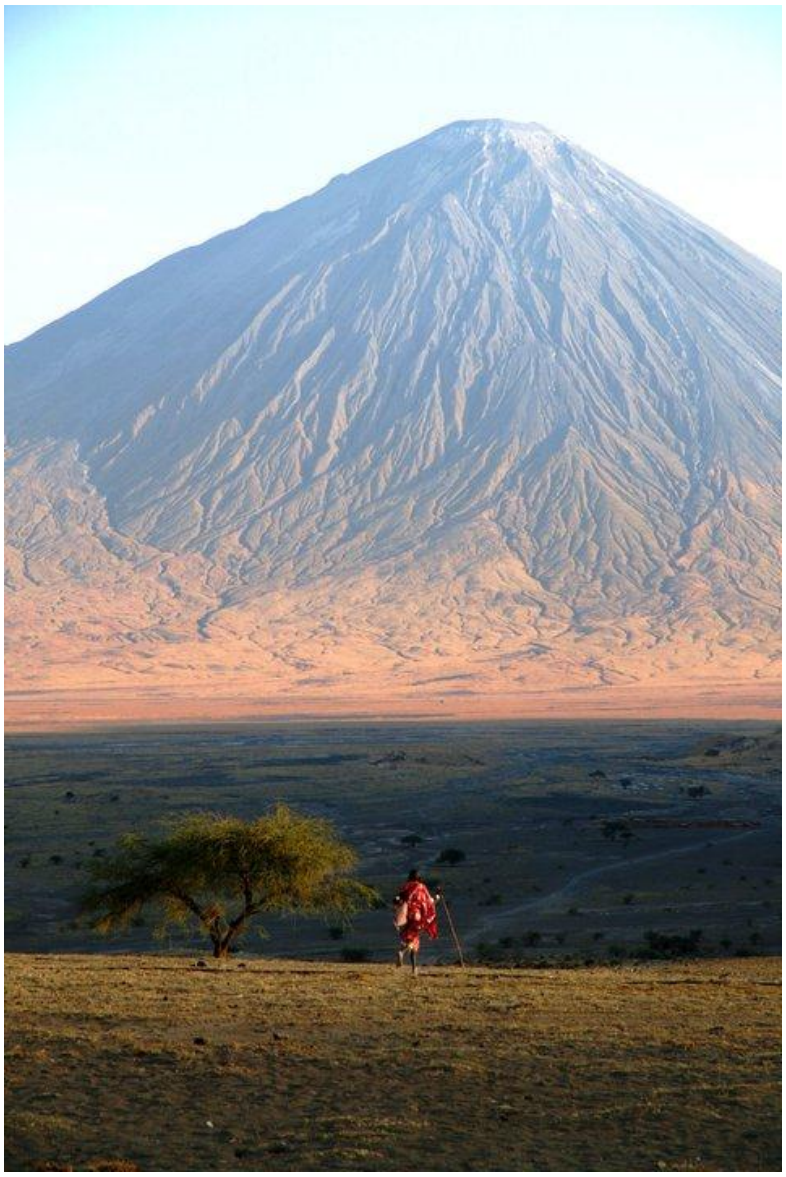

Serengeti Highway: Roadblocks to Resolution

Katie Hartin

September 2011

University of Vermont

Each year in Kenya and Tanzania, over 1.8 million wildebeest make a 2,000 kilometer trek in search of fertile grasses, moving from the Masai Mara in the north to the Serengeti plains in the south and back again (Judson 2010). One of the last great mammal migrations on Earth, this already dangerous journey may become more perilous for the beasts when a two-lane paved road will bisect their route, "possibly sending a thick stream of overloaded trucks and speeding buses through the traveling herds" (Gettleman 2010).

The 'Serengeti Highway' will connect the two major ports of Mwanza and Musoma on Lake Victoria to Dar es Salaam on the Indian Ocean, enabling larger companies, as well as small farmers and entrepreneurs, to transport goods more easily (see Appendix). As of now, there is a paved road from Dar es Salaam to Arusha already in existence, so the proposed highway would consist of a 480 kilometer tarmac road to connect Arusha to Musoma, passing through Serengeti National Park in northern Tanzania (East African 2010). Currently, traffic must travel 418 kilometers around the Serengeti in order to pass from Mwanza to Arusha on a paved road. The new road would drastically decrease this time, creating more business opportunities and easier travel.

In recent months, the Serengeti Highway has gained a significant amount of press from Western media, with outcries from conservationists and civilians alike. Since negotiations began about 3 years ago, environmentalists have protested the proposed road, in favor of an alternative route that would run south of the Masai Mara and Serengeti. This alternate route could potentially benefit more Tanzanian residents and avoid disturbing the wildebeest migration. Tanzanian President Jakaya Kikwete has been firm in his support for the original route though, leaving environmentalists scratching their heads.

Regardless of what actions outsiders take, it appears as though Kikwete is set on constructing the road through the Serengeti, in part to fulfill a pledge made during the 2005 election (de Waal 2011). He used the Serengeti route in his platform again in the 2010 campaign. He was re-elected, as nearly all of the people in rural areas claimed that they had voted for him and support him. For months now, signs of the new road have already begun to emerge in the form of markers along what are now dirt paths (Gettleman 2010). Several tour companies and Arab investors have built luxurious hotels along where the road is supposed to pass in anticipation that Kikwete will make good on his promise. Kikwete has said that construction will begin in the summer of 2011 and should finish sometime in the spring of 2012.

Who are the stakeholders?

Wildlife

Roughly 1.8 million wildebeest and 500,000 zebra and other herbivores take part in the annual migration in northern Tanzania (Hance 2011). Recent studies estimate that approximately 35 to 70 percent of these populations could be wiped out should the road be constructed (Hance 2011). While the 65- kilometer stretch of road passing though the Serengeti will remain unpaved, past research has indicated that a road in any form will have negative consequences on wildlife movement (Judson 2010). It is predicted that 800 trucks will use the Serengeti highway each day by 2015 and 3,000 will pass each day by 2035 (African Wildlife Federation; de Waal; Hance). This increase in volume of traffic is expected to have negative consequences on animal migration as the skittish wildebeest will be too anxious to cross the bustling highway. The road could have other far-reaching impacts in that it will allow poachers an easier route to access the ivory of elephants and horns of rare black rhinoceroses (Hance; Judson). It may also mean the construction of fences, invasive seeds sticking to car tires and being spread throughout the park,

and more frequent and more devastating fires (Gettleman 2010). Others have even argued that it will nullify any future opportunities for Tanzania to participate in carbon schemes, transforming the land from a sink to a source.

Despite Kikwete's constant assurances that the road will not hurt animal migration or the Serengeti, a government report was leaked to Serengeti Watch, a conservation group. This document painted a much different picture (Hance 2011). It alluded not only to the loss of herbivores, but also to the loss of the numerous wildlife that prey on them, such as lions, cheetahs, leopards, and Nile crocodiles. Without the movement of herbivores, the savannah grasslands will be drastically altered (Gettleman 2010). The grasses require fertilization through the dropping of herbivore dung, of which approximately 800,000 pounds is produced per day, and continual trimming through the feeding habits of herbivores. It is these ecological forces that have created the unique Serengeti ecosystem and landscape.

Environmentalists

Both Dave Blanton, co-founder of Serengeti Watch, and renowned conservationist Richard Leakey doubt that Kikwete's promise to leave the portion of road running through the Serengeti unpaved will hold true, as demand grows and traffic rises (Gettleman; Hance; Kahumbu). They say it is not feasible to believe that a dirt-paved road would suffice and be able to handle the significant amount of travel that is predicted to come along with the highway. It may serve the populations in the short-term, but when those port cities boast populations of several million, Leakey says there will be little stopping the roads from becoming six-lane tarmac highways. Leakey suggests that the portion of the highway running through Serengeti could be elevated so that the animals would be able to move freely below the structure. Others

retort that this is far too expensive and studies have not conclusively proven that this has no effect on migrations.

What is so puzzling to most environmentalists though is why Tanzania is pursuing this development project when it has such a longstanding history of creating conservation areas. Approximately one quarter of Tanzania's land is devoted to preserving wildlife, with the Selous Game Reserve also holding the record for the largest protected area in Africa (Judson 2010). Tanzania boasts a variety of endemic and endangered species in the Serengeti and the adjacent Eastern Arc Mountains, the latter being one of the most biodiverse regions of Africa (Hance 2011).

Environmentalists have also raised concerns with the manner in which the proposal was approved by the Tanzanian government in the first place. The highway was green-lighted before the Tanzanian Ministry of Infrastructure and Development and the Tanzanian National Roads Agency had even begun to conduct an Environmental Impact Assessment (EIA) of the road (de Waal; Hance). After the decision was finalized, these agencies determined that the road was not fit for wildlife management, but the EIA was disregarded.

The World Bank and the German Government

Interestingly, both the World Bank and the German government have put pressure on Kikwete to choose the alternative route in exchange for funding this development project (AWF, de Waal)). Kikwete has said that those people living in northern Tanzania are far more in need of the road than those south of the Serengeti, hence his reasoning for supporting with the proposed route. He rightly states that some of the people near the northern border must travel hours to get water and access human resources, such as healthcare (Hance 2011). As a rebuttal to this, the World Bank has agreed to fund the alternative route, and the German government to

fund the building of local roads in the north. Tanzania was a colony of Germany prior to the end of World War I and thus the Frankfurt Zoological Society had an extremely large role in the creation of Serengeti National Park and remains the most prominent group doing research in the park. While the World Bank looked into financing a highway project about 20 years ago, they rejected it, in part due to environmental reasons (Gettleman 2010).

Tourism

Another group of people with a stake in this issue are the tour companies and local guides taking tourists on safaris through the Serengeti and Masai Mara. To these people, the Serengeti Highway may have positive or negative impacts. The road may lead to an increase in the number of tourists, because the visitors can travel around more easily and comfortably to more locations. The higher volume of tourists is likely to benefit the larger tour companies quite substantially while having relatively little impact on the local tour guides who have fewer resources to invest and would face stiffer competition from the bigger operations. Should the road significantly decrease the amount of wildlife in the region however, the tourism industry could be devastated.

The Serengeti National Park, which attracts more than 100,000 visitors each year and produces millions of dollars in parks fees, is generally thought of as a major component driving Tanzania's economic development and progress (East African; Gettleman). Once again, the local tour guides have more to lose in this situation than the large tour companies, which are generally owned by ex-patriates and foreigners. The tour guides could be affected by the lack of wildlife not bringing any tourists, as tourism is a business that supplements their income as small farmers, similar to the local people working for the large tour companies.

Recently, the Tanzanian Association of Tour Operators (Tato) has announced their opposition to the Serengeti Highway, claiming that the road would negatively affect their work (de Waal; Hance). Tourism, which accounts for about 15 to 25 percent of Tanzania's GDP, employs a number of Tanzanians and the road may increase this number initially, but over the long-run is believed to decrease the number of tourists and therefore decrease the number of those involved in the tourism sector (Judson 2010). It has been estimated that more than $500 million in revenue and 200,000 jobs would be lost if the road is built (AWF 2011). This includes not only the guides themselves, but many people, including women, who work at hotels, small tourist shops, and as drivers or cooks.

Local people

The Tanzanians living in the northern region have a stake in this issue, perhaps even greater than any of the aforementioned actors. Located near the Kenyan border, the village of Engare Sero, home to approximately 6,000 people, was the feature of a New York Times article in October of 2010 (Gettleman 2010). Engare Sero, which lies just outside the popular tourist destination Ngorongoro Crater and lies within the Loliondo district, is set to fall along the new road. The article quotes former village chairman, Loshipa Sadira, who said that they have "been praying for it [the road] for years" (Gettleman 2010). As of now, the nearest paved road to Engare Sero is about 60 kilometers away.

Last fall, I conducted research in Engare Sero, asking the residents about a variety of topics, one of which included the building of the road. My results were similar to that of New York Times investigators in that I found that 99.1 percent of the sample population (n=87) are in favor of the road. When asked why they support the construction, the participants cited many reasons, including access to sell at bigger markets, cheaper goods, getting to a hospital faster (the

village currently only has a small dispensary that was built by OXFAM), opportunities for better education, schools and teachers, and a higher chance of getting electricity and cell phone service. To the residents of Engare Sero, or to residents of any northern Tanzanian village, a highway means everything. From conducting focal groups, I learned that to them it means a better life.

Foreign investment and other development projects

The highway project, which would cost about $480 million, will be funded by the Tanzanian government, as well as members of mining and industrial groups that have not been disclosed (de Waal 2011). The road's construction is strongly linked to the siteing of another development project, a soda ash extraction plant built by the Indian company, Tata, on Lake Natron, located between Arusha and Mwanza (Hance 2011). President Kikwete want to fast-track the project and build the plant in Loliondo, which is located 70 kilometers away from the lake and along the proposed highway route, and to transport the soda ash via pipeline. Joining the United Nations and the World Bank, Tata has withdrawn their support for the proposal amidst intense opposition from environmentalists. Regardless, Kikwete uses the example of Magadi Soda ash, a plant on the Kenyan side of Lake Natron, to justify the plant in Tanzania. He claims it is unfair to leave the Tanzanian people in poverty while not tapping the natural resources they have.

It appears as though Kikwete is bent on bringing Tanzania into the Western industrial development narrative and he refuses to budge on the location of the road. Rumors have been circulating that involvement of Chinese developers is sparking this stubbornness, as it appears as though they have agreed to back the project in order to better access goods in the interior of the country (Hance 2011). Some conservationists believe this is due to a link between the Chinese

and their desire for a thoroughfare for mined minerals to be brought to the coast to fuel China's growth.

Potential for Conflict Resolution

From a psychological perspective, it appears as though Kikwete may be trying to assert his authority by defying the Western world's desires. The president has stated that while he is sure that foreign conservationists are well-intentioned, they do not understand the needs of his constituents. The balance of power is in Kikwete's favor, as Tanzania is a sovereign country and he has the jurisdiction to make this decision, regardless of the opinions of the outside world.

In December of 2010, the African Network for Animal Welfare (ANAW) sought an interim order from the East African Court of Justice to stop the Serengeti highway project. The ANAW argued that in constructing the road, Tanzania was removing itself from UNESCO obligations and infringing on the terms of the Treaty for the Establishment of the East African Community. This treaty requires that Tanzania cooperate on management of shared natural resources and actions that may have significant transboundary environmental impacts. The Attorney General of Tanzania argued that his government had sovereign right to develop infrastructure within its boundaries and the court did not have jurisdiction over this matter. In August of 2011, the Tanzanian judge presiding over the case overruled the Attorney General's objections and claimed that the court did have authority to decide whether or not such development is within the law.

There are many forces shaping this environmental conflict, but unfortunately it appears as though the Tanzanian government is moving forward with their plan without considering any potential opportunities for bargaining and without seeking integrative solutions. Tanzania is somewhat of an anomaly among African countries in that it has remained peaceful and stable

since independence, and has held "free and fair" elections, but that does not mean that officials do not receive considerable bribes. With corruption permeating Tanzanian politics, it looks as though Kikwete and his peers will put into effect a very risky plan while under the thumb of foreign investors (Gettleman 2010). At this point, there is a great deal that is unknown and, although many have speculated, the consequences of the road could be either very positive or very negative for the wildlife, the people, or both.

Historically, during a conflict between two developing countries, one or more developed countries would attempt to step up to play the role of a third-party mediator. In this situation however, where it is a developing country at odds with developed countries (in the United States and Europe), there appears that there is no one filling such a position. The developed world has taken its stance and it appears there is no objective, outside observer left to mediate.

I, most of all people, do not want to deny the impoverished residents living in the northern area, particularly in Loliondo, the benefits that the highway could bring, but the German government has already agreed to install local roads that would serve a similar purpose. I admit that I must join the environmentalists in collective puzzlement as to why Kikwete is firm in his Serengeti highway plans. This case may serve to highlight the complexity of environmental conflicts, especially in developing parts of the world.

The conflict over the Serengeti highway is a classic case of what has become a polarized debate over conservation versus development. Both sides have noble goals, but it appears that this conflict has become intractable based on the actors becoming so entrenched in their positions that they have lost their grounding in their principles.

In the case of the Serengeti highway, it appears as if Kikwete has become set in his interests for economic gains, but has forgotten his positions on conservation and bettering the

lives of his constituents. Kikwete's principle is to improve the lives of Tanzanians by providing the country with development, but he has become entrenched in his position on which methods to employ in order to best accomplish this.

My suggestion is that people attempt to not juxtapose conservation and development, putting them on opposite sides of the spectrum. As Richard Leakey says, it does not necessarily have to be an either-or situation, nor should it be. In Tanzania, there are opportunities to create integrative solutions where none of the actors would be harmed and where some would hopefully stand to benefit.

In my view, it would appear as though the alternative highway route plus the building of local roads in the north would provide a nearly perfect solution. Although I have little knowledge about highway planning, many studies have shown that wildlife show great anxiety about crossing any road, and thus even a dirt road could inhibit the wildebeest migration. As mentioned earlier, compromising the wildlife of Tanzania would have far-reaching effects, possibly even endangering the livelihoods of those involved in the tourism industry.

My reason for selecting this option is that, despite the fact that the alternative route is not as direct, it is still an improvement over what is in place now. Goods can still be transferred from Lake Victoria to the coast via a route that is much faster than the current one. I would argue the same case for the local people in Loliondo. The paved local roads may not be as quick or provide as much access as the Serengeti Highway would, but they are still an improvement over the dirt roads now in place. It is certainly a far from perfect solution, mostly because each actor only stands to benefit minimally or not at all, but it prevents this situation from becoming a zero-sum game, where one side benefits only from the loss of the other.

From a personal perspective, it is unusual for me to fall in favor with the protection of wildlife over the betterment of peoples' lives. I believe, in this case though, there is far too much unknown about the long-term ramifications of a major highway cutting across the path of one of the last remaining great land migrations to justify this choice. I worry not only about the vast and beautiful wildlife roaming the area, but also about the potential for the local people to make a livelihood from the existence of this wildlife. Tourism is a major part of the Tanzanian economy and I do not think it should be put in jeopardy in order to benefit already wealthy businessmen and a few foreign investors.

Appendix

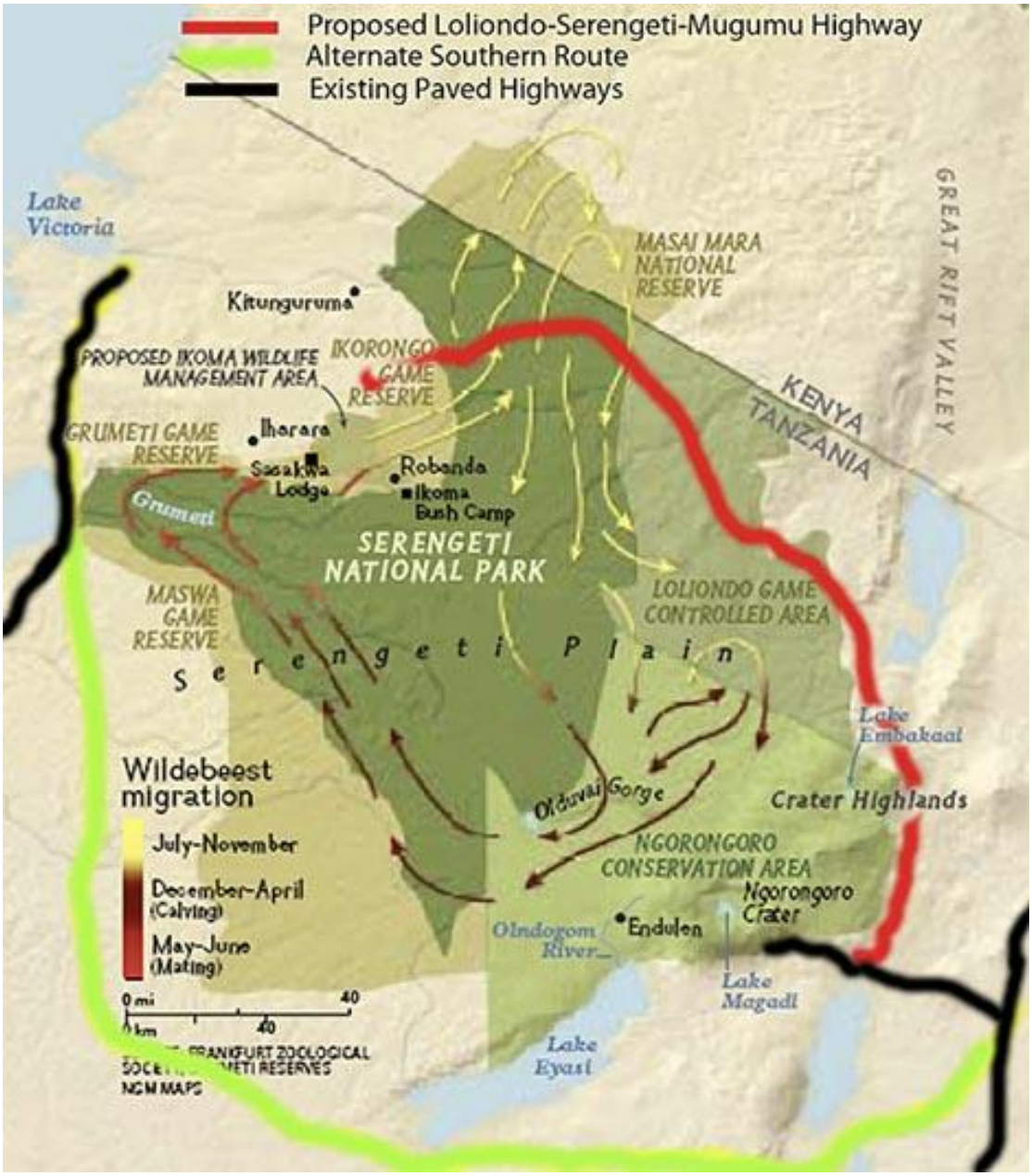

Figure 1. A map of the proposed Serengeti Highway, an alternate route that would avoid Serengeti National Park, and the existing highways. Image retrieved from http://www.african-horizons.com/SAFARI_WEB_WEB/UK

References

de Waal, L. (2011, April 6). Serengeti highway proposal- an overview. [Web log comment]. Retrieved from

http://baobabtravel.wordpress.com/2011/04/06/serengeti-highway-proposal-an-overview/

The East African. (2010, June 21). Tanzania: Outcry over plan to build road through Serengeti. Retrieved from http://www.afrika.no/Detailed/19709.html

Gettleman, J. (2010, October 30). Serengeti road plan offers prospects and fears. *The New York Times.* Retrieved from http://www.nytimes.com/2010/10/31/world/africa/31serengeti.html?_r=1

Hance, J. (2011, February 10). Leaked government study: road will damage Serengeti wildlife, despite president's assurances. Retrieved from

http://news.mongabay.com/2011/0210-hance_serengeti_road.html

Hance, J. (2011, April 14). From the Serengeti to Lake Natron: is the Tanzanian government aiming to destroy its wildlife and lands? Retrieved from

http://news.mongabay.com/2011/0414-hance_tanzania_gov.html?newsmenu

Judson, O. (2010, June 15). Road kill in the Serengeti? [Web log comment]. Retrieved from

http://opinionator.blogs.nytimes.com/2010/06/15/road-kill-in-the-serengeti/

Kahumbu, P. (2010, July 5). Richard Leakey comments on the Serengeti highway. Retrieved from

http://baraza.wildlifedirect.org/2010/07/05/richard-leakey-comments-on-the-serengeti-highway/

Miranda, E. (2011, March 15). Worldwide opposition to Serengeti road has yet to sway Tanzanian government. Retrieved from http://www.awf.org/content/headline/detail/4524

Star Correspondent. (2011, August 30). Tanzania loses bid to stop road suit. *Nairobi Star*. Retrieved from http://allafrica.com/stories/201108310051.html