Tourism Concern
research briefing

Cruise tourism – what’s below the surface?
Research briefing 2016 • Helen Jennings, Kai Ulrik & Peter Bishop

Introduction

Whether it’s travel by river boat on the Rhine or aboard one of the gigantic ships that ply the Caribbean, cruise tourism is becoming ever more popular. But is this form of tourism ethical and sustainable? Does it bring real benefits to local communities in the places visited?

According to Cruise Market Watch, fewer than 4 million passengers worldwide went on cruises in 1990, over 7 million in 2000, and over 18 million in 2010. By 2020 numbers are projected to increase to more than 25 million, with nearly 60% of passengers from USA and around 25% from Europe. The industry regards this growth as a success, but elsewhere there is mounting concern about the damaging impacts of a sector growing so rapidly.

Questions raised include:

• How much economic benefit do passengers bring to the destinations they visit, as on board spending demands and incentives increase?
• What are the environmental impacts of cruise ships visiting sensitive marine environments? And how is the huge quantity of waste generated during such cruises dealt with?
• With many larger ships registered in countries where there is limited legal protection for employees, how are cruise workers treated?

This report presents findings from desk-based research aimed at answering these questions, particularly in relation to mass market cruise tourism.

A short history

The earliest ocean-going vessels were not primarily concerned with passengers, but rather with the cargo that they could carry. By the mid-1850s, however, ships began to add a range of luxuries in order to cater for passengers. Although often luxurious, ocean liners nonetheless had shortcomings – such as a lack of passenger space – that made them unsuitable for cruising.

Superliners – massive purpose-built floating hotels designed to address these shortcomings – first appeared in the early twentieth century, making the 1920s and 1930s an era of glamorous trans-Atlantic travel. These journeys ceased during World War II, and the advent of air travel after the war dampened the revival of cruises. But from the 1960s, 'fun' vacation cruises increased dramatically, particularly in the Caribbean and the Mediterranean. The extravagance and luxury of cruise packages, often for seemingly bargain prices,* have brought increasing numbers of customers since, with an estimated 2100% growth since 1970

* Many cruise lines now have a more resort-like fare structure, with low up front prices masking the a la carte purchases which increase the real costs on board.
The extent of the economic benefit brought to a particular destination by cruise tourism is debatable. In theory visiting passengers buy food, souvenirs and local tours at ports on their cruise. In practice, however, cruise companies can limit the time spent ashore, and also encourage passengers to buy goods on board. The Cruise Lines International Association (CLIA) state that cruise lines generated nearly 1 million jobs in 2014 and contributed nearly $120 billion (£85 billion) to the global economy (CLIA, 2016/1). However, the majority of local businesses do not share the economic benefits. And, even when purchases are made ashore, there can be agreements between cruise companies and bigger local businesses which effectively shut out smaller concerns.

Many of the larger cruise ships run their own ‘ship economies’ providing floating hotels that satisfy most of the eating, drinking and even shopping needs of the passengers. Ships can carry all the supplies they need on board and often do so even where local food is easily available. Costa Rica, for example, is one of the biggest Caribbean exporters of bananas and other tropical fruits, yet scarcely sells any to the many visiting cruise ships (Tourism Concern, 2015).

Even in the places where local produce is bought by the ships, prices paid are kept to the minimum by the bargaining power of the companies. Passengers may also be given incentives to purchase tickets for tours ashore whilst still on board. These can include money back vouchers which, ironically, are only able to be spent on board! According to Brida & Zapata (2015) more than 50% of shore-based activities are sold on board by the cruise companies, with local operators only receiving 25% to 50% of the full price. The same local operators are also forced to pay high prices to advertise their tours on board. Those that can afford to compete in this way tend to be the bigger local companies.

Mexico, in an effort to gain a little more from cruise tourism, is attempting to request a levy of $5 per passenger (Brida, 2015). Many other destinations though are so highly dependent on cruise tourism that their ability to negotiate reasonable terms of trade is restricted. The economic value of cruise ships to governments and port authorities, especially in small island states, creates competition for their visits which can lead to the lowering of taxes and the relaxing of regulations, further reducing the benefits to local people of cruise visit (Kingston, 2006).

Floating tax havens and flags of convenience
Just as there are problems tracking the financial affairs of cargo ships sailing under ‘flags of convenience’, so there are also concerns with cruise liners. Many
of the major cruise companies are ‘transnational’– circumventing national borders and manipulating local economies. (Robinson, 2003).

For example Royal Caribbean – the second largest cruise company in the world (see box opposite) – are based in Miami, Florida, and yet sail under a Liberian flag. The company does not offer cruises to anywhere in Africa, let alone to Liberia. However, the arrangement does mean that they pay very little in US taxes, which may have helped the founder to accrue a reported fortune of US$8 billion (Walker, 2012). It also means that Royal Caribbean is accountable only to the far less stringent labour and safety laws of Liberia, which has arguably led to worse rights and conditions of employment for staff on their ships. Such companies are effectively floating ‘transnational corporations’.

Host Resorts..... where?
Some companies are even creating their own ‘dream resort’ destinations: purchasing land, and even whole islands, in order to reap all the profits from passengers’ visits.

Royal Caribbean for years promoted a resort named ‘Labadee’ on the island of Hispaniola in the Caribbean. Labadee is actually in Haiti, an impoverished country that is plagued with natural disasters, political strife, and economic deprivation. Royal Caribbean rents a strip of the coastline from the government, and here passengers use their cruise ship cards to buy everything they will need. The landscape is exploited and the Haitian people are completely excluded from the economic benefits. It took a considerable amount of public outrage to even get the cruise line to accurately advertise Labadee as being in Haiti. Carnival Corporation is soon to follow in Royal Caribbean’s footsteps to create their own private resort on the Haitian coast (Tourism Concern, 2015).

The way cruise companies use their economic muscle to maximise profits raises numerous questions. Have transnational cruise companies become too powerful? Should there be more regulation on an international basis? To what extent is there fair competition? Do countries visited by cruise ships have any real power to claim a fair share of the profits of such tourism? (Klein, 2005).
Environmental impacts

‘Most travellers don’t realize that taking a cruise is more harmful to the environment and human health than many other forms of travel’

FOE, 2012 Cruise ship environmental report card.

Cruise tourism consumes millions of tons of fuel and produces almost a million tons of sewage and other waste each year. The Lighthouse Foundation, which supports ‘integrated and long-term approaches in the relationship between humans and the marine environment’, states that a one-week trip of an average Caribbean cruise liner generates about 50 tons of solid waste, 7.5 tons of liquid waste, 800,000 litres of sewage and 130,000 litres of grey water (Lighthouse Foundation, 2002).

Greenhouse gases (GHG) – Energy consumption & Carbon emissions

Despite improvements in the environmental standards of newly built cruise ships, old vessels still produce considerably more emissions per capita than other forms of travel. Quoted in the Guardian in 2006, the Climate Outreach Information Network estimated that the Queen Mary II was then emitting 0.43kg of CO₂ per passenger per mile. This is much more than long haul flight emissions – regarded as hugely detrimental to the environment – which they calculated to be 0.257kg. These huge emissions are due to ships expending energy on a wide range of on board facilities, including laundry, water treatment, refrigeration and air conditioning (Tourism Concern, 2014).

In 2008, Carnival’s own environmental report stated that its ships were releasing 712kg of CO₂ per kilometre on average, or about 0.4kg per passenger per kilometer (based on an average of 1776 passengers). This is 36 times greater than the carbon footprint of a Eurostar passenger, and more than three times that of someone travelling on a standard Boeing 747 (Telegraph 2008). Many passengers also fly to the departure point for their cruise, further increasing their carbon emissions.

Air pollution – particulate matter

Many cruise ships still burn cheaper bunker fuel – the remains of crude oil after gasoline and distillate fuel oils are extracted through refining. On average, bunker fuel has almost 2,000 times the sulphur content of highway diesel fuel and is therefore much more polluting to the environment (Klein, 2009).

When docking in port, diesel particulates, along with emissions of sulphur dioxide and nitrogen oxides, can have a devastating impact on the health of local people. Research has suggested that air pollution from the world’s 90,000 ships kills at least 60,000 people each year (Guardian 2009). Sulphur dioxide and nitrogen oxides are also major contributors to acid rain, which has acidified soils, lakes and streams, accelerated corrosion of buildings, and reduced visibility. The quality and age of a ship’s engine can significantly alter the level of air pollution emitted, however. From the late 1990s onwards some cruise ships have been using gas turbine engines which produce far less sulphur and nitrous oxide emissions (Klein, 2009).

Liquid waste – sewage, bilge oil and chemicals

WWF describes cruise ships as enormous floating towns which are a major source of marine pollution – through the dumping of garbage and untreated sewage at sea, and the release of other shipping-related pollutants (WWF, 2015).

Although cruise ships are required to have on-board waste treatment systems, they can lawfully release black water (toilet wastewater) anywhere beyond three miles from shore (Klein, 2009). A large cruise ship with 3000 passengers will generate 30,000 gallons of human waste a day (Tourism Concern, 2002). The U.S. Environmental Protection Agency (EPA) has found that many cruise ships treat sewage with old technology, and

‘Environmentally speaking… ocean travel can be a dicey proposition: every year, the industry consumes millions of tons of fuel and produces almost a billion tons of sewage. If insufficiently treated, exhaust and sewage from ships can fog the air and pollute the water, potentially causing a host of ugly environmental and health effects that undermine the very natural beauty that cruise ships advertise to potential travellers’

The Guardian, January 2015
resulting in discharge that often contains significant amounts of faecal bacteria, heavy metals, and nutrients in excess of federal water quality standards (Hill, 2015). Encouragingly, though, improvements in new cruise ships include advanced wastewater treatment systems (CLIA, 2016/2).

Many ships illegally discharge bilge oil (a mixture of water, oil, lubricants, and other pollutants that collect in a ship’s hold) before entering a port, as this is cheaper than disposing of it legally at the port (WWF, 2015). A typical cruise ship with 3000 passengers can produce 15 gallons of toxic waste and 37,000 gallons of oily bilge water every day. (Tourism Concern, 2014).

It is estimated that more than 300 million gallons of petroleum products reach the world’s oceans each year, and nearly one-third of this comes from marine transportation discharges unrelated to collisions and other accidents (Hill, 2015).

Oil destroys the insulating properties of a seabird’s feathers, allowing ice-cold ocean water to soak through to its skin causing the bird to suffer from hypothermia and starvation. Oil is also a poison that, when ingested, can kill through either liver damage or blindness.

A range of other chemical waste is generated by cruise ships – for example cleaning agents, chemicals for water treatment, and chemicals in refrigeration equipment. Some of these chemicals are toxic, persistent, and bio-accumulative (WWF, 2015).

**Solid waste – food waste, garbage and packaging**

Cruise ships also produce a large volume of ‘non-hazardous’ solid waste including plastic, paper, wood, cardboard, food waste, cans and glass (Klein, 2009). Cruise Forward claims that more and more such waste is being recycled (CLIA, 2016/2). Nonetheless, it has been estimated that every cruise ship passenger produces approximately 3.5 kilograms of rubbish daily, as opposed to 0.8 kilograms generated by people on shore (Tourism Concern, 2014).

Under MARPOL (the International Convention for the Prevention of Pollution from Ships), no garbage can be discharged within three miles of shore. Some cleaning agents and food waste can be discharged over 12 miles from shore. Food waste can also be ground up and discharged into the sea between three and twelve miles, although even this can damage water quality and alter ecosystems by providing habitats for opportunistic organisms (Klein, 2009). Since 2013, discharge of most other garbage has been completely banned.

Significantly, MARPOL does not have its own enforcement regime. Instead it depends on active enforcement by nations where the vessels are registered. It becomes meaningless if ships are registered in countries that are not signatories to MARPOL, and is at best weak even in signatory countries, given the inconsistent enforcement across different jurisdictions.

Solid waste and some plastics are also incinerated on board. Incinerator ash and air emissions from incinerators can contain furans and dioxins – both of which are carcinogenic.

**Damage to biodiversity and reef ecosystems**

Coral reefs are home to more than 25% of all known marine fish species. They provide essential spawning and nursery grounds, are a source of food, protect coastlines from erosion, provide jobs and income, and are a source of new medicines. It is estimated that reefs provide around US$30 billion each year in goods and services (WWF, 2015). According to Ocean Planet, of 109 countries with coral reefs worldwide, 90 have suffered damage from shipping anchors and waste discharge.

Jamaica and Florida, two major cruise destinations, provide shocking examples of how the industry can negatively impact on coral reefs. According to the Ocean Conservancy less than five percent of the reefs around Jamaica are now alive, compared to 60 percent in 1982. ‘In the Florida Keys, one of the Western Hemisphere’s largest reefs is under tremendous stress from the two and a half million visitors who come each year to fish, dive, and boat.’ About 90% of Florida’s coral reefs are believed to be dead.

In Grand Cayman, scientists report that more than 300 acres of coral reef have been lost to cruise ship anchors, whilst a Norwegian Cruise Line destroyed 80 percent of a coral reef when it went aground in a national park off Cancun, Mexico (The Ocean Conservancy, 2002).
Rights and working conditions

Thousands of people from all over the world are employed on cruise ships. Yet the legal framework within which the ships operate may mean that pay and working conditions are far worse than for equivalent jobs ashore.

For many employees, cruise ships appear to offer work which is simply an extension of the hospitality industry. However, despite recent CLIA claims that they ‘strive to provide a high-quality work environment for [their] crew members’ (CLIA, 2016/3), terms of employment are often far less favourable, and rights less clear, than for equivalent jobs ashore. For some, terms may be tied to a particular cruise rather than the company, and based on short rather than long term contracts. Rates of pay may also be lower than for similar work in hotels and restaurants ashore. Professionals on board – the captain and key members of the crew, medical staff, entertainers or specialist tour guides and lecturers, for example – will probably be better paid, but even they may only be hired for specific cruises (Coggins, 2014).

Workers on cruise ships often also face unfavourable working hours. Ships are floating hotels in which passengers have to be catered to at all hours. There is therefore little scope to escape from the demands of the job.

Flags of Convenience

Cruise ships undoubtedly offer employment opportunities to relatively poor and unskilled workers from all over the world. Inevitably this means that the crews and teams on any particular cruise are often ethnically, culturally, religiously and educationally extremely mixed. Unfortunately this leads to unequal rates of pay, poor treatment of certain minorities, and a lack of respect for rights and customs. There are also numerous reports of gender discrimination.

The captain’s word is frequently regarded as law on board ship, particularly as ships move in and out of different territorial waters with different legal jurisdictions. Fines and punishments may vary considerably for different ‘crimes’, and it can be impossible for unions to protect all workers in such circumstances. The registration of ships under the flags of different countries, each with its own employment laws, further exacerbates this.

Enforcement & Regulation

International maritime law is in theory well developed: it lays down rules regarding safety, labour requirements and rights, and on environmental matters. Whilst this should cover what happens in international waters, enforcement is in practice extremely challenging. Ships cruising around the globe are constantly entering and leaving territorial waters which have very different rules and conventions, as well as approaches to inspection and regulation. It is up to different countries and port authorities to ensure that legislation is effectively enforced (Lighthouse Foundation, 2002).

Flying a ‘flag of convenience’, as the term suggests, enables companies to register their ships in any country they like, allowing them to choose those that offer tax advantages as well less stringent regulation. Companies are able to recruit staff under less favourable terms and conditions, and are less accountable regarding safety. Many of the largest Cruise companies – including Carnival Corporation, Royal Caribbean, Star cruises and Disney – register in such countries, commonly Liberia, Panama or the Bahamas (Walker, 2015).

Working Conditions:

‘Many ships are a floating microcosm of the worst excesses
of globalisation. Long hours, poor pay and a culture of fear cast a dark shadow over the five star experience of passengers above deck’ (Celia Mather, 2002). Crew and other staff have few rights of appeal on board ship and conditions have been compared to the factory conditions of nineteenth century England. On the worst run cruise ships low wages, long hours, inadequate training, no job security and poor accommodation have been documented by Mather and others.

For workers in poorer parts of the world, the exploitation starts even before they board the ship. They may have to pay recruitment agency fees, take out loans, and cede many of their legal rights in the contracts that they sign, making them extremely vulnerable. Some even have their passports taken from them as a condition of working on board ship (Mather, 2002).

According to surveys carried out by the International Transport Workers’ Federation (ITF) in 2002, 95% of 400 employees questioned were working 7 days a week; over one third worked over 12 hours a day, while just under a third worked over 14 hours a day. No holiday pay was given and employees waited months for their next contract to start. Little to no sick pay was provided, maternity leave rights were non-existent, and women were sacked on discovery of a pregnancy (Mather, 2002).

Some countries have attempted to carry out inspections and enforce regulations pertaining to working conditions, and to levy fines. For example, Royal Caribbean International’s Oasis of the Seas was fined 600,000 euros for violation of Dutch labour laws when it docked in Rotterdam in 2014 (Walker, 2015). Unfortunately, with fierce competition to encourage cruise ships to visit, it may be easier for cruise lines to cut ports considered too punctilious from their itineraries, than to improve their compliance with local laws.

**Equal pay for equal work**

Many employees work long hours with little or no time off and for less than the minimum wage. According to the ITF, overtime work is poorly remunerated and wages range from just US$400 to US$700 per month, out of which they are expected to pay for their own uniforms’ (Tourism Concern, 2014).

In common with other hospitality and entertainment employment, workers’ remuneration is often made up of a basic salary supplemented by gratuities. This is rarely to the advantage of the employees.

In 2002 ITF and War on Want found that cruise ship employees from the more developed countries ‘enjoyed better positions, better wages and working conditions’ than those from elsewhere. This affected who was employed above deck and who was employed in the less salubrious conditions below deck. Sadly there are frequent reports of racial and gender discrimination, bullying and favouritism on cruise ships.

Women in particular are discriminated against. They are often employed in the most menial positions and there have been reports of sexual abuse of various kinds. A lawsuit brought against Carnival Cruises in 1999 revealed that 100 accusations of rape and sexual assault had been reported on their lines in just five years (Walker, 2015).

**Lack of unions**

Not until more countries ratify ILO Maritime Labour Conventions protecting the rights of seafarers will the situation be improved. A TV programme made for Channel 4 in 2012 highlighted how cruise lines restricted the rights of workers to engage in collective action (Tourism Concern, 2015). When 150 Indian crew members protested about low wages in 2012, they were dismissed by P&O, a subsidiary of Carnival, and prohibited from working on its ships again. (Walker, 2016). Quoting a spokesperson from the seafarers union, *The Guardian* says ‘it’s a shabby unacceptable practise to exploit cheap foreign labour...’ (Guardian, 2012).
Much of the pollution from cruise ships is preventable, and technology exists which can significantly mitigate many of the problems outlined in this report (see box opposite).

However, given the industry’s environmental record, it might be naive to expect cruise lines to self-regulate. Real change seems to require legal compulsion. Equally, sustained consumer pressure can encourage the strengthening of legal frameworks whilst also creating a business case for the industry to improve.

The issues described in this briefing extend beyond the jurisdictional powers of a single country. Cruise lines operate under international regulations and international maritime organisations have been seeking to address at least some of these challenges for some time. Some were even established for the purpose.

One such body is the International Maritime Organization (IMO) – a United Nations agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships. It seeks to provide the global regulatory framework for the shipping industry, and claims to champion energy efficiency, new technology and innovation, maritime education and training, security, traffic management and the development of infrastructure. As described in this report, MARPOL (the International Convention for the Prevention of Pollution from Ships), which was developed by IMO, has strengthened its recommendations in recent years. Further toughening is planned. For example, IMO plans to reduce the amount of sulphur allowed in ship fuel from 3.5% to 0.5% across the globe by 2020.

However, in common with other international regulators, they are criticised for being too slow to regulate, and serious questions persist about who oversees enforcement of the regulations.

Similarly there are conventions under both the International Labor Organization (ILO) and IMO to legislate safety, and support fairer working conditions. Notable conventions include the International Convention for the Safety of Life at Sea and the 2014 Maritime Labor Convention, that requires ‘the certification of seafarer’s working and living conditions.’ As with human rights and labor law generally, individual countries are responsible for holding cruise lines accountable to international requirements and standards. Unfortunately, it has proven virtually impossible to enforce domestic and international laws on cruise lines when they are in international waters.

There is surely an urgent need for greater transparency and regulation of the rights of workers on cruise liners.

Both as individuals considering a cruise holiday, and as supporters of campaigning groups, we should continue to press for more stringent regulation, improved transparency and evidence of compliance. Some progress has been made, much of which has come about in response to public criticism and environmental campaigning. The box (left) shows how lobbying in the US has led to some positive change, particularly regarding regulation of the onshore impacts of visiting ships.
Friends of the Earth (FOE) have been raising awareness about the environmental impacts of cruise ships for several years. Until recently they released a yearly Cruise Ship Report Card, using information from CLIA – the world’s largest cruise association – to grade a number of cruise lines on their commitment to sewage treatment, air pollution reduction, water quality compliance, and transparency (see www.foe.org/cruise-report-card). In 2014, however, CLIA stopped cooperating with FOE. They claimed that although it ‘supports the preservation of the oceans... [FOE’s report card] does not advance the public’s understanding in a meaningful or objective manner’. In an article in January 2015, The Guardian suggested that, although many of the cruise lines claim to publish their own sustainability reports, they fail to be completely transparent. Although claiming to comply with legal guidelines (on sewage dumping for example) these standards are 35 years old and, according to FOE, fail to reflect up-to-date understanding about protecting our oceans.

What you can do
Tourism Concern’s advice is simple: consider whether you should go on a cruise at all. Quite apart from the serious issues raised in this report, there is an abundance of worrying feedback from returning passengers and tourism watchdogs, including about the spread of sickness aboard, safety issues, hidden costs, and legal safeguards that are significantly lower than you might expect for an equivalent holiday ashore.

If you do decide to go, pick your cruise line carefully and avoid the worst violators. Think about how your money is being spent and the extent to which your cruise is benefiting the places you visit. Transparency about the way a company operates is a good indicator of whether a particular company is serious about its obligations. Check what flag the ships sail under and try to ask them searching questions about the issues raised in this report.

Remember those below deck and steer clear of any cruise line that has a record for mistreating its employees.

There are several useful websites out there to help you make an informed choice. The following are excellent references and quick reads: Ethical Traveler, Friends of the Earth, Responsible Vacation, Cruise Law News, and the Business and Human Rights Resource Center, which lists legal actions brought against companies. And of course, Tourism Concern has a wealth of information on traveling responsibly and sustainably.

Make sure your travel purchases benefit local people. Investigate the activities offered at cruise destinations and find out if you might be able to travel beyond resort limits.

International tourism can and should be a great force for good, broadening travellers’ horizons, fostering cultural exchange, and bringing economic development to destination countries. Demand more of the cruise line industry; there is a lot of room for improvement.

And if you do choose to go on a cruise please report back on anything you experience or observe which might add to our research.

Positive steps forward?
Significant improvements are being made to the environmental impact of some new cruise ships. There are reports suggesting that new vessels may reduce CO₂ emissions by as much as 90%, and NOX by 70%. Nonetheless, older ships continue to be used, or are being sold on to other companies.

Cruise Lines International Association (CLIA) have formed Cruise Forward, an information hub that aims to provide data about the industry’s systems of accountability, economic and environmental impact and commitment to the safety, health and wellbeing of guests and crew. They cite innovations including:

- Exhaust gas scrubber equipment to significantly reduce sulfur emissions.
- Energy-efficient engines that consume less fuel and reduce emissions.
- Paint coatings for ship hulls that can reduce fuel consumption by as much as 5%.
- Solar panels that capture clean energy for shipboard use.
- Technologies that allow ships to “plug in” at ports where shore power is available and further reduce fuel emissions.
- Energy-saving technologies such as LED lights, tinted windows, higher efficiency appliances, and windows that capture and recycle heat.
- Heat exchangers that recycle hot water to heat cabins, as well as water reclamation from various sources for non-potable uses.
- Recycled materials used during ship construction.

Source: www.cruiseforward.org