yes they save energy. Many lamps are energy saving.

I: Everywhere?

R: Yeah

I: Who decided that?

R: Many combinations between the friend and the owner. The owner also learned education about decoration. He knows how to build. He can create with the space, you know. He loves art.

I: Where do you wash your laundry?

R: Actually we have the machines. We will clean by ourselves, about towels, bed sheets, something like that. For the laundry for the guests, we not do it. We send to some shop.

I: The washing machines also use a lot of water and energy.

R: It uses a lot of electric also. Normally for the laundry they use gas.

I: Is it cheaper to wash it here than to bring it somewhere?

R: Ehmmmm… for sure. We clean the towels here because it is cheaper. TO send to the company is not massive, you know.

I: How often do you wash the towels and the bed sheets? How often do you change them for the guests?

R: I think something like one week. For the big gas, the big tank. Only one week. But in the low season we will be very different. Because not many tourists come to Koh Chang. We will use maybe 20% or 30% because of the rain. But the chinese people and the Thai people still come in the low season.

I: We saw earlier today a lot of food coming in, like a food delivery, do you buy that yourself in the market?

R: Yes no problem. You can bring to your room.

I: And the food for your restaurant?

R: We make only breakfast. And for dinner only for big groups. Something like 50-80 people, we have the meeting room also. We can make a dinner for sure. We can make anything but normally we make just breakfast. That's enough. Then the staff works hard.

I: The coffeeplace is also from the hotel, right?

R: Yes, from the hotel. My boss just uses like Chill chill. Just have some space for guests, they can use wifi, they can drink, just for them to relax.

I: They are also loads of foreign-owned hotels here. Hotels owned by Germans and Swiss, what do you think about that? Is it good or is it not so good?

R: They make business here, I think it's a movement. It's like… for me, sure, it's still okay. 60-70% of the business is still Thai people. But foreigners can come here. Some of them they have the big resorts, big hotels, they can do like that, yeah. They open a bar. Normally the foreigners only open a simple business, everyone can do it. You can just open a bar. Old men they came here and they have spent time

here and then they think about to open something here, then they open a bar or a restaurant. Or maybe a hotel or resort. For me, I feel, I am okay. Most businesses have to be Thai people.

I: Do you think in this hotel, is there a possibility to use less energy and less water?

R: Mhm, if we meet the right people. But sometimes we met them. The system like electric here, change to the solar… I don't know. Costs a lot of money, too. But for the future it is very good. Cheap cheap cheap. Saves a lot of money. But we are still thinking about that, we did not delete it.

I: And for water as well?

R: for the water I don't know. I don't know how to do a good system for that.

I: for example there are shower heads or toilets which use not as much water?

R: I think we use

I: You can install those.

R: Have to go from the ground and pump and then to go to everywhere, every room…

I: Just if you for example you can have shower heads with not as much water coming out, so it saves some water… or for example in the room to say: dear guest, please use your towel for two days… Do you do that? Do you have signs in the room for the guests?

R: But we change every day for the guests, for sure. Every day. And sometimes we see the sign you put on the door… we change the towels every day.

I: do you think it is very important to change the towels every day?

R: I think they do it everywhere. It is good.

I: Did it ever happen that there is not enough water?

R: Yes. The system, the big pipe, it broke. Kaputt. That is a problem. The guests can't shower, you have to fix it. It happened in the high season before… Oh my god. We try to fix it but then okay, then the guests can shower again, we can clean.

I: Do you cool the water in the swimming pool?

R: There is a system, a machine.

I: DO you think that tourism in the future will increase?

R: Depends on the politic in Thailand. That is a problem. The problem is about politic. We need sure. We need politics to be stable. Because Thailand you know it is very known for holiday. I think you won't go to Korea or Japan for holiday, but you will come to South East. We are always number one. Thailand is number one. It is true. Cheap, people are nice, but okay you can go to Myanmar, Laos, Cambodia, you can do it. But Thailand still very important. But we need a good politics, if we have a good system, sure, everything…

I: What is bad about the system now?

R: We have to have security. Yesterday electricity was off. We have to have a vote, the red one. I hope they will stop fighting. Fighting is like war. Everyone doesn't like it. They don't want it. The tourists like to come here to relax… and safety. It is important. The situation like this is not good. They have problems with each other.

Interview – 13.05.2014 – Local resident

I: Interviewer; R: Respondent

I: Do you have a well for the water?

R: Yes.

I: And who builds this well?

R: ?

I: And do you have a pump for the water?

R: Yes.

I: Who build this well?

R: Probably the owner of Lonely Beach.

I: Who is the owner of this?

R: Some Thai guy, I don't know.

I: Is the water only for you or for more people?

R: More people, everybody around here. Others probably have another one.

I: And you never have to pay for the water?

R: I never paid.

I: The land here, where you have your business, is it yours?

R: No, no, it is my friends'.

I: Do you filter the water? Do you make it clean?

R: I don't know. I don't have anything to do with this. Probably no filter, its only for washing and showering, not drinking.

I: Did it ever happen that you had no water?

R: Couple of years ago, yes.

I: What do you do then when you don't have water?

R: Its only a couple of hours. Otherwise you have tanks, so when it rains they put them up to shower. They store here also for the dry season.

I: Is there a pipe which goes to the house or a pump and you do it yourself?

R: I think there is a pipe inside here, I am not sure. Or maybe somewhere else in the town.

I: Do you think there is water for everyone?

R: I did have problems, and then we had to buy water.

I: Where was this water from?

R: …?

I: The people who are selling the water, are they locals?

R: They are local people. This is probably more clean water.

I: Is it expensive to buy this water?

R: Last time I paid 200 Baht for one 1 ton. Or 2, or 1,5 ton.

Interview transcription – White Sand Beach - National Park Headquarters – 08.05.14 / 16.30

I: Interviewer; R: Respondent

I: Do you know Dasta?

R: Yes we know them. Their office is at the … waterfall.

I: What are you doing? What is your work about?

R: Protect the forest, see and beach. Area around it.

I: Is this the headquarter office?

R: Yes.

I: What are your activities? What are your activities relating to water management? How do hotels play a role?

R: Community Water management. The national park area, most of the ground water. Water in hotel area. Not area National Park. Possession of an area or community.

I: Is tapping the water harmful for the National Park? Animals harmed? Plants?

I: Is there enough water? Do you think there will be a problem in the future?

R: Problem sure! Population increase and expansion of businesses, hotels and resorts.

I: What are the consequences if there is no more water? (did not understand the question)/ What are the consequences if there is more water taken from the hotels?

R: Water issues on the island. No problem of insufficient water. Because each community has its own water management service. Groundwater. With Groundwater mountains and water supply coming from the pool on the mountain. But the issue of expansion of the hotels is wastewater problems/ sewage dumped into the sea.

I: What are the consequences of the sewage being dumped into the sea?

R: Hotels and resorts have onsite systems. Hotels and resorts, the management of waste water, the treatment system mounted to the onsite system.

I: What has to change in the future to improve the situation/implement new regulations? What is the role of the government?

R: Management of water under the supervision of the municipality and wastewater management of the district. On Koh Chang there is no law on the control of water. It is the duty of the municipality. The National Park, forest conservation and protect the forest not to be compromised.

I: How likely is it that the hotels and resorts expand into the area of the National Park?

R: Hotels and resorts not in the park. But if the attacker National Park area arrested and carried out the building. The park has a law enforcement. Therefore hotels and resorts no expansion into the park.

I: What are the effects of tourism on the nature/environment of the National Park?

R: Carrying capacity is a problem. To Accommodate the tourists.

Stakeholder meeting comments transcription – White Sand Beach – 16.05.14

I: Interviewer; R: Respondent

The following scenario was presented to the audience. The goal was to create meaningful discussion amongst those present in the stakeholder meeting.

Scenario

In 10 years time, tourism has increased tremendously. More hotels and resorts have been established which demand a high water consumption. Water has become a rare resource on Koh Chang.

→ *How would you deal with this situation?*

Manager Amari Emerald Cove Koh Chang

R: Well, this is a very optimistic scenario, I don't belief this is going to happen, but however it does, it is necessary to generate some steps to have this resource available, because it's a must. First of all I think more ways to collect the water would be a winning situation for everybody, because most of the businesses here can't really effort the technologies, or the costs that come together with the transportation, collection and extraction of water. So I guess in that case, or in the whole community case, saving water is the best way. So try to use only what is necessary, only what you can effort to use. I don't think distillation of sea water is a solution, because, if I remember correctly, in the high season even the sea water level drops critically […] I think there should be more awareness brought towards the water consumption and the water waste, wasting the water mostly. Maybe some prime holiday should not be cancelled, but a little bit better […] when it comes to the amount of water wasted, exactly at the end of the high season when water resources are the lowest. Of course it is a totally different scenario when we would have this discussion in September or October when the island is flooded and we are suffering from landslides and other ways of damaging the place we are living in. So I think the demand will grow, but not in such a huge pace to scare us, but I would put more concern on saving the water instead of wasting.

I: And what do you think about the collaboration with neighbors for example?

R: Well, in general this is kind of a problem of the island. I mean people should meet each other more often, in fact, work on projects more often. So I would say, and I only know about 10% of the people here, except for the students of course, people who are involved here on a day-to-day base on the island, both from the government and the private businesses, we didn't have the opportunity to meet so often and discuss the topics.

I: Thank you.

R: You're welcome, thanks.

Tana Sing, DASTA

R (translated): She mentioned that if we look at the capacity size of the island to accommodate tourists that would be one of the options, because if we keep on building or constructing new hotels and bring in more tourists of course we will run out of supplies for everyone but if we look at the capacity of the island and limit the number of tourists or visitor who come to the island then we can manage the supplies of water resources much better.

Mr. Dobra, Owner Kacha Resort & Spa Koh Chang

R (translated): So, this is Mr. Dobra, he owns a hotel himself. He owns this hotel exactly, he mentioned that if we mention about the water usage, the water supplies it should not be looked at every individual hotel and resort, but should look at the whole picture of how the water supplies in the island is managed and supplied. Because the island also suffers from floods, so there is an oversupply of water as well. He mentions how the hotel gets the water. There is no public water supply, so mainly we are using the ground water. The water supplies that he gets usually is either from the ground water or has to be transported from remote location. If he mentions how the hotel uses the water: for the guests, for the pool, for the laundry. So the water user side we work together between the hotel and the guests, because the water they have to supply, however they also have to push the water certification to the guests. He really appreciates your recommendations for the energy and resources conservation, however the market of Koh Chang has shifted from European market before to let's say Asian, Chinese, so some of the measures might not be effective to a different group. Obviously we have to work on a

different way how to approach and how to cooperate with the new group of visitors that come to the island. So he recommends the students and everyone to look at the whole picture, not at the individual picture of water supplies and other resources.

Audience

R (translated): He mentioned that we are in the middle of the water, but we don't have the water for our own usage. And we are the second largest destination island after Phuket, however we still don't have the publically managed water supplies. So with this information I would like to raise the concern to our government to take a look and take care of this centrally managed water system on Koh Chang.

Appendix 8 Koh Chang's Tourism Survey of Mid- Range & Luxury Hotels Guests - SPSS Raw Output

Part A –About your holiday

This part included two sets of multiple response questions about the tourist's most frequent choices on the type of accommodation when they were on holidays, and the importance of the destination attributes. This part also included a question about the tourist's frequency of going on a holiday in the last 12 months. The frequency tables, pie charts and analysis of the multiple answers sets are shown bellow (figures 1), 2), and 3).

Frequency table 1 **How many times did you go on vaction within the last 12 months?**

Question no. 1		Frequency	Percent	Valid Percent	Cumulative Percent
	1	12	18.5	18.5	18.5
	2	23	35.4	35.4	53.8
	3	21	32.3	32.3	86.2
	4	5	7.7	7.7	93.8
	5	1	1.5	1.5	95.4
	6	2	3.1	3.1	98.5
	12	1	1.5	1.5	100.0
	Total	65	100.0	100.0	

Multiple response frequency, table no. 2 **What type of accommodation have you been choosing most frequently? More than one answer is possible**

	Question no. 2							
	Q2.1 Family/Friends	Q2. 2 Camping	Q2.3 Hostel	Q2.4 Guesthouse	Q2.5 Apartment	Q2.6 Low-budget hotel	Q2.7 Mid-Range hotel	Q2.8 Luxury hotel
Responses	8	3	4	7	12	8	23	30
Row N %	12.3%	4.6%	6.2%	10.8%	18.5%	12.3%	35.4%	46.2%

Multiple response frequency, table no. 3 **Which of the following are of most importance to you. More than one answer is possible**

		Count	Responses	Row N %
Question no. 3	**Q3.1 Nightlife & Entertainment**	10	10	15.4%
	Q3.2 Quality of Beach	44	44	67.7%
	Q3.4 Easy to reach	10	10	15.4%
	Q3.5 Beautiful nature	30	30	46.2%
	Q3.6 Air conditioning	31	31	47.7%
	Q3.7 Price	34	34	52.3%
	Q3.8 Eco Friendly Management	9	9	13.8%
	Q3.9 Proximity to tourist attractions	11	11	16.9%
	Q3.10 Hotel stars	16	16	24.6%
	Q3.11 Facilities	11	11	16.9%
	Q3.12 Available services	12	12	18.5%
	Q3.13 Hot shower	19	19	29.2%
	Q3.14 Swiming pool	23	23	35.4%
	Q3.15 Beach Location	34	34	52.3%
	Q3.16 others	2	2	3.1%

Part B- Your General attitude towards sustainability

This part included sets of statements about the tourist's general attitude towards sustainability, and a multiple response question about which environmental impacts they were concerned about the most (see frequency tables and bar charts bellow).

Frequency table 4 **I am concerned about environmental issues**

Statement no. 4					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Little	9	13.8	13.8	20.0
	Neutral	11	16.9	16.9	36.9
	Quite a bit	28	43.1	43.1	80.0
	A lot	13	20.0	20.0	100.0
	Total	65	100.0	100.0	

Bar Chart no. 1 **I am concerned about environmental issues**

Mean = 3.569
Std. Dev. = 1.1452
N = 65
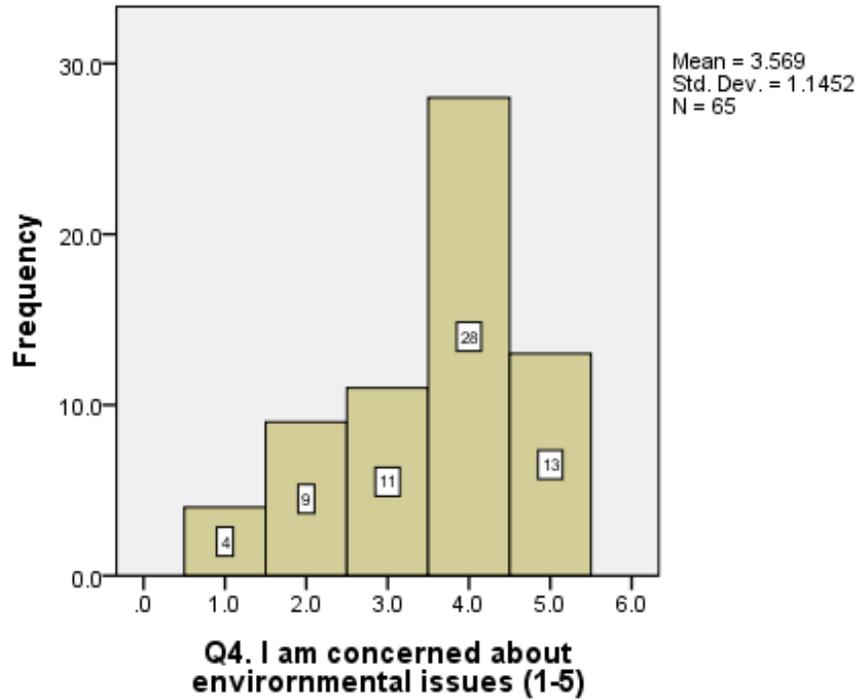
Frequency table no. 5 **During holiday I am less environmentally friendly than at home**

Statement no. 5		Frequency	Percent	Valid Percent	Cumulative Percent
	Not at all	33	50.8	50.8	50.8
	Little	10	15.4	15.4	66.2
	Neutral	11	16.9	16.9	83.1
	Quite a bit	9	13.8	13.8	96.9
	A lot	2	3.1	3.1	100.0
	Total	65	100.0	100.0	

Bar Chart no. 2 **During holiday I am less environmentally friendly than at home**

Mean = 2.031
Std. Dev. = 1.237
N = 65
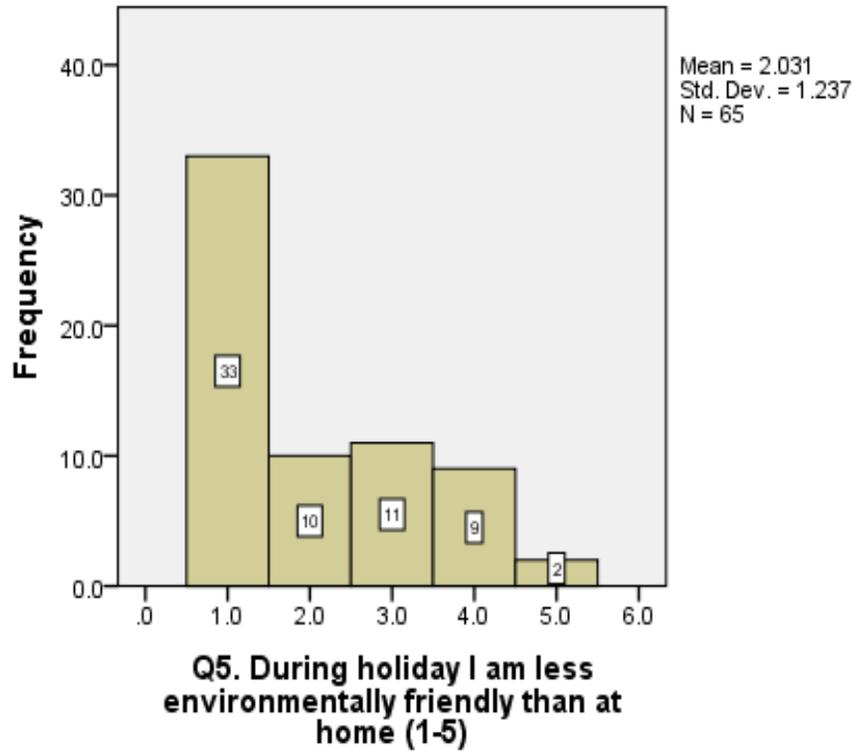
Frequency table no. 6 **I make an effort to be environmentally friendly on holidays**

Statement no. 6		Frequency	Percent	Valid Percent	Cumulative Percent
	Not at all	3	4.6	4.6	4.6
	Little	11	16.9	16.9	21.5
	Neutral	14	21.5	21.5	43.1
	Quite a bit	14	21.5	21.5	64.6
	A lot	23	35.4	35.4	100.0
	Total	65	100.0	100.0	

Bar Chart no. 3 **I make an effort to be environmentally friendly on holidays**

Mean = 3.662
Std. Dev. = 1.2535
N = 65

Frequency

Q6. I make an effort to be environmentally friendly on holidays (1-5)
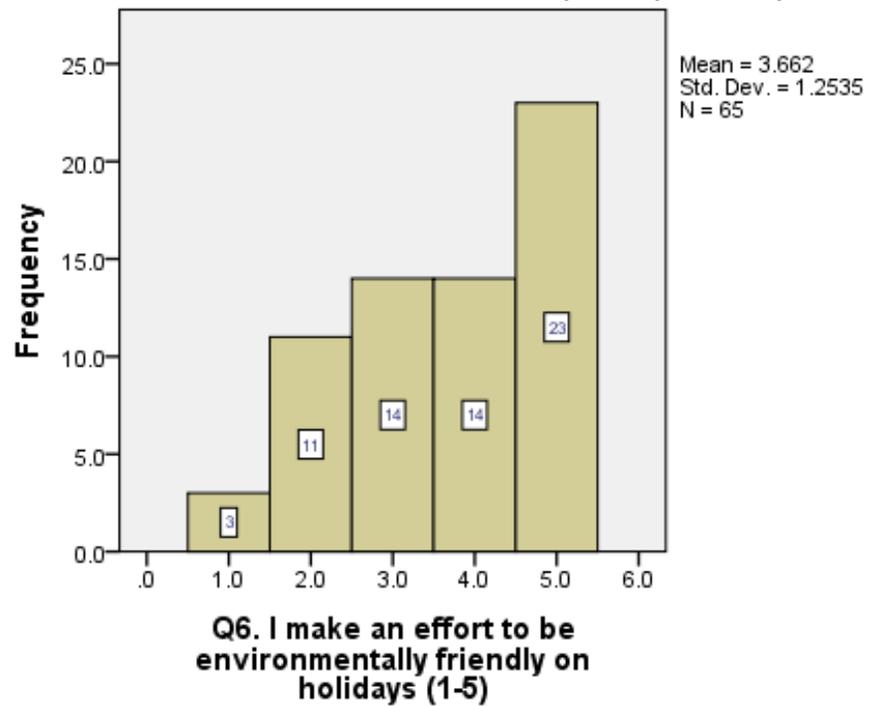
Multiple response frequency table no. 7 **Which environmental impacts are you concerned about the most? More than one answer is possible.**

Question no. 7	Q7.1 Global warming	Count	24
		Responses	24
		Row N %	36.9%
	Q7.2 Pollution	Count	41
		Responses	41
		Row N %	63.1%
	Q7.3 Extinction of animals/plants	Count	34
		Responses	34
		Row N %	52.3%
	Q7.4 Water scarcity	Count	19
		Responses	19
		Row N %	29.2%
	Q7.5 Sea Level Rise	Count	13
		Responses	13
		Row N %	20.0%
	Q7.6 Deforestation	Count	22
		Responses	22
		Row N %	33.8%
	Q7.7 Harming Vulnerable local communities	Count	13
		Responses	13
		Row N %	20.0%

Series of questions about the tourist preferences when staying in the hotel, and their frequency of use of the hotels facilities and services such as: towels change, and how often did the tourists showered, and for how long.

Pie chart no. 1, Question no. 8 **What is your preference?**

Q8. Air conditioning/fan (1=air; 2=fan)

■ Air condition
■ Fan

9.23%

90.77%
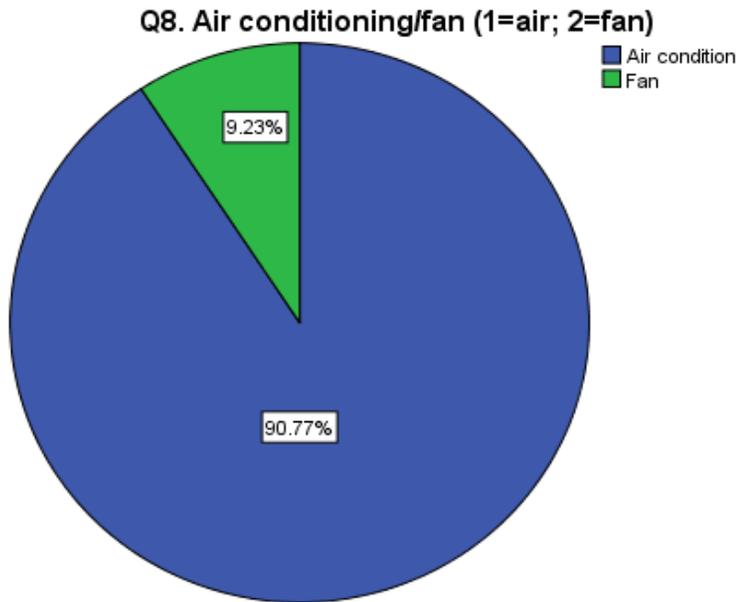
Pie chart no. 2, Statement no. 9. **I make an effort to consume locally produced food and drinks instead of imported goods during holidays.**

Q9. Food (yes=1, sometimes=2, no=3)

Legend:
- yes
- sometimes
- no

10.77% 3.08%

86.15%
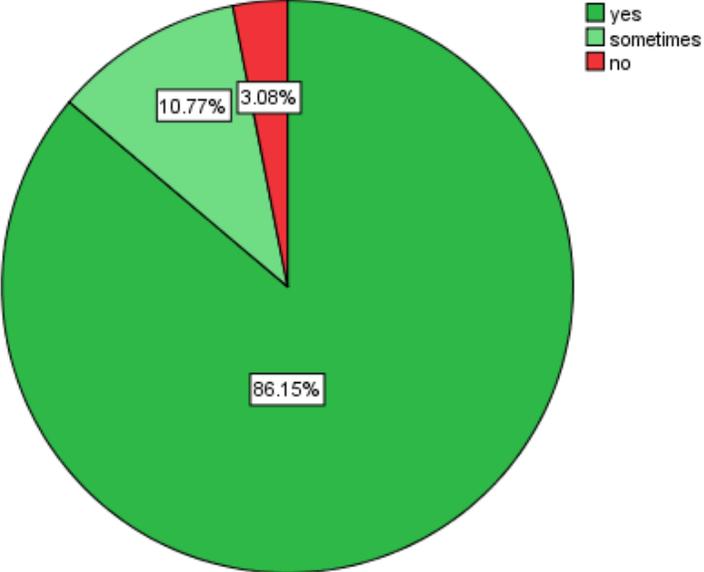
Pie chart no. 3, statement no. 10 a) **I turn off the air conditionning**
a) when I leave the hotel room

Q10.a) Room, When I leave the room (1-3)

Legend:
- yes
- sometimes
- no

9.23%

15.38%

75.38%
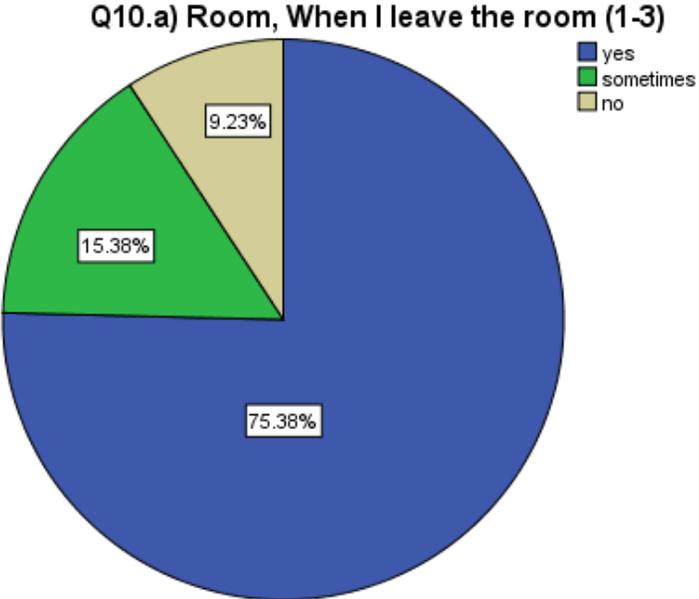
Pie chart no. 3, statement no. 10 b) **I turn off the air conditionning**
a) when I go to sleep

Q10.b) When I go to sleep (1-3)

■ yes
■ sometimes
☐ no

16.92%

47.69%

35.38%
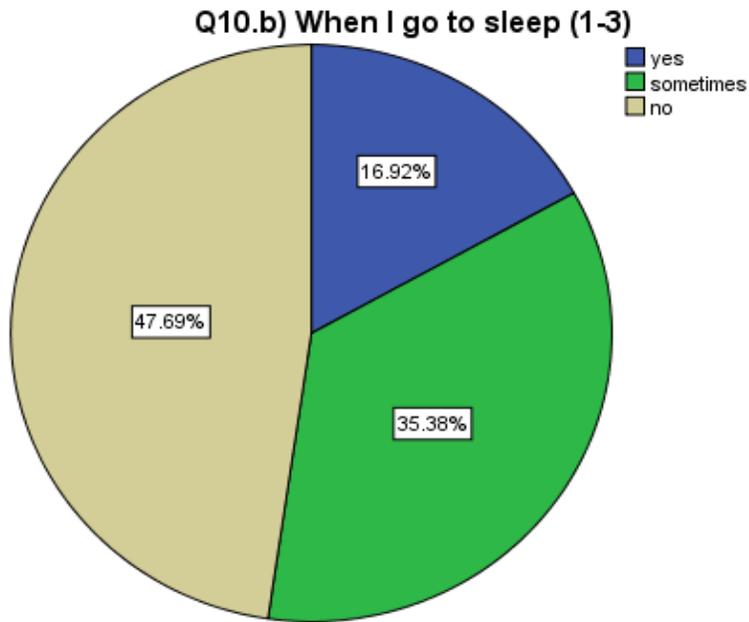
Frequency table no. 9. **If your hotel has got a Wellness & Spa, how often do you make use of it?**

Question no. 11		Frequency	Percent	Valid Percent	Cumulative Percent
	More than once a day	1	1.5	1.5	1.5
	Daily	6	9.2	9.2	10.8
	Every two days	11	16.9	16.9	27.7
	Once a week	19	29.2	29.2	56.9
	Never	28	43.1	43.1	100.0
	Total	65	100.0	100.0	

Frequency table no. 10. **How often do you want towels to be changed?**

Question no. 12		Frequency	Percent	Valid Percent	Cumulative Percent
	More than once a day	3	4.6	4.6	4.6
	Daily	20	30.8	30.8	35.4
	Every two days	36	55.4	55.4	90.8
	Once a week	6	9.2	9.2	100.0
	Total	65	100.0	100.0	

Bar chart no. 4, **How often do you want towels to be changed?**

Q12. Towels Changed (1-5)
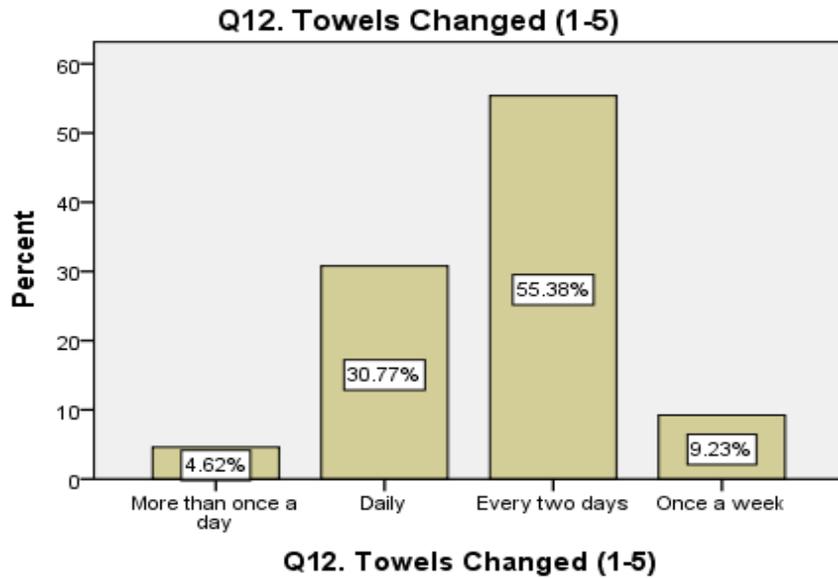
Frequency table no. 11 **How often do you shower?**

Question no. 13		Frequency	Percent	Valid Percent	Cumulative Percent
	More than once a day	40	61.5	61.5	61.5
	Daily	25	38.5	38.5	100.0
	Total	65	100.0	100.0	

Bar chart no. 5 **How often do you shower?**

Q13. Shower Frequency (1-5)
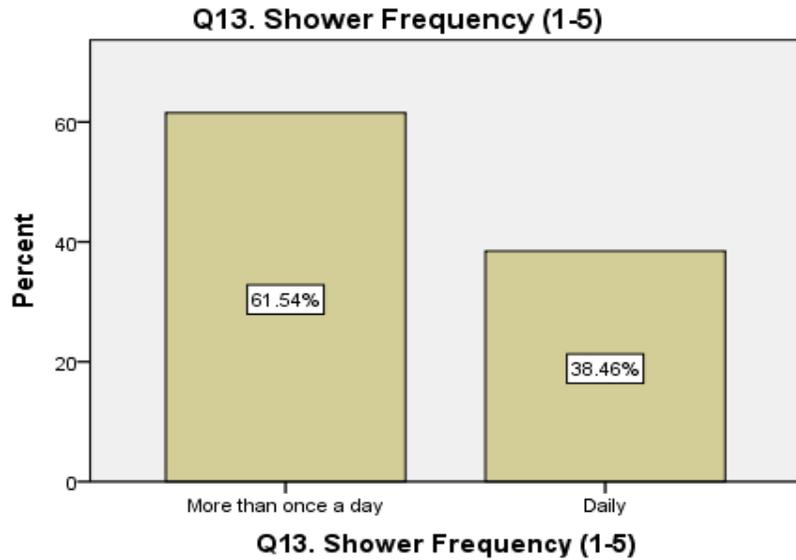
Frequency table no. 12. **How long do you shower? Please estimate**

Question no. 14					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Less than 5 minutes	26	40.0	40.0	40.0
	Between 6-10 minutes	30	46.2	46.2	86.2
	Between 11-15 minutes	4	6.2	6.2	92.3
	Between 16-20 minutes	2	3.1	3.1	95.4
	More than 20 minutes	3	4.6	4.6	100.0
	Total	65	100.0	100.0	

Part D – Willingness to participate

This part contained two open/ended questions about their willingness to pay extra for green accommodation and preference for green certified accommodation, CSR initiatives, and lastly demographics.

Frequency table no 13. **Would you prefer to stary in accomm. with green certification?**

Question no. 16					
		Frequency	Percent	Valid Percent	Cumulative Percent
	yes	58	89.2	89.2	89.2
	no	7	10.8	10.8	100.0
	Total	65	100.0	100.0	

Frequency table no. 14 **Willing to pay extra for green accommodation?**

Ques tion no. 17					
		Frequency	Percent	Valid Percent	Cumulative Percent
	yes	36	55.4	55.4	55.4
	no	29	44.6	44.6	100.0
	Total	65	100.0	100.0	

Multiple response frequency, table no. 15 **In which way(s) would you like this extra money to be used? One or more answers are possible.**

Question no. 18 Use of Extra Money	Q18.1 Renewable Energy	Count	14
		Responses	14
		Row N %	36.8%
	Q18.2 Development of local communities	Count	16
		Responses	16
		Row N %	42.1%
	Q18.3 Water Saving measures	Count	18
		Responses	18
		Row N %	47.4%
	Q18.4 Nature Conservation	Count	21
		Responses	21
		Row N %	55.3%

Frequency table no. 16 **Would you recommend Koh Chang to your family or friends?**

		Frequency	Percent	Valid Percent	Cumulative Percent
	yes	63	96.9	96.9	96.9
	no	2	3.1	3.1	100.0
	Total	65	100.0	100.0	

(header row: Question no. 19)

Demographics

Frequency table no. 17 **What is your nationality?**

Q.20 Nationality

		Frequency	Percent	Valid Percent	Cumulative Percent
	AUS	2	3.1	3.1	3.1
	BEL	2	3.1	3.1	6.2
	CHE	4	6.2	6.2	12.3
	CZE	1	1.5	1.5	13.8
	DEU	14	21.5	21.5	35.4
	DNK	1	1.5	1.5	36.9
	FIN	2	3.1	3.1	40.0
	FRA	7	10.8	10.8	50.8
	GBR	8	12.3	12.3	63.1
	GRC	1	1.5	1.5	64.6
	NLD	3	4.6	4.6	69.2
	RUS	14	21.5	21.5	90.8
	THA	2	3.1	3.1	93.8
	USA	3	4.6	4.6	98.5
	ZAF	1	1.5	1.5	100.0
	Total	65	100.0	100.0	

Pie chart no. 4 **What is your gender?**

Q.21 Gender (1=male,2=female)

40.00% 60.00%

- male
- female
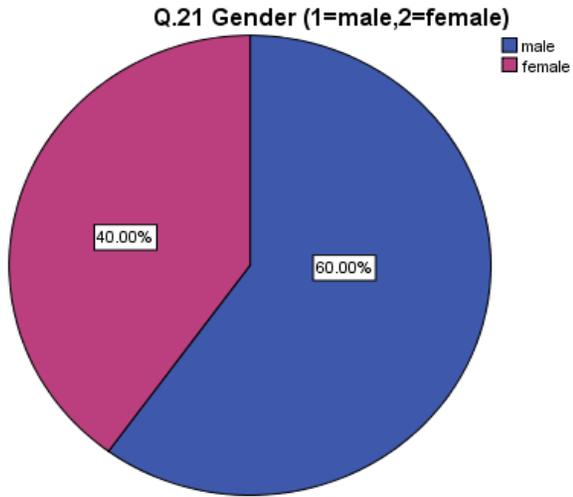
Frequency table no.18 **What is your age?**

Q.22 Age		Frequency	Percent	Valid Percent	Cumulative Percent
	18-29	25	38.5	38.5	38.5
	30-49	25	38.5	38.5	76.9
	50-64	12	18.5	18.5	95.4
	65 or older	3	4.6	4.6	100.0
	Total	65	100.0	100.0	

Other information

Pie Chart no. 5 **How many nights will you spend on this holiday / trip on Koh Chang?**

Q23. How many nights?
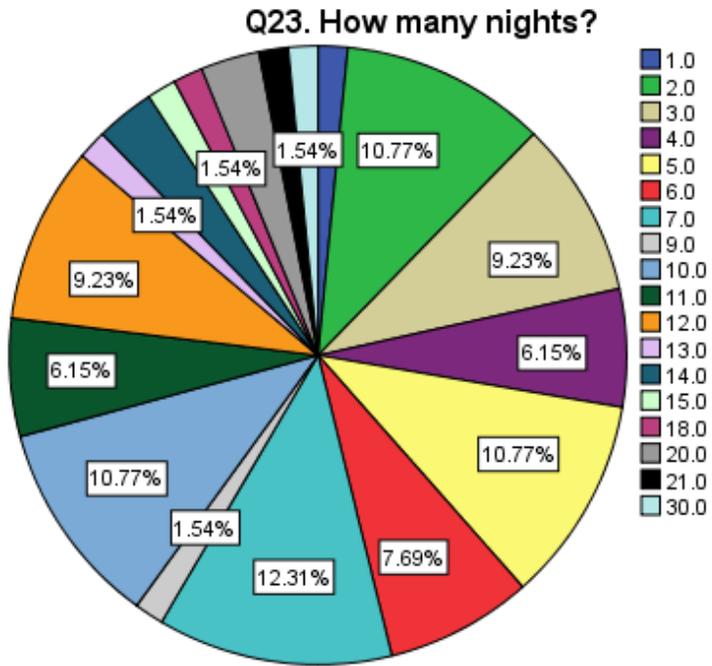
Pie Chart no. 6 **What is the price of your hotel room per night? (Baht)**

Q24.Price hotel per night.

1000.0	2900.0
1100.0	3000.0
1200.0	3300.0
1445.0	3350.0
1500.0	3500.0
1600.0	3800.0
1630.0	4000.0
1700.0	4200.0
2000.0	4500.0
2100.0	4900.0
2200.0	5000.0
2300.0	5700.0
2500.0	6000.0
2600.0	6200.0
2700.0	40000.0
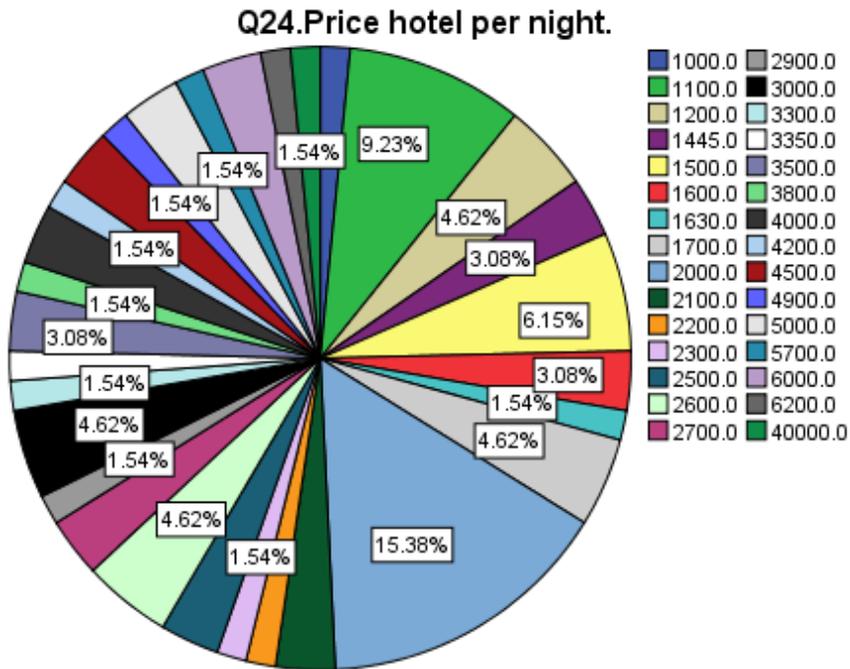
Cross- tabulations

Q4. I am concerned about environmental issues plotted against Q5. During holiday I am less environmentally friendly than at home

		Q5. During holiday I am less environmentally friendly than at home (1-5)					Total
		Not at all	Little	Neutral	Quite a bit	A lot	
Q4. I am concerned about environmental issues (1-5)	Not at all	2	1	0	0	1	4
	Little	5	1	2	1	0	9
	Neutral	4	1	3	3	0	11
	Quite a bit	14	5	5	3	1	28
	A lot	8	2	1	2	0	13
Total		33	10	11	9	2	65

Q4. I am concerned about envirornmental issues plotted against Q6. I make an effort to be environmentally friendly on holidays

		Q6. I make an effort to be environmentally friendly on holidays (1-5)					
		Not at all	Little	Neutral	Quite a bit	A lot	Total
Q4. I am concerned about envirornmental issues (1-5)	Not at all	1	1	0	1	1	4
	Little	0	2	2	1	4	9
	Neutral	0	2	5	3	1	11
	Quite a bit	1	4	5	8	10	28
	A lot	1	2	2	1	7	13
Total		3	11	14	14	23	65

Q4. I am concerned about envirornmental issues plotted againts Q16. Accommodation with green cert.

		Q16. Accommodation with green cert. (1=yes, 2=no)		
		yes	no	Total
Q4. I am concerned about envirornmental issues (1-5)	Not at all	4	0	4
	Little	7	2	9
	Neutral	10	1	11
	Quite a bit	25	3	28
	A lot	12	1	13
Total		58	7	65

Q4. I am concerned about envirornmental issues (1-5) plotted against Q.17Willing to pay extra

		Q.17Willing to pay extra (1=yes, 2=no)		
		yes	no	Total
Q4. I am concerned about envirornmental issues (1-5)	Not at all	2	2	4
	Little	3	6	9
	Neutral	5	6	11
	Quite a bit	18	10	28
	A lot	8	5	13
Total		36	29	65

Q6. I make an effort to be environmentally friendly on holidays (1-5) * Q16. Accommodation with green cert. (1=yes, 2=no)

		Q16. Accommodation with green cert. (1=yes, 2=no)		
		yes	No	Total
Q6. I make an effort to be environmentally friendly on holidays (1-5)	Not at all	3	0	3
	Little	10	1	11
	Neutral	13	1	14
	Quite a bit	13	1	14
	A lot	19	4	23
Total		58	7	65

Q6. I make an effort to be environmentally friendly on holidays (1-5) * Q.17Willing to pay extra

		Q.17Willing to pay extra (1=yes, 2=no)		
		yes	No	Total
Q6. I make an effort to be environmentally friendly on holidays (1-5)	Not at all	2	1	3
	Little	3	8	11
	Neutral	6	8	14
	Quite a bit	9	5	14
	A lot	16	7	23
Total		36	29	65

Q5. During holiday I am less environmentally friendly than at home (1-5) * Q16. Accommodation with green cert.

		Q16. Accommodation with green cert. (1=yes, 2=no)		
		yes	No	Total
Q5. During holiday I am less environmentally friendly than at home (1-5)	Not at all	28	5	33
	Little	10	0	10
	Neutral	9	2	11
	Quite a bit	9	0	9
	A lot	2	0	2
Total		58	7	65

Q5. During holiday I am less environmentally friendly than at home (1-5) * Q.17Willing to pay extra

		Q.17Willing to pay extra (1=yes, 2=no)		
		yes	no	Total
Q5. During holiday I am less environmentally friendly than at home (1-5)	Not at all	18	15	33
	Little	4	6	10
	Neutral	5	6	11
	Quite a bit	7	2	9
	A lot	2	0	2
Total		36	29	65

Q4. I am concerned about envirornmental issues (1-5) * Q.22 Age (1=< 18; 2=18-29;3= 30-49;4= 50-64; 5=65 >)

		Q.22 Age (1=< 18; 2=18-29;3= 30-49;4= 50-64; 5=65 >)				
		18-29	30-49	50-64	65 or older	Total
Q4. I am concerned about environmental issues (1-5)	Not at all	3	0	0	1	4
	Little	4	3	2	0	9
	Neutral	3	6	2	0	11
	Quite a bit	11	13	4	0	28
	A lot	4	3	4	2	13
Total		25	25	12	3	65

Q4. I am concerned about envirornmental issues (1-5) * Q.21 Gender

| | | Q.21 Gender (1=male,2=female) | | |
		male	female	Total
Q4. I am concerned about envirornmental issues (1-5)	Not at all	3	1	4
	Little	4	5	9
	Neutral	5	6	11
	Quite a bit	17	11	28
	A lot	10	3	13
Total		39	26	65

Q6. I make an effort to be environmentally friendly on holidays (1-5) * Q.22 Age (1=< 18; 2=18-29;3= 30-49;4= 50-64; 5=65 >)

| | | Q.22 Age (1=< 18; 2=18-29;3= 30-49;4= 50-64; 5=65 >) | | | | |
		18-29	30-49	50-64	65 or older	Total
Q6. I make an effort to be environmentally friendly on holidays (1-5)	Not at all	3	0	0	0	3
	Little	6	5	0	0	11
	Neutral	4	7	3	0	14
	Quite a bit	5	6	2	1	14
	A lot	7	7	7	2	23
Total		25	25	12	3	65

Q6. I make an effort to be environmentally friendly on holidays (1-5) * Q.21 Gender

		Q.21 Gender (1=male,2=female)		
		male	Female	Total
Q6. I make an effort to be environmentally friendly on holidays (1-5)	Not at all	2	1	3
	Little	7	4	11
	Neutral	9	5	14
	Quite a bit	6	8	14
	A lot	15	8	23
Total		39	26	65

Q16. Accommodation with green cert. (1=yes, 2=no) * Q.22 Age (1=< 18; 2=18-29;3= 30-49;4= 50-64; 5=65 >)

		Q.22 Age (1=< 18; 2=18-29;3= 30-49;4= 50-64; 5=65 >)				
		18-29	30-49	50-64	65 or older	Total
Q16. Accommodation with green cert. (1=yes, 2=no)	yes	21	24	10	3	58
	no	4	1	2	0	7
Total		25	25	12	3	65

Q16. Accommodation with green cert. (1=yes, 2=no) * Q.21 Gender

		Q.21 Gender (1=male,2=female)		
		male	female	Total
Q16. Accommodation with green cert. (1=yes, 2=no)	yes	36	22	58
	no	3	4	7
Total		39	26	65

Q.17Willing to pay extra (1=yes, 2=no) * Q.22 Age (1=< 18; 2=18-29;3= 30-49;4= 50-64; 5=65 >)

| | | Q.22 Age (1=< 18; 2=18-29;3= 30-49;4= 50-64; 5=65 >) | | | | |
		18-29	30-49	50-64	65 or older	Total
Q.17Willing to pay extra (1=yes, 2=no)	yes	15	11	7	3	36
	no	10	14	5	0	29
Total		25	25	12	3	65

Q.17Willing to pay extra (1=yes, 2=no) * Q.21 Gender

| | | Q.21 Gender (1=male,2=female) | | |
		male	female	Total
Q.17Willing to pay extra (1=yes, 2=no)	yes	23	13	36
	no	16	13	29
Total		39	26	65