

# Tourism and income growth for the Ngorongoro District population in Tanzania

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By Sef Sloomweg <sup>1</sup>

*Small abstract:* Tourism is focused in Ngorongoro on high-end, short-stay tourism. The inhabitants do not profit from this, at best they are object of curiosity. To bring local income to grow, diversification of tourism is needed. The paper analyses how this can be realised.

*Long abstract:* The 1.000.000 visitors to the Ngorongoro Crater in 2016 paid \$70 per person per day entry fee. These \$70 million go to the central government. The total revenues from tourism for the Ngorongoro district and its population are all together \$2.5 million a year. At most 1250 district people (out of ~200,000) work in the 36 luxury hotels and lodges. The rest is allowed to retain its pastoral life and to dance and sing and show their traditional lifestyle ... and to impoverish more and more. Currently of 1,000,000 tourists spend only between 50 and 60,000 nights in the district. And they pay per night between \$250 and \$1000. All tourism is oriented towards the ultimate wildlife experience in the parks, bringing high revenues for tour operators, hotel owners and government but nothing for the district population. However, real economic growth for the Maasai and Batemi families is perfectly possible outside the parks. This paper shows where, how and who can develop mid-range long-stay accommodation for leisure, health, adventure and sportive tourism and for religious and culture tourism. This will liberate the traditional inhabitants from being victims, losing land and livelihood to tourism. They will turn into subjects, actors who profit from tourism building their own future. Revenues go up to \$72 million and owners of tourist accommodation employ over 10,000 district people by 2026. This will represent 22% of a District Gross Product needed to achieve middle income status. A multiplier effect will easily double this.

## 1. Background: district, population and economy<sup>2</sup>

The Ngorongoro district (just over 14,000 km<sup>2</sup>) is part of the Arusha Region and is situated in the Northern part of Tanzania, bordering Kenya to the North, the Serengeti Park to the East and Lake Natron to the West. The district is part of the Serengeti ecosystem which is very important for the conservation of world wildlife species.

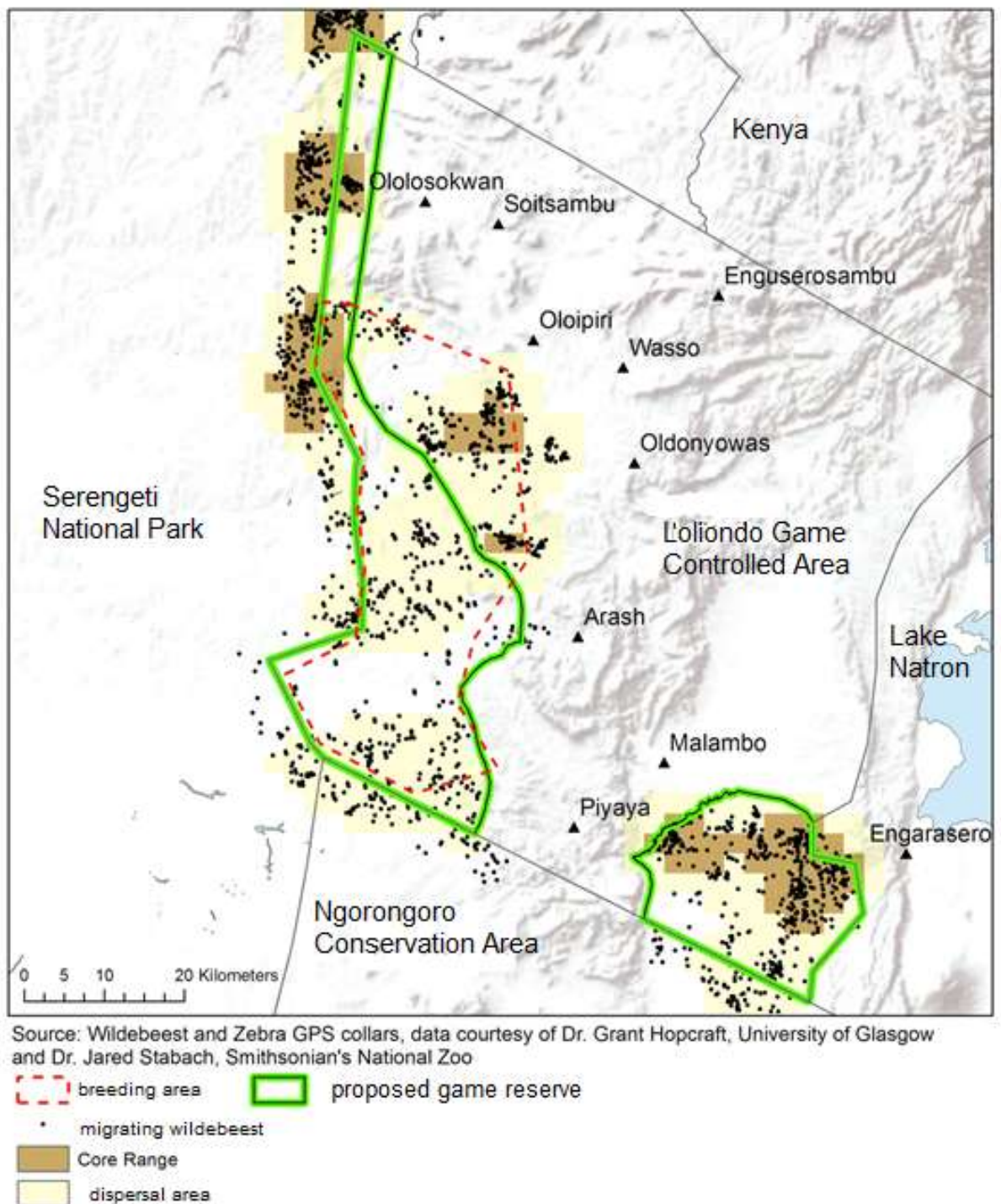
Almost 60% (~8,300 km<sup>2</sup>) of the district is the Ngorongoro Conservations Area where human activities are limited to cattle herding and photo-tourism. Permanent settlements are discouraged. Recently (2017) 10% (~1500 km<sup>2</sup>) is indicated by the Tanzania Government to be a corridor zone for wildlife migration where game reserve rules apply, meaning only

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<sup>2</sup> All information in this paragraph is from Sef Sloomweg: “Move child, move!” Towards Middle and High Income for the People of the Ngorongoro District; published by NDC in the Medium Term Strategic Plan 2016/2017-2020/2021; as paper presented at the ECHO Symposium 7-10 February 2017 in Arusha - Tanzania.

**Map 1: Loliondo and Natron Game Controlled Area**



sport-hunting and photo-tourism is allowed. The remaining 30% (just over 4000 km<sup>2</sup>) is formally game controlled area but in practice all human economic activities are practiced (livestock herding, crop production, tourism, mining, forestry). Human settlements range from traditional Boma's to urbanised villages.

The population has grown from approximately 20,000 in 1960 to 200,000 in 2016. This annual population growth of 4.2% (doubling every 17 year) is hard to explain only from natural growth. The district has seen a positive migration: more people have entered than left the district, which is most likely connected to tourism development.

The district population is 80% pastoral Maasai, 11% is agro-pastoral Batemi and 9% other tribes. Pastoralism, although more and more sedentary, is the main economic activity of the population, followed by crop production and forestry. Tourism is for the population a marginal although welcome additional source of income. Dancing, singing and selling beads or allowing pictures of their traditional dress, herds and boma's. Money transfers from migration contribute to the income of the population. It results in investments in housing and some shops, but most of all more income leads to a growing number of livestock.

## **2. Ngorongoro tourism current situation**

Tourism is important for Tanzania. In 2016 Tanzania counted 1.23 million visitors. Some 17% of foreign currency (or \$2.23 billion or over \$1,800 per visitor) is earned with this sector employing at least half a million people<sup>3</sup>. However local communities are only marginally involved. Revenues go to the State and to the owners of the tourist companies, mostly international, that bring "high end" tourists for one or two weeks to Tanzania. Practically all these tourists hop from one park to the other by car and plane. The Ngorongoro Conservation Area Authority counted over 1,000,000 visitors in 2016. The main entrance to the park is near Karatu (in Karatu district) at 2 hours tarmac road from Arusha, and a limited number of visitors lodge in the NCA and when they do it is seldom more than one night. The hotel capacity<sup>4</sup> in 2016 of the NCA is 535 beds in 25 hotel/camp/lodges and the price is high end: \$250-\$750 per person per night.

There are no figures known of revenues from Safari tourists to the NCA but when we compare prices we can estimate that on average Safari tourists spent between \$200 and \$400 per day on safaris per person, this would be a daily turnover in the tourist industry of between \$200 and \$400 Million of visitors of the Ngorongoro Conservation Area. Then where goes this money?

- Travel organiser, usually foreign, and air companies
- Tanzania State (visa 50\$ per stay and park entrance fees 70\$ per day and other taxes and levies)
- Touring company (pick up, driving around, park visits)
- Lodge, Camp, Hotel owners and personnel
- Souvenir producers and sellers/shops
- The industries and service sector for tourism (from banks to restaurants, (quality) retail shops, car maintenance, construction and maintenance, including services to staff in the tourism industry.

This whole business does only marginally involve the local Ngorongoro population. To put this in perspective, the entrance fee for the NDC is 70\$ pp which is a revenue for the Tanzania State of \$70 Million. The NCAA supports the district budget with \$85.000 a year or 0.12% of entree fee revenues.

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<sup>3</sup> The Guardian; Monday 10 April 2017, page 1 and 2.

<sup>4</sup> Hotel capacity based on registration of Ngorongoro District Finance Department.

**Table 1: NDC tourists revenues for Loliondo and Natron population**

Contribution tourism industry to District 3 financial years 2013 - 2016					
		3 year		1 year	
Tourist taxes and levies to district		3,311,360,131			
Direct contributions to villages		566,579,567			
Tourist Companies		3,397,940,363		\$566,323	
Hunting block contributions		7,817,019,464			
	in TZS	15,092,899,525	5,030,966,508		
	in US\$	\$7,546,450	\$2,515,483		
source: District Financial Department 2016					

The district has calculated average revenues either directly as contribution to the district and the village budget (in donations and taxes and levies) or by providing employment or as charity contributions of tourist companies in socio-economic projects to villages. The result is seen in table 1. The table only shows Loliondo and Natron Game controlled area related revenues from the tourist sector; the NCA is not included in this calculation. The NCAA and the hotels there do however also invest in socio-economic projects as are the companies active in NCA.

The population itself is connected to this industry by:

- Offering cultural services (dancing, singing, boma visits, allowing pictures) and the production and sale of souvenirs.
- Low paid labour for tourist companies. The Ngorongoro district hotels and lodges might employ on average 4 persons per room; which would be a maximum of 2,563 persons and they are mostly recruited from urban centres like Karatu or Arusha and not from Ngorongoro.
- Communities benefit from investments of charities related to hotels and lodges in health, education and other social services.
- Apart from these charities the Ngorongoro Conservation Area Authority (NCAA) itself invests directly or through the Pastoral Council in/for local communities and provides services ranging from education and health to food support and other outreach services.

**Table 2: Tourist capacity<sup>5</sup> in Ngorongoro District**

Tourists Ngorongoro District				capacity with occupancy					
	nr lodges	beds		25%	100%	per bed	25% in US\$	employees	per bed
Loliondo GCA	4	48		4,320	17,280	500	2,160,000	240	5
Natron GCA	7	61		5,490	21,960	300	1,647,000	183	3
Ngorongoro	25	535		48,150	192,600	400	19,260,000	2,140	4
Total	36	644		57,960	231,840		23,067,000	2,563	

When we calculate the turnover realised from 1.000.000 tourists visiting the Ngorongoro Conservation Area and we compare this with the current capacity in tourist accommodation the situation looks pretty sombre. When we assume the 644 beds in the district in tourist accommodation with an average turnover per tourist between \$250 and \$750 per day, when

<sup>5</sup> The capacity is calculated with a 25% occupancy rate. Tourist industry is very volatile and exact figures are hard to find. The percentage might be estimated too high and with that the calculated turnover will also be too high. The number of employees is based on an estimation of the number of employees per room. It seems the more expensive the lodge; the more employees are employed per room.



we further assume an overall occupancy rate of 25% we count these 1,000,000 visitors spend only 58,000 nights in a hotel in Ngorongoro District at on average \$400 a night which results in a general gross revenue of 23,000,000\$. Based on the calculation of the district of these revenues for Loliondo and Natron in Table 1, around 550,000 US\$ from Hotel and Lodges sector ends up in benefits for the district population (in charity projects, employment and contributions to district budget). Because in NCA are roughly four times more beds one might expect 2.2 Million to remain in the NCA economy.

The situation in Loliondo and Natron Game Controlled Area is different from NCA. The almost 10,000 tourist nights come from approximately 3,000 tourists passing the NDC gate at Engarasero where district entrance fees are collected (15\$ per person per stay). An optimistic calculation is that these visitors actually stay one to maximum four nights, mostly in the Natron area. Engarasero village at Lake Natron has 7 lodges/tented camps with 61 rooms at prices between 100 and 700\$ for tourists. Partly the visitors drive straight to Serengeti Park using the district for an adventure day trip. The Loliondo Game controlled area has four luxury lodges (in total 48 rooms, priced at \$200-1000\$ per person per day) in Ololosokwan near the Northern Serengeti Park entrance. All but one lodges, camps or camping sites have owners from outside the district. With 5 staff per bed (Loliondo) and 3 staff per bed (Natron) the tourist accommodation provides an estimated 423 jobs. Management and most staff is from outside the district and does not consider itself resident.

Other jobs are for example game scouts when a specific area needs to be guarded which is the case in Loliondo, or guides for walking safaris. Engaresero has 83 registered local guides, and most likely also Olosokwan might have quite a number. But local guides do not work regularly. Additionally you find many women involved in beadwork they sell to passing tourists. Revenues are marginal.

Summing up, based on a 25% occupancy rate, the Loliondo and Natron Game controlled areas would have nearly 10,000 tourist-nights while NCA would have close to 50,000 nights. When we apply a 25% occupancy rate, and average price of a room per night of 300\$ (Natron) 400\$ (Ngorongoro) or 500\$ (Loliondo) the total yearly turnover can be estimated at \$23 million or 51 Billion TZS; which is much lower than NCA entree fees, good for some \$70 million.

Together the NCA \$2.2 million plus the \$2.5 million from Loliondo and Natron is \$4.7 Million out of the \$23 Million calculated as total year revenues of the tourism industry from lodging and food in Ngorongoro District. This is just about 20% of the turnover of hotels, lodges and camps in the district will benefit in one or another way the district economy, the rest leaks away. Compared to the total turnover for tourists for one night stay to visit NCA of between \$100 and \$200 million (tourists spend in Karatu or Arusha, outside the NCA and Serengeti between \$100 and \$200 per night) and between 2.3% and 4.7%. Also compared to the benefits for the Government (around \$70 million) this \$4.7 million for the district is peanuts.

**Table 3: Tanzanian Travellers in Ngorongoro District**

Local Travellers Ngorongoro District			capacity with occupancy		revenue			
	guesthouse	beds	25%	100%	per bed	25% in TZS	employees	per bed
Loliondo GCA	16	261	23,490	93,960	12,500	293,625,000	261	1
Natron GCA	6	45	4,050	16,200	12,500	50,625,000	45	1
Ngorongoro	4	38	3,420	13,680	12,500	42,750,000	38	1
	total	26	344	30,960	123,840	12,500	387,000,000	344

The picture of the hospitality industry would not be complete if we don't mention the local traveller. Local travellers is a big variety of people who for business (administration, NGO, public or private services etc.) or for religious and family reasons (funerals and marriages) is travelling and needs accommodation. As large part of these visitors finds informal lodging, the district knows of some 26 guesthouses with a capacity of 344 rooms. When we estimate an occupancy rate of 25% and an average price per room of 12,500 TZS the local market will have a turnover of TZS 387 million a year of which most is realised in Wasso. When here we calculate 1 employee per room the total of employees is 344 for Tanzanian travellers in the whole district. Next to the lodging industry a bigger number of people might be involved in the hospitality industry providing food and drinks to local guests and travellers alike. Nevertheless we can conclude that the total number of revenues and number of employees involved in the local sector is relatively low compared to the international tourist industry.

## Conclusion

The district calculated the revenues from Tourism in Loliondo and Natron for the district economy as \$2.5 million a year (table 1) and we can add another \$2.2 million for Ngorongoro which remains in the district. The global turnover in the North of Tanzania of the 1,000,000 visitors can be estimated as between \$100 and \$200 million a day. Therefore the Ngorongoro district receives between 2.4% and 4.7%<sup>6</sup> of total daily tourists revenues of visitors to Ngorongoro District. The remaining 95% to 98% is earned elsewhere.

The hospitality industry of Ngorongoro District is based on estimated 1,000,000 tourists who visit the Ngorongoro Conservation Area. This one million tourists stay between 50,000 and 60,000 nights in the district, of which 80% in the NCA. The total number of nights an average safari takes for tourists would be 10 or 10 million nights in total. Ngorongoro District therefore lodges 0.5% of tourists nights spend in the country, 99.5% of tourist nights is spend elsewhere.

The total turnover in the lodging industry in Ngorongoro District is estimated at \$23 Million plus \$70 Million entree fees, but a very small proportion (possibly \$4.7 million or 5% of Ngorongoro turnover) remains in the district<sup>7</sup>.

When we look to the benefit related to employment we estimate certainly not more than 50% of the employees in tourist hotels or lodges or camps is from Ngorongoro district and they are all in lower paid jobs: optimistically a maximum of 1280 jobs in the district (out of 200,000 population) is from this high-end short-stay tourism.

All in all the tourism industry in Ngorongoro District contributes only marginally to income of the citizens and will not lift families from poverty.

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<sup>6</sup> These percentages are based on rough calculations. We are aware there are some double counts, as there are some omissions in the calculations of revenues from Tourism that enter the Ngorongoro Economy. But the point here is that only a very small proportion of revenues from Tourism enter the local economy and that will not change even when we double the figures.

<sup>7</sup> When we compare the total figure of \$2.23 billion tourist revenues for the country with the \$4.7 that is left in the district this means only 0.2% of all tourist money benefits the Ngorongoro district.

### 3. More of the same?

Ngorongoro District claims that 80% of the district revenues generated locally comes from tourism. Village leaders who negotiate with lodge or luxury camp investors also see large benefits. The complete result of what is often called “benefit sharing” is given in Table 1. Therefore the district and village leaders are eager to have more lodges and hotels on its territory.

The options are discussed in among others “the Loliondo Tourism Concept Note” written in 2016 by the District Tourist Officer. This concept note presents the options for further development of the tourism sector for the Loliondo Division. The note pictures the further development of tourism to be a community owned and led process with the objectives:

- *Providing employment for locals*
- *Develop education and health services through philanthropic commitment from tourist sector (“social corporate responsibility” and gifts from tourists)*
- *Deliver high-end tourism with cultural and wildlife experience to the visiting tourist.*

These three objectives reflect the current understanding of the benefits of high-end tourism. High-end tourism supposes to provide a “maximum number of employees to a minimum number of tourists” because the assumption in the policy note is that one room would provide work for 4-7 local staff.

When we compare these expectations with reality as described in section 2, we can conclude that high-end short-stay tourism at best leads to no more than 2,563 jobs (see table 2) of which at most half from the district. The impact for the district economy of this high-end short-stay tourism is small, even for the communities that receive considerable benefits in the form of social-economic investments and a direct financial contribution.

The Loliondo Tourism Concept Note was written based on expectations for attracting more high-end investors. It roughly hopes to double the current capacity, especially at the border with the Serengeti National Park, in order all villages would have at least one high-end tourist company. The district explains in the note: “the high-end tourist does not want to see other tourists around” and therefore there should not be more than one tourism investment per village. We think that the district listens too well to the existing high-end tourist lodges and luxury camps who like to protect their investment from too much competition.

When this note is taken as a base for the ambitions of the district it means to double the capacity currently found in the three luxury lodges near Serengeti from 45 rooms to 90 rooms. Even in the optimistic calculation of 7 (local) employees per room this would mean an increase of currently maximum 315 employees to a maximum of 630 employees.

Although it might sound attractive to the villages that border the Serengeti to have, like Ololosokwan and Sukenya, a rich investor who would provide some jobs to villagers, give rather large amounts to village leaders and would invest in social and economic projects, the impact on poverty elevation, or better, the impact on the economy of the district to lift the population from poverty into middle and high income can be neglected. The ambition to have in every village bordering the Serengeti Park and the NCA one high-end tourist accommodation with 15-30 rooms will not change much in the lives of the ordinary citizens of the district. To achieve real change the ambitions for tourism should be drastically revised.

The country and the district has an ambition for an economic growth rate that allows the population to achieve middle income status (average income above 1260\$ per person per

year) in 2026 and growing to high income status (above 13,000\$ per person per year) towards the end of the century. This requires growth rates of around 6% a year which is not impossible<sup>8</sup>. The tourism sector should contribute considerably to achieve this goal. Elsewhere is described that by 2037 the tourism sector would have to provide income to support at least some 100,000 people out of the 360,000 total expected population in that year<sup>9</sup>. In order to get there, the ambition for 2026 would be a figure of about 10,000 people employed in the sector up from may be 1250 at this moment of which only 200 or 250 are from Loliondo or Natron.

Just increasing the high-end tourism with a few more investors will not do the trick. To achieve these growth rates a profound change in the tourism sector is urgent.

#### 4. The alternatives

Tourism as it has developed in Serengeti and Ngorongoro district does not impact the population other than negatively, as the freedom to roam around and use the territory for productive activities is reduced while the benefits that come from tourism and wildlife protection are reaped by the Tanzanian State and the (international) tourism industry. To put it a bit in a cruel context: while livestock is threatened by predators, and rangeland is reserved for wildebeest, zebra and antelope, which gives a thrill to the Safari Experience of the 1 million tourists who come to visit the area every year; the local population sees its livelihood disappear. They are allowed to continue herding their livestock, and dance and hum for the tourists who buy beads and pay for the pictures they take of their boma's. Maasai and Batemi fight over their disappearing livelihood.

The tourism industry must be completely localised and bring thousands of jobs, would it impact positively to the livelihoods of ordinary citizens. This upscaling is only possible when the tourists visiting the district not only are attracted for a one day safari in the NCA and another one in the Serengeti, but will stay for at least 5 in the district and preferably more. To achieve this, the district should look what it has to offer that makes tourists want to stay more days, and it should try to differentiate the type of tourists. Currently the tourists are almost exclusively coming to have the "wildlife experience" visiting the NCA and Serengeti. And these tourists are almost exclusively foreigners from Europe, North America and over recent years growing numbers from Asia. Tourists from Africa or the region are hardly seen. With one exception: Tanzanians, Kenyans and others from the region were visiting by the hundred thousands the Lutheran Pastor known as "Babu wa Loliondo". Strangely enough at national and international level this type of tourism has been described as "dangerous"<sup>10</sup> and was strongly discouraged.

In order to understand the potentials of the Ngorongoro district for tourism we need first to look how tourism developed elsewhere in the world. The first tourism in Europe developed from religion. Ever since the Middle Ages believers are traveling to holy places to worship and seek relieve, and often hope to witness miracles. Pilgrimages went to Rome, Mecca, or the Holy Land and over the last four-five centuries all over Europe places emerged where miracles were believed to have happened. And all these places became prosperous due to a

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<sup>8</sup> See: p. 9: Sef Sloomweg: "Move child, move!" Towards Middle and High Income for the People of the Ngorongoro District; published by NDC in the Medium Term Strategic Plan 2016/2017-2020/2021; paper presented at the ECHO Symposium 7-10 February 2017 in Arusha.

<sup>9</sup> Idem p. 13

<sup>10</sup> [https://de.wikipedia.org/wiki/Babu\\_wa\\_Loliondo](https://de.wikipedia.org/wiki/Babu_wa_Loliondo)



very busy tourist industry. Lourdes in the French Pyrenes is one of the most successful among the many<sup>11</sup>. The second form of tourism originates from the urban population in industrial societies who seek refuge from the polluted and overcrowded city; and look for a healthier environment. It started with public baths in towns, which since the ancient times gave people the opportunity to clean themselves. But in a number of these areas a hospitality industry developed, especially when the water was believed to be healing, due to minerals or other qualities. Massage, foot and fingernails treatment, beauty salons followed. A bit further from urban industrial centres in Europe from the 19<sup>th</sup> century developed a sanatorium industry near the beaches, in the forests and in the mountains for people suffering from chronic lung diseases (TB!). Areas with hot springs (usually in volcanic areas) and with mineral or salty water developed a bathing - healing industry where people would go to cure from rheumatic diseases, or to heal wounds or broken bones and joints.

When train transport developed at the end of the 19<sup>th</sup> century, these areas that originally were visited for health reasons were opened for day-tourists who came to enjoy a healthy air for a day or a weekend and a leisure industry was born. People went for a day to the beach or the forest for leisure and not just for fresh air.

A fourth type of tourism is born from curiosity, often connected with the other forms of tourism: religion, health and leisure. People wanted to see the wonders of nature, or places of cultural value. Museums, Zoos and botanical gardens were created in urban centres, and in the country caves, mountains, views, parks, waterfalls, and other wonders of nature were opened up, made accessible and became places of interest for that part of society that could afford to have some days off.

When the economy developed further and holidays other than Holy Days or family festivities (baptism, circumcision, confirmation, marriage, and funeral) were introduced, mass tourism developed in Europa and in North America. Especially when paid leave of 2 weeks (US) or longer (Europe) became a right for every worker and employee. Beaches developed in entertainment centres where one could go to eat, go gambling, to enjoy the merry-go-round and other pleasure for the whole family. At the same time people were seeking sportive challenges like swimming (on the beach), walking (in the woods and in the mountains), or skiing (in the mountains). In recent years this sportive element has been further developed with all kind of related sports like climbing, diving, paragliding, wave and water-surfing, snowboarding, etcetera.

### **Touristic attractions in Ngorongoro District outside the Parks ?**

What are the resources Ngorongoro can use to develop a tourism industry? To sum up:

*Religious Tourism:* “Babu wa Loliondo” has the option to develop as a centre for believers who hope for a miracle.

*Health and healing tourism:* the region has hot springs, salt water and volcanic ashes in and around Lake Natron, which can be combined with virtues of healing herbs.

*Leisure and sportive tourism.* Because a large part of the district is on higher altitudes, the temperatures are very comfortable (not too high and not too low) and the airs are healthy. This is very good for active forms of tourism like walking and other sports. The Oldoinyo Lengai, the only active volcano in the region, is one of the top challenges for sportive climbers. Other sportive hikes can bring hikers from village to village through the beautiful nature and will open wildlife and botanical beauties of the area: plains, hills and forests alike.

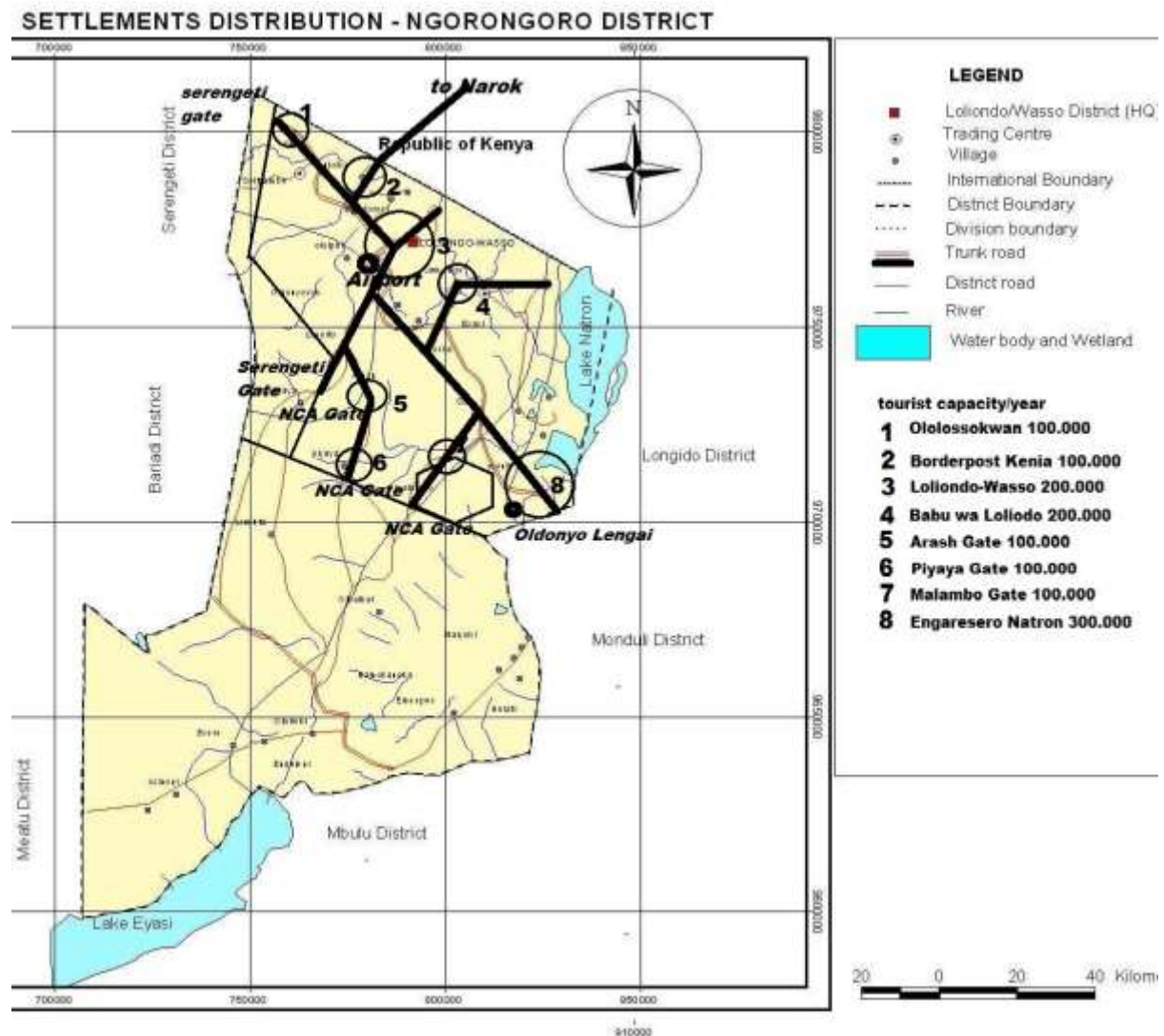
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<sup>11</sup> In West Africa we also see much tourism related to religion: the yearly voodoo festival in Ouidah; the Celestine Christians celebrate purity at the Porto Novo beaches and the Catholics enjoy Jesus suffering and resurrection in Savalou, all in Benin hundred thousands of believers are on the move yearly. In East Africa millions of believers are each week attracted to Evangelic preachers in the hope to be touched by God.

Other attractions are many in the district, mostly underdeveloped, like archaeological and natural sites including waterfalls. The mineral underground resources can also be used to fill museums with human and natural artefacts dating back hundreds of millennia.

*Culture tourism.* Of great value is the rich human cultural heritage which is open for the development of natural and ethnographic museums, cultural boma's, but above all yearly cultural festivals for music, singing and dance (Uhuru Torch and ethnic religious festivities) that could attract African and foreign visitors alike.

## Map 2: proposed Tarmac road system Ngorongoro District



## Conditions for take off

Four main hindrances for further development appear eminent: the Loliondo and Natron area is remote and not easily accessible. Secondly there is hardly any infrastructure in the area to lodge and feed any great number of people. Thirdly the local population sees itself as poor without any opportunity to invest in tourism industry. For a large part this is true, but the hundred thousands of livestock in the area show this image is relative. Fourth the local population lacks many capacities and competences for a hospitality industry to grow. The following paragraphs will go deeper into these hindrances and propose solutions.

#### **4.1 Roads and transport infrastructure**

For any economic development a well-developed transport system connecting an area with urban and populated centres is a “conditio sine qua non”. Currently there is no road in or to the district. The track currently in use connecting Ololosokwan via Wasso/Loliondo to Sale and Engaresero/Natron and further to Arusha via Longido or via Mto wa Mbu (Karatu road) does not deserve the name road. Furthermore there are no roads to enter the Ngorongoro Conservation Area nor official entrances to the Serengeti Park other than the one at Klein’s Camp near Ololosokwan. And besides a tarmac road connecting Arusha to Loliondo as much important is a tarmac road connecting Loliondo with Kenia/Nairobi. Any developing economy needs easy access from international airports (like Kilimanjaro or Nairobi) and needs access to the national and international road grid. This is not only important for tourists, but also for the industries that can develop from agriculture or mining. People and products need to be easily transported at low costs to reach markets.

How to finance? The revenue the State collects from the tourism industry is important enough to afford these investments quickly. Any investment in the road infrastructure will be paid back in the shortest time due to economic growth of the area, whether in the tourism or in other sectors.

#### **4.2 Hotel and other long stay infrastructure**

The current hotel and holiday infrastructure is separated between very expensive exclusive sector in the Parks or at the entrance of parks, and the very low quality and cheap accommodation for local use. There is nothing in between. In order to develop mass tourism affordable accommodation is needed where tourists can stay for longer periods. When the district is serious and wants a substantial part of its population working in the tourism industry it needs to get more tourists. The district needs by 2026 to lodge at least 240,000 tourists who want to stay 5 nights and it needs some 6667 rooms where 2 persons on average can stay. Where and how to achieve this will be explained in section 5.

#### **4.3 Local investments and tourism services**

Other investments are equally important. Tourists need food and drinks, they need restaurants and bars. And the hospitality industry needs a local service industry. But most of all is needed an entertainment industry that attracts tourists to Ngorongoro district for a week or two.

Ngorongoro needs to prepare attractions like savannah walks, mountain climbs, bird watching, waterfalls, picnic areas, hot water bathing, salt water and mineral healing bathing, forest walks, archeologic sites, cultural sites and museums, modern and traditional music, dancing, singing festivals and competitions, in combination with existing events like Uhuru Torch, and the Maasai or Betemi rituals and last but not least: religious festivals (Babu wa Loliondo for instance) are wanted. The fact that NCA, Serengeti and the protected wildlife corridor give priority to wildlife does not mean outside these areas one cannot capitalize on this beautiful nature. Villages can protect areas, savannah or forest or lake for wildlife and they turn into natural zoo or mini safari park open for the public. Management of these areas can be public (village, Wildlife Management Area or WMA) or private (companies).

Tourist companies, national and international, need to sell 7-9 day packages at competitive prices, competitive for the national and for the international market. They need to provide good tourist information on the webpages on the internet where tourists can find prices and availability of lodging in the district and all information about attractions, transport and car hire. Tourist information centres in the main urbanised centres like in Engaresero, Ololosokwan, Loliondo/Wasso and the border with Kenia and possibly in places like Arusha or Karatu can help tourists find their way. The investments to establish these centres need to

come from the private sector, as they are the direct beneficiaries. But as it is a common interest it might be done by the public sector from revenues generated from tourism. Local feeder roads, investments in public sanitation, and other public facilities (water, markets, car and bus parks) are to be financed from taxes and fees to prevent everybody seeks his/her own solution. Investments in attractions can either be funded by local authorities via taxes, or from entree fees.

#### **4.4 Vocational Training for the hospitality industry**

Already today the tourism sector complains about the quality of staff and service providers. Hotels, lodges and camps recruit their staff from areas where competent personnel can be found and that is not in Ngorongoro. Ngorongoro lacks vocational training linked to the tourism and hospitality industry. Game scouts, guides, drivers, receptionists, restaurant, kitchen and serving staff, accountants, but even cleaning and washing staff deserve special training. Not only direct job related competences but also language and social skills are important.

The district would profit very much from the establishment of vocational training centres. These can be created with the support of the existing tourist industry, including the NCA and Senapa.

### **5. How to lodge 240,000 tourists?**

A fear usually expressed when there is talk about mass tourism: it will destroy the exclusivity of the nature. The protected areas risk to be flooded by tourists, wildlife will be forced in the defensive and disappear. The truth is that indeed a mass tourist industry should not be tolerated in or at the border of the parks. The number of rooms in the parks should be limited. But the real growth of the tourism can be stimulated at some distance of the parks at 5 km or at 20 km or at 50 km or more. Entree fees should be high to prevent tourists to stay for more than one day. There must be enough other entertainment outside the parks that will give them the satisfaction to stay at least some 5 days in the area. And to make this possible, affordable rooms for tourists are needed.

Compare for instance the NCA (8,300 km<sup>2</sup>) with the US Yellowstone park (9000 km<sup>2</sup>):

**Table 4: Comparison of key facts between Ngorongoro Conservation Area (Tanzania) and Yellowstone Park (US)**

	NCA	Yellowstone Park
Area	8,292 km <sup>2</sup>	9,000 km <sup>2</sup>
Tourists per year	500,000 – 1,000,000	3,500,000
People permanently living in the NCA/park	100,000 (one hundred thousand!)	400 (four hundred!)
Tourist accommodation in the park	535 beds	2000 beds
Employees in the park at peak season	2200 – 4000 (?)	4000
Accommodation outside the park	109 rooms at North Entrance to Serengeti; no entrance to NCA, an estimate of 20,000 rooms elsewhere	60,000 rooms equally divided between tourist areas near the North the West, the South and the East entrances.

It is clear that these rooms outside the NCA/Serengeti National Park but inside the district cannot be realised as high-end accommodation. In order to attract tourists Ngorongoro needs to develop medium priced accommodation. The ambition should be to grow from the currently 109 rooms with an estimated 9,810 tourist nights (see the optimistic estimation in table 2) to 6667 rooms for 1,200,000 tourist nights in 10 years.

In order to get an idea what tourists are looking for when they want to stay for one or two weeks in a place, let us make a comparison with popular July holiday destinations for European tourists:

**Table 5: Compare popular holiday destinations for European Tourists**

1. Turkey 400\$ breakfast or 600\$ all-inclusive pp 8 days + flight EU-Turkey
2. Egypt 600\$ breakfast or 750\$ pp all in 8 days + flight EU-Egypt
3. South Africa pp 1300\$ pp 9 days breakfast + flight EU-SA
4. Bali (Indonesia) 1000\$ pp 10 days breakfast + flight EU-Bali
5. Thailand 1000\$ pp 10 days breakfast + flight EU-Thailand
6. Zanzibar (October) 1000\$ pp or 1200\$ all in 9 days + flight EU-Zanzibar
7. Kenia Mombasa 1100\$ pp all in 9 days + flight EU-Kenya

All these destinations offer a stay in one hotel: “all in”; meaning all meals and drinks and attractions around the hotel are included. When we come to a budget flight Zanzibar or Kenia cost at 650-750\$ this would mean for hotel is available 250\$ and for food 200\$. This is 30\$ per person per night and 25\$ per person per day food and drinks. This arrangement is based on 2 persons per room in four or five star accommodation with swimming pool, sports and other leisure activities included. Compare this with the current situation in Loliondo and Natron Game Controlled Area:

**Table 6: Accommodation Loliondo and Natron Game Controlled Area**

2016 Accomodation	Rooms	Food per day	Transport to and from airport
High-end 100-1000\$	109	50\$	(fly plus car)
Mid-range 25-100\$	-	20\$	(car 8p)
Basic standard 2.5-25\$	83	5\$	(bus) 30\$

In order to compete with destinations in Zanzibar or Kenia, Ngorongoro needs to grow its midrange accommodation. This consists of private rooms, holiday homes, guest houses, “Bed&Breakfast”, Airbnb, or hotel/motel accommodation with (solar) electricity, warm water, shower, bed, easy chairs, space inside outside, privacy, and in holiday homes it includes kitchen/gas-cooker, all for 40\$ per person per night. The accommodation can be breakfast included or meals and drinks included which would add 20\$ per person per day. Transport to and from airport should of course be included. Car rentals for safaris and entree fees for parks are excluded.

With an ambition of 1,200,000 nights with tourists, and each room occupied by 2 persons, you need 600,000 room nights. When this represents 25% of full capacity you need a year capacity of 2,400,000 nights or 6667 rooms. When all tourists would book 5 nights (2 per room) you will have 240,000 tourists visiting Ngorongoro and staying 5 nights using around 6667 rooms. With an average of 3 rooms per accommodation this is 2222 accommodations. The investment needed to build a self-contained room including services is estimated at \$10,000 per room.



**Table 7: Where to develop accommodation**

		tourist nights	capacity rooms
1	Ololosokwan Gate	100,000	556
2	Borderpost Kenia	100,000	556
3	Liliondo-Wasso	200,000	1,111
4	Digodigo	200,000	1,111
5	Arash Gate	100,000	556
6	Piyaya Gate	100,000	556
7	Malambo Gate	100,000	556
8	Engaresero-Natron	300,000	1,667
	total	1,200,000	6,667
	nr tourist	240,000	
	average nr. of nights	5	
	occup. rate p room	25%	
	nr persons per room	2	

Then we need to make a division in the district where we expect these guesthouses could be developed. In Map 2 is chosen for locations at some 5 km from four (future) entrance gates to NCA or Serengeti Park, plus the locations Engaresero/Natron; Loliondo/Wasso; Digodigo and the border with Kenya. For each location is calculated a part of the tourist nights and the needed guestrooms when 25% average occupancy is used. The map and the figures are only indicative. The map also shows the need for tarmac roads in the district, of which two are crucial: the connection Ololosokwan – Engaresero (~150 km) and the connection Loliondo/Wasso – Kenya. Tarmac feeder roads to Digodigo and to the (proposed) park/NCA entrances would be very beneficial for economic development.

**Table 8: Employment and dependants**

owner	2,222
staff lodge	10,001
total employed	12,223
nr dependants	4
total people	48,891

If these investments in guestrooms of mid-range level can be realised, an economic boost for the area will happen where we can expect some 12,223 people to find employment (all together an estimated 48,891 dependants) in the tourist lodging sector with an average of ~420,000 TZS month revenue. Compared with currently 2,500 (a figure that includes employment in NCA and at least half who do not live in the district) this would mean a big boost for the economic wellbeing of the citizens. The effect for the economy is even greater when we look at the expected turnover in the tourist sector: turnover from renting out the 6667 rooms with food to 240,000 tourists for 5 nights at \$60 a night would mean a turnover of at least \$72 million a year.

**Table 9: Key figures exploitation rooms for tourists**

Tourist nights	1,200,000	2 tourist per room, for 5 night stay
Rooms	6,667	Average 3 rooms per accommodation total 2222 accs.
Turnover	\$72,000,000	60\$ per tourist for lodging (\$40) and food & drinks (\$20)
Investment	\$66,670,000	\$10,000 per room earned back in 4 years

Staff	10,001	1,5 per room
Costs staff per year	\$24,001,200	\$200 average salary per month
Costs food	\$24,000,000	\$20 per day stay
Profit per year	\$7,331,300	\$1,100 profit per room (11% on investment), after costs for staff, food, investments, before tax

Outside the lodging sector for tourist there can be expected an enormous growth of employment in the rest of the hospitality industry: drivers, guides, restaurant and bar staff, staff at attractions. And furthermore the service industry to make this work: banks, tourist-office, souvenir making and selling, car service, construction and maintenance, etc.

Furthermore we think of the effect for additional accommodation at the basic level, needed for seasonal workers and low budget Tanzanian travellers and tourists. In this sector currently the number of nights can be estimated at almost 30,960 nights in 344 rooms in 26 guesthouses bringing a turnover of 387,000,000 TZS a year (see table 3), a growth of this sector might be as big as the growth in the midrange sector: considerable and bring anywhere between 100,000 and 200,000 people for which you need some 5000 rooms in total or an additional spending in the district economy of between \$500,000 and \$1,000,000. A growth of between 4 and 8 times the current level. As investments and incomes in this sector are lower than in the midrange sector the effects on the economy are also more moderate.

Economic studies about the hospitality industry in Europe have calculated the multiplier effect of every Euro spend in the hospitality industry by customers. The hospitality industry is understood as the total of accommodation and out-door consumption in restaurants and bars and the like. The smallest multiplier in 2013 was found in Greece (€0.87) while the largest multiplier was in Turkey (€1,84) while for the EU as a whole the multiplier in 2013 was €1,13 on each consumed Euro in the hospitality industry<sup>12</sup>.

When we would calculate with the same multipliers the effect on the economy of the district of 240,000 tourists with 5 overnight stays would vary between \$135 million and \$204 million a year.

## 6. A model for indigenous investments

Who is able to invest in rooms, in attractions, in public services? In other words how to finance? The investment in one room is estimated at 10,000\$ which is an amount not many people have. But there are signs that more money is available in the area than one maybe expect.

- Many people who have regular and moderate to high incomes either because of their employment or because they do business, they invest outside the district. Because... investing in the district does not give enough security for revenues. It is better to invest in buildings (houses, shops) in Karatu or in Arusha then to build something in Wasso or Ololosokwan. This trend can be reversed.
- Second, we see many people who have large herds; these herds represent a high value. But these livestock numbers go up and down with the weather and climatic conditions. People tend to go for quantity and not for quality. Quantity is important to

<sup>12</sup> Page 2 in Ernst & Young: The Hospitality Sector in Europe, an assessment of the economic contribution of the hospitality sector across 31 countries, September 2013, commissioned by The Brewers of Europe with support from HOTREC (Hospitality Europe)

make sure that one can overcome severe reductions due to disasters like diseases or draughts. It has been estimated that in the 2016-2017 draught in certain areas in the district big cattle owners loose between 10% and in some cases even up to 70% of the cattle. Many small cattle owners have lost all cattle. These investments in livestock have just evaporated in air. Another way of livestock keeping that keeps better pace with the risk of diseases and droughts would change this livestock model of quantity over quality into a model where you have quality over quantity. Doing so you would change from keeping livestock as banking wealth into keeping livestock to produce wealth. In order to invest \$10, \$20 or \$30,000 for 1, 2 or 3 rooms, this cannot be done in one year when you must create your wealth from selling cattle for ~500.000TZS or \$250 each. It means that with a good price for a local breed, you need to sell 40 cattle to construct one room. The investment model based on livestock keeping is difficult but not impossible.

- A spin off from the high-end tourism for villages is rent payment for area they leave for the companies for wildlife. These rent payments can go up to \$100,000 a year. Villages can decide to invest these in accommodation for medium-end tourists. This medium-end accommodation will eventually bring more wealth for villagers then the high end.

In order to construct 6667 rooms in 10 years you need 666 people willing to invest in a room each year. On a population of 200,000 this means 0.3% of the population should each year add one quality guest room. When just 1% of the population would be involved during 10 years this is certainly possible. According to this model there is even no need of any bank loans.

## 7. Economic development perspectives

The president of Tanzania wants to guide Tanzania into middle income status by 2026. This would also include the Ngorongoro District population. In 2016 the district had a population estimated at 196,338 people. In 2026 this number will be around 264,000 people. Middle income status means an average gross product of above \$1,260 per person per year<sup>13</sup>. This equals a gross district product in 2026 of \$333 million.

When indeed in 2026 a total of 6667 rooms have been realised, and when 240,000 tourists would be lodged for 1.2 million nights at 60\$ per night, this will contribute 72 Million US\$ to the targeted \$333 million. This represents 22% of the target. When we add the multiplier effect of between 0.87 and 1.83, the effect on the district economy would be an additional \$63 – 132 million or an additional 19% to 42%. In other words the effect on the economy of having 240,000 tourists a year spending 72 Million for 5 nights accommodation would make a total contribution between 135 Million and 204 Million US\$ to the economy of Ngorongoro District, good for between 41% and 61% of the \$333 million target.

## 8. Conclusion

The analyses of the current situation shows that tourism as it has developed in the district only marginally contributes to the gross district income when we do not count the revenues earned by National Government and national and international tourist operators and hotel and lodge owners. The type of tourist described as “high-end, short-stay” who spends from 250 to

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<sup>13</sup> Sef Sloomweg: “Move child, move!” Towards Middle and High Income for the People of the Ngorongoro District; published by NDC in the Medium Term Strategic Plan 2016/2017-2020/2021; paper presented at the ECHO Symposium 7-10 February 2017 in Arusha.

1000 \$ a day provides only charity and breadcrumbs to improve the economy of the population. NCAA estimates to have had in 2016 over 1,000,000 visitors. But the high-end hotels in the NCA and in Loliondo and Natron GCA have had no more than 50-60,000 tourist nights. Practically all revenues go to national and international tourist companies who employ some 2000-2500 people in the NCA. Only a limited number (certainly not more than 1250) of the lower paid jobs (guards, cleaners, kitchen) come from the district. The population at large does not profit from tourism. On the contrary, wildlife kills livestock, rangeland is reduced, and people are limited in diversifying their economy. The revenues of the maximum 60,000 tourist nights spend in Ngorongoro District (estimated at 24 million US\$ a year) and the revenues of the entrance fees for the Ngorongoro Conservation Area (estimated at 70 million US\$) virtually all disappear from the district without contributing to the local economy. This paper presents a radically different tourist model based on local investments and local economic growth of the tourist sector aiming at mid-range long stay tourists. People from the district are expected to invest in rooms for tourists who are ready to spend around 100\$ to 150\$ per person per day on travel and stay which is competitive with costs for travellers to Zanzibar or Kenya beaches.

When each year 666 persons invest \$10,000 in the construction of a room for tourists, and when 25% of the constructed accommodation is occupied over the year, we will have in 10 year 6,667 rooms, rented out at 60\$ per person including meals this would result in yearly earnings of 72 Million US\$ by 2026. This would contribute for 22% of the target of 333 million gross income for 264,000 people living in Ngorongoro district by 2026. When we assume a multiplier effect between 0.87 and 1.83 the total effect on the economy would be between \$135 and \$204 million in 2026, which would be good for a contribution between 41% and 61% to the target middle income status of an average \$1,260 per person per year. The rest is supposed to come from livestock and meat processing, crop production and food processing or mining revenues.

This model however, will only work when conditions are fulfilled. The district needs tarmac roads, and the tourist industry together with the district needs to invest in attractions and activities for tourists and enough publicity to make tourists effectively come. The youth in the district needs to be educated and trained to provide top services in the hospitality industry. And last but not least the big cattle owners among the Maasai must be ready to change their way of livestock keeping: from quantity over quality into quality over quantity.