sustainability

MDPI

Supplementary Material

Resident Perceptions of Environment and Economic Impacts of Tourism in Fiji

Questionnaire

Location: _____(Area/Town/City)

Gender: (Please tick √)

□ Male □ Female

Age: (Please tick √)

□ 15–20 □ 21–25 □ 26–30 □ 31–35
□ 36–40 □ 41–45 □ 46–50 □ 50–55
□ 56–60 □ 61–65 □ 65 +

Occupation: (Please tick √)

□ Student □ Private-sector □ Public sector □ other

Education Level: (Please tick √)

□ None □ Primary □ Secondary □ Certificate
□ Diploma □ Degree □ Masters □ PhD

1. Do you feel that there are negative impacts on the environment in your community and/or country?

□ Yes □ No

2. Please rank (1 to 5) the issues you feel have a negative impact on the environment in your community and Fiji? (Feel free to enter other issues at the bottom space if an issue is not listed)

Key:

Impact Level	Meaning
1	No Impact
2	Very Little Impact
3	Little Impact
4	High Impact
5	Very High Impact

Community Issues	Impact Level	Community Issues	Impact Level
Air Pollution		Pollution (unspecified)	
Inadequate waste recycling		Waste production/Waste management	
Global warming		Emissions from cars, trucks & other land transport	
Traffic congestion		Water pollution	
Littering		Extreme Weather	
Noise Pollution		Water wastage	
Over development		Climate Change	

Over-population	Energy overuse (Electricity)
Dependence on cars	Deforestation
Tourism	CO_2 emissions
	Air transport

3. Please rank (1 to 5) the issues you feel have a negative impact on the environment, globally? (Feel free to enter other issues at the bottom space if an issue is not listed)

Key:

Impact Level	Meaning
1	No Impact
2	Very Little Impact
3	Little Impact
4	High Impact
5	Very High Impact

Global Issues	Impact Level	Global Issues	Impact Level
Global warming		Pollution (unspecified)	
Air Pollution		Climate change	
Deforestation		Waste management	
Water pollution		Water pollution	
Water wastage		Species extinction/loss of biodiversity	
Rising sea levels		CO_2 emissions	
Over population		Overuse/depletion of natural resources	
Inadequate waste recycling		Extreme weather	
Melting ice caps		Habitat destruction	
Ozone layer depletion		Emissions from cars, trucks & other land transport	
Energy overuse (Electricity)		Tourism	
Air Transport			

4. Do you feel that the Tourism industry has a negative impact on the environment in Fiji? (Please do not change your response afterwards)

□ Yes □ No

5. According to United Nations Environment Programme (UNEP) the Tourism industry has the following negative impact areas on our environment. Please read and tick (√) if you feel that Fiji faces similar impact on its environment.

Impact Areas	Response (√)
Overuse of water resources	
- For hotels, swimming pools, golf courses and personal use	
- An average golf course in a tropical country such as Thailand needs 1500 kg of chemical fertilizers, pesticides and herbicides per year and uses as much water as 60,000 rural villagers.	
Pressure on local resources	
- Tourism creates great pressure on local resources like food, energy and other raw materials	

- Many destinations have 10 times more inhabitants in high season placing high demand on resources.
Land degradation
- Increased construction of tourism and recreational facilities has increased pressure on land resources such as minerals, fossil fuels, fertile soil, forests, wetland and wildlife.
Air & Noise pollution
- Tourism accounts for 60% of air travel therefore responsible for air emissions - One study estimated that a single transatlantic return flight emits almost half the CO_2 emissions produced by all other sources (lighting, heating, car use, etc.) consumed by an average person yearly. - Noise pollution from planes, busses and cars is an ever-growing problem.
Solid waste and littering
- Solid waste and littering can degrade the physical appearance of the water and shoreline and cause the death of marine animals.
Sewage
- Construction of hotels, recreational and other facilities lead to sewage pollution which pollutes seas and lakes damaging flora and fauna. - Sewage also cause damage to coral reefs as it stimulates growth of algae.
Visual Pollution
- Often tourism fails to integrate its structures with the natural features and indigenous architectural of the destination. Large, dominating resorts of disparate design can look out of place in any natural environment and may clash with the indigenous structural design.
Trampling
- Tourists using the same trail over and over again trample the vegetation and soil, eventually causing damage that can lead to loss of biodiversity and other impacts. Such damage can be even more extensive when visitors frequently stray off established trails.
Anchoring & other marine activities
- Anchoring, snorkeling, sport fishing and scuba diving, yachting, and cruising are some of the activities that can cause direct degradation of marine ecosystems such as coral reefs, and subsequent impacts on coastal protection and fisheries.

6. Do not answer if you ticked "Yes" in Question 3. Do you feel that Tourism has a negative impact on the Fijian environment? (This question has been repeated on purpose)

□ Yes □ No

7. Do you feel that there is lack of awareness about the negative impacts of Tourism on our environment?

□ Yes □ No

8. We all have impact on the environment, like amount of water we use, amount of electricity we use, amount of garbage we produce and so on.

Therefore, in the last 3-5 years, how have you changed your behavior in order to minimize your impact on the environment? (Please tick √ if you agree with the listed actions. Do not tick if have not changed your behavior in the listed ways)

Actions Taken	Response	Actions Taken	Response
Recycle (in general)		Walk more (save fuel, lesser emissions)	
Save electricity/energy		Save water	
Turn-off lights		Use fewer plastic bags	

Use less paper	Separate garbage (recyclable & non-recyclable)
Buy organic food	Drive less (lesser emissions)
I have changed but I can't explain how.	Turn air conditioner down
Buy/use fewer plastic bottles	Turn off electric appliances
Live more green/become more aware	Litter less
Reduce waste	

9. Is there a way in which you can be motivated to willingly keep your impact on the environment to a minimal? (If "Yes", please state how?)

□ Yes □ No

_____

_____

10. Do you feel the new governments' electricity subsidy will motivate consumers (who qualify for the subsidy) to minimize electricity usage in order to minimize their impact?

□ Yes, they will save more electricity now.
□ No, they will not save electricity because they get free electricity units now.
□ I don't care.

11. Do you feel that we as the general public should minimize our impact on the environment for a sustainable future?

□ Yes □ No

12. Do you feel that the government and Resort & Hotel owners should do more to reduce the impact of Tourism on our environment?

□ Yes □ No

13. Eco-costs is defined as the costs which should be made to reduce the environmental pollution and materials depletion because of a product or service, to a level which is in line with the carrying capacity of our earth.

Do you feel Eco-costs should be part of financial statements of Tourism stakeholders so as to understand the cost of reducing the negative impacts incurred?

□ Yes □ No

14. Do you feel sustainability is ever fully achievable?

□ Yes □ No

15. Tourism has many economic benefits such as foreign exchange earnings, increase in job opportunities among others. Do you feel that the economic benefits of Tourism outweigh its negative impacts on the environment?

□ Yes, economic benefits are more important
□ No, negative impacts are of more concern

Please explain your answer:

_____

_____

16. State 1 or more innovative (new) ways in which we can focus more on sustainability and reduce the negative impact of Tourism on our environment?

_____
_____
_____
_____

THANK YOU!

My name is Navneel Prasad and I give you my utmost thanks for your time and effort in completing this questionnaire. Please feel free to contact me on my e-mail: navi_7237@hotmail.com or @naviliko on twitter regarding any questions or queries regarding this survey or any other supplementary points that I would have missed. Please feel free to give me your e-mail address if you are willing to participate in future surveys which would be of immense help to me. Regards!

Your e-mail address (optional): _____