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POUR L'EDUCATION, LA SCIENCE ET LA CULTURE

CONVENTION CONCERNING THE PROTECTION OF THE WORLD
CULTURAL AND NATURAL HERITAGE

CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE
MONDIAL, CULTUREL ET NATUREL

WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL

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Item 7 of the Provisional Agenda: State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger

Point 7 de l'Ordre du jour provisoire: Etat de conservation de biens inscrits sur la Liste du patrimoine mondial et/ou sur la Liste du patrimoine mondial en péril

MISSION REPORT / RAPPORT DE MISSION

Ngorongoro Conservation Area (United Republic of Tanzania) (C/N 39bis)

Zone de conservation de Ngorongoro (République-Unie de Tanzanie) (C/N 39bis)

4-8 March 2019



**REPORT ON THE JOINT WHC/ICOMOS/IUCN
MISSION TO NGORONGORO CONSERVATION AREA,
UNITED REPUBLIC OF TANZANIA
4-8 MARCH 2019**

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The 2019 Joint UNESCO World Heritage Centre, the International Council on Monuments and Sites (ICOMOS) and the International Union for the Conservation of Nature (IUCN) Reactive Monitoring Mission team extend their thanks to the United Republic of Tanzania for the invitation to visit the Ngorongoro Conservation Area (NCA) and to assess the State of Conservation of the site. In particular, our sincere thanks go to the Chairperson of the Board of Directors of Ngorongoro Conservation Area Authority (NCAA), Prof Abiud Kaswamila; NCAA's Conservator, Dr. Freddy Manongi and the entire NCAA staff, as well as representatives of the United Republic of Tanzania's National Commission for UNESCO and the Ministry of Natural Resources and Tourism for facilitating the organization of this mission. Particularly, we would like to thank Ms Joyce Mgaya for organizing all the logistics and meetings with the stakeholders.

Our heartfelt thanks to NCAA for the warm welcome extended to our Mission team and for adapting mission agenda in accordance with the mission team requests. During these meetings and on-site visits, the Mission greatly benefited from the information and kind cooperation from Dr. Maurus January Msuha and Eng. Joshua Mwankunda and their respective staffs. Through the agency of NCAA, well-attended individual meetings were held with the various institutional stakeholders, which included the Ngorongoro Maasai Pastoral Council (NPC), Hotels Association of Tanzania (HAT), and Tanzania Association of Tour Operators (TATO). In addition to this, the Mission was further privileged to hold a telephone conference with NCAA staff during their mission to Paris for the Laetoli Footprints.

Lastly, we would like to acknowledge the important references that past monitoring and advisory reports to the property have provided to this Mission team.

COMPOSITION OF THE MISSION TEAM

Mr Edmond Moukala (UNESCO World Heritage Centre)
Mr Pascall Taruvinga (ICOMOS)
Mr John Zulu (IUCN)



EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

A joint World Heritage Centre/IUCN/ICOMOS Reactive Monitoring mission visited Ngorongoro Conservation Area (NCA) World Heritage property from 4 to 9 March 2019 as requested by the Committee in its Decision **41 COM 7B.39** (Krakow, 2017). Its task was to assess the conservation of the additional set of footprints discovered at the Laetoli site in 2014, proposed Laetoli Hominid Footprints Museum, and monitor progress on the road upgrade project and proposed tourist developments as well as review progress in balancing conservation, livelihood and development needs. The full list of objectives is available in the Terms of Reference (ToR) in Annex 6.1.

The mission held consultations with the Tanzanian authorities at national, regional and local levels, including representatives of the Ngorongoro Conservation Area Authority (NCAA), Tanzania National Parks (TANAPA), Ministry of Natural Resources and Tourism, representatives of local communities who live within the property, including the Maasai pastoralists and representatives of the tourism sector in the various associations (Tanzania Association of Tour Operators-TATO and Hoteliers Association of Tanzania-HAT) and the project consulting engineers. Site visits included travelling the full (83km) length of the road through the property, examining its present condition and particular points of environmental, archaeological and engineering interest as a follow up to the 2017 mission. The mission also made visits to Laetoli, the crater, Olduvai Gorge Museum, and Ngorongoro crater lodge.

The mission notes with appreciation the progress made in developing the General Management Plan (GMP), the Multiple Land use review study and the enhanced capacity of anti-poaching and intelligence units. However, it notes with concern that the Tourism Strategy has not been finalized, requested by the World Heritage Committee since 2014 (Decision 38 COM 7B.61). While the

State Party has employed stringent measures towards zero poaching in the property, and positive efforts have been made by the State Party in instituting measures to control poaching, increasing number of such incidents between 2017 and 2018 is concerning and requires urgent attention. The absence of precautionary measures to manage reckless driving inside the property is also concerning and needs to be addressed as a matter of urgency. It is worth noting is that the State Party has constructed a number of monitoring posts for purposes of enhancing security for both tourists and animals in the property.

While stakeholders are being engaged, the State Party lacks a framework for engaging and involving given the cross cutting matters of mutual interests. With the changing ways of livelihood, it is imperative to undertake an ethnographical research to update exiting information on cultural practices and belief systems, including material culture of the people living in the property. This also includes assessing the opportunities and potential pitfalls of the operationalisation of the intent by the State Party to settle communities in Protected Areas.

The mission notes with deep concern that while the designs for the proposed road upgrade project have been completed and submitted, including the Environmental and Social Impact Assessment (ESIA), Cultural Heritage Impact Assessment (CHIA) and tender documents, it is clear that this project and its associated maintenance works which will be ongoing, will have negative impacts on the property as most of the recommendations of the 2017 Advisory Mission have not been addressed. This report further identifies gaps to reinforce initial observations made in 2017. The failure of the State Party in addressing concerns raised by Advisory Bodies (ABs) regarding the shortfalls of the ESIA and CHIA, including providing outcomes of the feasibility study on the alternative by-pass route to Serengeti remains a matter of concern.

The mission notes that the property does not have an integrated carrying capacity, related policies and guidelines, and this poses a serious threat to the property given the tourism investment drive enshrined in the Draft GMP. From a management effectiveness perspective, the property now requires an integrated/harmonised approach, address stakeholder engagement and involvement and build capacity for cultural heritage management. The absence of information on the current and future developments in the area remains a concern, and this is worsened by an absence of mechanisms to monitor compliance with ESIA and CHIA. The visual impact of emerging houses and settlements within the property remains a huge concern, including the lack of respect of existing building/construction guidelines by stakeholders.

Specifically, the mission team noted:

- Overall, the property still retains its Outstanding Universal Value (OUV) but looming threats such as impact of developments (in particular road upgrade project, tourism developments, carrying capacity issues, invasive alien species (IAS), poaching, rampant migratory patterns of the local communities resulting in new developments (some with modern architecture) and the environmental degradation threatening Laetoli and other cultural sites are very visible and of concern;

- Previous recommendations and decisions by the World Heritage Committee are not being implemented by the State Party and this is leading to cumulative and gradual intensification of threats to the OUV.
- **Road upgrade:** While the designs for the proposed road upgrade project have been completed and submitted, including ESIA, CHIA and tender documents, it is clear that this project, and its associated maintenance works which will be on going, will have negative impacts on the property as most of the recommendations of the 2017 Joint Mission have not been addressed by the State Party. The upgrading has not been halted, as requested by the Committee, until the results of the feasibility study of the Southern Bypass road are available. The mission notes that the negative impacts emanating from the road upgrade project are not fully understood nor planned for under mitigation measures as recommended by ABs in previous missions
- *New General Management Plan (GMP):* From a management effectiveness perspective, the site now requires an integrated/harmonised approach to inform the finalisation of the Draft GMP, including considering recommendations made to the State Party in previous missions.
- **Sustainable livelihoods:** The intent to address issues of local communities residing in Protected Areas is noted and there is need to have a holistic approach in order to retain the OUV of the property while addressing the needs of communities from conceptual processes to operationalisation.
- *Wildlife Protection:* While the State Party has employed stringent measures to ensure zero poaching in the property, the increasing number of poaching incidents between 2017 and 2018 requires some attention from the State Party. The continued invasion of the property by IAS is causing habitat fragmentation, and remains a serious threat to biodiversity conservation in the property.
- *Archaeological conservation:* The property still does not have a conservation strategy nor has it prioritised conservation to deal with identified threats at various cultural sites. The authenticity of these sites is under threat and the impact may not be reversible if not mitigated. The absence of consolidated database for cultural sites in NCA remains a matter of concern. The State Party needs to make provisions for allocating more resources for cultural heritage programmes.
- *Governance:* While stakeholders are being engaged, the State Party lacks a framework for engaging and involving given the cross cutting matters of mutual interest.
- **Tourism Development:** The number of tourist and passenger vehicles into the property has increased, posing a threat to its OUV. This linked with the incomplete Tourism Strategy, which has been recommended repeatedly by the Committee, poses a threat to the OUV including its integrity.

- *Other developments:* The absence of information on the current and future developments in the area remains a concern, and this is worsened by absence of mechanisms to monitor compliance with ESIA and CHIA. The lack of a consistent approach in approving and monitoring developments at the site also remains an issue of concern.
- *New Developments and visual impacts:* The visual impact of emerging houses and settlements within the property is a matter of huge concern, including the lack of respect of existing building/construction guidelines by stakeholders.

Recommendations of the Mission

In view of the above, the mission makes the below recommendations.

1. Road Upgrade Project

Regarding the road upgrade project, the mission recommends that:

- R (1):** The State Party urgently submit to the World Heritage Centre for review by the Advisory Bodies, the details of the surveys and studies that were recommended by the 2017 Advisory mission before construction of the road upgrade project could commence, and implement all of the outstanding recommendations of the 2017 Advisory Mission as a matter of urgency, including:
- a) Apply a phased approach to the implementation of the road upgrade project to enable adjustments to be made as required to mitigate potential impacts on the OUV of the property;
 - b) Develop a specific action plan for the mitigation measures to ensure traffic through the property does not increase as a result of the road upgrade;
 - c) Finalise and submit the feasibility study for the southern bypass route;
 - d) Develop suitable environmental and archaeological management standards for the project based on a thorough review of the recommendations of the ESIA and HIA before the completion of the tender documents;
 - e) Ensure NCAA has the technical and human resource capacity to monitor and enforce the required standards of environmental and archaeological management during all stages of the project;
 - f) Undertake archaeological investigations, and collect ecological and environmental baseline data along the length of the road;
 - g) Reconsider the possible use of asphalt concrete (with added colour) as an exceptional case to import material, consider Olduvai Museum road separately, and consider the use of geocell in conjunction with asphalt concrete;
 - h) Review the method of maintenance of the existing unpaved road, including enforcement of speed limit of 50km/h, inclusion of geocell reinforcement to increase longevity of the gravel surface and management of water material.
- R (2):** The State Party develops a framework for the road upgrade and its maintenance for principal and secondary roads throughout the property, as well as the paths in order to bring uniformity and standards on such works by January 2020.

R (3): Sensitising the appointed contractor on the sensitivity of the property as a World Heritage site, including formally committing the contractor (through an addendum to the main contract) to undertaking intensive monitoring during construction and clear rehabilitation plans for the borrow pits.

2. Draft General Management Plan

Regarding the development of the General Management Plan, the mission recommends that the State Party:

R (4): Finalise the Draft GMP in consultation with stakeholders and taking into consideration the following:

- a) aligning the GMP with all existing and future sub-plans i.e. Tourism Strategy/Plan, Cultural Heritage Conservation Plan etc.;
- b) Ensuring the organisational structure and capacity aligns with the needs and priorities of the GMP;
- c) The challenges noted in implementing the previous GMP and prioritising concerns and issues raised by the World Heritage Committee in its past Decisions, which have an impact on the OUV, integrity and authenticity of the property.

3. Sustainable Livelihoods

Regarding the implementation of sustainable livelihoods, the mission recommends that the State Party:

R (5): Continue to engage local communities and other stakeholders in exploring alternative livelihood solutions to its current voluntary resettlement scheme, consistent with the policies of the Convention and relevant international norms.

R (6): Complete the Multiple Land Use Model review exercise and share the results with the World Heritage Centre and the Advisory Bodies to advise on the most appropriate land use model, including in the matter of settling local communities in protected areas.

4. Wildlife Protection

Regarding wildlife protection, the mission recommends that the State Party:

R (7): Reinforce monitoring and early detection systems, including intensifying anti-poaching awareness among local communities and stakeholders operating in the property.

R (8): Explore other alternative or additional methods of controlling invasive alien species as a matter of urgency, including defining quantitative and qualitative monitoring indicators.

5. Archaeological conservation

Regarding archaeological conservation, the mission recommends that the State Party:

R (9): Prioritise developing a Cultural Heritage Conservation Strategy for the property, in particular the paleo-anthropological sites in the property, including providing both human and financial resources for this process. In addition, the State Party should also prioritise developing a database for all cultural heritage sites in the property.

6. Governance

Regarding governance issues at the property, the mission recommends that the State Party:

R (10): Implement an integrated/harmonised approach to address the current compartmentalised approach for the property, in which nature and culture are not planned for at the same level of detail and financial commitment.

R (11): Review the organisational structure, including establishing an Implementation and Monitoring Department for the effective implementation of the GMP.

R (12): Establish a Cultural Heritage Advisory Committee comprising of a representative of Department of Antiquities (DoA) and independent specialists to advise the NCAA on management of cultural heritage in the property.

R (13): A site specific Stakeholder Engagement and Involvement Framework should be developed for the property, or alternatively, the Serengeti Stakeholders' Forum should be strengthened, given that the property is part of a broader ecosystem, which includes Serengeti National Park.

R (14): Develop EIA/HIA compliance monitoring tools to be completed by project proponents and submitted to the World Heritage Centre as part of its state of conservation report to the World Heritage Committee.

R (15): Organise stakeholder awareness seminars on World Heritage in partnership with UNESCO and the National Commission of UNESCO (Tanzania).

7. Tourism Development

Regarding tourism development, the mission recommends that the State Party:

R (16): Develop an Interpretation Strategy for the property with a clear vision, mission, interpretation options and models to ensure the protection of the OUV, integrity and authenticity of the property, as well as contributing to conservation efforts within it.

R (17): Establish the carrying capacity for the property and develop a monitoring framework, including that of all attributes open to the public as a matter of urgency.

8. Other developments

R (18): Urgently submit further details on all existing and future developments (both internally and investor driven) in the property.

R (19): Place a moratorium on all new developments in the property until awareness-raising programmes among stakeholders are undertaken and guidelines are enhanced through training via a well-established school of architecture on the African continent for the purposes of developing creative and innovative architectural designs promoting modernity, comfort but maintaining the connection between traditional architecture and its broader landscape.

9. Laetoli footprints

R (20): Adopt a Landscape approach for developing options for re-excavation, new reburial approaches, conservation and development of a potential site museum as integrated processes, including capacity building.

10. Overall

In the overall and in view of the above concerns regarding the property, the mission recommends that the State Party:

R (21): Submit a detailed updated report on the progress in implementing the above recommendations by 1st December 2020.

1.0 BACKGROUND TO THE MISSION

1.1 Inscription history

The World Heritage Committee at its 3rd session (Cairo and Luxor, 1979) inscribed the Ngorongoro Conservation Area under natural criteria (vii) (viii) (ix) (x) due to its global importance for biodiversity conservation as illustrated by the presence of globally threatened species, the density of wildlife inhabiting the area and the annual migration of the wildebeest, zebra, gazelles and other animals into northern plains. Following the submission of the re-nomination dossier by the State Party, the World Heritage Committee decided at its 34th session (Brasilia, 2010) to inscribe the property under criterion (iv), due to its exceptionally long sequence of crucial evidence related to human evolution and human-environment dynamics, collectively extending over a span of almost four million years to the beginning of this era, including physical evidence of the most important benchmarks in human evolutionary development.

1.2 Inscription criteria and World Heritage values

The property has been inscribed on the World Heritage List under cultural criterion (iv), and natural criteria (vii), (viii), (ix) and (x) as noted above. The World Heritage Committee, at its 35th session, adopted a Retrospective Statement of Outstanding Universal Value (SOUV) for NCA, including on the integrity and authenticity of the property. These are available here: <http://whc.unesco.org/en/list/39/>.

1.3 Integrity/authenticity issues raised in the IUCN/ICOMOS evaluation report at time of inscription

1.3.1 Integrity

The statement of integrity (available here: <http://whc.unesco.org/en/list/1167>) was adopted by the Committee in 2010 as part of the SOUV. It noted that connectivity of the property with the wider landscape is essential to allow the movement of wildlife but poaching poses a significant threat, which requires effective monitoring, management and enforcement. Whilst the property provides grazing land for semi-nomadic Maasai pastoralists, increasing human population was already considered to be threatening both the natural and cultural values of the property. The integrity of specific paleo-archaeological attributes and the overall sensitive landscape are to an extent under threat and thus vulnerable due to the lack of enforcement of protection arrangements related to grazing regimes, and from proposed access and tourist related developments at Laetoli and Olduvai Gorge.

1.3.2 Authenticity

In general, the authenticity of the fossil localities is unquestionable, however given the nature of fossil sites, the context for the fossil deposits needs to remain undisturbed (except by natural geological processes). As the nomination dossier does not contain sufficient detailed information on most of the sites to delineate their extended areas or the areas of archaeological sensitivity, or sufficient guarantees in terms of management arrangements to ensure that the

sites will remain undisturbed and not threatened by visitor access, construction or grazing cattle, their authenticity is vulnerable.

1.4 Examination of the State of Conservation by the World Heritage Committee

On 31 January 2017, ICOMOS and IUCN submitted a joint analysis of the proposed upgrades of the Lodoare Gate to Golini Main Road and the access road to Olduvai museum, and on 9 February 2017, the ABs and the World Heritage Centre met with the State Party at UNESCO Headquarters to discuss the proposed project. Additional information was requested during this meeting, some of which were submitted on 24 April 2017, namely a map of the road with the project locations including borrow pits, and an analysis on the downstream impacts on the OUV of Serengeti National Park World Heritage property and the proposed mitigation measures.

1.5 Justification of the mission

At its 41st session (Krakow, 2017), the World Heritage Committee requested the State Party of the United Republic of Tanzania to invite a Joint World Heritage Centre/ICOMOS/ICCROM/IUCN Reactive Monitoring mission to Ngorongoro Conservation Area (NCA) World Heritage property in August 2017, in order “to provide advice to the State Party on the conservation of the additional set of footprints discovered at the Laetoli site in 2014, proposed Laetoli Hominid Footprints Museum, and monitor progress on the road upgrade project and proposed tourist developments as well as review progress in balancing conservation, livelihood and development needs” (Decision 41 COM 7B.39).

The Reactive Monitoring mission could not be undertaken in August 2017 due to the unavailability of suitable experts to cover the full mandate of the mission. However, in response to a request by the State Party, an ICOMOS/IUCN Advisory mission was organized from 23 to 26 August 2017 to monitor progress and advise the State Party on the project concerning the Lodoare Gate to Golini Main Road, and the Access Road to Olduvai museum.

After considerable discussion between ICOMOS and ICCROM on how best to offer advice on the conservation of footprints and the proposed Laetoli Hominid Museum, the World Heritage Centre suggested to the State Party that these two issues should be considered separately from the mission. Both ICOMOS and ICCROM considered that it was necessary to bring together a range of experts for these highly complex and sensitive projects, including, archaeologists, palaeontologists, conservators and museum specialists, and that this could not be satisfactorily accomplished in the framework of a Reactive Monitoring mission. The State Party agreed that the Reactive Monitoring Mission would no longer address these issues. In light of this decision, it was considered that the presence of an ICCROM expert was not necessary and that the mission would be conducted by representatives of the World Heritage Centre, ICOMOS and IUCN.

Regarding the conservation of footprints and the proposed Laetoli Hominid Museum, ICOMOS and ICCROM intends to undertake a technical review of the documentation

submitted by the State Party. On the basis of the conclusions of this technical review, the World Heritage Centre and the ABs will propose the way forward, which could include the organization of an expert meeting devoted specifically to these issues.

2.0 NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

2.1 Protected area

The Ngorongoro Conservation Area (NCA) is located in Ngorongoro Division, Ngorongoro District in Arusha region. It is found between Latitude 03° 14'.715 S and Longitude 35° 29'.275 E. It covers an area of 8,292 square kilometres. It borders with Lake Eyasi Escarpment, the agricultural communities of Karatu, Oldeani (Oltiyani in Maasai) Mbulumbulu mountain forests on the South and Southeast in Karatu District. Loliondo Game Controlled Area borders NCA to the north in Ngorongoro District. The Sale Plains and Lake Natron basin border the area on the Northeast and Serengeti National Park on the North and Northwest. To the West is Maswa Game Reserve (Figure 1 and 2. Maps sourced from NCA draft GMP).

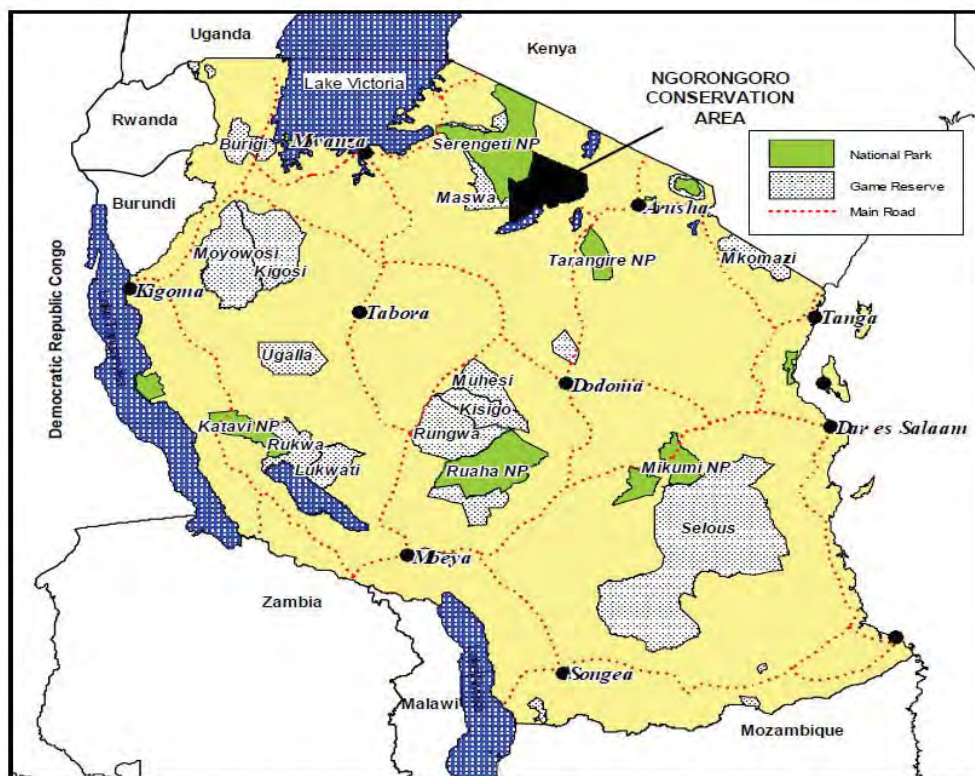


Figure 1: Location of the Ngorongoro Conservation Area in Tanzania

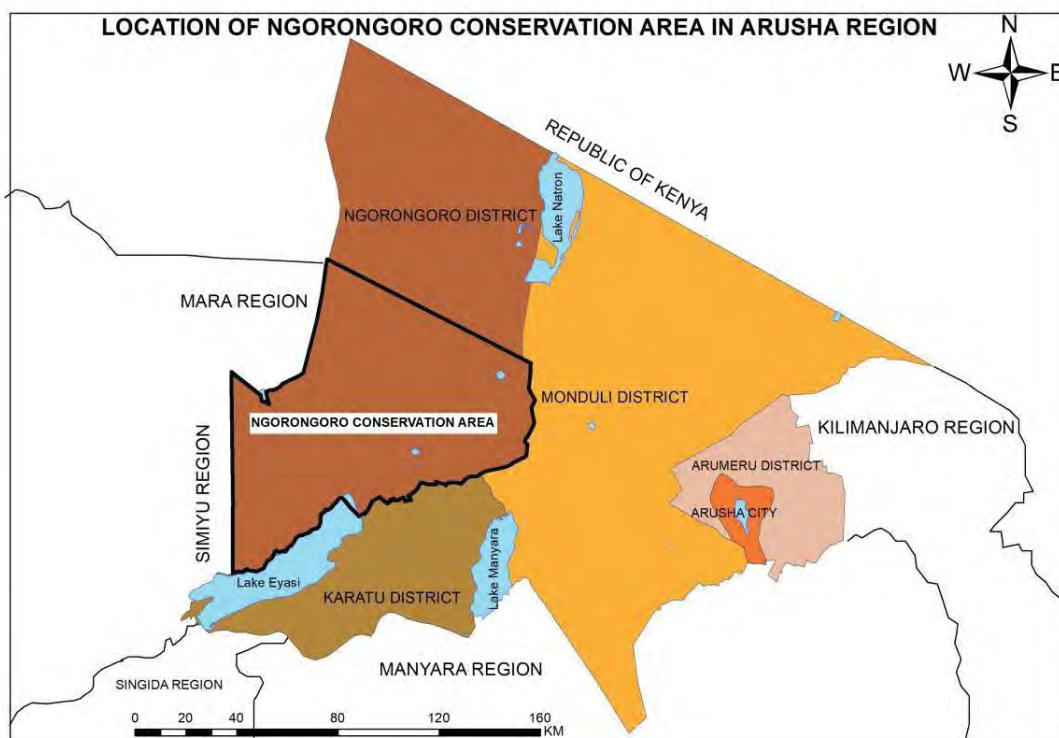


Figure 2: Location of the Ngorongoro Conservation Area in Arusha Region

2.2 National legislation and institutional framework

Management of natural resources, tourism and community development in the NCA is guided by legal frameworks, international agreements, conventions, treaties and protocols as listed here below.

POLICIES AND FRAMEWORKS	ACTS
a) Tanzania Development Vision - 2025	a) Land Act No. 4 of 1999
b) National Strategy for Growth and Poverty Reduction (Mkukuta) - 2025	b) Wildlife Conservation Act of 2009
c) National Land Policy of 1995	c) Ngorongoro Conservation Act of 2002
d) National Wildlife Policy of 2007	d) Tourism Act of 2008
e) National Forest Policy of 1998	e) Livestock Identification, Registration and Traceability Act of 2010
f) Livestock Policy of 2006	f) Antiquities Act Cap 333
g) National Tourism Policy of 1999	g) Mining Act of 2010
h) National Environment Policy of 1997	h) National Forest Act of 2002
i) Rural Development Policy of 2003	i) Environmental Management Act of 2004
j) National Bee-keeping Policy of 2012	j) Land Use Planning Act Cap 116
k) National Water Policy of 2002	k) Animal Welfare Act of 2008
l) National Energy Policy of 2015	

m) National Health Policy of 2003 n) National Population policy of 2006	l) Animal disease Act of 2003 m) Beekeeping Act of 2002
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2.3 Response to the recognition of values under international treaties and programmes

The Ngorongoro Conservation Area Authority (NCAA) is responsible for the management of Ngorongoro Conservation Area (NCA), UNESCO's Man and Biosphere reserve (Serengeti - Ngorongoro Biosphere Reserve) since 1981, and as UNESCO's mixed world heritage site since 2010 and UNESCO's Global Geopark since 2018. NCAA also carries out the implementation of the following international treaties and programmes, Protocols and Agreements:

- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Ratified on 29th November 1979, entry into force on 27th February 1980.
- Convention on Biological Diversity (CBD). Signed on 12th June 1992 and ratified on 8th March 1996.
- Biosphere Reserve - MAB- Programme, entry into force on 1981
- Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat (Convention on Wetlands), Ratified 13th April 2000.
- Kyoto Protocol- United Nations Framework Convention on Climate Change (UNFCCC)
- Convention for the Safeguarding of the Intangible Cultural Heritage, signed on 17th October 2003, ratified on 18th October 2011.
- Convention on the Protection and Promotion of the Diversity of Cultural Expressions. Paris, ratified on 18th October 2011.

3.0 IDENTIFICATION AND ASSESSMENT OF ISSUES / THREATS

3.1 Management effectiveness

An assessment of the management effectiveness of the property shows that an integrated/harmonised approach is now required. The management effectiveness assessment focussed on the following aspects: status and threats at the site, planning processes, management planning processes and the General Management Plan, management processes and inclusive planning approach, and the general management of the site.

- 3.1.1 *Status and threats at the site:* Overall, the property still retains its OUV but looming threats such as impact of developments (in particular road upgrade project, tourism developments, carrying capacity issues, invasive alien species, loss of biodiversity species, rampant migratory patterns of the local communities resulting in new developments (some with modern architecture) and the environmental degradation threatening Laetoli and other cultural sites are very visible and of concern. Despite previous Committee requests (since 2011) on the conservation and stabilisation of cultural heritage, very little has been done so far by the State Party. The water diversion system introduced at Laetoli is highly visible

when considered against the general ambience of the site (see photographs on Laetoli). Also a database linked to GIS for all known cultural heritage sites has not been established yet, including the development of an integrated disaster risk plan for the property. The carrying capacity issue still remains an area of concern, and this may become aggravated with improved accessibility when the principal road is hardened.

3.1.2 *Planning processes and the General Management Plan:* the management effectiveness assessment notes with concern the possible misalignment between the General Management Plan (GMP) and the parallel sub-plans such as the invasive plant strategic management plan, the tourism destination plan, large carnival management plan, the food security strategic plan and the livestock improvement strategic plan. Other plans are still been developed such as the Conservation Education Strategic Plan, Protection Strategic Plan and the on-going Multiple Land Use study review at the site and the Tourism Strategic Plan. While it is understandable that the GMP is an overarching framework, alignment between the GMP and all these other sub-plans is important in demonstrating how emerging issues, previous recommendations and decisions on the property are being implemented as a cascading planning process for the property. This observation is against the noted non-implementation of some of the previous mission recommendations (see 2011 and 2012 Reactive Monitoring mission reports). Overall, the planning process still reflects compartmentalised approach at the property, and the mission recommends an integrated/harmonised approach. In addition, there has been no effective transitional evaluation of achievements and challenges from the 1996 GMP to the 2006 Provisional Integrated Management Plan to inform the current Draft GMP. The State Party has to make provision for allocating more resources for cultural heritage programme to address the bias towards nature exhibited in the 2006 Provisional Integrated Management Plan as shown in the table below:

2.0. Indicative Budget

Planning Period: 2006 – 2010
(US Dollars)

Item	Activity	Costs
1	Habitat management	50,000
2	Wildlife management	40,000
3	Human/wildlife management	40,000
4	Tourism management	10,000
5	Research and monitoring	100,000
6	Education and awareness	50,000
7	Human resources and infrastructure	200,000
8	Monitoring and evaluation	40,000
TOTAL		530,000

Source: 2006 Provisional Integrated Management Plan

3.1.3 *Management processes and inclusive planning approach:* the governance structure for the site is complex and there is a perceived lack of consensus on key issues and priorities between NCA and multiple stakeholders. These stakeholders include among many others the tourism industry and associations, government departments, local communities, Ngorongoro Pastoral Council (NPC) and NGOs. The Mission observed that there could be limited communication between NCAA and these multiple stakeholders. Lack of communication among stakeholders hinders engagement in community and conservation efforts at the property, in that the level of awareness and understanding of issues is different among them. While engaging and involving stakeholders is slowly happening, the Mission noted with concern the continued tensions among stakeholders, in particular with the local communities, tourism players and associations on addressing matters of mutual interest, in particular mitigating threats to the OUV of the site. This scenario could be attributed to the absence of a stakeholder engagement and involvement framework for the property. Such a framework is important in engaging multiple stakeholders in the formulation and execution of various policies pertaining to the property.

The Mission also noted that while NCAA views the operational pillars for the management of the property as wildlife, human and livestock, the NPC additionally sees natural resources (i.e. forests, grasslands, water and land) as one (NCA Livestock Strategy, 2019). The NPC has also criticised that livestock interventions in the property was implemented without proper consultation with pastoralists (Livestock Strategy, 2019). From the perspective of NPC, NCAA should understand their traditional management systems and anthropological perspectives in moving towards an integrated/harmonised approach at the property. On the other hand, tourism stakeholders are interested in business, quality control of experience and sustainability across board. Based on the stakeholder consultations, it is evident that the current level of stakeholder engagement and involvement in the decision making process for the management of the property needs to be strengthened to ensure the long term protection of its OUV, and to meet the socio-economic needs of the property in line with the sustainable development policy for World Heritage. The State Party should consider developing a Stakeholder Engagement Framework for the property and strengthen the Serengeti Stakeholder Forum to manage a broader ecosystem in which NCA falls under.

3.1.4 *General Management of the site:* the mission notes with concern that there still remain outstanding recommendations from past missions that are not being implemented by the State Party (see 2011 and 2012 Reactive Monitoring mission reports). This is evidenced by the lack of conservation intervention at cultural heritage sites etc. The cumulative and gradual intensification of threats to the OUV identified in the 2011 and 2012 Reactive Monitoring mission reports, remain a matter of concern and the State Party needs to be proactive in addressing them. In addition, the GMP should provide measurable outputs linked to the sub-plans over the time period or the GMP should be refined to have specific outputs.

3.2 Nature and extent of threats to the property

The mission identified the following threats:

3.2.1 *Ineffective control of Invasive Alien Species:* spread of invasive alien plant species (IAS) remains a serious threat to biodiversity conservation at the property. The impact of IAS is usually immense, insidious and irreversible (Cronk and Fuller, 1995). IAS pose a threat to wildlife, livestock and the aesthetic values of the property, including bringing weeds that could be harmful to both wildlife and human beings. While the 2017 State Party report states that the Parthenium weed has been brought under control within the property, the mission noted with concern that there is no quantitative data on the mechanical removal of invasive species at the property as the State Party is only able to show areas where removal has taken place. This makes it difficult to assess the effectiveness of the control measures outlined in the IAS Plan.

3.2.2 *Carrying capacity issues: increased number of vehicle traffic:* while the State Party argues that there are vehicular controls, in particular for the principal road (from Lodoare to Golini Gate into Serengeti) passing through the NCA and the crater road, the number of tourist and passenger vehicles (buses and lorries servicing villages) into the property has increased thereby disturbing its “naturalness”. This linked with the incomplete Tourism Strategy, which has been recommended in previous missions and by the Committee in 2017, poses a threat to the integrity of the property. The State Party confirmed that it is still finalising the Tourism Strategy alongside the GMP. The speeding noticed during the mission and animals hit by vehicles is an indication that existing monitoring controls are being effectively implemented. The delayed finalisation of the Tourism Strategy is detrimental to the overall implementation of tourism initiatives, including monitoring of tourism impacts and related developments within the property, and establishing the visitor carrying capacity which remains to be defined. A detailed study to deduce the carrying capacity for the different areas within the property is therefore urgently required.

According to information obtained from the NCAA during discussions, 300 to 700 vehicles drive through the site monthly during the high season but this does not reconcile with concerns raised by other stakeholders of increased vehicular traffic into the property. Below are vehicle statistics collected by the NCAA at Lodoare gate between 2000 and 2013 (see table below). The vehicle statistics show increasing flow of traffic within NCA and the State Party needs to update this to give a clearer picture of the current situation, possible through the process finalising the Tourism Strategy. This will assist in checking which daily caps are being respected or not by the State Party. However, the latest figures were not shared with the State Party with the Mission.

Year	Vehicles under 2,000kg (normal car)	Vehicles between 2,001-3,000kg (e.g. van)	Vehicles between 3,001 – 7,000kg	Totals
2000	30,782	5,201	598	36,581
2005	52,885	7,714	861	61,460
2006	58,472	8,945	987	68,404
2007	67,106	9,583	1,514	78,203

2008	69,790	9,966	1,575	81,331
2009	73,280	10,464	1,654	85,398
2010	76,980	11,062	1,670	89,712
2011	98,160	7,821	2,215	108,196
2012	113,996	7,995	2,211	124,202
2013	113,423	14,364	2,181	129,968

The above indicates there is an increase in traffic growth rate of 10.9% per annum from 2000 to 2006, 7.9% from 2005 to 2010 to 2013, giving an overall average traffic growth of 9.4% per annum between 2000 and 2013. The table above shows that over the years the number of vehicles below 2,000kg has been increasing and these mostly include tourist vehicles. The statistics for vehicles in the years 2014 to 2018 are assumed to be higher than the years preceding due to various marketing strategies employed by the NCAA and the State Party of Tanzania. The current figures were not submitted but assumptions were made. The increasing presence of vehicles in the property causes visual pollution due to the high volumes of dust created by the vehicles passing through the site. In some instances, the vehicles result in a number of wild animals being hit by motorists because of poor visibility caused by dust and speeding. In addition, an intense use of roads by vehicle can disturb or alter habitat use by wildlife, create noise pollution, accelerate the damage to roads surface thereby having to repair the road more regularly.

3.2.3 *Tourism, quality of control and infrastructure development:* relating to Tourism, the draft GMP focuses on zonation within the property and to undertake land use analyses for these zones. The mission, as well as the stakeholders consulted, note with concern however, that these zonations are not sufficiently enforced to control tourism developments in the property. For example, the draft Tourism Strategy points out that one campsite was built as a semi-permanent structure, even though NCAA's permit/approval was for a temporary camp. This campsite is now being treated as a pilot study and will be taken down after 10 years or sooner if negative social or environmental impacts are reported. However, the monitoring framework to assess these impacts are unclear, and there is a lack of consistent approach in approving and monitoring developments within the property. The mission could not obtain detailed documentation on current and future developments within the property. The State Party only submitted a map showing some form of development sites but without details at the nature, extent and stage at which these developments are. It is important for the State Party to provide details of each proposed development inside the property, and provide adequate assurance that these are permitted in line with the Tourism Strategy (which is still incomplete). The draft Tourism Strategy notes that, there is no quality control linked to the tour guides training and that there is no standard curriculum for the tour guides. This concern was noted in the previous GMP (2010-15), which acknowledged that 'experience is a fast-declining quality in the Ngorongoro Crater' and this needs to be seriously considered in the GMP being finalised.

3.2.4 *Uncontrolled settlements, emerging modern housing architecture and impact on the integrity of the landscape:* the mission noted with concern the visual impact from fast emerging modern buildings as a result of human population increase. The proliferation of this visual impact is

also attributed to lack of awareness and enforcement of the existing building/infrastructure guidelines for NCA by all concerned parties. Communities inside the property are constructing houses of all sizes and designs using different construction materials, which are out of “context”. The shift from constructing “traditional houses” to modern styles and very large houses, some with protective fencing, is not only impactful on the landscape, but is also an erosion on the connection of the communities with their landscape. The bomas are a living testament of this harmony. While modern architecture and comfort are needed for better lives and social status, there is a need to be creative and innovative from an architectural and design perspectives beyond just embracing modernity. The existing policy should therefore be made more explicit as to the type of houses that can be developed inside the property. The mission recommends training, exchange and awareness programmes in this area through well-established architectural schools on the African continent. Notions of modernity and change are acceptable, but this should be guided in a manner that retains the integrity and authenticity of the landscape, and its people and their cultural practices

3.2.5 *Impact of increasing human population in NCA:* while a multiple land use policy has been established for NCA since the time of establishment, where peaceful co-existence of human and wildlife in a natural and tradition setting was envisaged, both elements have not been static over the decades. As of 2018, NCA recorded 93,136 inhabitants (NBS, 2017) and the projection is that this will reach 161,000 inhabitants by the year 2027 (GMP 2018-2028). This population increase is associated with various impacts, among them increasing infrastructures, need for grazing lands, human & wildlife conflicts, and land use conflicts are becoming unavoidable. Related to this carrying capacity issue in the property, is the lack of a balanced monitoring approach as a growing concern for both human and animals in the same space as in 1959. The Maasai are complaining that NCAA is prioritising conservation and tourism at the expense of improving their traditional livelihoods, which existed before the property obtained World Heritage status (NCA Livestock Strategy, 2019). Domesticated animals are not only owned for prestige but as material culture embedded with spiritual, and socio-economic values of the Maasai. While land use and zonation demarcated grazing spaces and for other communal usages has been done in the past, it is observed that with climate change and unpredictable rainfall patterns, droughts and scarcity of grazing land and water resources in the conservation area has contributed to expanding settlements in the property as they look for options (NCA Livestock Strategy, 2019). This scenario, if not proactively addressed, continues to be a recipe for competition and tension between the OUV and the needs of the Maasai. To this end, the Mission noted with deep interest the Land Use Model review study being carried out by State Party in order to enhance the existing model or possibly develop a new one towards retaining the OUV of the property and addressing the growing needs of the Maasai. While NCA assured the mission about the linkage between this research initiative and the finalisation of the GMP, there is a risk of misalignment between the strategy and the model that may be recommended, which could provide solutions to the current tensions.

3.2.6 *Intention to settle communities in Protected Areas:* while the Multiple Land Use review study by the State Party is nearing completion, a public statement made by State Party in 2019 to the effect that local communities living in or close to National Parks should be treated fairly, and where possible, be accorded settlement rights and be given meaningful responsibilities over areas allocated to them, brings both opportunities and threats to the property and potential

pitfalls. However, the said public statement is still yet to take effect as a legally binding instruction to such departments. The institutionalisation and operationalisation of this statement of intent by responsible Government departments requires critical assessment. The bottom-line is that a responsive land use model, which can reduce or resolve the tension between NCAA and the local communities is now urgently required. The operationalisation of this statement of intent on settling communities in Protected Areas, and its implications on the boundaries, the OUV, and integrity of the property and Serengeti National Park World Heritage property requires engagement from the onset. The mission recommends that the State Party works together with UNESCO and the ABs from inception on this matter. However, the political sensitivity of this matter, in view of the desire of the State Party in addressing such long-standing issues, should also be fully appreciated but without losing an opportunity to develop a solution which equally retains the OUV of the properties concerned. There is an opportunity for a common approach in balancing conservation and social responsibility at the site, which requires sharing ideas from inception to implementation.

3.3 Positive or negative developments in the conservation of the property

3.3.1 *Positive developments*

The mission noted positive effort made by the State Party in developing the draft GMP in consultation with stakeholders, and the review study on the current Multiple Land Use Model, which may provide useful and strategic direction on retaining the OUV, integrity and authenticity of the property. However, the completion and alignment of the GMP with existing and future sub-plans, as well as parallel studies, remains an area of concern. For instance, the Tourism Strategy started before the GMP, is still to be completed. There are many parallel sub-plans being developed which require a centralised monitoring approach. Other positive developments include the already noted appointment of staff to oversee the management of key functions (anti-poaching and security aspects), and the new Olduvai Museum, with its informative exhibitions and an outdoor amphitheatre for enhancing visitor experiences as they view the landscape.

3.3.2 *Negative developments*

3.3.2.1 *Lack of Compliance Monitoring Tools*

The mission noted with concern that while some developments are subject to EIA/HIA, the State Party does not have the mechanisms to monitor compliance with the development protocols (EIA/HIA, including IUCN/ICOMOS guidelines) and this is a risk to the OUV, integrity and authenticity of the property as a whole. This is against the commitment made by the State Party in its 2017 state of conservation report for the property, and again in its 2019 report, to subject all developments to EIA/HIA processes. Such a proposed monitoring system would assist the State Party in monitoring whether all developments are complying with EIA and HIA guidelines, and would assist in establishing a centralised approach in data capturing, storage and retrieval system in NCAA. This could be linked to the Implementation and Monitoring Unit proposed by the State Party towards improving institutional archives. It is recommended that the State Party develop the proposed EIA/HIA compliance tool for use by all stakeholders undertaking developments in the

property, which should be submitted regularly as part of the statutory report to the World Heritage Committee. This tool would provide information such as stage of compliance, progress in monitoring mitigations among many other aspects.

3.3.2.2 Potential and undesirable impacts resulting from the upgrading of the Lodoare road (hardening project).

The mission noted that many of the 2017 Advisory mission recommendations have not yet been implemented by the SP. The following update is provided by the mission:

- a) applying a phased approach to the implementation of the road hardening project to enable adjustments to be made as required to mitigate potential impacts on the OUV of the property; **update:** developed project has phases 1, 2 and 3.
- b) Develop a specific action plan for the mitigation measures to ensure traffic through the property does not increase as a result of the road upgrade; **update:** not developed and the State Party could not provide satisfactory information.
- c) Finalise and submit the feasibility study for the southern bypass route; **update:** not done.
- d) Develop suitable environmental and archaeological management standards for the project based on a thorough review of the recommendations of the ESIA and HIA before the completion of the tender documents; **update:** not done and the State Party is expecting the heritage consultant to be appointed alongside the contractor to address this on the basis of generic terms in the contracting documents benchmarked against national approaches relating to road constructions.
- e) Ensure NCAA has the technical and human resource capacity to monitor and enforce the required standards of environmental and archaeological management during all stages of the project; **update:** established inadequate staff capacity including relevant competencies.
- f) Undertake archaeological investigations, and collect ecological and environmental baseline data along the length of the road; **update:** Cultural heritage impact assessment done but site data base not developed.
- g) Reconsider the possible use of asphalt concrete (with added colour), exceptional case of importation of material, consider Olduvai Museum road separately, and consider the use of geocell in conjunction with asphalt concrete; **update:** still yet to be done and subject to implementation of phase 1.
- h) Review the method of maintenance of the existing unpaved road, including enforcement of speed limit of 50km/h, inclusion of geocell reinforcement to increase longevity of the gravel surface and management of water material **update:** some widths widened during maintenance, speeding noticed along the main road.

The mission notes with concern that State Party is on the verge of appointing the construction contractor for the road upgrade project yet these recommendations have not been fully addressed. The State Party argues that it has included these matters in the general conditions of the tender documents. As such, construction and this additional research will be done simultaneously and the impact mitigated as an on-going concern. This approach of solving things while implementing the upgrade is a major threat to the OUV, integrity and authenticity of the property. While monitoring, documenting and rescue/salvage archaeological work as mitigation during construction phase is highlighted by the State Party, the compulsory conditions of the tender documents remain generic

because the additional studies recommended by ABs would have helped in developing detailed specifications.

While the State Party was requested to put on hold the upgrading of the Lodoare Gate to Golini Main Road until the results of the feasibility study of the Southern Bypass road are available and submitted to the World Heritage Centre for review by the ABs, this has not yet happened and it is important that this be considered as a matter of urgency.

3.3.2.3 Lack of a conservation strategy for cultural heritage

Despite many recommendations from previous missions and successive Committee decisions, the property still does not have a holistic sustainability strategy nor has it prioritised conservation to deal with identified threats at various cultural sites. The authenticity of these sites is under threat and the impact may not be reversible if not mitigated. These threats include but not limited to environmental degradation, impacts of tourism, erosion, documentation, impact of livestock, delineation of clear boundaries and water logging. These pose a threat to the OUV This is further compounded by lack of skills and knowledge for the effective management of cultural heritage within the Cultural Heritage Department. There is a need to prioritise the development of a holistic sustainability strategy and securing adequate financial and human resources.

3.3.2.4 Absence of an Interpretation Strategy for the NCA

While noting the positive development in regards to interpretation at Olduvai Gorge, with the launching of the new museum, the same cannot be said for other attributes open to the public, neither is there an overall interpretation strategy to advise on the same in conformity with the integrity of the landscape as a whole. For instance, interpretation at the main gate (Lodoare) does not reflect a harmonised approach in raising awareness on the shared values and aspirations of the property. Paleo-anthropological sites have varying interpretation models and approaches, yet there is need to standardise and optimise this through an Interpretation Strategy, which should inform the nature and extent of infrastructure and tourism developments at the site. There is need to prioritise the development of an Interpretation Strategy with a clear and harmonised vision, integrated planning, including well thought out interpretation options and models for site as a whole and in tandem with retaining the OUV, integrity and authenticity of the site.

3.4 Information on any specific threat or damage to or loss of outstanding universal value, integrity and/or authenticity for which the property was inscribed

Based on previous reports and observation of the mission, the specific threats or damage to or loss of OUV, integrity and authenticity for which the property was inscribed include the following:

- 3.4.1 The negative impacts of the main road upgrade project on criteria (vii) (viii) (ix) and (x) in the absence of additional studies to reinforce mitigation measures as recommended by the 2017 ICOMOS/IUCN Advisory mission.
- 3.4.2 Development pressure around the property as part of tourism investment in the continued absence of a Tourism Strategy, related monitoring tools, and a defined carrying capacity.

- 3.4.3 The proliferation and visual impact of modern infrastructures on the landscape as a result of lack of management, awareness-raising, knowledge and enforcement of existing building guidelines and the failure to be creative and innovative in bringing traditional architecture to modernity without altering its connection with the landscape.
- 3.4.4 The progressive conservation challenges at paleo-anthropological features in the absence of a holistic sustainability strategy for cultural heritage in the property, compounded by lack of skills and specialist knowledge on the subject, and inadequate funding for cultural heritage which will negatively impact on criterion (iv).
- 3.4.5 While the State Party has strengthened the capacity of the anti-poaching units in the property, including indicating that zero poaching for elephants was achieved in 2017 and 2019, the statistics since 2017 show an increase in the number of overall poaching incidents relating to other species and a corresponding increase in the number of convictions. The increase is a matter of concern and has impact on the criteria (vii), (ix) and (x).

YEAR	Number of Poaching Cases	Number of Persons Involved/Charged
2012	2	3
2013	6	9
2014	2	5
2015	4	7
2016	2	4
2017	7	19
2018	11	20
TOTAL	34	67

*Source: Draft GMP: 2018-2028

4.0 ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

4.1 Review: values and conditions of integrity

The site is under threat from multiple factors as outline below:

Criteria	Definition	OUV	Observation
(iv)	Outstanding example of a type of landscape illustrating significant stages in human history	NCA has yielded an exceptionally long sequence of crucial evidence related to human evolution and human-environment dynamics, collectively extending over a span of almost four million years to the early modern era. This evidence includes fossilized footprints at Laetoli, associated with the development of human bipedalism, a sequence of diverse, evolving hominid species within Olduvai gorge	The site has no conservation strategy, neither has the State Party implemented the recommended conservation measure, and this is threatening the authenticity and the future of all paleo-anthropological sites at the site given the identified threats which include but not limited to developments, erosion, waterlogging, human and wildlife induced damage. This is compounded by lack of competence in cultural heritage management and weak advisory role of DoA.
(vii)	Contain superlative natural phenomena of exceptional natural beauty and aesthetic importance	The stunning landscape of Ngorongoro Crater combined with its spectacular concentration of wildlife is one of the greatest natural wonders of the planet. Spectacular wildebeest numbers (over 1 million animals) pass through the property as part of the annual migration of wildebeest across the Serengeti National Park boundary. This constitutes a truly superb natural phenomenon.	Values in this criteria are upheld. Besides the natural beauty of the site, the migration of wildebeest and other animals is still occurring.
(viii)	Ongoing geological processes in the development of landforms, and significant geomorphic features	Ngorongoro crater is the largest unbroken caldera in the world. The crater, together with the Olmoti and Empakaai craters are part of the eastern Rift Valley, whose volcanism dates back to the late Mesozoic	While there are policies to regulate the number of tourist vehicles entering the property at any given time, there are no means to monitor the numbers nor its impacts. These have a negative

		/ early Tertiary periods and is famous for its geology. The property also includes Laetoli and Olduvai Gorge containing outstanding paleontological values.	bearing on the property's OUV including its integrity.
(ix)	Outstanding example of significant ongoing ecological and biological processes in the evolution and development of terrestrial and freshwater communities of plants and animals	The variations in climate, landforms and altitude have resulted in several overlapping ecosystems and distinct habitats, with short grass plains, highland catchment forests, savanna woodlands, montane long grass plains and high open moorlands. It is one of the last intact ecosystems in the world which harbours large and spectacular animal migrations.	The NCAA urgently needs to implement stringent policies to control population growth and its subsequent impact on the OUV including its integrity. The absence of this poses serious danger on the natural habitat of the property. While the State Party is conducting the review of the Multiple Land Use approach, maintaining the ecological and biological processes in the property should remain a priority.
(x)	Contain significant natural habitat for in-situ conservation of biological diversity including threatened species of OUV	Ngorongoro Conservation Area is home to a population of some 25,000 large animals, mostly ungulates, alongside the highest density of mammalian predators in Africa including the densest known population of lion (estimated 68 in 1987). The property harbours a range of endangered species, such as the Black Rhino, Wild hunting dog and Golden Cat and 500 species of birds. It also supports one of the largest animal migrations on earth.	The Maasai are pastoralists and herd their domesticated animals alongside the wild animals. This may affect the naturalness of the animals in the long term. Whilst considerable efforts have been made by NCAA to bring poaching under control, it continues to remain a large threat to the wildlife including animals being killed through reckless driving.

The property has overarching threats emanating from the (i) negative impacts emanating from the road upgrade project which are not fully understood and planned for under mitigation measures, (ii) uncontrolled settlements and modern architecture changing the connection between the traditional landscape and integrity of the site, (iii) and the inadequate and inconsistent monitoring of current and future developments at the site.

4.2 Review any follow-up measures to previous decisions of the World Heritage Committee

4.2.1 *Assess progress made in implementing the August 2017 ICOMOS/IUCN Advisory mission recommendations, including the efforts made to measure and mitigate any impacts on the OUV of the property of upgrading the Lodoare Gate to Golini Main Road, and the Access Road to Olduvai museum from gravel to hardened standard.*

The mission notes the historical context of the Road Upgrade Project and the ESIA, including the CHIA conducted as part of the feasibility studies but notes with concern the failure to implement follow up recommendations on the same. During the mission, the State Party shared the tender specification documents for implementing the project. The mission also physically traversed along the road to ascertain the current status and assess any works related to the upgrade project. The current poor state of the road continues to add to environmental destruction through regular need to repair the road, which involves blasting, quarrying and extraction of road materials within the property, which have been affecting the communities, wildlife and tourists (ESIA 2018). Furthermore, visual pollution is prominent in the conservation area especially on the roads because of high volume of dust emanating from vehicles, which continuously utilize the road. The mission therefore understands that there is a pressing need to upgrade the road on the part of the State Party. However, the mission noted with concern that the State Party is at the stage of appointing a contractor for Package (phase) 1 of the Road upgrade project without addressing all the issues raised by the ABs from 2017 (see 3.3.2). From the tender documents, the improved and hardened road structures will have culverts, bridges, and realigning of the road particularly in sharp unsafe corners in both ascending and descending sections.

The mission notes that the negative impacts emanating from the road upgrade project are not fully understood and mitigation measures not assessed as recommended in previous missions. The question on maintaining the OUV, integrity and authenticity of the landscape with the proposed hardening method are still unclear without the additional studies. The preferred approach of the State Party to simultaneously undertake the additional studies and commence the implementation of Package (phase) 1 of the project is not in line with the standard practice and poses a considerable threat to the property. The mission recommends that the State Party be encouraged to address the outstanding ESIA concerns as a matter of urgency before starting the implementation of the project.

Another area of concern during the implementation of Package (Phase) 1 is the risk of materials being sourced inside the property, a matter which requires close monitoring to avoid exacerbating the current situation associated with the rehabilitation of the borrow pits used for sourcing the road construction materials for the maintenance of the road. Accessing construction materials for maintenance in the property remains a major challenge and needs to be better managed to avoid exacerbating the existing environmental degradation associated with the past and active pits used for the current road maintenance. Most of these borrow pits have not been maintained after extraction of materials. The borrow pits, are a threat to both humans and animals in the area, as well as the ecological processes at the site. There is a need to provide detailed mitigation plans for rehabilitating borrow pits as opposed to leaving this in the hands of the contractors as informed by generic conditions outlined in the tender documents shared by the State Party. Furthermore, and

during a meeting with NCAA and their consulting Engineer on Upgrade Project, the mission noted that tender documents have been advertised on the market to appoint a service provider for Package (Phase) 1. The mission reinforced that the contractor to be appointed should be made aware of the sensitivity of the property as a World Heritage. This includes committing the contract to the rehabilitation plans for disturbed grounds during the construction phase to avert an ameliorating environmental degradation, which will impact on the OUV, integrity and authenticity of the property. The State Party is further requested to submit a map showing locations of construction camps and temporary storage areas for equipment and materials, and these should be subjected to impact assessment too.

In addition, the mission recommended that if Package (Phase) 1 is implemented upon meeting all outstanding EIA/CHIA concerns as recommended by ABs, it should be used to further review the visual impact of the hardened road with the aim of enhancing tender specifications for Package (Phase) 2 and 3 and towards reducing any undesirable impacts on the site. While the EIA and tender documents define the width of the hardened road as 7 metres, this needs to be closely monitored as the Mission observed width distortions on the current road ranging from 6-9 metres. The 7m width for the road needs to be applied consistently, including reducing current broader sections to the same width. The State Party also need to urgently develop a clear guideline on specific dimensions, materials and attributes for the Principal and feeder roads, as well as paths to specific sites, in order to inform road and paths maintenance, upgrades and constructions (in case of new paths) within the property. Such a guideline does not exist for the property. The said guidelines should bring standard and uniformity in line with the integrity and authenticity of the property as a whole.

While the rationale, intended benefits of the upgrade are justified and articulated by the State Party, the ESIA and CHIA submitted had inadequacies which have not been fully addressed as advised by ABs, and these remain a source of threat to the OUV, integrity and authenticity of the property.

4.2.2 Assess the contents and status of the new General Management Plan (GMP), which is currently under preparation by the State Party, with a view to ensuring effective management and protection of the World Heritage property.

The Mission reviewed the Draft General Management Plan (GMP), being developed by the State Party and the following key issues are identified, including how it has failed to review the successes and challenges of the last GMP, with a view of addressing identified challenges through the GMP being developed. Firstly, the Draft GMP does not demonstrate an integrated/harmonised approach in the management of the site to ensure that all values are managed in harmony. Cultural heritage continues to be considered secondary to nature. Research, conservation and interpretation of cultural heritage remains lagging at the site. Also, there is lack of appreciation and inclusion of traditional perspectives as embodied in the ethno-historical experiences of local communities. The GMP does not demonstrate understanding and appreciation for the magnitude of managing a mixed property.

Secondly, there is limited evidence demonstrating the involvement of the Department of Antiquities (DoA- custodian of cultural heritage in Tanzania) in developing the Draft GMP owing to the glaring gaps on research, conservation and interpretation issues which they could have

advised, in particular in prioritising conservation challenges identified through previous missions to the site. On the hand, the DoA is constrained by financial and human resources to the extent that the institutional arrangement between them and NCAA is now being extended to other Protected Areas in Tanzania. Under the circumstances, it may be prudent for NCAA to consider establishing a Heritage Experts Advisory Committee (comprising both independent nature and culture experts) on the management of heritage in an integrated/harmonised approach at the site.

Thirdly, the GMP is an ambitious overarching management framework for the property, but there is a gap in technical knowledge and skillset in implementing and monitoring the GMP, in particular for the management of cultural heritage. In terms of mitigation, the State Party is preparing for an institution-wide organisational review to address this matter. The mission also noted the ongoing review of the Park Legal framework, which may result in the review of the organisational structure. These processes are critical to the implementation of the GMP and therefore, the State Party needs to be encouraged to address them swiftly as part of finalising the GMP. In addition, and related to staff issues, there is lack of awareness on cultural heritage values, and to a certain extent on World Heritage understanding among the NCAA staff, and this would require a specific capacity building initiative in the short and long term.

Fourthly, the Draft GMP does not have a clearly present all of the existing and future development plans within the property. It also does not present SMART (Specific, Measureable, Achievable, Realistic, Time-bound) objectives and outputs for monitoring purposes. This includes assessing how these have been successfully implemented under the framework of the previous GMP. This is critical because the Draft GMP does not drill down in detail to specific plans to be implemented by respective divisions in the next 10 years (2018-2028). The State Party should move towards a situation where these sub-GMP plans are developed towards having an integrated GMP for five years instead of saying between 10 years. This will synchronise the time frames to avoid overlaps and the possibility of not being aligned to each other. This will also allow the allocation of financial resources to these sub-plans, in particular prioritising areas of concern raised by previous missions.

Fifthly, and on a positive note, the State Party has appointed key personnel to coordinate critical divisions, in particular, the paramilitary personnel appointed to lead anti-poaching efforts in the property. Also, NCAA is now part of the established National Task Force on anti-poaching monitoring for all Protected Areas in Tanzania. In addition, all other vacant or acting positions within NCAA have been filled except Head of Departments for Engineering Division (under recruitment), public relations and community development (being advertised). From a gender perspective, only one female has been appointed into senior management position.

4.2.3 Based on the above-mentioned assessment of the GMP, relevant stakeholder consultations and other relevant documentation, review overall progress made in addressing sustainable livelihoods, wildlife protection and archaeological conservation, as well as wide-ranging governance issues, including management and conservation approaches, stakeholder involvement and benefit sharing, in accordance with Decision 38 COM 7B.61.

4.2.3.1 Sustainable livelihoods and Sustainability in the NCA.

While commending the State Party for actively and consistently supporting the Maasai with financial capital and other subsidies for their livelihood needs, this model appears to have a sustainability risk, which cannot be guaranteed with the increasing population and the expansion of new settlements, which require additional supportive infrastructure such as clinics and schools. This matter requires NCAA and the local communities to explore alternative sustainable socio-economic beneficiation models, in addition to encouraging voluntary resettlement of Maasai outside the property, consistent with the policies of the Convention and relevant international norms, in order to reduce the risk of failure of the current model, hence deepening tensions and areas of conflict. If this risk/threat is not addressed, it may result in the unintended consequences of a dependency syndrome on the part of the local communities, thereby suppressing the spirit of creativity and sustainable entrepreneurship (NCA Livestock Strategy, 2019). Such alternative models should consider that change has been constant and inevitable since 1959, hence the need to have an inclusive stakeholder and holistically driven approach responding to these changes with a view of retaining the balance between conservation and socio-economic livelihoods. If this matter is not addressed in a holistic and inclusive manner, it increases threats to the site and could be catastrophic if not proactively dealt with. However, this holistic and inclusive approach should be sensitive to the political context of this matter, and the need to assist the State Party in resolving such matters in a harmonious way.

4.2.3.2 Wildlife protection

Progress on Anti-poaching: The State Party continues to monitor poaching activities in the property by undertaking patrols and sharing investigation information with other state organs for the purpose of preventing poaching. The State Party has collared five elephants for close monitoring. Also, the State Party has increased the number of rangers, ranger posts on the southern circuit along the line close to the Northern Highlands Forest Reserves (NHFR) and appointed paramilitary personnel to curb illegal practices in the property. Two new ranger posts were constructed at Nasera rock situated on the North East side of the property and Engaruka located on the Eastern part of the property respectively. The mission recommends the State Party to further reinforce this approach and ensure poaching is closely monitored at all fronts. However, and despite this progress, the mission noted that wildlife is being killed because of reckless driving and excessive speeding along the main road as speed humps and speed traps have not been enforced. There are currently no road signs or any danger warning signs along the road for drivers to adhere to. This needs to be addressed as soon as possible, including having in-built mechanism for speed control in the upgraded road network. While the State Party has not recorded any incident of elephant poaching for the year 2017/2018, the number of poaching incidents of other wildlife species have increased since 2017 in the property and this needs to be addressed by the State Party.

Control of invasive species: The State Party developed the Invasive Alien Plants Strategic Management Plan and has been implemented it since 2011. The State Party, through the department of Range and Wildlife Management continues to monitor Invasive Alien Species (IAS) in the property. Recently, the NCAA updated the Invasive Plant Strategic Management plan and shared with the World Heritage Centre. The property continues to experience challenges in controlling IAS and different methods have been identified and employed, including mechanical,

chemical, and biological methods. The predominant use of the mechanical method in the property has its limitations given its vastness, and the mission could not confirm progress made so far in terms of set monitoring indicators. This requires exploration of other methods for the effective control of the IAS, and this needs to be prioritised as a matter of urgency.

4.2.3.3 Archaeological conservation

The Mission visited Olduvai Gorge and Laetoli sites and noted progressive conservation challenges as previously reported. Lack of progress in implementing conservation remains an area of concern in view of the limited progress made in this area over the years by the State Party, limited financial allocations for addressing these matters, the absence of a conservation strategy and competent staff to implement recommendations over the years. The State Party should urgently develop a conservation strategy, appoint competent cultural heritage staff or consider upskilling current staff (but this may take longer) and deliberately prioritise cultural heritage management. The option could be a hybrid capacity building combining recruiting new staff and upskilling existing staff.

4.2.3.4 Wide-ranging governance issues, including management and conservation approaches,

These matters have addressed under the section analysing the management effectiveness at the site.

4.2.3.5 Stakeholder involvement and benefit sharing

These matters have been addressed under the section analysing the management effectiveness at the site. The recommendation is the development of a Stakeholder Engagement Framework

4.2.4 Based on site visits and existing documentation, verify the number and locations of existing and proposed tourism developments inside and on the periphery of the property (including resting areas, lodges, hotels, campsites, etc.), review existing tourism management procedures and provide recommendations so as to manage tourism in a sustainable manner which considers social, cultural, economic and environmental aspects and does not impact on the OUV of the property.

Having reviewed the maps submitted by the State Party, and noting the challenge of verifying the number and locations of existing and future developments in the absence of data, and the failure by State Party to complete the Tourism Strategy as previously agreed upon, there is need for the State Party to address the following; develop and submit a list of existing and future developments, complete the Tourism Strategy and share with ABs, establish the carrying capacity of the property as opposed to adopting limits of acceptable use, develop monitoring and compliance tools to be used as part of SOC reporting and intensify engaging stakeholders on developments and its impact on the landscape. This is against the increasing pressure from investors who intend to construct tourism facilities in the property. Among such infrastructure include hotels, lodge development at the craters and other recreational facilities. The mission also notes with concern the inadequate and inconsistent monitoring of current and future developments at the site.

4.2.5 Verify the status of the International Advisory Committee for the Laetoli Hominid Footprints (established in 2014).

While the mission visited the site Laetoli Hominid Footprints and noted the conservation challenges, including the installation of a pathway (half concrete and half stones), the matter of the International Advisory Committee for the site was discussed in a separate meeting convened between the State Party and World Heritage Centre in Paris on the 18 and 19 March 2019. Noting the results of the geochemical and rock conservation analyses at the site, which shows that the footprints are decaying and becoming more soft and sandy, the meeting recommended that the State Party should be excavated and sheltered in a building with controlled temperatures and humidity for improved preservation and active monitoring. However, this requires a Landscape strategy or research to avoid further damaging the site, including modelling re-excavation and new reburial options taking into consideration the hydrogeology and water flow of the site in its broader territorial location. On the composition of the International Advisory Committee for the Laetoli Hominid Footprints to drive this process, it is also recommended that local/regional experts in this area, including transferring skills to the State Party, should be prioritised in the process. Without this local/regional infusion, conservation solutions may remain entangled in the bureaucracy and limitations of such International Committees.

The road leading to Laetoli was in a bad state making it inaccessible, however, it also meant that it naturally limited the number of visitors to the site, whilst proper protection measures continued to remain weak. In the face of proposed upgrading of the road, the mission recommends that conservation of Laetoli be prioritised. The proposed museum should be informed of the conservation needs of the Laetoli site, and not only be used as an interpretation space. The proposed museum should be an enhancer of conservation in the process and should also be sensitive to the ecological setting of the site, which is under threat from soil erosion. Furthermore, the location and architecture of the proposed Museum should be informed by the recommended Interpretation Strategy for the entire landscape site. The said Interpretation Strategy is not in place and needs to be urgently developed to avoid non-harmonised approach for attribute interpretation plans. And the mission recommends that the State Party should first commit to a conservation programme at the site, maybe starting by creating an archive of all materials relating to the site; carrying out of condition assessment leading to a conservation plan for the entire site and implementing recommended conservation actions. Whatever proposals the State Party will make for the re-excavation, the new reburial options, site museum and conservation work should be peer reviewed and the State Party should invite ABs to Tanzania to final the agreed approach.

4.2.6 In line with paragraph 173 of the Operational Guidelines, assess any other relevant conservation issues that may impact on the Outstanding Universal Value of the property, including the conditions of integrity and protection and management.

4.2.6.1 Increased human population within NCA

The State Party, in consultation with the local communities, has developed strategies and measures to control the human population growth in and around the property. The mission recommends that the State Party should continue to: (i) promote and encourage voluntary

resettlement of communities, consistent with the policies of the Convention and relevant international norms, from within the property to outside by 2028; (ii) promote family planning and reproductive health to the community to control birth rate and family size in the property with the aim to decrease population by 2028; and (iii) collaborate with the local community and village governments adjacent to NCA in controlling migration of people into the NCA by 2028. In addition, the restriction of grazing at Ngororongu, Empakai and Olmoti craters, has limited the total grazing areas available to pastoralists who are now forced to concentrate into few areas that are dominated by noxious weeds including the *Eleusine jaegeri* (Makutiyani). Understanding that livestock define and provide social identity and security for the Maasai (Hesse and MacGregor, 2006), there is a need to consider the impact of climate change on the landscape and its implication on both livestock and wildlife, access to water and other resources, which may become scarce. Addressing the grazing pressure is already embedded in the three strategies previously agreed upon between the State Party and stakeholders concerned. While diseases and frequent droughts due to climate change have remained a challenge (GMP 2019), the State Party has collaboratively made a number of interventions targeting livestock improvement within the property in the past decades.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The Joint Reactive Monitoring Mission makes the following conclusions and recommendations:

5.1 Conclusions

The Mission notes with appreciation progress made in developing the GMP, the Multiple Land use review study and capacitation of anti-poaching and intelligence units. However, it notes with concern the failure by the State Party to finalise the Tourism Strategy. While the State Party has employed stringent measures to ensure zero poaching in the property, the increasing number of such other incidents between 2017 and 2018 requires some attention from the State Party. While NCA is commended for instituting measures to control poaching in the conservation area, reckless drivers are knocking down a number of animals. There is no precautionary measure in place to manage reckless driving inside the site. This needs to be addressed as a matter of urgency. Worth noting is that the State Party has constructed a number of monitoring posts for purposes of enhancing security for both tourists and animals in the property.

While stakeholders are being engaged, the State Party lacks a framework for engaging and involving given the cross cutting matters of mutual interests. **With the changing ways of livelihood, it is imperative to undertake an ethnographical research to update exiting information on cultural practices and belief systems, including material culture of the people living in the property. This also includes assessing the opportunities and potential pitfalls of the operationalisation of the intent by the State Party to settle communities in Protected Areas.**

The Mission notes with deep concern that while the designs for the proposed road upgrade project have been completed and submitted, including ESIA, CHIA and tender documents, it is clear that this project and its associated maintenance works which will be on going, will have negative impacts on the property as most of the recommendations of the 2017 Joint Mission have not been addressed. This report further identifies gaps to reinforce initial observations made in 2017. The

failure of the State Party in addressing concerns raised by ABs regarding the inadequacy of the ESIA and CHIA, including providing outcomes of the feasibility study on the alternative by-pass route to Serengeti remains a matter of concern.

The mission notes that the site does not have an integrated carrying capacity, related policies and guidelines, and this poses a serious threat to the property given the tourism investment drive enshrined in the Draft GMP. From a management effectiveness perspective, the site now requires an integrated/harmonised approach, address stakeholder engagement and involvement and build capacity for cultural heritage management. The absence of information on the current and future developments in the area remains a concern, and this is worsened by absence of mechanisms to monitor compliance with ESIA and CHIA. The visual impact of emerging houses and settlements within the property remains a huge concern, including the lack of respect of existing building/construction guidelines by stakeholders.

Specifically, the mission team noted:

- Overall, the property still retains its outstanding universal value but looming threats such as impact of developments (in particular road upgrade project, tourism developments, carrying capacity issues, invasive/alien species, loss of biodiversity species, rampant migratory patterns of the local communities resulting in new developments (some with modern architecture) and the environmental degradation threatening Laetoli and other cultural sites are very visible and of concern;
- Previous recommendations and decisions by the World Heritage Committee are not being implemented by the State Party and this is leading to cumulative and gradual intensification of threats to the OUV.
- Road upgrade: While the designs for the proposed road upgrade project have been completed and submitted, including ESIA, CHIA and tender documents, it is clear that this project, and its associated maintenance works which will be on going, will have negative impacts on the property as most of the recommendations of the 2017 Joint Mission have not been addressed by the State Party. The upgrading has not been halted, as requested by the Committee, until the results of the feasibility study of the Southern Bypass road are available. The mission notes that the negative impacts emanating from the road upgrade project are not fully understood nor planned for under mitigation measures as recommended by ABs in previous missions
- New General Management Plan (GMP): From a management effectiveness perspective, the site now requires an integrated/harmonised approach to inform the finalisation of the Draft GMP, including considering recommendations made to the State Party in previous missions.
- Sustainable livelihoods: The intent to address issues of local communities residing in Protected Areas is noted and there is need to have a holistic approach in order to retain the outstanding universal values of the property while addressing the needs of communities from conceptual processes to operationalisation.

- **Wildlife Protection:** While the State Party has employed stringent measures to ensure zero poaching in the property, the increasing number of poaching incidents between 2017 and 2018 requires some attention from the State Party. The continuing invasion of the property by alien species (IAS) is causing habitat fragmentation, and remains a serious threat to biodiversity conservation at the property.
- **Archaeological conservation:** The property still does not have a conservation strategy nor has it prioritised conservation to deal with identified threats at various cultural sites. The authenticity of these sites is under threat and the impact may not be reversible if not mitigated. The absence of consolidated database for cultural sites in NCA remains a matter of concern, The State Party needs to make provision for allocating more resources for cultural heritage programmes.
- **Governance:** While stakeholders are being engaged, the State Party lacks a framework for engaging and involving given the cross cutting matters of mutual interest.
- **Tourism Development:** The number of tourist and passenger vehicles into the site has increased thereby disturbing the “naturalness” of the site. This linked with the incomplete Tourism Strategy, which has been recommended in previous missions, poses a threat to the integrity of the property. The property does not have an integrated carrying capacity framework, related policies and monitoring guidelines, including lack of enforcement and this poses a serious threat to the property given the tourism investment drive enshrined in the Draft GMP.
- **Other development:** The absence of information on the current and future developments in the area remains a concern, and this is worsened by absence of mechanisms to monitor compliance with ESIA and CHIA. The lack of a consistent approach in approving and monitoring developments at the site also remains an issue of concern.
- **The visual impact of emerging houses and settlements within the property is a matter of huge concern, including the lack of respect of existing building/construction guidelines by stakeholders.**

5.2 Recommendations of the Mission

In view of the above concerns regarding the property and in response to the Terms of Reference for the Joint Reactive Monitoring Mission, the following actions are recommended;

5.2.1 Road Upgrade Project

Regarding the road upgrade project, the Mission recommends that;

R (1): The State Party urgently submit to the World Heritage Centre for review by the Advisory Bodies, the details of the surveys and studies that were recommended by the 2017 Advisory mission before construction of the road upgrade project could commence, and implement

all of the outstanding recommendations of the 2017 Advisory Mission as a matter of urgency, including:

- a) Apply a phased approach to the implementation of the road upgrade project to enable adjustments to be made as required to mitigate potential impacts on the OUV of the property;
- b) Develop a specific action plan for the mitigation measures to ensure traffic through the property does not increase as a result of the road upgrade;
- c) Finalise and submit the feasibility study for the southern bypass route;
- d) Develop suitable environmental and archaeological management standards for the project based on a thorough review of the recommendations of the ESIA and HIA before the completion of the tender documents;
- e) Ensure NCAA has the technical and human resource capacity to monitor and enforce the required standards of environmental and archaeological management during all stages of the project;
- f) Undertake archaeological investigations, and collect ecological and environmental baseline data along the length of the road;
- g) Reconsider the possible use of asphalt concrete (with added colour), exceptional case of importation of material, consider Olduvai Museum road separately, and consider the use of geocell in conjunction with asphalt concrete;
- h) Review the method of maintenance of the existing unpaved road, including enforcement of speed limit of 50km/h, inclusion of geocell reinforcement to increase longevity of the gravel surface and management of water material.

R (2): The State Party develops a framework for the road upgrade and its maintenance for principal and secondary roads throughout the property, as well as the paths in order to bring uniformity and standards on such works by January 2020.

R (3): Sensitising the appointed contractor on the sensitivity of the property as a World Heritage site, including formally committing the contractor (through an addendum to the main contract) to undertaking intensive monitoring during construction and clear rehabilitation plans for the borrow pits.

5.2.2 Draft General Management Plan

Regarding the development of the General Management Plan, the Mission recommends that;

R (4): Finalise the Draft GMP in consultation with stakeholders and taking into consideration the following:

- a) aligning the GMP with all existing and future sub-plans i.e. Tourism Strategy/Plan, Cultural Heritage Conservation Plan etc.;
- b) Ensuring the organisational structure and capacity aligns with the needs and priorities of the GMP;
- c) The challenges noted in implementing the previous GMP and prioritising concerns and issues raised by the World Heritage Committee in its past Decisions, which have an impact on the OUV, integrity and authenticity of the property.

5.2.3 Sustainable Livelihoods

Regarding the implementation of sustainable livelihoods, the Mission recommends that;

- R (5):** Continue to engage local communities and other stakeholders in exploring alternative livelihood solutions to its current voluntary resettlement scheme, consistent with the policies of the Convention and relevant international norms.
- R (6):** Complete the Multiple Land Use Model review exercise and share the results with the World Heritage Centre and the Advisory Bodies to advise on the most appropriate land use model, including in the matter of settling local communities in protected areas.

5.2.4 Wildlife Protection:

Regarding wildlife protection, the Mission recommends that;

- R (7):** Reinforce monitoring and early detection systems, including intensifying anti-poaching awareness among local communities and stakeholders operating in the property.
- R (8):** Explore other alternative or additional methods of controlling invasive alien species as a matter of urgency, including defining quantitative and qualitative monitoring indicators.

5.2.5 Archaeological conservation

Regarding archaeological conservation, the Mission recommends that;

- R (9):** Prioritise developing a Cultural Heritage Conservation Strategy for the property, in particular the paleo-anthropological sites in the property, including providing both human and financial resources for this process. In addition, the State Party should also prioritise developing a database for all cultural heritage sites in the property.

5.2.6 Governance

Regarding to governance issues at the property, the Mission recommends that;

- R (10):** Implement an integrated/harmonised approach to address the current compartmentalised approach for the property, in which nature and culture are not planned for at the same level of detail and financial commitment.
- R (11):** Review the organisational structure, including establishing an Implementation and Monitoring Department for the effective implementation of the GMP.
- R (12):** Establish a Cultural Heritage Advisory Committee comprising of a representative of Department of Antiquities (DoA) and independent specialists to advise the NCAA on management of cultural heritage in the property.

R (13): A site specific Stakeholder Engagement and Involvement Framework should be developed for the property, or alternatively, the Serengeti Stakeholders' Forum should be strengthened, given that the property is part of a broader ecosystem, which includes Serengeti National Park.

R (14): Develop EIA/HIA compliance monitoring tools to be completed by proponents and submitted to the World Heritage Centre as part of its state of conservation report to the World Heritage Committee.

R (15): Organise stakeholder awareness seminars on World Heritage in partnership with UNESCO and the National Commission of UNESCO (Tanzania).

5.2.7 Tourism Development

Regarding tourism development, the Mission recommends that;

R (16): Develop an Interpretation Strategy for the property with a clear vision, mission, interpretation options and models to ensure the protection of the OUV, integrity and authenticity of the property, as well as contributing to conservation efforts within it.

R (17): Establish the carrying capacity for the property and develop a monitoring framework, including that of all attributes open to the public as a matter of urgency.

5.2.8 Other development

R (18): Urgently submit further details on all existing and future developments (both internally and investor driven) in the property.

R (19): Place a moratorium on all new developments in the property until awareness-raising programmes among stakeholders are undertaken and guidelines are enhanced through training via a well-established school of architecture on the African continent for the purposes of developing creative and innovative architectural designs promoting modernity, comfort but maintaining the connection between traditional architecture and its broader landscape.

5.2.9 Laetoli footprints

R (20): Adopt a Landscape approach for developing options for re-excavation, new burial approaches, conservation and development of a potential site museum as integrated processes, including capacity building.

5.2.10 Overall Recommendation

In the overall and in view of the above concerns regarding the property, the Mission recommends that;

R (21): Submit a detailed updated report on the progress in implementing the above recommendations by 1st December 2020.

5.3 Recommendation as to whether the level of threats to the property warrants the property being placed on or removed of the List of World Heritage in Danger

Having considered with concern, the current state of conservation and the failure by the State Party to implement previous recommendations, as well as the observed threats to the OUV, integrity and authenticity of the property, in particular from the road upgrade project, lack of conservation at cultural sites and the intent to settle communities in protected areas, it is recommended that the State Party takes the necessary urgent measures to mitigate threats to the property within the next two years (with the clear indicators), including ensuring that all parallel studies and reviews with an impact on the property are completed. The State Party should invite further Monitoring Missions in order to work closely with UNESCO and ABs, Failure to mitigate threats and the outstanding issues, a Mission should be undertaken to consider placing the property on the List of World Heritage Sites in Danger. This way, the State Party will access technical support to assist in monitoring and mitigating all outstanding recommendations and decisions.

6.0 ANNEXES

6.1. Terms of reference

Joint World Heritage Centre/ICOMOS/IUCN Reactive Monitoring mission to Ngorongoro Conservation Area, United Republic of Tanzania 4 – 9 March 2019

At its 41st session in Krakow (July 2017), the World Heritage Committee requested the State Party of the **United Republic of Tanzania** to invite a Joint World Heritage Centre/ICOMOS/ICCRUM/IUCN Reactive Monitoring mission to **Ngorongoro Conservation Area** (NCA) World Heritage property in August 2017, in order “to provide advice to the State Party on the conservation of the additional set of footprints discovered at the Laetoli site in 2014, proposed Laetoli Hominid Footprints Museum, and monitor progress on the road upgrade project and proposed tourist developments as well as review progress in balancing conservation, livelihood and development needs” (Decision **41 COM 7B.39**).

The Reactive Monitoring mission could not be undertaken in August 2017 due to the unavailability of suitable experts to cover the full mandate of the mission. However, in response to a request by the State Party, an ICOMOS/IUCN Advisory mission was organized from 23 to 26 August 2017 to monitor progress and advise the State Party on the project concerning the Lodoare Gate to Golini Main Road, and the Access Road to Olduvai museum.

After considerable discussion between ICOMOS and ICCROM on how best to offer advice on the conservation of footprints and the proposed Laetoli Hominid Museum, the World Heritage Centre has suggested to the State Party that these two issues should be considered separately from the mission. Both ICOMOS and ICCROM consider that it is necessary to bring together a range of experts for these highly complex and sensitive projects, including, archaeologists, palaeontologists, conservators and museum specialists, and that this cannot be satisfactorily accomplished in the framework of a Reactive Monitoring mission. The State Party has agreed that the Reactive Monitoring Mission will no longer address these issues. In light of this decision, it is considered that the presence of an ICCROM expert will not be necessary and that the mission will be conducted by representatives of the World Heritage Centre, ICOMOS and IUCN.

ICOMOS and ICCROM will undertake a technical review of the documentation submitted by the State Party regarding the conservation of footprints and the proposed Laetoli Hominid Museum. On the basis of the conclusions of this technical review, the World Heritage Centre and the Advisory Bodies will propose the way forward, which could include the organization of an expert meeting devoted specifically to these issues.

The Reactive Monitoring mission will carry out the following tasks:

1. Assess progress made in implementing the August 2017 ICOMOS/IUCN Advisory mission recommendations (<http://whc.unesco.org/document/165407>), including the efforts made to measure and mitigate any impacts on the OUV of the property of upgrading the Lodoare

Gate to Golini Main Road, and the Access Road to Olduvai museum from gravel to hardened standard.

2. Assess the contents and status of the new General Management Plan (GMP), which is currently under preparation by the State Party, with a view to ensuring effective management and protection of the World Heritage property.
3. Based on the above-mentioned assessment of the GMP, relevant stakeholder consultations and other relevant documentation, review overall progress made in addressing sustainable livelihoods, wildlife protection and archaeological conservation, as well as wide-ranging governance issues, including management and conservation approaches, stakeholder involvement and benefit sharing, in accordance with Decision **38 COM 7B.61**.
4. Based on site visits and existing documentation, verify the number and locations of existing and proposed tourism developments inside and on the periphery of the property (including resting areas, lodges, hotels, campsites, etc.), review existing tourism management procedures and provide recommendations so as to manage tourism in a sustainable manner which considers social, cultural, economic and environmental aspects and does not impact on the OUV of the property.
5. Verify the status of the International Advisory Committee for the Laetoli Hominid Footprints (established in 2014).
6. In line with paragraph 173 of the *Operational Guidelines*, assess any other relevant conservation issues that may impact on the Outstanding Universal Value of the property, including the conditions of integrity and protection and management.

In order to ensure adequate preparation of the mission, the State Party should provide the following items, with confirmation on the status of these documents, to the World Heritage Centre (copied to ICOMOS, ICCROM and IUCN) as soon as possible:

- a. Draft General Management Plan, including the results of stakeholder consultations and the situation analysis and tourism needs assessment referred to in the 2016 State Party report.
- b. All new and relevant documents related to the road upgrade project, including the wider road strategy for the Serengeti-Ngorongoro Southern bypass road, referred to in Decision **41 COM 7B.39**;
- c. Details of all known archaeological and other cultural sites that had been considered in completing the ESIA and the HIA to upgrade the Lodoare Gate to Golini Main Road, and the Access Road to Olduvai museum and proposed further documentation of sensitive areas;
- d. Available data on the number of local inhabitants of the property (local communities, NCA staff, staff of the tourism sector), livestock, population trends of key wildlife species, trends of tourism numbers visiting the park, vehicle numbers entering the property and the Ngorongoro crater, as well as other monitoring data that may be available and would facilitate the mission's work.
- e. Relevant maps of the property which define the different use zones, as relevant, and locations of current and planned tourism and other infrastructure within the property.
- f. Other relevant and valid management documents related to the property.

Please note that additional information may be requested from the State Party and key stakeholders during the mission.

The mission should hold consultations with the Tanzanian authorities at national, regional and local levels, including representatives of the Ngorongoro Conservation Area Authority (NCAA), Tanzania National Parks (TANAPA), Ministry of Natural Resources and Tourism and management authority of the Serengeti National Park World Heritage property. In addition, the mission should hold consultations with a range of relevant stakeholders, including: i) representatives of local communities who live within the property, including the Maasai pastoralists; ii) representatives of the tourism sector; iii) representatives of the bi-lateral and multi-lateral cooperation partners supporting the management of the property; and v) relevant scientists, researchers and experts.

Based on the assessment of available information and discussions with the State Party representatives and stakeholders, the mission will develop recommendations to the World Heritage Committee regarding the status of the property and provide guidance to the State Party on further recommended actions. It should be noted that recommendations are made within the mission report (see below), and not during the course of the mission.

The mission will prepare a report on the findings and recommendations of this Reactive Monitoring mission no later than 6 weeks after the completion of the mission, following the standard format, for examination by the World Heritage Committee at its 43rd session in 2019. For the mission team to be able to carry out the above-mentioned tasks, the State Party should facilitate necessary field visits to key locations and also kindly arrange all the meetings with the relevant stakeholders.

6.2. Itinerary and programme

DATE	ACTIVITY UNDERTAKEN	EXPECTED OUT COME	OUTCOME	COMMENT
4 March	Arrivals	Pickup	Done	
	Held review meeting on the missions objectives as per ABs TORs	develop an effective program for expected results	The program was reviewed	
5 March	Travel to Arusha			
	Briefing meeting at NCAA Head quarters <ul style="list-style-type: none"> - Mission' objectives - Briefing on management challenges by the Conservator 	Share the mission' expectations Understand the challenges the site is facing	The mission objectives were understood The mission also understood the management objectives and challenges being faced	
	Site Visit and Briefing Ngoitoktok, Ngorongoro Crater			
	Had a meeting with Committee Chairpersons for NCAA Board of Directors	Share experiences and challenges in the managing of the NCA		
6 March	Meeting with the road contractor			
	Site Visit of the <ul style="list-style-type: none"> - Main Road-Lodua to Golini, Olduvai road and Olduvai Museum - Held stakeholder meeting with TAWISA campsite management 	Olduvai		
	Visit Ngorongoro Crater Lodge and held stakeholder meeting with the lodge management			
7 March	Mini Workshop for Presentations, discussions, Assessment and reviews <ul style="list-style-type: none"> - Developments and Dynamics within NCA – Environmental, Social, Economic, Tourism investments, Community education strategy - Draft General Management Plan (GMP), Proposed NCA Land use plan amid NCA Multiple Land Use Model - NCA Roads hardening 	NCAA HQ	8.30 am – 1pm	NCAA Management Team/ National Land Use Commission
	- Lunch	Ngorongoro Serena Hotel	1pm-2pm	All

	<ul style="list-style-type: none"> - Assess the state of road to Serengeti - Visit to assess the Laetoli Hominid Footprint site 	NCA HQ	3pm – 4pm	NPC/ DCCCDT/MCD
	<ul style="list-style-type: none"> - Visit Sopa Lodge 	NCA	4.30 – 6 pm	DCCCDT/MPI/ MTS/MCH
	Travel back to the hotel (to be confirmed)	NCA	6pm	RMM/MPR
8 March	Travel to Arusha and Transfer to Hotel	NCAA, ARUSHA	6 – 9 am	RMM/PR/NCA A Management
	Meetings with Stakeholders – TATO, HAT and the NPC	NCA Njiro Office	11- 12pm	RMM/ DCCCDT /MCHD
	Lunch	NCA Njiro Office	1-2 pm	All
	Wrap up meeting with Stakeholders with NCAA, NPC	NCA Njiro Office	2- 3pm	RMM/CN/ DCCCDT /DCCS/MCHD/ MES NatCom
	Telephone interview with the NCA Deputy Conservator and Manager Cultural Heritage Dept.	NCA Njiro Office	3-4 pm	RMM/ NCAA Management
9 March	Departure <ul style="list-style-type: none"> - Transfer to the Airport 	ARUSHA, KIA	9am -	RMM/PR

6.3.List and contact details of people met

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P.O Box 6162
Arusha
Tanzania
Email. sirili@tatotz.org

Representatives
The Ngorongoro Maasai Pastoral Council
P.O Box 1
Arusha
Tanzania

Yusufu Yusufu
JBG Gauff Ingenieure
Dar-es-Salaam
Tanzania

7. maps (most recent maps of the boundaries of the property)
8. photographs and other graphical material (showing issues of integrity and authenticity)

7. maps (most recent maps of the boundaries of the property)

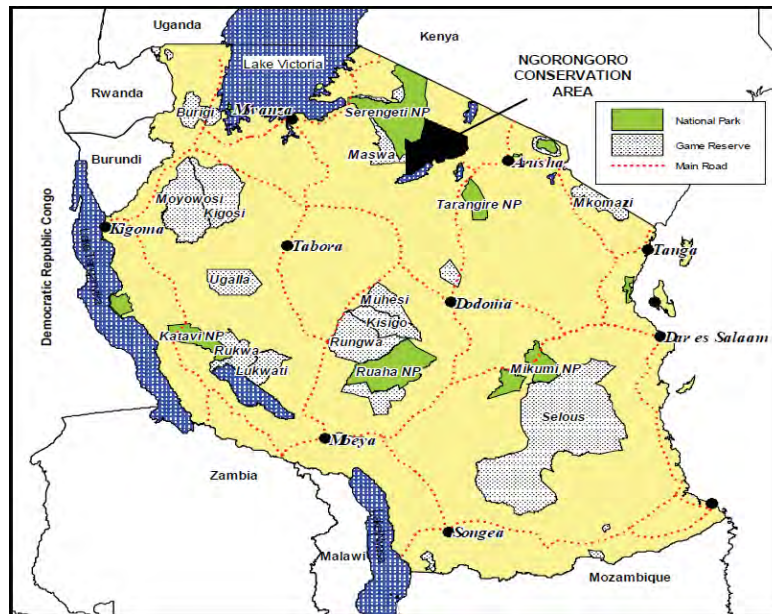


Figure1. Location of Ngorongoro Conservation Area in Tanzania (Source: NCA. GMP 2018)

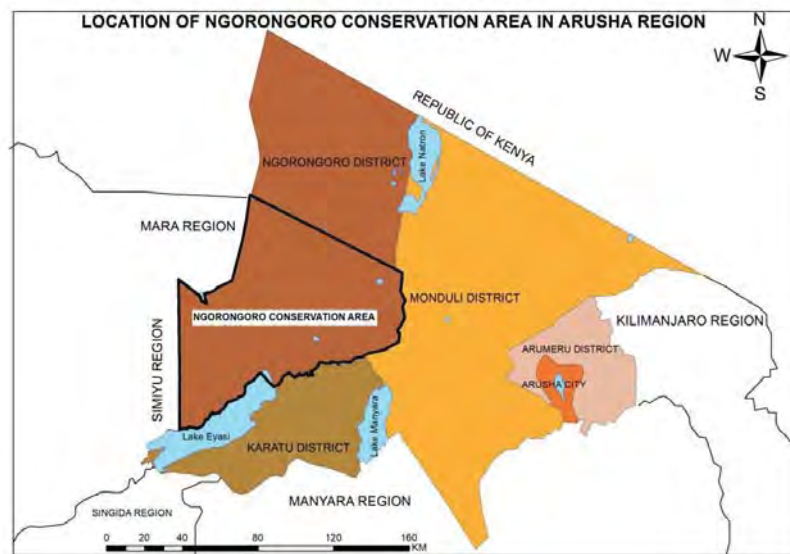


Figure 2. Position of Ngorongoro Conservation Area in Arusha Region (Source: NCA. GMP 2018)

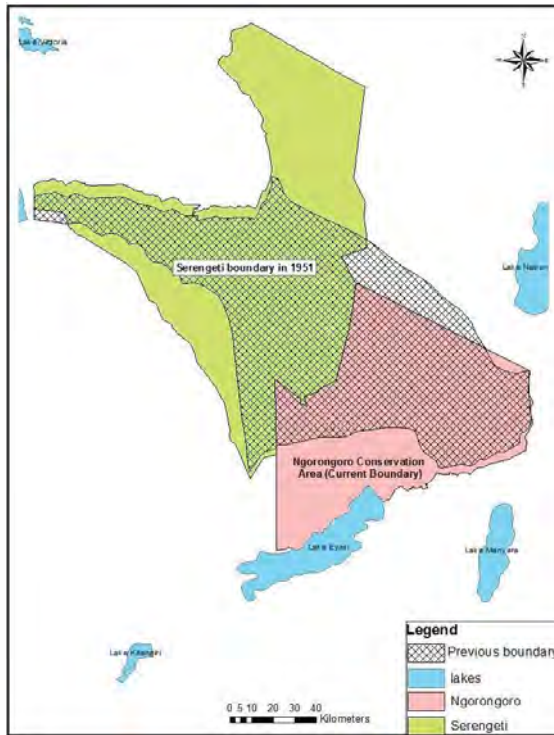


Figure 3. Previous and current boundaries of Ngorongoro Conservation Area (Source: NCA. GMP 2018)

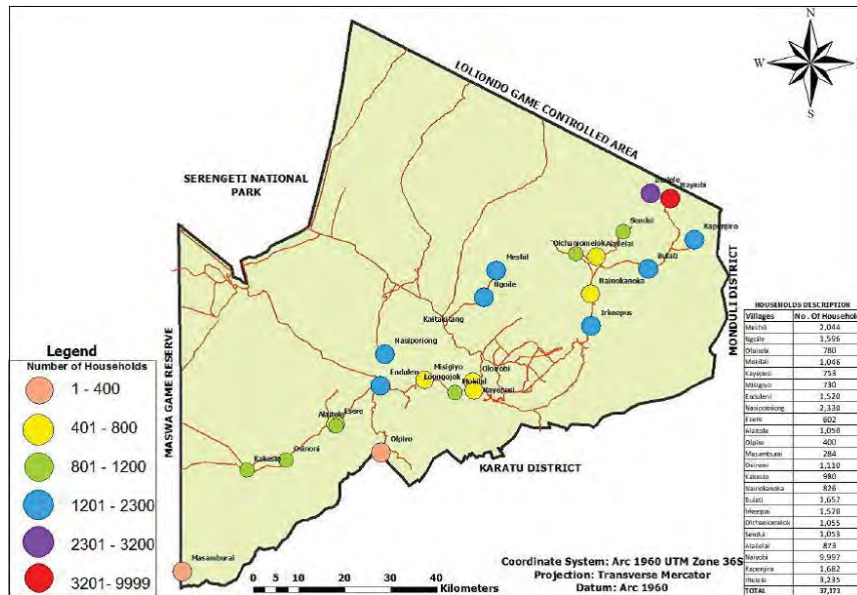


Figure 4. Road network in the Ngorongoro Conservation Area (Source: NCA. GMP 2018)

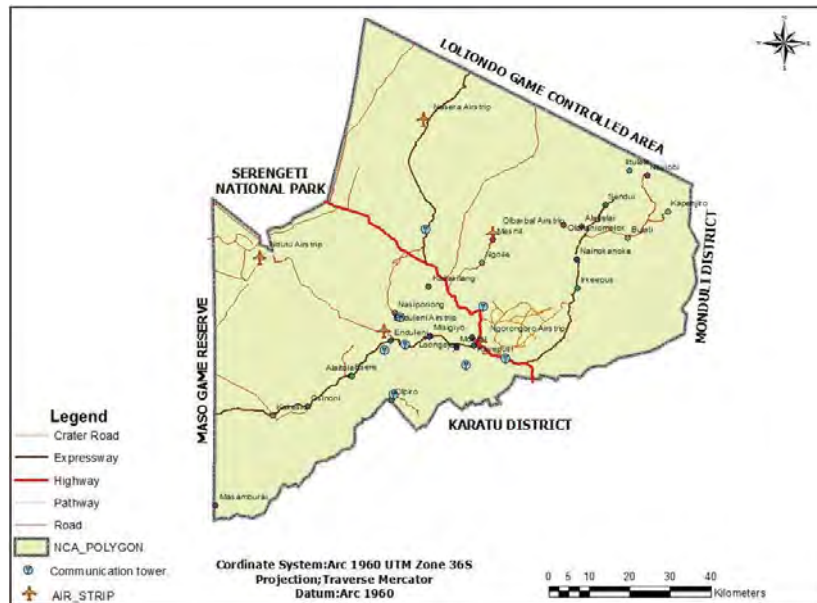


Figure 5: Road and communication network in the Ngorongoro Conservation Area (Source: NCA, GMP 2018)

Meetings with Stakeholders

Meeting with Technical Team



Meeting with Chief Conservator



Meeting at Olduvai Gorge Museum



Soil Erosion affecting the Olduvai landscape



Meeting with NCAA, Hotel Association of Tanzania



Discussion with Representatives of NCA Pastoral Council



Meeting with a Lodge Operator (NCA)



Meeting with Ngorongoro Crater Lodge



Road Survey

Dust from Vehicular Traffic



Main Road: Crater viewing point



Vehicular Traffic



Road Assessment with the Engineer





Main Road Maintenance in NCA (Illustration of width related issue)



STATE OF ROADS- CRATER

Visit to the Crater

