

Comments to the Environmental Impact Assessment for the Development of a Domestic Airport in Fainu, Raa Atoll, Maldives.

13<sup>th</sup> November 2018

EIA Consultant for the project: Water Solutions. Project Developer: Island Aviation Services Limited.

Note: The following comments have been made by ECOCARE Maldives and several Environment Advocates/activists working on the conservation and preservation of the Environment in the Maldives.

Section/Headings		#	Comment(s)
5	Non-Technical Summary	1	Text:  "The environmental impacts that are anticipated for the project are both positive and negative.  Among the activities from the construction phase, vegetation clearance has been identified as the activity with the most negative impacts. This is because the impacts are long term or permanent, and definite."
			Comment 01:  The EIA recognises that the vegetation clearance activity is going to be the most negative aspect with "definite", presumably, irreversible damage.
			In this case, how does the project propose to compensate the loss of these natural resources especially to women, who use them to supplement their income? What long-term compensation or alternative income generation activities does the project propose for those who will completely lose this livelihood generating public resource?
		2	Text:  "Reclamation has it positive impacts as it increases the land are of the island and thus increasing the area of freshwater lens over time."
			Comment 02: How long will it take for such a change in the island's structure to happen - if it happens at all - that a freshwater lens will develop and what benefit will it have in the short, medium and long term to the people of Fainu?
			What impact will such reclamation have on the existing water lens of the island, which is the water source for both household use and farming irrigation at the moment?
			What is the anticipated levels of loss and/or damage to this essential water source of the island?



How might such reclamation impact on the water source (existing water lens) and current livelihoods of the farmers?

## 3 Text:

"The operational phase of the project has its positive and negative impacts as well. Positive impacts includes more employment opportunities to Fainu Island the region. It is expected that the tourism industry would have more demand when the airport becomes operational."

#### Comment 03:

 What form would the "more employment opportunities" take? What kind of jobs would these be? How many such jobs are likely to be generated? Also, does the impacted population have the skills required to undertake these operational phase jobs?
 To what extent have these aspects been assessed/studied?

Note: It appears to be an assumption that more employment opportunities is a positive impact, but there is nothing of substance to support that assumption. Such a statement is inadequate because from day one, the project will significantly affect the livelihoods of the people who depend on the forest and farmland as an income source. It is not reasonable or feasible for the project to deprive people of their income source and expected to wait for an assumed opportunity, if this is what is implied here.

#### 4 Text:

"Furthermore, development to the island community is also expected through stimulation of local economies and other fringe industries such as transportation, trade, food services, fuel, accommodation etc. As more visitors and tourists transiting in the island increases, the demand for basic necessities such as health care would increase, thus resulting in the improvement of the health care facility in the island. Additionally the airport will increase accessibility to healthcare in Male' as well."

## Comment 04:

What kind of local economies are expected to be stimulated?

Currently, the community is sustained by 60-70 government jobs and the rest of the income source of the community is generated from the natural resources, forest and farmland of the island, much of which will be destroyed as a result of the project.



Therefore, this statement require further detailed clarification.

The suggestion that increased tourist numbers as a result of the project would increase a demand for healthcare facilities, which in turn would be beneficial to the community is somewhat strange. Are tourists coming to the region to access healthcare facilities? If so, what kind of tourism is being offered in this region? In what way would an increase for healthcare demand benefit the community?

The last sentence of this text also appears to contradict the one before.

If it is expected that an increased demand for healthcare would be generated and catered for in this community/or in the region as a result of the project, why would residents need to access healthcare in Male'?

Overall - this section of the text is very unclear and uncertain with no substantive developmental benefits to the community, and does not provide adequate justification to support the project.

# 5 Text:

"The no-project option is also recommended considering the two existing airports in the region, and the permanent negative impacts that will be produced."

### Comment 05:

If a no-project option is recommended by the EIA due to the fact there are 2 airports already in the region, and the "permanent negative impacts" it is self-evident that it is advisable to follow this recommendation. This point is especially valid considering the many other observations in this commentary, which observes inadequate justification and clarification of the costbenefit of the project to the community affected by it. The loss and damage the project will cause to the community is irreversible.

### 6 Text:

"The overall project has a number of concerning aspect, as with any development project of this scale. However it is important to consider the necessity of the project since there is no strategic environmental assessment undertaken for the region or the country as a whole. The proponent shall also carry forward the responsibilities for compensation of trees and the relocation of the island waste management centre, and the recommended monitoring."



			Comment 06:
			This text is extremely unclear and confusing. Why
			would it be important to consider the project because
			"there is no strategic environmental assessment
			undertaken in the region or the country as a whole"?
			If anything, the project must not go ahead in the
			absence of any strategic environmental planning and
			assessment.
			In connection with the proposed compensation, for the
			trees - what would this entail? What kind of
			compensation and what modality would be used to
			provide compensation? How would recipients be
			identified, compensation quantified and assurance
			provided to the community? What kind of monitoring
			and reporting mechanism would there be to ensure
			communities are adequately compensated?
			In connection with the relocation of the island waste
			management centre and monitoring - what are the
			details of this?
			How, when and by whom will this be done?
8.3	Justification for the	7	Text:
	project		"The airports are reasonably spread out. However,
			Kulhudhuhfushi airport, now completed, and
			Hanimaadhoo airport are 20 minutes away. These are
			the closest airports/proposed airport. The next closest
			airport to two existing airport is the proposed Fainu
			airport, 30 minutes away from R.Ifuru airport and
			about 40 minutes from B.Dharavandhoo airport. Even
			with the proposed airport, there are some regions that
			are not covered by air transportation within 50
			minutes. These are Vaavu atoll, Meemu atoll and Alifu
			Alifu atoll"
			Comment 07:
			With Ifuru airport existing already 30 minutes away
			from the proposed new airport in the same Atoll, as
			well as the fact that there are airports in Baa
			Dharavandhoo (40 minutes away). An alternative island
			that can be more accessible for Vaavu, Meemu and
			Alifu Alifu Atolls could have been chosen.
			In what way would this additional airport improve the
			social, economic & environmental security/status of
			the people of Fainu and/or the region? What inquiries
			had been conducted with the people of Fainu to inform
			them about the cost-benefit of this development to
			their existing income and quality of life?
		8	Text:
			"However, it is important to consider the necessity of
			this proposed airport when there is an existing
			domestic airport located in Ifuru Island which is 30
			minutes away2 Therefore, the main justification for the



			project is implementation of the government's policy of transport and connectivity and tourism expansion policy of Maldives."  Comment 08:  It should be noted that the new government takes over on 17th November 2018. There is a high possibility of change in the new governments' policy towards such projects. It is important to halt any such initiatives without consulting the new government and referring to its policies.  Was this proposed development discussed with the Transitional Committee on the Environment and if so, what was the outcome of that discussion?
			Instead of building Airports/air strips, considering that vast sea area that surrounds the Maldives it is advisable to strategically expand sea-plane and seaplane ports in the country to ensure connectivity.
8.5.2	Dredging, Borrow Areas and reclamation	9	Text:  "To accommodate the full length of the runway, a total area of 8.33Ha is required to be reclaimed from the northern and eastern edge of the island. This includes 7.17 Ha from the Eastern side and 1.160 from the Western side. The areas would be reclaimed to a height of +1.3m which is the average height of the island. The reclaimed area is not elevated to maintain a uniform height throughout the runway. Therefore, shore protection measures will be stricter than the usual reclamation measures in Maldivian islands."  Comment 09:  According to previous Tourism Ministry announcement, 4 Hectors would be required for reclamation however EIA report clarifies total reclamation area as 8.33Ha. In an exclusive interview by the Minister of Tourism in April 2018 to Mihaaru Daily.
8.5.3	Shore Protection for the reclamation areas	10	Text:  "As the reclaimed land is said to be elevated to 1.3m, the average height of the island, extra precautions are taken by raising the revetments up to 2m.  Furthermore, the reclaimed area is a part of a runway with an airport terminal in the close vicinity and therefore this elevated shore protection measures would provide protection against any damage or flooding from climatic factors."  Comment 10:  EIA takes into account measures that can be taken to undertake coastal/shore protection, however, it does not factor in the possibility for in-land flooding due to



			surface runoff (Storm water drainage) from the runway into the island. Flood mitigation measures have not been detailed out.  It was also noticed that a beach profile study was not carried out. Considering the dynamic beaches and coastal environments found in these islands it is important to study how the reclamation can affect the entire beach and coastal dynamics of the island.
8.6.1	Project Inputs	11	Comment 11: Increase of singe use plastic waste with import of increased quantities of drinking water for construction staff. No waste management system in operation to deal with this waste
9	Methodology	12	Text:  Methodology Type: Terrestrial floral survey, Environment Aspect: Terrestrial environment, Used in this project: No"  Comment 12: Given that the terrestrial fauna is the largest area impacted in the project, it is surprising that no Terrestrial Fauna survey has been done. The information provided in this EIA is inadequate and probably downplays the real environmental impact of the project
10.2	Existing Marine Environment	13	Comment: 13  Though the marine survey was conducted using generally acknowledged methodology, a more thorough study indicating specific ecosystem loss to the proposed reclamation area is not available. Periodic observation is suggested rather than one photo quadrant and a 15 minutes swim.
10.7. 10.8 10.9 10.10	Existing terrestrial Environment	14	<ul> <li>"Majority of the vegetation clearance would take place within the Airport boundary. All vegetation within the boundary needs total clearance. The area accounts for 38 percent of the Islands vegetation. In addition vegetation clearance required to build an access road to the airport. The diagramme below shows the vegetation area within the airport boundary which requires total vegetation clearance."</li> <li>"The Fainu Island Council enumerated the trees to be 5792."</li> <li>"The area of Funa which needs clearing, accounts for only approximately 13 percent of the total Funa present in the island."</li> <li>"There are a total of 20 Banyan trees 20 meters or greater in height in the island. They can</li> </ul>



			reach a height of approximately 30 meters and live for hundreds of years. Out of these large Banyan trees 8 trees falls in the total clearance boundary. These trees need to be removed during the vegetation clearance. The largest tree on the island with an approximate height of 29 meters is among the trees which require removal."  Comment 14:  The report lacks a proper quantification of total number of trees that will be removed. The diagram shows that a large area with Tertiary Vegetation falls within the proposed site and these are not quantified
			properly. A mention of number of funa and banyan trees are made.
			The assessment of vegetation removal in terms of both numbers and type is rather weak and does not provide adequate information. In addition just the bare minimum information provided clearly shows that the vegetation to be removed is unacceptable.
10.11	Existing Socio- Economic Environment	15	<u>Text</u> : "Most of the islander's primary resource is from fishing and farming."
			Comment 15:  The section on socio-economic environment does not provide basic information on number of farmers or fishermen let alone an assessment of their income from these activities. However, the project does show that a large area of farmland will be removed.  This EIA should not be approved without proper information on economic activities that will be impacted by the project.
10.11.3.1	Utilities	16	Text: The utility provider for Fainu Island is FENAKA, providing round-the-clock electricity by 2 generators of 170W and 150W. The island does not have a water supply system. Their main source of potable water is by harvesting rain water. For non-potable use, ground water is extracted. However, many residents mentioned the water to have an odour and in some areas oxygen pumps are used to aerate the water to improve the quality. Fainu Island also lacks a sewerage network system and the current method of disposal is using septic tanks. The lack of a proper sewerage system poses the threat of faecal and microbiological contamination to the freshwater lens.



			Comment 16:
			Were Fainu residents given the impression that there
			was a greater chance of a sewage system installed on
			their island if this project was given the go ahead?
			What is the impact on rain water harvesting on Fainu
			when 38% of the island's vegetation has to be
		47	uprooted for this project to go ahead.
11.4.1	Vegetation Clearance	17	Text:  "Vegetation clearance is the construction activity that would produce the most negative impact on the environment for all three components studied, giving a total of -58 points. Most of these impacts are permanent and certain. Therefore, poses the highest impact significance."
			"Negative impact will be seen from local economy due to vegetation loss as about half of the farms are lost. The aesthetic luscious greenery of the island will be lost as well."
			Comment 17:
			The project should not be approved with the great
			negative impact it has because of vegetation clearance.
			Given the high environment impact of vegetation
			removal the proposed mitigation measures are highly
			inadequate and vague. The measures do not explain
		4.0	-
11.4.2		18	
	Reciamation		the coastal zone and coral reefs when dredging."  "Impact to the biological included the destruction and disruption to the marine environment due to sedimentation"
			Comment 18:
			There is no quantification of the reef or other coastal
			area affected by the project. A vague statement on
			impact in provided. The coral reef area impacted is not
			quantified. In addition the recreational loss from loss of a large beach and lagoon areas is not assessed.
			The project should not move ahead without a proper quantification of the loss to the coastal and marine environment
11.6.1	Airport operations	19	Text:
			"Health and well-being of the society and local
			·
11.4.2	Dredging and Reclamation  Airport operations	18	would produce the most negative impact on the environment for all three components studied, giving total of -58 points. Most of these impacts are permanent and certain. Therefore, poses the highest impact significance."  "Negative impact will be seen from local economy due to vegetation loss as about half of the farms are lost. The aesthetic luscious greenery of the island will be loas well."  Comment 17: The project should not be approved with the great negative impact it has because of vegetation clearance.  Given the high environment impact of vegetation removal the proposed mitigation measures are highly inadequate and vague. The measures do not explain how the impact will be minimized.  Text:  "The negative physical impacts are sedimentation to the coastal zone and coral reefs when dredging."  "Impact to the biological included the destruction and disruption to the marine environment due to sedimentation"  Comment 18: There is no quantification of the reef or other coastal area affected by the project. A vague statement on impact in provided. The coral reef area impacted is no quantified. In addition the recreational loss from loss a large beach and lagoon areas is not assessed.  The project should not move ahead without a proper quantification of the loss to the coastal and marine environment  Text:



			thus resulting in the improvement of the health care facility in the island."
			"The local economy will get direct benefits from the airport operations. Locals would be employed in the airport. In addition as more people transit in the island there would be greater demand for local businesses such as guest houses, dive centers, cafes, private boat for hire, and tourist shops. These factors would contribute to increase in household income and improvement of the local economy."
			Comment 19:  No quantifiable data is presented to demonstrate the above statements. For instance, how much time are tourists/travellers expected to wait in Fainu between flights/other modes of transport? Does this allow sufficient time for them to make use of the island's facilities? With over 38% of the island's vegetation removed, what is the negative impact on the island's local tourism opportunities?
12.2	Consultations with Civil Aviation Authority	20	Text:  CAA does not have any regulation or guideline for the minimum distance for an airport to be from a population
			Inquired about LGA's concern regarding the association of air craft noise with psychological effect in children growing up in close proximity to airports. CAA replied that there are no safe minimum distance for noise to an inhabited area.
			Comment 20:  If the CAA does not have a guideline, EPA should establish a minimum distance for an airport to be from a population. If the CAA maintains that there is no safe minimum distance, Fainu airport should not be given the go ahead.
12.4	Consultation with EPA	21	Text:  "Please try not to destroy the trees that are 50 years and above and instead relocate them at appropriate places. IASL informed that the matured trees will be relocated to the new reclamation sites around Male area interests for this has been receiving to the company."
			Comment 21: This is not IASL's decision to make. EPA must ensure if any uprooting of takes place that they are transported and replanted according to strict guidelines and the



			location for replanting must be decided in consultation with the EPA.
12.6	Consultation with	22	Comment 22:
12.0		22	The EIA states that most of the islanders who were
	the island council,		
	FENAKA, Island		consulted were not fully aware of the project or its
	Health Centre and		plans, but were in agreement with the project. Could
	School		the EIA please clarify how their survey truthfully
			reflects the opinion of those surveyed, if they are
			unaware what they're being questioned about?
13.1	No Project Option	23	Text:
			"There is a significant amount of environmental impact
			from the proposed projects as it requires a large area
			of vegetation clearance from an inhabited island as
			well as dredging and reclamation."
			Comment 23:
			The project should not go ahead with significant
			amount of environmental impact.
13.2	Alternative analysis	24	Comment 24:
	matrix		It is not clear how the alternatives were chosen. With
			the highest impact coming from vegetation removal
			there should have been an alternative to avoid removal
			of large amounts of vegetation. However, it is very
			clear this project cannot go ahead in Fainu, without
			destroying large areas of mature trees and farmland.
13.6	Preferred	25	Text:
	Alternatives		"The "no-project" alternative, in this case is an option
			that should be considered. However, if the project is to
			go forward, the options A1 and A2 are the preferred
			alternatives. These proposed alternatives does not
			bring about major changes to the initial concept plan."
			Comment 25:
			The "no-project" option needs to be recommended for
			this project.