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Tourism Impacts

Evidence of Impacts on employment, gender, income

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Abbreviations

DFID	UK's Department for International Development
GATS	General Agreement on Tariffs
GDP	Gross Domestic Product
GHG	Greenhouse Gases
ILO	International Labour Organisation
UNEP	United Nations Environment Programme
UNWTO	United Nations World Tourism Organisation
WTTC	World Travel & Tourism Council

1 Introduction

1.1 Methodology

The paper, carried out under the DFID Economics and Private Sector Professional Evidence and Applied Knowledge Services (EPS-PEAKS) framework seeks to answer the question of:

Do we have clear evidence on tourism's impact on income, jobs, gender and the environment?

The report uses a mixture of quantitative data – of which the main sources were the World Travel& Tourism Council and the United Nations World Tourism Organisation – as well as academic literature and information from relevant websites, where available.

The report follows on from a previous EPS-PEAKS helpdesk which investigated the impacts of tourism strategies for poverty reduction in South Asia, hence it includes some examples (where data and case studies were available) of the impacts of tourism, on the above factors, within the region.

Issues with the reliance on the use of WTTC indicators (see Annex 1 for further explanations on the WTTC methodology for evaluating impact) for a number of economic estimators is a potential cause of concern for the methodology as it was not apparent whether the data coefficients used by the WTTC, especially for the indirect and induced impacts of tourism on GDP and employment clearly represent actual impacts. Environmental indicators for tourism also present a challenge in terms of their reliability and availability.

1.2 Summary of Findings

Tourism impacts economies through **three interrelated routes i.e. direct, indirect and induced** effects. These impacts and the structure of the tourism sector determine the sectors economic impact on a country.

The impact of tourism on both economic **growth** and **employment** is clearly positive, there is good quantifiable data and evidence that tourism positively contributes to both economic growth (through measures of GDP) as well as on employment, both directly and indirectly.

Estimating tourism's overall impact on **incomes** is problematic due to limited evidence on income and wage effects at the global level. Overall, available data shows positive impacts on incomes as well as positive impacts on both **livelihoods** and **poverty**.

Good data on the **gender** impacts of the sector are limited to the number of females employed in tourism and the types of work they undertake, both showing positive impacts. Data on pay equality and working hours is more limited, but both show that females are disadvantaged within tourism.

The **environmental impacts** of tourism are difficult to quantify – whilst data on emissions is available (albeit old), there is limited data on other environmental impacts. Anecdotal evidence does however suggest that tourism can have negative environmental impacts.

2 Impacts of Tourism on Growth, Employment, Income & Livelihoods

The section highlights the economic impacts of the tourism sector, looking at its contributions to growth, employment and incomes. The section first looks at the three routes through which tourism achieves its impacts i.e. the direct, indirect and induced impacts, subsequently assessing its impacts on employment and on incomes.

Economic Impacts of Tourism

Tourism has direct, indirect and induced impacts on local economies, these can often be largely divergent between countries, based on the structure of the sector but most importantly on how well linked tourism activities are with the local economy. Greater linkages generally translate into higher levels of local economic activity (and growth), which tend to occur when tourism enterprises source their goods and services (including labour) locally whilst low levels of economic linkages occur where tourism enterprises are dependent on imports (including staff) to supply their demands. The overall impacts of the sector are the sum of the direct, indirect and induced effects (WTTC, 2012a):

- **Direct Impacts**: Represents the GDP generated by activities that directly deal with tourism such as hotels, travel agents, airlines and tour operators as well as restaurants and other activities that cater to tourists.
- **Indirect Impacts**, impacts which accrue due to the activities undertaken by the sector, and are a function of three different factors:

1. **Capital Investment in tourism:** Includes capital investment within all sectors that are directly involved in the tourism industry as well as spending by enterprises in other sectors on tourism assets such as transport or accommodation.
2. **Government Spending for Tourism:** Government spending to support the tourism sector, which can include both national and local spending. Activities include tourism promotion, visitor services, administration etc.
3. **Supply Chain Effects:** These represent the purchase of domestic goods and services, as inputs to the production of their final outputs, by enterprises within the tourism sector.

- **Induced Impacts**: Represents the wider contribution of tourism through the expenditures of those who are directly or indirectly employed by the tourism sector.

Table 1 (below) shows the different components of the direct, indirect and induced impacts of tourism on an economy. The table highlights the different activities that are undertaken at the three levels of impact i.e. direct impacts will be accrued through the activities of accommodation or tourism transport services, indirect contributions through expenditure on food and beverage suppliers to tourism enterprises, whilst induced impacts will be the expenses of people working in the tourism sector (or benefitting from the sector) within the local economy.

Table 1: Components of Direct, Indirect & Induced tourism contribution to GDP

Direct Contribution of Tourism	*Industries*	• Accommodation Services • Food & Beverage Services • Retail Trade • Transportation Services • Cultural, Sports & Recreational Services
	Commodities	• Accommodation • Transportation • Entertainment • Attractions
	Sources of Spending	• Resident's Domestic Spending • Business Domestic Travel Spending • Visitor Exports • Individual Government Tourism & Travel Spending
Indirect Contribution of Tourism		• Private tourism investment spending • Government collective tourism spending • Impact of Purchases from Suppliers
Induced Contribution of Tourism (spending of direct and indirect tourism employees)		• Food & Beverages • Recreation • Clothing • Housing • Household Goods

Source: WTTC (2012)

The table does not take into account other effects which can cross boundaries i.e. that can be direct, indirect and induced depending on who undertakes them. For example, government taxes paid by tourism enterprises will be a direct impact of the sector; however taxes paid by tourism employees will be induced impacts. Similarly, in-country tourist expenditure will have both direct and indirect impacts as the money follows the tourism supply chain.

Using examples at the sub-regional level (table 2 below for South Asia in 2013) and at the regional level (table 3 below) for the Gross Domestic Product (GDP) impacts of tourism, both direct and total, we can see that indirect impacts on GDP are, in nearly all cases, twice as high as direct impacts. This signifies that tourism is not just important for its direct contributions but, potentially, also through its links to other economic activities and other sectors of the economy as the direct impacts spill-over into other productive sectors.

Table 2: Direct & Total GDP Contribution of Tourism in South Asia, 2013

Country	Direct Contribution of Tourism to GDP (%)	Total Contribution of Tourism to GDP (%)
Bangladesh	2.1	4.3
India	2.0	6.1
Maldives	47.7	94.0
Nepal	3.8	8.2
Pakistan	3.0	7.0
Sri Lanka	3.9	9.3
Average	2.9	9.5

Source: WTTC (2014)

Globally (table 3 below), the direct impacts of tourism on GDP range from 2.6% contribution to GDP (in both Sub-Saharan Africa and in Northeast Asia) up to 5.6% (in North Africa). Total GDP contribution ranges from 6.4% in the Middle East up to 13.9% in the Caribbean. What is interesting is that the total GDP impacts of tourism are (on average) nearly three times as large as direct impacts whilst the range is not particularly large i.e. from a 2.2 multiple in North Africa to a 3.9 multiple in Oceania. This could be attributed to the depths of tourism linkages in the economy i.e. where links are greater, total impacts would also be larger.

A study by Mitchell & Martins (2012) highlights examples where links are strong (i.e. Mauritius and Morocco) and where they are weak (Cape Verde & Seychelles). Such links are especially important where tourism destinations offer high value products as stronger links equate to greater impacts. The data below suggests that regions such as Oceania may have higher linkages (perhaps due to their remoteness and greater need for self-reliance (as transport costs are higher), whilst regions such as North Africa (where transport links are stronger) have weaker links. Alternatively they could reflect the set-up of tourism industries i.e. regions more reliant on all-inclusive resorts may have weaker links than regions where the tourism sector is more integrated in local areas.

Table 3: Table 1: Direct and Total Effects of Tourism on GDP, 2013

Region	Direct Contribution of Tourism to GDP (%)	Total Contribution of Tourism to GDP (%)	Ratio of Total to Direct Impacts
Caribbean	4.3	13.9	3.2
Europe	3.0	8.6	2.9
Latin America	3.2	8.8	2.8
Middle East	2.4	6.4	2.7
North Africa	5.6	12.1	2.2
North America	2.7	8.4	3.1
Northeast Asia	2.6	8.5	3.3
Oceania	2.8	10.8	3.9
South Asia	2.9	9.5	3.3
Southeast Asia	5.0	12.2	2.4
Sub-Saharan Africa	2.6	6.9	2.7
Average	3.4	9.6	2.9

Source: WTTC (2014)

The data from the WTTC lacks information on the indirect impacts of tourism on growth. Vellas (2011) discusses the importance of these indirect impacts of tourism within T20 countries[1], where the indirect impacts of the sector account for 45% of tourisms contributions to GDP. The analysis highlights that indirect impacts are stronger where domestic tourism is more prevalent as well as in countries which have developed a high-value tourism sector. Vellas (2013) provides a breakdown of tourism contributions to GDP, both direct and indirect (as well as total contributions) and shows that indirect contributions can range from around 1.6% (in India) up to 6.9% (in Australia). Hence, the sector can make a significant contribution to growth, provided that investment to support the sector (such as transport infrastructure, clean water, waste treatment) occurs.

Steck (2010) explains that the direct impacts of tourism affect the wider economy through six main channels:

- Employment Creation: Tourism activities generate employment through a number of avenues i.e. hotel staff, tour operators, cooks etc.
- Supply of Goods & Services: Local or national enterprises can supply goods and services to tourism businesses, such as food or furniture, however these items may also be imported if the local provision does not satisfy demand in either terms of cost, quality or quantity.
- Direct Sales of Goods & Services: Retailers in tourist destinations can sell their products and services directly to tourists (i.e. souvenirs or food), directly capturing the monetary gains of tourist activity.
- Establishment of Tourism Enterprises: High (or increasing) levels of tourism activity can lead to the establishment of new tourism enterprises, creating new employment opportunities etc.

[1]The T20 is an initiative set up by the UNWTO which includes: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Republic of Korea, Republic of South Africa, Russia, Saudi Arabia, Turkey, United Kingdom, United States of America, European Union & Spain (Permanent invitee)

- Tax & Levy Generation: Tourism enterprises contribute to national income through taxes, whilst tourists can (and are often) be directly taxed, such as through visa's, further generating revenues for national or local governments.
- Investment in Infrastructure: As the tourism sector expands its requirements on local infrastructure will increase, which in turn pushes investment in infrastructure either by private actors or by the public sector.

Employment

Turner & Sears (2014) state that the travel and tourism sector is a leading creator of employment throughout the world, directly employing more than 98 million people (by 2013) and representing around 3% of total world employment, and indirectly creating one out of every eleven jobs. WTTC (2014) estimates of the total contribution to employment (both direct and indirect) place the sector's contribution at around 266 million jobs in 2013.

Growth in employment within the sector is likely to remain high i.e. between 2012 and 2022 an estimated 63 million extra jobs in the sector will be created (see table 4 below), the majority of which will be in Asia (approximately 40 million).

Table 4: Estimated no. of Jobs Created in Tourism (by region) 2012 - 2022

Region	Estimated Jobs Created
Caribbean	465,000
Europe	2,437,000
Latin America	4,513,000
Middle East	1,413,000
North Africa	1,689,000
North America	4,513,000
North East Asia	23,947,000
South Asia	9,820,000
South East Asia	7,348,000
Oceania	289,000
Other	6,580,000
Total	**63,014,000**

Source: Turner & Sears (2014)

Table 5 below shows some examples of tourism impacts on direct and total employment in South Asia. The data shows that direct contributions range from 1.7% in Bangladesh to 44.3% in the Maldives, whilst total employment from tourism (including indirect employment) ranges from 3.8% to 86.7%, hence the effect can be significant, but can vary substantially between countries.

Table 5: Direct, Indirect & Total Contribution to Employment for South Asia in 2013

Country	Direct Contribution of Tourism to Total Employment (%)	Total Contribution of Tourism to Total Employment (%)
Bangladesh	1.7	3.8
India	4.8	7.7
Maldives	44.3	86.7
Nepal	3.1	7.0
Pakistan	2.5	6.3
Sri Lanka	3.5	8.4
Average	10.0	20.0

Source: WTTC (2014)

If we look at employment data at the regional level across the world (table 6 below) we can see that even at the regional level there is a significant range of direct and total impacts on employment for the sector i.e. directly accounting for between 2.3% of employment (in Sub-Saharan Africa) up to 10% (in South Asia). Total impacts can be significant i.e. 20% in South Asia (mainly due to the Mauritius) or 12.4% in Oceania and 11.3% in the Caribbean. Hence, the highlighted data does show that tourism can have some large impacts on employment

The ratio of total jobs to direct jobs created by the tourism sector highlights an interesting point of note i.e. across all regions the ratio is broadly similar (with an a average of 2.5%), as the range varies from a multiple of 2.0 (in South Asia) to 3.1 (in the Caribbean), hence the total employment effects of the sector are broadly similar across all regions. This may be down to the relatively higher inflexibility of labour to move across borders (unlike goods) which may mean that the tourism sector needs to source labour locally, which makes its total employment impact (relative to its direct impact) broadly similar across regions.

Table 6: Global Contribution of Tourism to Employment, 2013

Region	Direct Contribution of Tourism to Total Employment (%)	Total Contribution of Tourism to Total Employment (%)	Ratio of Total to Direct Jobs
Caribbean	3.6	11.3	3.1
Europe	3.0	8.4	2.8
Latin America	2.8	7.9	2.8
Middle East	2.5	6.4	2.6
North Africa	5.2	11.6	2.2
North America	4.2	10.4	2.5
Northeast Asia	2.9	8.2	2.8
Oceania	4.4	12.4	2.8
South Asia	10.0	20.0	2.0
Southeast Asia	3.7	9.7	2.6
Sub-Saharan Africa	2.3	5.8	2.5
Average	4.1	10.2	2.5

Source: WTTC (2014)

Data from the WTTC does not include the indirect employment impacts of the sector. A 2011 study by Vellas however states that the indirect effects of tourism on employment can also be significant i.e. in India indirect jobs created by tourism accounted for 1.6% of total employment (in 2011), whilst in Australia the figure was 7.8%. On average, for the T20 countries in 2011, indirect employment accounted for 3.8% of total jobs.

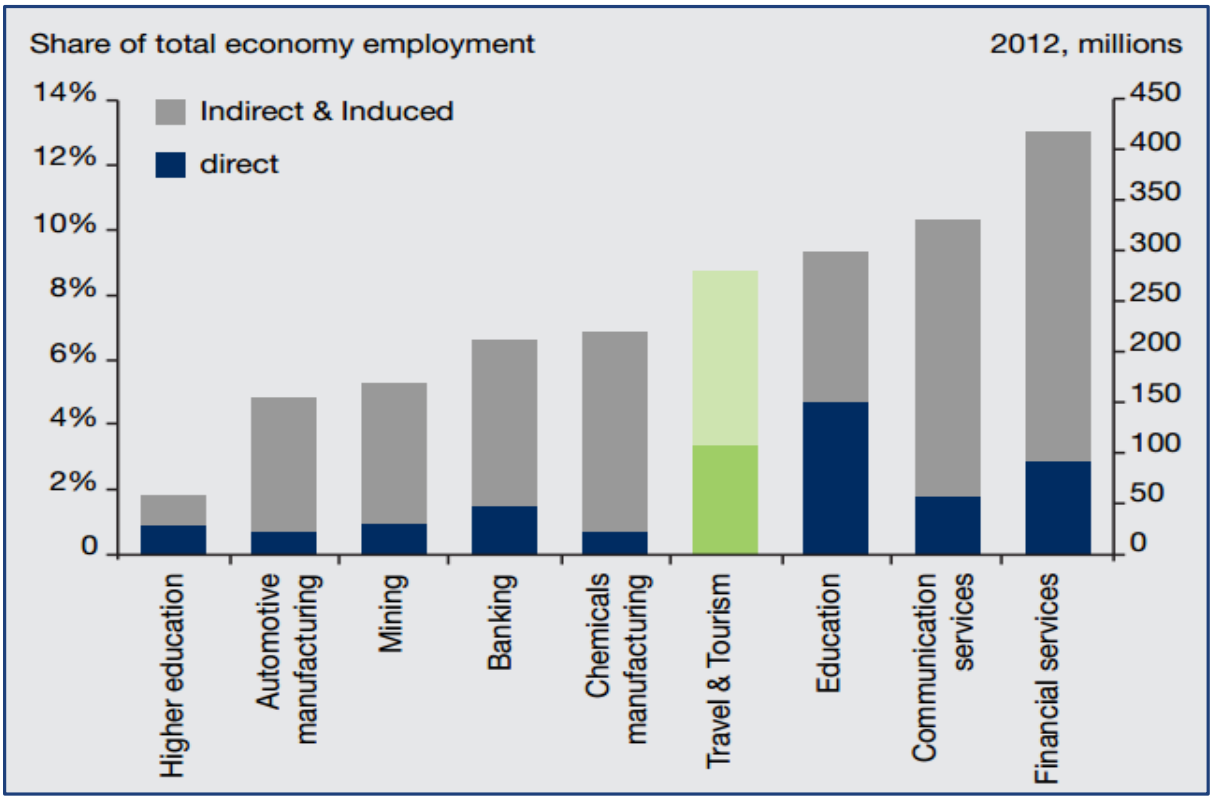
The data presented above thus shows that tourism is a significant contributor of employment. An analysis carried out of the Jamaican tourism sector found that it's contribution (by 2012) in terms of employment was so significant that without the sector unemployment would have risen from 13% to 34% (Oxford Economics, 2012).

Even compared with other sectors, tourism holds up well. Research shows that at the global level, the sector contributes to (WTTC, 2013):

- 5 times the employment of the automotive industry;
- 5 times as many jobs as global chemical industry;
- 4 times the jobs of the global mining industry;
- Twice as many jobs as in the global communications sector and
- 15% more jobs than in the global financial service sector.

The WTTC (2014) study estimates that in 2012, global tourism employment created more jobs than the combined total of the automotive industry, the chemical manufacturing sector, the banking sector, the mining sector and the higher education sector (see figure 1 below).

Figure 1: Tourism Employment vis-à-vis other Sectors, 2012



Source: WTTC (2014)

The employment story is applicable across nearly all the regions of the work, barring the Asia Pacific region, where the financial services sector created more jobs than tourism (WTTC, 2014).

It is important to note that economic shocks may have an effect on the tourism sector. Research carried out through the UNWTO (2013) in Costa Rica, Tanzania and the Maldives showed that in all three countries there was a reduction in tourism employment as a result of the 2007 global financial crisis. In all three cases, there were negative repercussions on employment in the sector as tourism enterprises restructured their services in order to meet declining demand. In all three cases, unskilled (i.e. poorer) employees tended to suffer the greatest losses in employment. Hence, even though the data may only cover these three case studies, in each one there were clear negative impacts on employment in tourism due to economic shocks to the sector.

Income

In terms of impacts on income, there is limited quantitative data i.e. unlike employment and GDP impacts; there are no detailed aggregate datasets that compare incomes in tourism. In order to understand the impacts of tourism the use of case study analysis is necessary. The data will not provide a holistic assessment of the impacts of tourism on incomes but it does offer a partial picture.

A 2009 World Bank study on the economic impacts of tourism in Panama (Klytchnikova & Dorosh, 2009) found that the tourism sector had a greater effect on incomes than almost all other sectors within the country i.e. employment in tourism would bring greater household income benefits than employment in other sectors. Lee & Kang (1998) demonstrate that the tourism sector helps create a moderate equal distribution of earnings and is more likely to improve the living standards of people in lower incomes than employment in the services or manufacturing sector. The sector can also potentially

provide greater opportunities for income growth i.e. where people join the tourism sector there seems to be higher upward mobility in employment skills and in wages than in other sectors (WTTC, 2013).

The seasonality of tourism could also play a part in the sector's income distribution. During peak tourism season, income inequality (within the sector) tends to decrease whilst during low seasons, income inequality tends to increase (Fernandez-Morales, 2003). Where the tourism sector offers a greater variety of products, income inequality tends to be lower than where the sectors offers more limited products (Fernandez-Morales, 2003). In contrast, research by Perez-Dacal[2] (2012), argues that seasonality may not have such large income impacts on tourism wages but the specialisation of tourism activities may actually have a positive impact on wages.

A study looking at tourism multiplier effects (Horvath & Frechtling, 1999), showed that tourism had varied impacts on incomes across different countries i.e. in Australia (in 1984), tourism had a 25% greater effect on incomes than in Turkey (in the same year), whilst in 1990, tourism's effect on incomes in Bermuda were twice as large as in Samoa (also for 1990). This suggests that income effects vary across countries.

In terms of rural incomes and livelihoods, a study by Tanrivermis & Sanli (2007) looking at tourism in rural Turkey, found that the sector accrued for around a quarter of average household incomes (26%) whilst the majority of household incomes (73.5%) was still down to agricultural activities carried out by the region's3 inhabitants. Similarly, Jamaican tourism plays a large role in supplementing agricultural incomes within the country (Oxford Economics, 2012).

A study by Shah & Gupta (2000) provides some anecdotal evidence on incomes, stating that as a region's tourism sector expands, there are increased opportunities for households to benefit (i.e. supplement their incomes) from the sector through home-stay schemes, however as the sector further develops, these home-stay initiatives are often supplanted by lodges and hotels and the effects on local incomes depends on how high local involvement is in these formal establishments 9i.e. higher involvement leads to increased income capture at the local level).

Box 1: Impacts of Tourism on Incomes & Employment in Nepal

A study looking at tourism (specifically the accommodation sector) in three tourist areas of Nepal found that it was a good source of employment. The report found a clear gender skew where 84% of jobs went to males, but most jobs were benefitting local populations i.e. 78% went to people in local and nearby areas – the remainder were filled by people from other parts of Nepal.

The report also found that staff salaries were deemed to be competitive vis-à-vis other sector salaries/incomes and that tourism employers often provided other benefits to their workers, such as bonuses, meals and basic healthcare. The study also found that there were good links with the local economy with 88% of food expenditure made by tourism enterprises going into local and nearby area.

Source: Banskota (2012)

Income impacts may also extend beyond earnings i.e. in rural Namibia, tourism incomes helped secure physical assets such as livestock and agricultural tools or equity in community based tourism activities (Ashley, 2000). In Botswana, members of a local community based tourism project have been able to secure housing, water supplies, transportation and school scholarships through their tourism activities (Mbaiwa & Stronza, 2010).

[2] Both the Perez-Dacal and the Fernandez-Morales research were conducted in Spain

[3] Nevsehir Province, Cappadocia, Turkey

Poverty rates can also be affected by tourism but these are dependent on the structure of the sector and its integration into the local economy i.e. in Zanzibar (Steck et al. 2010), only 10% of tourism earnings go to poor people (as the sector mainly relies on imports). On the other hand, in Panama, local households are able to access 56% of local tourism income (Klytchnikova & Dorosh, 2009) whilst in Malaysia even though hotel owners capture a large share of tourist expenditure (28%) vis-à-vis local businesses which capture about 16%, local people can still capture around 34% of total tourism income (TPRG, 2009). In Costa Rica, tourism helps reduce poverty rates by between 1.5% to 3% (Rojas, 2009 and CEPAL, 2007).

3 Impacts of Tourism on Gender

The UNWTO (2011) discuss the impacts of tourism on women. The report states a number of key findings which include:

- Women making up a larger proportion of the formal tourism workforce.
- Women being well-represented in services and clerical jobs, but having limited representation at professional levels.
- Women typically earn 10% to 15% less than male counterparts.
- Compared to other sectors, tourism has twice as many female employers.

Table 7 below highlights the regional employment rate of women across the world, showing that women tend to be more active in the tourism sector (within hotels and restaurants) in Latin America and in the Caribbean, although relatively high participation can also be seen across all other regions. On average, women represent nearly half the tourism workforce, hence in terms of raw numbers, superficially there does seem to be some gender parity within the sector. The results are further substantiated by a 2013 study by the WTTC on tourism in five countries, which found that in 2013 the sector proportionately employed more women (and youth) than the national average across four of the five countries.

Table 7: Women Hotel/Restaurant Employees by Region, 2010 (%)

Region	**Regional Average (%)**
Latin America	58.5
Caribbean	55.4
Africa	47.0
Oceania	46.8
Asia	35.4
Average	48.62

Source: UNWTO (2011)

Looking at the types of jobs that women tend to hold in the sector (table 8 below) we can see that there is actually a bias for women to work in clerical and service worker (i.e. cleaning staff) positions as opposed to more professional positions within the sector. This bias is evident across all regions (for which there is data) and averages show that women tend to dominate clerical position roles (close to 60% of the workforce) within the sector.

Table 8: Women employees by occupational status, 2010 (%)

Region	Professional	Clerk	Service Worker
Latin America	38.9	49.4	35.6
Caribbean	36.6	62.7	65.5
Africa	34.9	56.6	34.8
Oceania	-	67.4	42.9
Asia	-	-	-
Average	36.8	59.0	44.7

Source: UNWTO (2011)

Comparing tourism employment of females to other sectors at the regional level, we can see that employment of women in the tourism sector seems to be proportionally higher than female employment in other sectors (36.1% in tourism against 21.9% in other sectors). This suggests that tourism can be beneficial for women in terms of offering them employment opportunities; however as table 8 (above) shows, the positions available to them tend to me mid to low tier.

Table 9: Female Employment in Tourism visi-a-vis other Sectors, 2010 (%)

Region	All Sectors	Hotels/Restaurants
Latin America	23.2	51.3
Caribbean	26.4	32.8
Africa	20.8	30.5
Oceania	17.4	29.7
Asia	-	-
Average	21.9	36.1

Source: UNWTO (2011)

Baum (2013) looks at women in tourism – the results of the paper agree with the data presented by the UNWTO (2013) i.e. women may play an important numerical role in tourism employment, however they are 'disproportionately represented in lower skills and lower paid areas of tourism work'.

In terms of wages, a study based in the UK (Jordan, 1997), found that women were receiving lower wages in the tourism sector due to cultural issues i.e. women were used in lower paid front desk jobs (i.e. as tour operator representatives) as a way to sell tourism products to tourists, but were limited in their upwards mobility within tourism enterprises (the study specifically looked at travel agencies and tour operators – excluding hotels and restaurants). Although the study is limited in its scope and does not encompass the full breadth of the sector (nor any regional variations) it does provide an interesting point of note.

Baum does however note that the gender income gap is lower in the tourism sector, at least within Europe (see table 10 below), where across all sectors the average gender gap in Europe (in 2011) was 16.7%, whilst in the tourism sector the gap was at 10.8%. Similarly, in the USA the gap was at 8% whilst in Bermuda the gap was also similarly 'low'

at 8.9% however, in Madagascar, women tended to earn 35.5% more wages then men. However, in Bangladesh there was a 30% gap in wages whilst in Botswana there was a 32%, and a 28% gap in Tanzania. Hence a generalisation of wage gap results may be too simplistic – and the lack of quantitative data means that it is difficult to ascertain what the real gap in wages between men and women is within the sector.

Table 10: Gender Gap in Tourism Wages in Europe, 2011 (%)

Country	All Sectors	Hotels & Restaurants
EU	16.2	14.7
Norway	15.9	9.2
Switzerland	17.9	8.4
Average	16.7	10.8

Source: Baum (2013)

Baum also looks at another indicator of employment inequality i.e. the difference in working hours for men and women in tourism. The study finds that in Europe men tend to work longer hours in tourism than women, the same is found across a selection of countries in Latin America where, on average, men work 46.9 hours a week whilst women work 41.3 hours. Similarly, in Asia men work marginally longer than women. There is no clear evidence on why women tend to work less hours then men within the sector; however Baum posits that the fact that women tend to have multiple responsibilities such as working, looking after their children etc. may preclude them from working longer hours within the sector.

4 Impacts of Tourism on the Environment

In additional to tourism's impact on national and local economies, the sector's impacts also has an environmental aspect that must be taken into account. The UNEP[4] highlights three main impact areas of tourism on the environment i.e. the depletion of natural resources, pollution and tourism's physical impacts.

Depletion of Natural Resources: Where tourism increases pressure on natural resources where they may already be scarce, manifested through the use of water and the use of local resources.

Water Resources: Overuse of water by tourism enterprises i.e. for tourist use, swimming pools, garden maintenance etc. In dry regions, the use of water is particularly concerning especially as tourists tend to consume twice as much water on holiday as they do at home (440 litres against 220 litres), whilst the quantity of water used for a golf course in a year is equivalent to its use by 60,000 rural villagers (UNEP, 2014). In some popular South Asian resort areas, potable water is diverted away from local villages and supplied to nearby hotels, leaving villagers only a few hours per day to use water (UNEP, 2011). Tourism water use typically accounts for 5% of total national water use, although in some countries it can be significantly higher i.e. around 40% in Mauritius or 35% in Cyprus (Gossling et al. 2012).

Local Resources: Pressure on resources such as energy, food and raw materials can be increased due to tourism. Increased use can affect their impact on local populations, especially in peak seasons when demand for resources is higher. Tourism can also negatively effect of biodiversity (UNEP, 2011), especially in coastal areas (such as coral reefs or coastal wetlands), rainforests as well as arid and semi-arid regions and mountainous areas. Trekking, over-fishing, the construction of tourism resorts etc. can all contribute negatively to the biodiversity of these areas which can in-turn negatively affect the attractiveness of such areas for tourism activities. Trekking tourists in Nepal, for example, can use up to 5kg of wood (each) per day during treks, which compounds the effects of deforestation, which are already severe in Nepal (UNEP, 2014).

Pollution: Tourism can contribute to pollution in the same way as many other economic sectors i.e. through air pollution, solid waste and wastewater.

Air & Noise Pollution: Increases in tourist numbers (and subsequent demand in tourism travel demand) means that the sector is becoming an increasingly important source of emissions. The UNWTO (2008) has undertaken an analysis of the impact of tourism on carbon emissions based on 2005 data. Table 11 below shows the results of estimated emissions in 2005, highlighting how the sector (globally) accounted for close to 5% of total carbon emissions.

4 http://www.unep.org/resourceefficiency/Business/SectoralActivities/Tourism/TheTourismandEnvironmentProgramme/FactsandFiguresaboutTourism/ImpactsofTourism/EnvironmentalImpacts/TourismsThreeMainImpactAreas/tabid/78776/Default.aspx

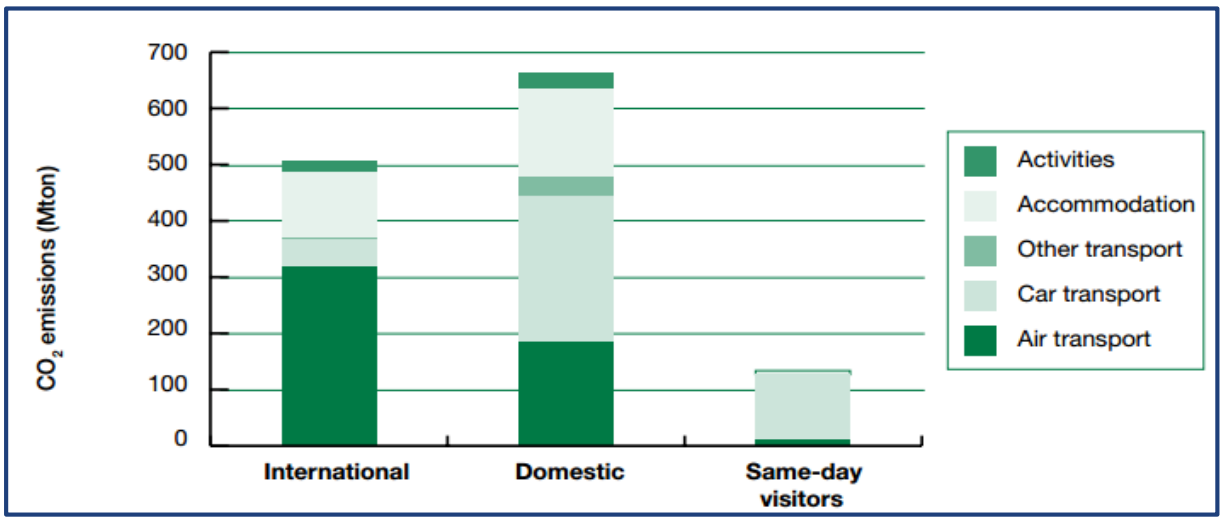
Table 11: Carbon Emissions from Tourism (2005)

	Mt CO_2	**Share in Tourism (%)**
Air Transport	515	40
Car	420	32
Other Transport	45	3
Accommodation	274	21
Other activities	48	4
Total Tourism	1,302	100
Total World	26,400	-
Share of Tourism in Total World (%)	4.9	-

Source: UNTWO (2008)

The UNWTO (2008) also provides a breakdown of tourism carbon emissions, a result which shows that domestic tourism was actually a larger contributor to greenhouse gas emissions than international tourism (although the data stems from 2005 so may be subject to change over time). For both domestic and international tourism, aviation transport and accommodation account for a significant part of the emission process, whilst land transport is the largest contributor for domestic tourism.

Figure 2: Tourism Carbon Emissions by Destination (2005)



Source: UNWTO (2008)

The UNWTO (2008) also provides a breakdown of emissions by region of origin and region and destination (for 2005), which shows that travel from high income countries to developing countries accounts for the largest amount of travel CO_2 emissions, followed by travel between high income countries.

Table 12: CO_2 Emissions by region of origin and destination (2005)

	All Travel		
	Trips (millions)	**CO_2 Emissions (total Mt)**	**Trips (millions)**
High Income to Developing Countries	40	79	40
Developing Countries to Developing Countries	5	9	5
Developing Countries to High Income Countries	24	49	24
High Income Countries to High Income Countries	35	70	35

Source: UNWTO (2008)

Litter & Solid Waste: Waste management is an increasing challenge within the tourism sector i.e. European tourists can create up to 1 kg of solid waste per day, whilst tourists from the USA can create up to 2kg of solid waste per day (UNEP, 2011). Cruise ships operating in the Caribbean are estimated to produce around 70,000 tons of solid waste per year (Sunlu, 2003) which can increase and harm coastal waters and the marine life within it. Similarly, expeditions in mountainous areas can leave a trail of litter behind them, negatively impacting local flora and fauna and degrading the physical appearance of trekking routes (UNEP, 2014).

Sewage: Wastewater management is also becoming an important issue within the sector especially where hotels discharge untreated wastewater directly into the sea (UNEP, 2011) or into other bodies of water.

Aesthetic Pollution: Aesthetic pollution occurs where tourism activities fail to integrate buildings and infrastructure into natural features and local architectural practices, hence features may not be deemed to be compatible with the natural environment and cultural architectural practices.

Physical Impacts: Physical impacts, by tourists and by tourism enterprises can impact

Tourism Development: The construction of tourism infrastructure (including facilities such as hotels, restaurants and recreation facilities) can lead to land degradation (i.e. soil erosion) and the loss of biodiversity and wildlife habitats. Development within the Yosemite national park (in the SUA) has led to negative impacts on local wildlife and increases in air and noise pollution (UNEP, 2014). Tourism can also lead to increased deforestation whilst development on marine localities can cause changes in coastlines and currents, negatively affecting local fauna and flora (UNEP, 2014).

Tourism Activities: Tourism activities can also lead to negative on the environment. Such activities include trampling damage from trekking trails (see table below) where trekkers cause damage to vegetation and soil which in turn can lead to a loss of biodiversity. Other impacts such as those from marine activities (boat anchoring, sport fishing and scuba diving) can damage the environmental integrity of tourism areas (Sunlu, 2003). Interaction with local wildlife can also increase stress to local wildlife as well as the degradation of land i.e. by using safari trucks to track wildlife (UNEP, 2014).

Table 13: Trampling Impacts on Vegetation and Soil

Trampling impacts on vegetation	Trampling impacts on soil
Breakage and bruising of stems	Loss of organic matter
Reduced plant vigor	Reduction in soil macro porosity
Reduced regeneration	Decrease in air and water permeability
Loss of ground cover	Increase in run off
Change in species composition	Accelerated erosion

Source: Sunlu (2003)

Tourism destinations are often highly sensitive to changes in weather and natural resources as these often define the attractiveness of destinations as well as influencing related factors (i.e. the spread of diseases or the impacts of extreme weather events). Tourist destinations are subject to four main types of climate change impacts (UNWTO, 2008):

1 **Direct Climate Impacts**: Changes in weather patterns can have important impacts on tourism in destinations that depend on particular weather patterns (i.e. sunshine in beach destinations or snowfall in winter tourism destinations). Any changes in weather patterns could shift the competitive advantage certain destinations have over others, threatening established tourism industries.
2 **Indirect Environmental Change Impacts**: Changes in environmental conditions (i.e. agricultural productivity, water availability or biodiversity) will impact tourism. Any changes to the environment are potentially going to be negative in terms of their impact, especially for areas that base their tourism activities on environments that are considered to be particularly sensitive (such as Coral Reefs).
3 **Impacts of Climate Mitigation Policies**: Climate change mitigation policies (at the national or international level) may impact international tourist flows, through changes in transportation costs or attitudinal changes by tourists who could change travel patterns with the aim of reducing environmental impacts (i.e. by taking less long-haul flights).
4 **Indirect Societal Change Impacts**: Climate change may impact long-term development prospects by impacting growth trajectories i.e. reducing rural livelihoods through reduced crop growth.

5 Conclusions

Tourism impacts economies through **three interrelated routes i.e. direct, indirect and induced** effects. Direct impacts are those impacts that occur as a direct result of tourism activities i.e. tourist spending, employment by the tourism sector and taxes paid by tourist activities. Indirect impacts occur due to the effect of tourism activities on other economic sectors i.e. hotels purchasing goods from retailers or sourcing food from producers. Induced effects are the changes in economic activity that occur from households benefitting from the tourism sector i.e. tourism employees paying taxes or spending money on local goods and services. These impacts and the structure of the tourism sector determine the sectors economic impact on a country.

Overall the section shows that there is a clear positive **impact on growth** by the tourism sector – data on the direct and total impacts of the tourism sector shows strong positive economic effects. What the data is missing, however, is the distribution of these effects in terms of equality.

Much like the impact of tourism on growth, its impact on **employment** is also positive. Overall tourism (globally) contributes to a significant amount of jobs and also compares favourably vis-à-vis other significant sectors such as the extractive sector, the financial sector and the automobile construction sector. The extent of its impacts varies by country and by tourism's predominance within it, but overall it is a net contributor to employment.

Tourism's effect on **incomes** is harder to quantify than growth and employment, mainly due to a limited amount of data and the global level. The available case study data does highlight that tourism has a positive impact on incomes, both in monetary terms and in non-monetary terms (especially for rural households that participate in the sector). The sector also seems to positively impact **livelihoods** and **poverty**.

Whilst there the data on the impacts of tourism on growth and employment is good enough to understand the 'raw' impacts of the sector, the limited available data (especially at the global level) for incomes, livelihood and poverty effects means that the sector's **impacts on equality** are harder to effectively measure and monitor.

In terms of **gender impacts,** the sector shows that there are both positive and negative impacts to female employment within tourism. The sector tends to employ more women than other productive sectors, however there seems to be disparities both in the position that women occupy as well as the wages that women earn i.e. women tend to occupy mid to low skill positions and also tend to earn lower wages. The data evidence of gender impacts seems to be strong in terms of the quantitative impacts of the sector i.e. the number of women employed in the sector and the positions that they hold, but seem to be less strong when taking into account wages and working hours, where limited country evidence dominates impact measurement.

The **environmental impacts** of tourism are harder to effectively quantify due to a limited availability of data on impacts. Tourism greenhouse gas emission data is available, however it is nearly a decade old (2005) and there is limited data on other environmental impacts of the sector such as waste, deforestation, land degradation etc. Anecdotal evidence does however suggest that tourism can have negative environmental impacts, as demand for the sector increases so does demand for travel, in turn increasing GHG emissions. Similarly, tourists tend to use larger amounts of resources (water, energy) than local people, which can be problematic where these resources are scarce.

References

Ashley, C. (2000) "The Impacts of Tourism on Rural Livelihoods: Namibia's Experience" ODI Working Paper 128, February 2000

Banskota, K (2012) "Impact of Tourism on Local Employment and Incomes in Three Selected Destinations: Case Studies of Sauraha, Nagarkot and Bhaktapur" Nepal Tourism and Development Review 2, 2012

Baum, T (2013) "International Perspectives on Women and Work in Hotels, Catering and Tourism" ILO, 2013

CEPAL (2007) "Turismo y Condiciones Sociales en Centroamerica: Las Experencias en Costa Rica y Nicaragua" ECLAC, 2007

Fernandez-Morales, A (2003) "Decomposing Seasonal Concentration" Annals of Tourism Research, Vol. 30 No.4, 2003

Gossling, S. Peeters, P. Hall, M.C. Ceron, JP. Dubois, G. Lehmann, LV. & Scott, D. (2012) "Tourism and Water Use: Supply, Demand and Security. An International Review" Progress in Tourism Management, No. 33 (2012)

Horvath, E & Frechtling, DC (1999) "Estimating the Multiplier Effects of Tourism Expenditures on a Local Economy Through a Regional Input-Output Model" Journal of Traveo Research, Vol. 37, No. 4, May 1999

Jordan, F (1997) "An Occupational Hazard? Sex Segregation in Tourism Employment" Tourism Management, Vol. 18, No. 8, 1997

Klytchnikova, II & Dorosh, PA (2009) "How Tourism can (and does) benefit the poor and the environment – A case study from Panama" World Bank, Enbreve Responsible Tourism Series, August 2009, No. 146

Lee C & Kang, S (1998) "Measuring earnings inequality and median earnings in the tourism industry" Tourism Management, Vol. 19 No. 4, 1998

Mbaiwa, JE & Stronza, AL (2010) "The effects of tourism development on rural livelihoods in the Okavango Delta, Botswana" Journal of Sustainable Tourism, Vol. 18, No. 5, June 2010

Mitchell, J & Martins, P (2012) "Pro-Poor Tourism Linkages in Cape Verde" ODI, May 2012

Oxford Economics (2012) "Travel & Tourism as a Driver of Economic Development in Jamaica" Oxford Economics, 2012

Perez-Dacal, D (2012) "The role of seasonality and tourism specialisation in wages and employment" University of Santiago de Compostela, 2012

Rojas, L (2009) "The Evolution and Importance of Tourism in costa Rica" Estado de la Nacion en Desarrollo Sostenible, San Jose'

Shah, K & Gupta, V (2000) "Tourism, the Poor and Other Stakeholders: Experience in Asia" ODI & Tourism Concern, 2000

Steck, B (2010) "Tourism: More Value for Zanzibar" SNV, February 2010

Sunlu, U (2003) "Environmental Impacts of Tourism" in *Local Resources and Global Trades: Environments and Agriculture in the Mediterranean Region* Camarda, D & Grassini, L (eds.), 2003

Tanrivermis, H & Sanli, H (2007) "A Research on the Impacts of Tourism on Rural Household Income and Farm Enterprises: The Case of the Nevsehir Province of Turkey" Journal of Agriculture and Rural development in the Tropics and Subtropics, Vol. 108, No. 2, 2007

TPRG (2009) "The Application of Value Chain Analysis to Measure Economic Benefits at Tanjong Piai, Pontian and Johor" Tourism Planning Research Group, Universiti Teknologi Malysia

Turner, R & Sears, Z (2014) "Travel & Tourism as a Driver of Employment Growth" in *The Travel & Tourism Competitiveness Report 2013* World Economic Forum, 2014

UNEP (2011) "Tourism: Investing in Energy and Resource Efficiency" Part of the 2011 UNEP Green Economy Report, UNEP 2011

UNEP (2014) "Tourism's Three Main Impact Areas" accessed in July 2014 at:

http://www.unep.org/resourceefficiency/Business/SectoralActivities/Tourism/TheTourismandEnvironmentProgramme/FactsandFiguresaboutTourism/ImpactsofTourism/EnvironmentalImpacts/TourismsThreeMainImpactAreas/tabid/78776/Default.aspx

UNWTO (2008) "Climate Change & Tourism: Responding to Global Challenges" UNWTO, 2008

UNWTO (2011) "Global Report on Women in Tourism 2010: Preliminary Findings" United Nations World Tourism Organisation, 2011

UNWTO (2013) "Economic Crisis, International Tourism Decline and its Impact on the Poor" UNWTO, 2013

Vellas, F (2011) "The Indirect Impact of Tourism: An Economic Analysis" Paper prepared for the Third Meeting of T20 Tourism Ministers, Paris, France, October 2011

WTTC (2012) "Methodology for Producing the 2012 WTTC/Oxford Economics Travel & Tourism Economic Impact Research", March 2012

WTTC (2013) "The Comparative impact of Travel & Tourism – Executive Summary, November 2013" WTTC, November 2013

WTTC (2014) The WTTC Data Research Tool at:

http://www.wttc.org/research/economic-data-search-tool/

Annex: A Note on the WTTC Methodology

- *Number of Jobs Generated*: The WTTC estimates tourism contribution to employment by looking at tourisms direct share of GDP as well as an estimate of the relative productivity of the tourism sector vis-à-vis the rest of the economy. The methodology finds that less-developed countries tend to have higher productivity rates for tourism than other sectors.

- *Tourism's Contribution to GDP*:

  - *Direct:* The WTTC calculates tourism's direct contribution to GDP "as the sum of the demand components making up tourism consumption (personal domestic Travel & Tourism spending, business domestic Travel & Tourism spending, foreign visitor Travel & Tourism spending and government individual Travel & Tourism spending) minus supply-chain purchases (including imports) by Travel & Tourism providers" (WTTC, 2012).
  - *Indirect:* In regards to tourism's indirect contribution this is calculated through an input-output approach that relates the output of each industry to the components of the tourism sector. The approach weighs the ratio of value added to output in these industries and divides the output equivalent of tourism consumption into the industry's own direct value added as well as the indirect value added of other industries in the supply chain.
  - *Total:* The concept of tourism's total contribution to GDP includes tourism consumption, its associated supply-chain value added as well as the goods and services that are produced on behalf of the tourism industry by government spending and fixed investment. It also includes the induced effects of tourism through the spending of workers directly and indirectly employed in the industry.

The WTTC states that for non-OECD countries, where the required national accounts data necessary to estimate tourism's wider contribution to GDP may not be readily available, the relationship between tourism and other economic variables is based on data from existing Tourism Satellite Accounts as well as appropriate tourism and economic indicators that are available across all countries.

Source: WTTC (2012)