

Review of the EIA for the "Proposed Highway 2000 North South Link: Moneague to Ocho Rios" Highway Construction Project Jamaica

Done by

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This document contains the professional opinion of the Jamaica Environment Trust (JET). In arriving at our opinion we made every reasonable attempt to ensure that our resource persons are informed and reliable and experts in the area in which their comment and analysis is sought. JET encourages readers to apply their own critical analysis to the information provided in this document and by others, particularly where JET's opinion differs from those others.

With technical assistance from the Environmental Law Alliance Worldwide (ELAW), the Jamaica Environment Trust (JET) evaluated the Environmental Impact Assessment (EIA) for the "Proposed Highway 2000 North South Link: Moneague to Ocho Rios" Highway Construction Project dated November 2012.

GENERAL COMMENTS

Introduction

With ELAW's assistance JET reviewed the technical aspects of the EIA for the first segment (Caymanas to Linstead) of this North-South Highway project. Many of our concerns remain the same for this second segment (Moneague to Ocho Rios). This segment of the road seems to present lower risk than the Caymans to Linstead leg, but there are some general and specific concerns we would like to highlight.

In general, it does not seem appropriate to have separate EIAs for each 20-30 km segment of this road and we wonder why this approach has been adopted. Clearly the project is larger than 20 km of highway and it would facilitate a more accurate and comprehensive evaluation of the new highway as a whole if it could be reviewed under a single EIA, preferably a Strategic Environmental Assessment. Both EIAs describe risks of landslides, flooding, and threats to ground water, as well as removal of forests. As in our review of the EIA for the Caymanas to Linstead leg, JET reiterates the following:

- 1. A Strategic Environment Assessment should have been done for the entire North/South link
- 2. There should be full disclosure of information relating to the engineering solutions to be used to address the incomplete leg at Mount Rosser
- 3. There should be full disclosure of all associated developments which are part of the arrangements made with the contractors.

SPECIFIC COMMENTS

Proper justification for the highway has not been established

We raised this issue in our first review and it remains a concern here. The EIA states that "it is well documented that investment in transportation infrastructure generates substantial economic benefits" (EIA p. 22). It is possible that this statement is true but the documentation is not in the EIA, so it is impossible to assess its veracity. Without documentation or evidence of any economic benefit to the communities where the highway will be built, it is extremely difficult to accept that in fact the highway will be a positive development for the Jamaicans living in the region.

Curiously, the EIA also states on p. 22 that:

"In road projects, externalities are the major source of benefits and the challenge is to internalise these externalities and thus give a measure and a value of the effects on vehicle operating costs, people's time, people's lives, environment, etc."

It is not clear what is meant by this statement, in particular with regard to the environment. What exactly will the value added be for the environment? Further, the EIA states that, "there are other benefits such as accident saving cost and environmental cost that are difficult to quantify" (EIA p. 22). It may be difficult to quantify them but it should not be difficult to describe them. What positive environmental impact will arise as a result of this project?

Finally, the EIA states as part of the project rationale that the highway will "induce additional/collateral economic and development activity in the areas served. For example, the establishment of Economic Re-processing Zones (EPZ)" (EIA p. 21). EPZs are economic processing zones—it is not clear what the "re-processing" will be—but of greater importance is the fact that EPZs *do not*, as a matter of course, benefit the local communities. In a recent paper for the Corporate Social Responsibility Initiative, Lang (2010) writes:

"Since at least the 1980s, there has been a rapid expansion in the number and size of Export Processing Zones (EPZs) across many parts of the developing world. This proliferation has been of some concern to many within the human rights movement, primarily because of some evidence of low and deteriorating labor standards within these zones. Successive reports on the outcomes of EPZs published by international organizations such as the ILO, the OECD and the World Bank, show a mixed overall picture of the impact of EPZs on wages, working conditions, rights of association and gender discrimination in the workplace – but also provide evidence of some egregious examples of serious violations of these and other fundamental labor rights in some circumstances. These reports provide a similarly mixed picture of the economic outcomes of EPZ experiments, in terms of export development, employment, dynamic spillover effects, and growth.

The human rights impacts of EPZs include more than labor issues. Where EPZ projects attract large numbers of migrant workers, the availability of essential facilities – housing, water, electricity, medical and educational services – can fail to keep pace with demand. The movement of migrant workers can also lead to the rapid introduction and spread of communicable diseases, with consequent impacts on the right to health. The sheer scale of some EPZ projects can cause significant disruption to local communities during the initial construction phase. The rights to life and health of individuals living and working in the vicinity of EPZ projects may also be affected by any environmental damage caused by economic activity within the EPZ. There is also some anecdotal evidence of emerging human rights issues relating to the trend towards the private management and operation of EPZs."

Thus, it may be that an EPZ in this region would benefit Jamaicans but it certainly is not a guarantee, and it is incumbent upon the project proponents for this highway to clearly articulate what the benefits and advantages would be for the local communities. An EPZ in and of itself may not be a positive outcome from the highway.

Flooding remains a serious issue

The EIA states that at least in one section of the highway route (Malvern Park to Mammee Bay), "flooding can occur through overbank discharge from the numerous rivers. Additionally, experience has shown that, during extended periods of precipitation, extreme flooding, erosion and destruction of road beds and property can occur" (EIA p. 30).

Unfortunately, the mitigation measures proposed to counteract this very real concern are to map the sinkholes (EIA p. 36) and the flood plain "for the pre and post construction scenarios for both the present and future conditions" (EIA p. 41), as well as conduct a detailed study that will include "historical flooding of areas along the alignment" (EIA p. 41). These are important studies and activities to carry out. But including them as mitigation strategies will not enable decisionmakers and the local communities to understand the risks *in advance* of agreeing on the final highway route. Doing a flooding study and mapping after determining the highway alignment is the wrong order of events. Clearly these studies need to be completed *before* any project approval, especially for something as critical as a roadway that will be dangerous if frequently flooded or vulnerable to instability from sinkholes.

We would also like to see strong measures taken to protect sinkholes from dumping of material during the construction process.

Habitat fragmentation is undeniable but no solution is offered

This EIA includes a good list of the impacts that the highway project will have on species and habitats in the area, including fragmentation, degradation, and noise (EIA pp. 303-304). In the conclusion of the avifauna impacts section the report reads, "both the construction of paved roadways and the removal of vegetation will cause a loss of habitats. For example the road construction processes includes removal of vegetation, blasting and excavating, which will scare away fauna such as birds. However, several of them will return" (EIA p. 227). It is discouraging to read this conclusion, which is based on no data or evidence, and further to read that the mitigation offered for the negative impacts is quite minimal. There is a brief mention of using bridges and/or tunnels to reduce fragmentation in the mitigation chapter. The EIA states that the mitigation strategy will be to:

"incorporate at regular intervals engineering solutions that would help minimise habitat fragmentation such as tunnels and/or bridges especially at higher elevations. These structures would help reduce population isolation by providing links between potentially fragmented habitats (Primack, 2006; Smith & Smith, 2006) and minimise the impact of vegetation removal" (EIA p. 325).

This mitigation strategy is disappointing because it is so vague. How precisely will the addition of bridges or tunnels (both of which sound like passageways for vehicles, not animals) aid the migratory and local fauna? In addition, the two scientific citations listed are for a general textbook on conservation biology and a general ecology textbook, which does not suggest serious knowledge of or intention towards constructing meaningful passageways for animals.

There are many useful resources available for constructing effective structures to help wildlife navigate roadways. For example, the National Cooperative Highway Research Program in the U.S. wrote a very useful report on best practices for protecting wildlife, titled, "Interaction Between Roadways and Wildlife Ecology" (2002). It includes many strategies and examples for different species and can be accessed here: http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_305.pdf. These strategies should be reviewed and the relevant ones for Jamaica required. We discussed the impacts of fragmentation in more detail in our first EIA review.

Conclusion

In summary, it is frustrating to see some of the same deficiencies in the EIA for this segment of the highway. We hope that this highway project will be considered as the larger project that it is, rather than several smaller, seemingly isolated projects, so that the impacts and benefits can be accurately assessed.

References

Lang, A. 2010. "Trade Agreements, Business and Human Rights: The case of export processing zones." Corporate Social Responsibility Initiative Working Paper No. 57. Cambridge, MA: John F. Kennedy School of Government, Harvard University. Online access: http://www.hks.harvard.edu/mrcbg/CSRI/publications/workingpaper_57_lang%20FINAL%20APRIL%202010. pdf

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