



Erasmus+

North Iceland Culinary Experience: Innovate, Develop, Taste!

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NICE -North Iceland Cuisine ZERO Waste initiatives with Local Food

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Introduction

Travel and Tourism's impact on the economic and social development of a country can be enormous; opening it up for business, trade and capital investment, creating jobs and entrepreneurialism for the workforce and protecting heritage and culture.

Key Iceland statistics from World Travel and Tourism Council (WTTC) 2015 Annual Research

Total contribution of Travel and Tourism to GDP was 23.3% of total GDP in 2014.

In 2014 Travel and Tourism supported (direct and indirect employment) 42 000 jobs being 23.7% of total employment.

Visitors accounted for 20.5 % of all exports.

Source: WTTC Travel & Tourism Economic Impact 2015, Iceland

As tourism is an open industry it is subject to political, social, environmental and technological changes and trends to which it must respond. In the case of Iceland, the fall out from the financial crisis in 2008 and 2010 eruption of Eyjafjallajökull are poignant reminders of some of the recent challenges facing the tourism sector.

In the 2012 PKF research report comments:

“With regard to food, the main issue was around promoting the quality and variety available throughout Iceland. Again, the cost of food was of concern to some interviewees”. (p.14)

The Icelandic Tourist Board carried out a survey with 2,359 visitors during summer 2011 and with 2,181 visitors during the 2011/12 winter season. In summary, the results of the summer survey suggested that the main purpose of visit recorded was vacation/holidays at 86.3% followed by meetings, incentives, conferences and exhibitions (MICE) at 13.3% and visiting friends and relatives (VFR) at 6.2%. The winter pattern was similar apart from a slight increase in the number of MICE visitors at 16.5% and business visitors at 4.5%.

There was a high number of returning visitors both during the summer and winter. In summer 79.6% of those interviewed came on an individually arranged trip compared with 67.8% during the winter. During the summer 10.2% were part of a package tour whereas in winter the figure was slightly higher at 17.6%. The remaining 10.2% (summer) and 14.6% (winter)

According to Horng and Tsai (2012) culinary tourism and food tourism represent an emerging tourism market for many countries and creates a unique competitive edge for tourist destinations and related enterprises.

The potential for using a zero waste approach to create competitive advantage and as a sustainable practice is the focus of this case study report.

Defining Zero Waste (ZW)

A number of definitions exist for zero waste. Each definition does however share a focus on sustainable waste management and comprehensive use of resources.

Cole et al (2014) defined ZW as “an aspirational end process where all waste that is produced is reused or recycled as a resource without the need for any landfill or energy recovery”

In their research, Curran and Williams (2012), recognise that Zero Waste utilises a range of measures aimed at eliminating waste and challenging conventional ways of thinking, seeing waste as a resource with value, rather than a problem. This is very much the guiding principles for the case study investigations undertaken in this report in North Iceland.

Case Studies visits – data collection



In terms of data collection a number of site visits were undertaken to observe best practice. There was the opportunity to interview and question representatives from each of the organisations where the primary data collection was undertaken.

In terms of waste management and zero waste three questions were designed to elicit a consistency of responses from each of the case study establishments, these being:

1. Do you separate waste (to get measure of awareness of waste, and probe understanding of the term “waste”
2. Examples of best practice in dealing with waste
3. Do you know how much your waste costs you?

The findings from this data collection is summarised below, under the name of the organisation:

Summary of findings

Kaffi Ku

There is recycling of bale plastic, other than this response, evasive.

Slurry washed into slurry put and then used as fertiliser on grass.

Unsure of carcass waste, once slaughtered. Unsure if all meat used.

Farm does use barley mash waste from brewery.

No evidence of best practice.

No evidence given on waste costs. Fair to assume no attempt at quantification.

Skjaldarvik Guest House



A design led establishment.

Led and managed by a very switched on entrepreneurial owner, whom has a background in graphic design.

Does not own the property, this is leased. If the property was to go on open market there is a fear that this would result from community (old hospital). Go out of current lease holders hands as investor would buy their ideas.

Book donations from local library – and used in aspects of signage around the guest house, and windows, and bedside tables.

Stopped using commercial laundry, now in-house

Re-using bread waste by making into bread sticks.

Lefty over items from breakfast service is the basis for staff feeding.

An admirable approach to waste management and innovation, borne out of necessity.

Owners quote “bin is your enemy”. Struck a chord with the group and has not often been quoted.

Aiming to reduce food miles, growing tomato and cucumber in polyurethane tunnels.

Up-cycling redundant furniture from friends and family.

Banquette seating made from recycled suits.

“the best way to train a horse is with a knife and fork” Buying horse on price considerations, although horse riding as an experience is offered to tourists.

Home grown ingredients for cooking. Then a small number of suppliers for food items like potatoes and fish.

Vogaþgos (Cow Shed restaurant – with lunch)





Cow shed presentation of animals, and work to reduce cow odours more impressive than Kaffi Ku. Cattle seem happy, and on visit were let out. Stalls seen as clean and painted. Tourists able to walk into bespoke cattle shed entrance.

This outlet has been so busy during the season that not able to produce own brand food items for sale in shop, and all used in feeding customers. They produce their own ice-cream.

Cooking with geo-thermal bread, make puddings.

Shed smoking legs of lamb.

Local radius of buying local food, kale, tomatoes.

Tourism again to save the farm.

Asrticus Sea Products

Dried fish crisps, snack items, claimed to be unique on the market. Using a waste to create their own food offering.

Young entrepreneur showed the party around.

Say finished product, not process.

Waste fish used.

Their waste, the fish heads to Nigerian fish soups.

Embronic stage of business, plenty capacity.

Using geo-thermal to do the drying of the fish.

Contact package for other companies.

The Great Fish Day – a presentation delivered as part of NICE seminar, Dalvik

Lots of waste in terms of polystyrene and plastic being given away.

No evidence of re-cycling

EKTA Fiskur

On visit presented with a shark being cut up, which was caught in error by trawler, so would have been lost and wasted.

Owner found to be very entertaining, and a great ambassador for Iceland. Evidence of entrepreneurial development, with the owner building a restaurant to use straight away in seated area cafe.

Traditional tourism thinking that an industrial harbour area, as is the case here, would sit uneasily with tourism development. In theory the two industries are kept apart. Bits of fish left over were shipped off to other companies, as per the dried fish snack company, the waste, fish heads, to another company to produce the material to allow fish soup to be reconstituted for Nigerian soup.

Kaldi Micro-brewery (family run Beer Company)



By-products are being sent out to sea. Down mains pipes, this appears to be without treatment before being flushed away.

Mash was given away to farmers for cow feed. This is normal and valuable to use as feed.

Fish Farm at Hollar

Very low waste organisation.

Using glacier water, fish faeces collected and then spread onto soil.

No antibiotics used.

No heat going in, conversation very efficient.

Fish able to live at a low temperature.

The Tannery Centre



An entrepreneurial business that recognised a market opportunity based on waste from food companies.

Business based on other peoples waste, as owner quoted “garbage from food industry”.

Specifically lamb, fish and cows.

98% of sales overseas to companies like Gucci, and Dior. Treated skins are sold.

The challenge was to perfect a system to extract fish skins. This was achieved and fish skin products joined the portfolio in 1991. This company is the only fish tanning company in Europe.

Shop sells the skin items and also products made my local Icelandic cottage industry. Skins are their main sales items though.

This business is a certified eco-green organisation. Established in 1985, and the only one in Iceland.

Wool is sold on.

No geo-thermal heat used.

Question mark over the water treatment. The company uses water 4-5 times, and “grinds” down all water used and dye, prior to being sent to sea.

Even re-using old buildings, brought to the site from former airfield. While this is a great boast, in reality these are poor buildings, which without geo-thermals would not be easy to heat, and are likely to be very inefficient.

Conclusions

At a presentation by VisitNorthIceland, in Akureyri the importance of tourism to economy was communicated.

There was evidence throughout the case study visits in North Iceland that the host community are embracing tourism, which allied to the Icelandic innovative spirit has resulted in business diversification. This is exemplified by the visits to: Kaffi Ku and Vogafjos restaurant, where the organisations have diversified into restaurant and retail operations from their core activity. T

There is a need, and demand for water being used for cleaning for dairy, tannery, fish and beer businesses. While the Tannery visited is eco accredited, there is still a question mark over the water waste products, and there disposal.

Returning to the guiding light of this study; Curran and Williams (2012), recognising that Zero Waste utilises a range of measures aimed at eliminating waste and challenging conventional ways of thinking, seeing waste as a resource with value, rather than a problem, key conclusions can be drawn:

in North Iceland this philosophy is being embraced, specifically:

- Skjaldarvik Guesthouse has used waste in various guises to add value to the guesthouse product offering. The books, suits, and food waste items are used as resources. These resources help differentiate the guesthouse and deliver competitive advantage.
- The industry as a whole has moved to embrace zero waste in relation to fish production. There is virtually zero waste in fish farming evidenced at Hollar University. In terms of maximising the gain from fish production, Icelandic processes have moved from close to 50%, to using 99% of the fish, which includes examples discussed on the visit: fish skins being converted to high quality fashion materials at the Tannery, dried fish snacks being produced at two companies visited, and fish heads being dried and sent to Nigeria to be used as soup.
- by-products from the brewing industry are being used by the cattle farmers.

Recommendations

Work with re-cycling companies to ensure both organisations win. Provision of the right receptacles will increase re-cycling.

Water treatment needs to be investigated. Water being flushed away, needs to be investigated, although guidelines may be in place.

Great Fish Day could more effectively embrace re-cycling as part of the event: separation, charge the carrier bags, and move away from polythene and plastic containers. Consider the model of the German Beer Festival in Birmingham, where a deposit is taken for a beer glass to be used throughout the stands, at the end of the event, either return for deposit to be returned, or attendee keeps. At the Great Fish day themed crockery plates could be used taking the same principle of return or keep.

Taking Curran and Williams (2012), view of recognising that Zero Waste utilises a range of measures aimed at eliminating waste and challenging conventional ways of thinking, seeing waste as a resource with value, rather than a problem chefs and kitchens in Iceland and throughout Europe are encouraged to embrace a menu planning approach that:

- limits the choice, short menus if you like. Here the customer trusts the chef to deliver a dish and unusual taste. Waste is reduced with short menus.
- work closely with suppliers. Buy the ingredients that are recommended as fresh, and good value on the day.
- buy the ingredients/cuts that are not widely being used, this allows creativity in the kitchen, keeps the cost down, and reduces waste.

References

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