# Supplementary Materials: Implications of Climate Change on Nature-Based Tourism Demand: A Segmentation Analysis of Glacier Site Visitors in Southeast Iceland

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Supplement S1: Visitor survey questionnaire (English language, summer season version)



# **Glaciers and Tourism**

Dear visitor, the University of Iceland currently seeks insight into the development of glacier tourism and the challenges it faces in Southeast Iceland. Such information is valuable both for a better understanding of tourist needs and in order to improve tourist services. All information will be handled confidentially and are anonymous. The questionnaire should take about *8* minutes to complete. Your participation is very valuable. Thank you!

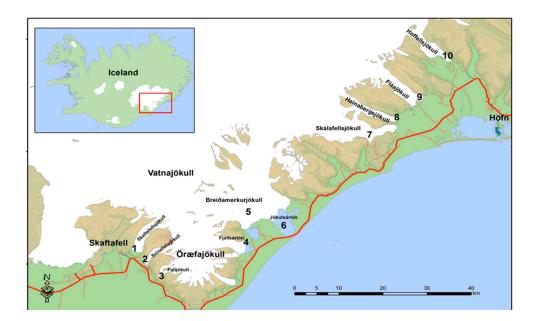
- **1.** How many days are you staying in the Southeast Iceland? \_\_\_\_\_ days (if less than 1 day write 0)
- 2. What kind of activities are you interested in participating in this area? (*mark all relevant activities*)

$\square_1$ Sight-seeing	$\square_6$ Glacier tour	$\square_{10}$ Scenic plane flight
□ <sub>2</sub> Camping	□7 Horse riding	□11 Mountaineering
□3 Biking	$\square_8$ Jeep tour	□12 Swimming/ bathing
□₄ Fishing	<b>□</b> <sup>8</sup> Hiking	□13 Museum visit
<b>□</b> <sup>5</sup> Photographing	□9 Snowmobiling	□ <sub>14</sub> Boat tour

□₀ Other \_\_\_\_\_

**3.** How many times have you visited a glacier in your life? \_\_\_\_\_ time(s) (if this was your first write 0)

- **4.** How did you organize your trip to the glacier(s) you are visiting in Southeast Iceland? (*mark all relevant items*)
  - $\square_1$  By myself
  - $\square_2$  By travel agency in home country
  - $\square_3$  By travel agency in Iceland
  - By local tour company (such as Mountain guides /Glacier Guides)
- $\square_5$  By tourist information center
- $\square_6$  By my hotel/guesthouse
- $\square_7$  Do not know
- $\square_0$  Other, please describe:



#### 5. Which glaciers or glacier sites according to the map above did you visit in Southeast Iceland?

- □1 Skaftafellsjökull
- □2 Svínafellsjökull
- **□**<sup>3</sup> Falljökull
- □4 Fjallsárlón
- **□**<sup>5</sup> Breiðamerkurjökull
- **□**<sub>6</sub> Jökulsárlón
- □7 Skálafellsjökull
- □8 Heinabergsjökull
- **□**9 Fláajökull
- □10 Hoffellsjökull
- $\square_{11}$  Did not visit a glacier
- □12 Do not know
- Do Other \_\_\_\_\_

#### 6. How important were the following motivations to you to visit a glacier site in Southeast Iceland?

		Not important at all				Very important
a.	Do something with friends and family	$\square_1$	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
b.	Have a thrilling experience	$\square_1$	<b>D</b> 2	□3	$\square_4$	<b>D</b> 5
c.	To have a story to tell	$\square_1$	$\square_2$	□3	$\Box_4$	<b>D</b> 5
d.	Experience new and different things	$\square_1$	$\square_2$	□3	$\Box_4$	<b>D</b> 5
e.	See a glacier in real-life	$\square_1$	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
f.	Be close to nature	$\square_1$	$\square_2$	□3	$\Box_4$	<b>D</b> 5
g.	Develop personal, spiritual values	$\square_1$	$\square_2$	□3	$\Box_4$	<b>D</b> 5
h.	Visit a glacier before it disappears	$\square_1$	$\square_2$	□3	$\Box_4$	<b>D</b> 5
i.	Have a change from everyday life	$\square_1$	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
j.	Experience peace and calm	$\square_1$	<b>D</b> 2	□3	$\square_4$	<b>D</b> 5

- 7. How much time did you spend at glacier sites in Southeast Iceland, all together?
  \_\_\_\_Hour(s)
- 8. What activities did you do at the glacier sites you visited in Southeast Iceland? (*mark all relevant activities*)
  - $\square_1$  Guided walk on the glacier
  - 2 Viewed the glacier from a short distance
  - $\square_3$  Snow mobile tour
  - $\square_4$  Super jeep tour
  - $\square_5$  Photographing

- $\square_6$  Glacier lake boat tour
- □7 Ice climbing
- □<sup>8</sup> Scenic flight (airplane)
- $\square_9$  Kayak tour of glacier lake
- $\square_0$  Other, please describe:

## 9. How important was visiting a glacier for your decision to visit Iceland?

Not at all impor	tant			Very important
$\square_1$	$\square_2$	□3	$\Box_4$	$\square_5$

# 10. How important was visiting a glacier for your decision to visit Southeast Iceland?

Not important at	all		Very important				
$\square_1$	$\square_2$	3	$\Box_4$	<b>D</b> 5			

# 11. How important were the following aspects for your experience during your last visit to a glacier site in Southeast Iceland?

		Not important			Very		
		at all				im	portant
a.	The weather conditions		<b>]</b> 1	<b>D</b> <sub>2</sub>	□3	$\Box_4$	<b>D</b> 5
b.	The scenery of the glacial landscape		]1	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
c.	Being in a unique environment		1	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
d.	The size of the glacier		]1	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
e.	To come so close to a glacier		1	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
f.	Seeing glacier attributes such as						
	crevasses, blue ice or calving ice-block		1	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
g.	Learning something about glaciers		1	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
h.	Seeing real-life impacts of climate change		1	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
i.	Being in an untouched natural environme	ent D	<b>]</b> 1	$\square_2$	□3	$\Box_4$	<b>D</b> 5
j.	Being in a challenging environment		]1	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5

#### 12. To what extent do you agree with the following statements?

		Totally				Tota	lly	
		disagre	е			ag	ree	
a.	Climate change is happening right now	$\square_1$	$\square_2$	□3	$\Box_4$	<b>D</b> 5		
b.	Climate change is the result of human activity		C	1	2	□3	$\Box_4$	<b>D</b> 5
c.	Climate change is the result of natural causes		C	1	2	□3	$\Box_4$	<b>D</b> 5
d.	I am very concerned about climate change		C	<b>]</b> 1	<b>2</b> 2	□3	$\square_4$	$\square_5$

### 13. How willing are you to visit a regional glacier site when it had the following aspects?

		Not willing			Very	
		at all				willing
a.	You cannot come within 150 meters of the glacier	$\square_1$	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
b.	You cannot touch or stand on the glacier	$\square_1$	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
c.	The amount of walking time to come to					
	the edge of the glacier is 45 minutes	$\square_1$	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
d.	The amount of walking time to come to					
	the edge of the glacier is 1,5 hours	$\square_1$	<b>D</b> 2	□3	$\Box_4$	<b>D</b> 5
e.	The glacier is covered considerably with sand,					
	mud and stones	$\square_1$	<b>D</b> 2	□3	$\Box_4$	$\square_5$
f.	It is only possible to come to the edge of the glacier by usin commercial motorized transport (jeeps/truck) It is only possible to come to the edge of the glacier	g □1	<b>D</b> 2	□3	$\square_4$	<b>D</b> 5
g. h.	by crossing a glacier lake with a commercial boat					Π-
i.			<b>L</b> 2	<b>L</b> 3	<b>L</b> 4	<b>L</b> 3
1.	It is necessary to take a guided tour for a safe passage to the glacier		<b>D</b> 2	□3	$\square_4$	<b>D</b> 5

14. Who are you	<b>□</b> 1 Individual		$\square_2$ Couple		□₃Family	
traveling with?	□₄ Small group	o (<10)	<10) □₅ Big group (>:		$\Box_0$ Other	
15. What is your gender	?	□1 Fei	nale	□₂ Ma	ıle	
16. What is your year of	birth?					
17. In what country do	you live?					

Thank you for your participation!