

PROPOSED FORESTRY LISTED ACTIVITIES AMENDMENTS TO THE ENVIRONMENTAL MANAGEMENT ACT AND ASSOCIATED REGULATIONS

PREPARED FOR



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DEFINITIONS AND ABBREVIATIONS

BCBU	Bush Control and Biomass Utilisation
DEA	Department of Environmental Affairs
DoF 	Directorate of Forestry
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
GIZ	GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
IFC	International Finance Cooperation
I&AP	Interested and affected parties
IUCN	International Union for Conservation of Nature
JMC	Joint Management Committee
MAWF	Ministry of Agriculture Water and Forestry
MET	Ministry of Environment and Tourism
SAIEA	Southern African Institute for Environmental Assessment
SEA	Strategic Environmental Assessment
TE	Tree Equivalent

1. INTRODUCTION

1.1 BACKGROUND

The Ministry of Environment and Tourism (MET), in partnership with Gesellschaft für Internationale Zusammenarbeit (GIZ) (commissioned by the German Federal Ministry for Economic Co-operation and Development (BMZ)), are currently implementing the 'Biodiversity Management and Climate Change II (BMCC II) Project. One of the components of this project is to optimise the Environmental Management Act (EMA), 2007 (No. 7, 2007).

In 2015, the Department of Environment Affairs (DEA) under the MET commenced a process to review the EMA and associated Environmental Impact Assessment (EIA) Regulations. In 2016, consultants were engaged to develop new EIA Regulations. Towards the end of 2017 and beginning of 2018, the DEA/MET held various workshops to engage organs of state, the private sector, environmental practitioners and Non-Government organisations (NGOs) in the review process.

The GIZ Bush Control and Biomass Utilisation (BCBU) Project has been engaged to take part in participating in the review process of EMA and EIA Regulations as a key stakeholder of the bush based biomass sector. The BCBU Project is a technical cooperation jointly implemented by the Ministry of Agriculture, Water and Forestry (MAWF) and the GIZ. The Project aims to support Government and private stakeholders to address the bush encroachment problem as one of the challenges of farming community in Namibia. Its primary objective is to develop and improve strategies for bush control in order to upscale de-bushing in the country.

During the current round of consultations and call for comments on draft documents, the BCBU project together with other important stakeholders were requested by the reviewing team (DEA/MET and Southern African Institute for Environmental Assessment (SAIEA)) to develop recommendations that would contribute to the List of Activities and anticipated categorisation in the EIA Regulations.

The BCBU project have been tasked with revising categories of projects requiring Environmental Clearance as stipulated in the booklet "Forestry and Environmental Authorisation Process for Bush Harvesting Projects" (Southern African Institute for Environmental Assessment, 2017).

1.2 PURPOSE OF REPORT

Environmental Compliance Consultancy (ECC) was commissioned by GIZ to co-ordinate a review of the categories of projects requiring Environmental Clearance as stipulated in the booklet "Forestry and Environmental Authorisation Process for Bush Harvesting Projects, 2017". As part of the review, the project seeks to obtain expert opinion on the subject matter through stakeholder engagement.

The purpose of this report is to present the findings of a desk-top study, present feedback from consultation with key stakeholders in the forestry sector and based biomass industry, and present recommendations for revised Listed Activities specific to bush harvesting and associated definitions to be included in the revised EIA Regulations. Other forestry activities such as wood processing and treatment facilities are not part of the scope presented in this report.

The report is structured as follows:

Chapter 1 – This chapter, provides an introduction to the report.

Chapter 2 – Sets out what literature was reviewed, and which stakeholders were engaged with.

Chapter 3 – Presents the findings of the literature review

Chapter 4 – Divided into three main sections: (i) presents the current listed activities, (ii) presents the proposed Listed Activities from SAIEA for stakeholder comment, and (iii) presents the proposed revisions to the Listed Activities through the review presented in this report.

Chapter 5 – Presents the conclusions.

Appendix A - Email to stakeholders.

Appendix B – Responses from Stakeholders.

1.3 ENVIRONMENTAL CONSULTANCY

ECC, a Namibian consultancy registration number CC/2013/11401, has prepared this desktop study on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across Southern Africa in the public and private sector. ECC is independent to the proponent and has no vested or financial interested in the proposed project.

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2. LITERATURE REVIEW AND STAKEHOLDER ENGAGEMENT

2.1 INTRODUCTION

A literature review was undertaken to gather information on the management and use of forests in Namibia, in addition, stakeholder consultation was undertaken to engage experienced people in the forestry sector. The following sections provides further details of this review and the stakeholders who were consulted with.

2.2 LITERATURE REVIEW

The literature review involved studying the following documents to identify best practise measures of the management and use of forests in Namibia:

- Forestry and Environmental Authorisations Process for Bush Harvesting Projects (Southern African Institute for Environmental Assessment, 2017);
- Strategic Environmental Assessment (SEA) of Large-scale Bush Thinning and Value-addition Activities in Namibia (Southern African Institute for Environmental Assessment, 2015);
- National Rangeland Management Policy and Strategy (Ministry of Agriculture, Water and Forestry, 2012);
- Bush Control Manual (Rothauge, 2017);
- Namibian Journal of Environment, articles by P. Cunningham (Cunningham P, Detering F, 2017) and I Zimmermann (Zimmermann I, 2017);
- Forest Act, 2001 (Act No. 12 of 2001) and Regulations 2015;
- Environmental Management Act (EMA), 2007 (No. 7, 2007); and
- Proposed Environmental Management Regulations.

It is not the intention to rewrite any of the studies listed above, but rather to incorporate and apply the findings to the proposed revised Listed Activities and associated Listed Activities; thereby facilitating the process of permitting and Environmental Clearances for bush thinning projects. By making the EIA Regulations more practical and user-friendly, compliance in the bush-thinning sector throughout Namibia as well as more sustainable management of rangeland will be improved.

2.3 STAKEHOLDER ENGAGEMENT

Key stakeholders in the forestry sector were engaged so that people with 'hand-on' experience could provide meaningful feedback ensuring that the categories of Listed Activities and subsequent thresholds were appropriately defined allowing the EIA process to be robust, stringent and practical, without hindering activities or causing unnecessary work and costs.

A draft version of this report was provided to the stakeholders listed in

Table 1. The issuing email is included in Appendix A and summary or comments in Appendix B. Comments have been taken on board during the drafting of the proposed revised Listed Activities, thresholds and definitions.

Table 1 – Stakeholders

NAME	ROLE & ORGANISATION	CONTACT INFORMATION
Mr H Joseph S. Hailwa	Director of Forestry - MAWF	Joseph.hailwa@mawf.gov.na Tel: +264 (0) 61 2087 666
Mr Jonas Mwiikinghi	Chief Forester - MAWF	jonas.mwiikinghi@mawf.gov.na Mobile: 0811245133
Mr C Lindeque	General Manager Namibia Biomass Industry Group	c.lindeque@n-big.org Tel: +264 (0) 61 371 196
Mr P Potgieter	Manager Namibia Charcoal Association	pieter.potgieter@ncanamibia.com Tel: +264 (0) 67 304 220
Mr D van Vuuren	Principle Officer Agricultural Employers Association	lww-aea@agrinamibia.com.na Tel: +264 (0) 61 237 838
Mr P Kashandula	General Manager De-bushing Advisory Services (DAS)	progress.kashandula@dasnamibia.org Tel: +264 (0) 61 429 256
Mr Roelie Venter	Executive Manager - NAU	roelie@agrinamibia.com.na Tel: +264 (0) 61 237 838
Mr Immanuel Mwilima	Executive Manager - NNFU	musho@nnfu.org.na Tel: +264 (0) 61 271 117
Mr Mervin Kazapua		kazapua@nnfu.org.na
Mr Tobias Konzmann	General Manager - Ohorongo Cement	konzmann.tobias@eff.na Tel: +264 (0) 67 235 7000
Mr Ibo Zimmerman	Lecturer and Bush Expert (NUST)	izimmermann@nust.na
Mr Nico de Kerk	Retired Bush Expert and Consultant	264813647999@mtcmobile.com.na
Mr Jerome Boois	Rangeland Expert - MAWF	Jerome.Boois@mawf.gov.na Mobile: 0814958964
Mr Axel Rothauge	Consultant – Agri Consult Namibia	agriconsult@iway.na Mobile: 0811403833
Dr Chris Brown	CEO - Namibian Chamber of Environment	ceo@n-c-e.org
Mr Ian Galloway	Director of Jumbo Charcoal	jumboch@iway.na

In addition to the above, this report was circulated by stakeholders, and through this, John Pallett (SAIEA) and Peter Cunningham (Environment & Wildlife Consulting Namibia) provided feedback (Appendix B).

3. MANAGEMENT AND USE OF FORESTS

3.1 INTRODUCTION

This Chapter sets out the findings of the literature review that aided and influenced the proposals for the revisions to the Listed Activities for bush thinning. A summary of the regulatory regime specific to the forestry sector is provided along with a summary of relevant information obtained from the documents listed in Chapter 2. Chapter 4 presents the proposed revisions to the Listed Activities.

3.2 REGULATORY REGIME

There are two main laws that govern the cutting and use of trees and shrubs: (i) the Forest Act, 2001 (Act No. 12 of 2001) and Forest Regulations, 2015 (No. 170 of 2015); and (ii) the EMA (2007) and its Regulations (2012). These laws set out controls to manage and use forests and woody plants, providing for the protection of the environment, in particular the controlling of excessive cutting of the large trees and protected trees.

3.2.1 THE FOREST ACT AND REGULATIONS

All harvesting of trees and wood, anywhere in Namibia, is governed by the Forest Act and its Regulations. The Act also governs activities which take place in classified forests, namely State Forests, Forestry Management Areas and Community Forests. This Act is administered by the Directorate of Forestry (DoF) in the Ministry of Agriculture, Water and Forestry (MAWF).

The Forest Act consolidates the laws relating to the management and use of forest produce; and provides for the protection of the environment and the control and management of forest fires. The Act requires anybody who needs to harvest, transport, and export or market forests resources to be in possession of a valid permit issued by the nearest forestry office. Sections 22(1), 23(1), 24 (2&3) and 33 (1&2) of the Act stipulate that a harvesting permit is required for any tree cutting and/or wood harvesting (including bush encroached areas) for commercial purpose. In addition, harvesting of wood products on an area greater than 15 hectares, or generating a volume of more than 500 cubic metres of wood, must be authorised by the Director of the DoF.

It has been recognised that the Forest Act and associated Regulations need to be revised; various loopholes exist that weaken their enforcement and the requirements of the Act are not clear or practical, resulting in considerable non-compliance within this sector. GIZ, Legal Assistance Centre and the Southern African Institute for Environmental Assessment (SAIEA) have recommended that specific issues in the Act and associated Regulations are amended, however it is uncertain as to whether or not amendments will occur.

To improve compliance, changes to the EMA and associated Regulations will streamline the Environmental Clearance application process which will align to the permit system as part of the Forest Act.

3.2.2 THE ENVIRONMENTAL MANAGEMENT ACT AND ITS REGULATIONS

The EMA promotes the sustainable management of the environment and the use of natural resources by establishing principals for decision making on matters affecting the environment; and provides for a process of assessment and control of activities which may have significant effects on the environment.

The Environmental Impact Assessment Regulation, 2007 (No. 30 of 2011) gazetted under the Environmental Management Act, (EMA), 2007 (Act No. 7 of 2007) (referred to herein as the EIA Regulations) provide a list of activities (Listed Activities) that require an Environmental Clearance. The Regulations do not specify bush harvesting / de-bushing as Listed Activity, however activities that require a permit under the Forest Act (i.e. all wood harvesting and wood value-addition activities) require an Environmental Clearance Certificate. Therefore, anybody who harvests, transports, and exports or market forests resources, must comply with this.

This EMA and associated Regulations are administered by the Environmental Commissioner in the DEA in the MET. As part of the Environmental Clearance application, an EIA report and an Environmental Management Plan (EMP) need to be submitted. This can be a lengthy and expensive process, and it can bring delays to implementing projects. Therefore, it is crucial to ensure the Listed Activities under the EIA Regulations are clearly defined to simplify the process to avoid heavy costs and time delays that would hinder projects such as bush thinning.

Compliance with EMA is currently very poor for bush harvesting activities; there are many ongoing commercial bush harvesting and value adding activities, yet the total number of EIAs done in Namibia for these activities is very few.

In addition to the changes to the EIA Regulations, recommendations for simplifying the EIA process and for using a generic EMP have been accepted by the DoF and DEA officials, and are now published in an information booklet produced by the directorates – ‘Forestry and Environmental Authorisations Process for Bush Harvesting Projects’ (Southern African Institute for Environmental Assessment, 2017).

3.3 HARMONISING AUTHORISATION PROCESSES

The Forestry and Environmental Authorisations Process for Bush Harvesting Projects’ booklet (the booklet) (Southern African Institute for Environmental Assessment, 2017) and the SEA of Large-Scale Bush Thinning report (Southern African Institute for Environmental Assessment, 2015) are the key references for the review.

The SEA prepared by SAIEA and endorsed by MET and MAWF, provides background to bush encroachment in Namibia, emphasising that de-bushing activities should aim for selective bush thinning rather than clearing; the impacts of bush harvesting; and discusses the ecological principles that are important Namibia’s savannas. It also provides an overview of the legal and policy framework that underlies bush harvesting activities.

The booklet explains the Namibian environmental laws and regulations that must be complied with in bush harvesting and value addition projects. It is based on the SEA and provides guidelines for complying with regulation.

The following information is taken from the booklet (also echoed in the SEA), which has been considered when preparing the proposed revisions to the Listed Activities and associated thresholds (these are not the proposed thresholds):

1. **Environmental Clearance not necessary:** Small bush harvesting operations, covering an area less than 15 ha, need no Forestry permits and therefore no Environmental Clearance. Areas between 15 and 150 ha need a Forestry Permit but no Environmental Clearance.
2. **Environmental Clearance based on Generic EMP:** Medium-sized bush harvesting operations, covering an area between 150– 5,000 hectares, need to obtain Environmental Clearance from DEA. The area to be thinned should be less than 5,000 ha altogether, in one vicinity. The environmental assessment for this Clearance can be customised from the generic Environmental Management Plan provided in the Guidance document. If a farmer harvests individual areas that are less than 5,000 ha, but they contribute to a larger project that covers an area greater than 5,000 ha, then the activities fall into category 3 (full EIA).
3. **Environmental Clearance based on dedicated EIA and EMP:** Large bush harvesting operations, covering an area greater than 5,000 hectares, need to obtain Environmental Clearance from DEA. These operations are likely to have extensive, complex and/or long-term environmental impacts. They require a full EIA and include a thorough EMP. The EIA must cover all the specific details of the source areas, and individual farms that contribute harvested wood to a large project will all be bound by the conditions described in the EMP.

Through the inclusion of area sizes in the thresholds for bush thinning Listed Activities, it implicates a considerable number of farmers in Namibia due to the average farm size being more than 5,000ha. As discussed above, there is currently limited compliance with the EIA Regulations, and applying thresholds such as ‘*between 150 ha and 5,000ha requiring an Environmental Clearance*’ would not support improvements with compliance and would result in increased costs and project delays for farmers.

Therefore, it was recognised through this review that thresholds should focus on **how** farmers undertake bush thinning of bush encroached areas. Applying thresholds focussed on sustainable practices would streamline the EIA process and focus on those that are not undertaking sustainable practices and thus potentially causing significant impacts.

A healthy and productive rangeland depends on well-functioning ecosystem services such as effective cycling of water and nutrients. After rangeland has degraded, bushes may encroach in nature's attempt to restore water and nutrient cycling. Selective bush thinning to achieve the goal of ecological restoration of rangelands is particularly important. The paper 'The influence of two levels of de-bushing in Namibia's Thornbush Savanna on overall soil fertility, measured through bioassays', (Zimmermann I, 2017) illustrates that through different levels of bush-thinning, soil quality and fertility can decline and even be lost, due the nutrient cycle being disrupted. It is therefore evident that the level of bush thinning needs to be controlled to minimise environmental impacts.

Annex 2 of the SEA provides recommended density of trees that should be left after bush thinning. The annex defines what level of bush thinning is most appropriate, categorised according to the main encroacher species to minimise impacts such as soil quality degradation.

The two key thresholds that demonstrate sustainable harvesting are as follows:

Sustainable bush thinning area per annum: The growth rate and regrowth of indigenous tree species is important to understand the problem of bush thickening as well as the successful (sustainable) management of species. A 25-year period has been identified as the average growth rate of some indigenous tree species that cause bush thickening in Namibia (Cunningham P, Detering F, 2017). This is based on age, growth rate and regrowth. By dividing the size of a rangeland unit or farm into this 25-year time period, allows one to determine the 'sustainable bush thinning area per annum'.

Tree Equivalent: The SEA emphasized the importance of selective bush thinning, to achieve the goal of ecological restoration of rangelands. It continues by defining what level of bush thinning is most appropriate, categorized according to the main encroacher species. The recommendations use a formula based on tree equivalents (TEs) and average annual rainfall. The SEA should be referred to for further description.

A farmer not operating within these parameters would therefore not be considered as harvesting sustainably, no matter what size the area of land is being harvested. Therefore, significant environmental impacts would likely occur and thus should be considered as a Listed Activity.

Listed Activities are to be categorised: Category A would automatically require an EIA; and a Category B would be scoped to determine the level of assessment. To differentiate between a Category A and B for bush thinning activities, the application of the TE would be the key distinction: Category B projects would have to apply the thresholds of the TE, whereas Category A projects would not. Both categories would have the threshold of being more than the sustainable bush thinning area per annum.

In summary:

- A farmer complying with both thresholds would be screened out of the EIA Regulations as there would unlikely be any significant harm to the rangeland and farming practices would be compliant with best practice.
- A farmer complying to the TE thresholds but not the sustainable bush thinning area per annum would be screened as a Listed B Activity.
- A farmer not complying to either thresholds would be screened as a Listed A Activity.

The size of the area being bush thinned would not factor into these categories.

For all bush thinning projects that fall under Category A or B, an EMP would be mandatory. Within the EMP, further details of the activity would be required, for example the identification of species, limitations to the size of area being thinned, measures to maintain heterogeneity and homogeneous environment, and number of trees.

Various definitions identified in this report are in line with those presented the SEA, and ones that are proposed to be included in the revised EIA Regulations are presented in Table 6 in the next chapter.

4. REVISIONS TO THE LISTED ACTIVITIES

4.1. INTRODUCTION

This Chapter is divided into three: Section 4.2 presents the current Listed Activity for Forestry in the EIA Regulations; Section 4.3 provides the proposed changes circulated by the DEA and SAIEA on the 26th February for consultation (this report is part of consultations); and Section 4.4 presents the proposed revisions (additions) for bush thinning activities, after taking into consideration the findings of the literature review and comments from stakeholders.

The scope of this report is for proposed Listed Activities and thresholds for bush thinning only.

4.2. CURRENT LISTED ACTIVITIES

Under the EIA Regulations, the following Activity is listed:

FORESTRY ACTIVITIES

4. The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorisation in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.

4.3. PROPOSED LISTED ACTIVITIES

The proposed revised Listed Activities relevant to the de-bushing and distributed by SAIEA on the 26th February to stakeholders for comments is provided in Table 2 (Category A) and Table 3 (Category B). Those specific to this review are highlighted in yellow.

Category A activities will require an EIA to be undertaken and subsequent EIA report for the granting of Environmental Clearance to be considered; while submission of a scoping report and management plan for Category B activities may suffice for the granting of Environmental Clearance to be considered (if significant environmental impacts are considered to be unlikely).

Table 2 - List of Category A Project Activities that Cannot be Undertaken Without Environmental Clearance Certificate

SECTOR	TYPICAL CATEGORY A PROJECTS	BOUNDARY CONDITIONS
Agriculture, Irrigation and Related Activities	1. Large scale land clearance/ conversions/ reclamation to commercial agriculture – on commercial and communal farm land	Clearing / Conversion / Reclamation of more than 15 ha specified in the Forestry Act Specific size or Specific protected species
	2. Surface water fed irrigation projects	Covering more than 50 ha
	3. Groundwater fed irrigation projects	
	4. Construction of veterinary protected area or game proof and international boundary fences	More than 15 km or 50 ha
Removal of natural living resources	All commercial fisheries and processing operations related to marine fisheries including the exercise of rights of quota holder.	All commercial fishing and processing operations.
	Large-scale de-bushing of bush encroached areas	By species listed Method: Chemical or bush harvesting More than 150 ha

Table 3 - List of Category B Project Activities that cannot be undertaken without Environmental Clearance Certificate

SECTOR	TYPICAL CATEGORY B PROJECTS	BOUNDARY CONDITIONS
Agriculture, Irrigation and Related Activities	1. Smaller scale land clearance/ conversions/ reclamation to commercial agriculture	Clearing / Conversion / Reclamation of more than 50 ha
	2. Surface water fed irrigation projects	Covering more than 10 ha but less than 50 ha
	3. Groundwater fed irrigation projects	
	4. Significant increase in cultivation over a land area already being cultivated	More than 50 ha
	5. New and conversion of open range rearing of cattle / livestock to industrial scale feedlots, chicken broilers, piggeries, etc.	All industrial / commercial scale projects
	6. Construction of veterinary protected area or game proof and international boundary fences	More than 1.5 km or 50 ha
	7. Large-scale de-bushing of bush encroached areas	By species listed Method: Chemical or bush harvesting More than 10 ha
	8. Introduction of Invasive Species	Any invasive species
Forestry	1. Plantation of trees/ forests / or reforestation	
	2. Wood processing and treatment facilities	Covering more than 50 ha or as may be required by the Forest Act, 2001
	3. The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorization	
	4. Commercial charcoal production	Required permitting under the Forest Act, 2001

4.4. ECC'S RECOMMENDATIONS FOR LISTED ACTIVITIES

The proposed revised Listed Activities specific to the bush thinning sector are listed in Table 4 and Table 5. For definitions, please see Section 4.5 and Table 6.

Table 4 - List of Category A Project Activities specific to the forestry sector

SECTOR	TYPICAL CATEGORY A PROJECTS	BOUNDARY CONDITIONS
Agriculture, Irrigation and Related Activities Removal of natural living resources	Bush thinning of bush encroached areas through manual or mechanical means	Area to be thinned does not meet the 'sustainable bush thinning area per annum' and Tree Equivalent thresholds Compliance with Regulations set out under the Forest Act (e.g. not within 100m of river / within riparian zone and protected trees and other limitations as per harvesting permits)
	Bush thinning of bush encroached areas through chemical measures.	Any chemicals used for bush thinning. Does not include the use of chemicals for the management activities such as maintenance of roads, servitudes, fire breaks and aftercare.

Table 5 - List of Category B Project Activities specific to the forestry sector

SECTOR	TYPICAL CATEGORY B PROJECTS	BOUNDARY CONDITIONS
Agriculture, Irrigation and Related Activities	Bush thinning of bush encroached areas	Area to be thinned does not meet the 'sustainable bush thinning area per annum' but meets the Tree Equivalent thresholds Compliance with Regulations set out under the Forest Act (e.g. not within 100m of river / within riparian zone and protected trees and other limitations as per harvesting permits)

Bush thinning project that is less than the 'sustainable bush thinning area per annum' and apply the TE thresholds are not considered as a Listed Activity; however, these projects would need to be compliant with the permitting requirements under the Forest Act (see **Error! Reference source not found.**).

4.5. PROPOSED DEFINITIONS

Proposed terms and associated definitions to include in the revised EIA Regulations are listed in Table 6. These proposals do not reflect the final words that shall be included as legal advice and editing is required; instead it provides information to be used to support the proposed terms and definitions.

The definitions in the Forest Act should be referred to and used for consistency, however it is recognised that several terms have not been defined in the Forest Act (see terms marked with *), therefore should be included in the revisions to the EIA Regulations.

Table 6 – Recommended terms and definitions to be included in the EIA Regulations

DEFINITION TO BE INCLUDED	
FORESTRY ACT & REGULATIONS	
<p>The Act states: ‘management plan’ – means a management plan prepared under section 12 of the Forest Act for a classified forest.</p> <p>The Regulations state: “management plans” means an agreement between the Minister and a management body which contains all operational work and administration of a community forest</p>	<p>Differences between the Act and Regulations. Amendments to include in the EIA Regulations are detailed below.</p>
EMA & REGULATIONS	
<p>The Regulations state: “management plans” means a plan that describes how activities that may have significant environments effects are to be mitigated, controlled and monitored.</p>	<p>Generic Management Plan from SEA to be considered.</p>
PROPOSED DEFINITION	
<p>‘Bush thinning’* - The felling of selected trees under the guidance of Forestry permits and management plans based on the SEA of large scale bush thinning and value addition activities in Namibia.</p>	
<p>‘Bush encroachment’* - The invasion and / or thickening of aggressive undesired woody species resulting in an imbalance of the grass:bush ratio, a decrease in biodiversity, and a decrease in carrying capacity and concomitant economic losses As defined in the SEA (section 2.1, page 4)</p>	
<p>‘Excessive Harvesting’ – the live trees left standing after a bush thinning operations are less than the Tree Equivalent (TE) formula As per Section 3.1.1 and Appendix B Annex 2 in the SEA of large scale bush thinning and value addition activities in Namibia.</p>	
<p>‘Tree Equivalent’ – a woody tree/bush of 1.5m high. As per the SEA. Example: A 3m tree represents 2 TE.</p>	
<p>‘Project Area’ – intended to be considered as farms or sections of farms as per title deeds.</p>	
<p>‘Sustainable bush thinning area per annum’ – The time frame that allows vegetations to regrow in order to be harvested again (utilisation of natural resources sustainably), through the application of the following equation:</p> <p>Project area / 25 years** = sustainable bush thinning area per annum. **25 years has been defined as the most relevant timeframe to be used as per (Cunningham P, Detering F, 2017).</p> <p><u>Example of sustainable bush thinning area per annum:</u></p> <p>A farm with registered title deed size of less or equal to 5,000 ha / 25 years = 200ha of sustainable harvesting per annum is considered sustainable. Anything above this is considered as unsustainable bush thinning and potentially causing environmental impacts.</p>	

5. SUMMARY

The EIA Regulations are currently under review, and proposed changes include the inclusion of Category A and B Listed Activities and revised list of Listed Activities. Bush thinning is currently not defined in the Regulations as a Listed Activity and therefore ECC were commissioned by GIZ to develop proposals.

The conclusions drawn from a literature review and stakeholder consultation is that thresholds to distinguish Category A and B Listed Projects should focus on how de-bushing activities are undertaken and not by area harvested.

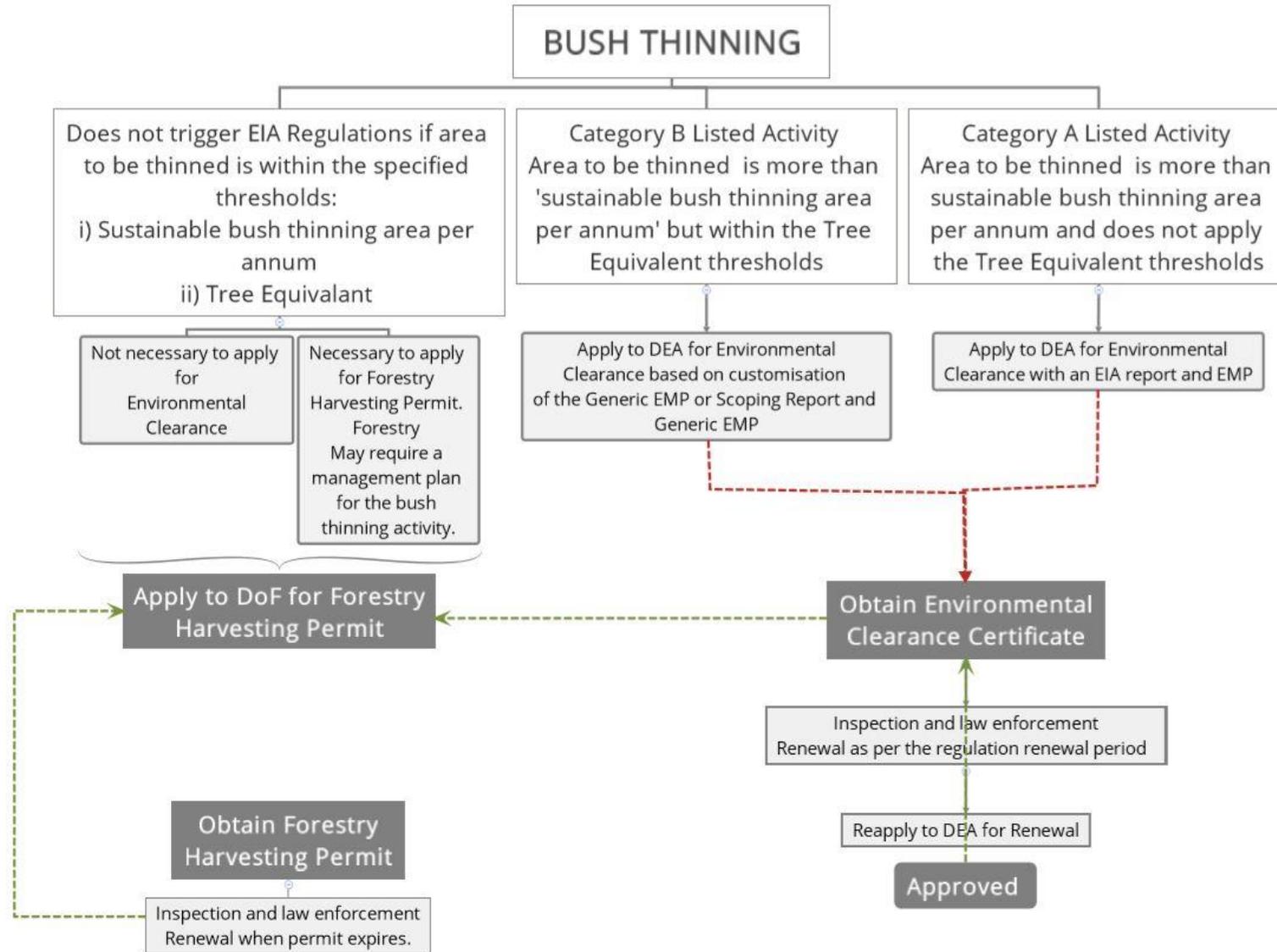
In summary, the following has been proposed:

- A farmer harvesting within the sustainable bush thinning area per annum and the TE thresholds would not trigger the EIA Regulations, and therefore would be **screened out** of the EIA Process completely. It is important to note that activities under this category must still apply and comply with Forestry harvesting permits.
- A farmer complying to the TE thresholds but not the sustainable bush thinning area per annum threshold would be screened as a **Listed B Activity**, and thus an Environmental Clearance would be required. The aim through the screening process would be to demonstrate that bush thinning activities, whilst not within the thresholds of the sustainable bush thinning area per annum, would unlikely result in an environmental impact, therefore an environmental assessment would not be required and a customised Generic EMP (in the SEA) would be sufficient as part of the application. If potential impacts are identified through screening, a Scoping Report and customised Generic EMP would be required as part of the Environmental Clearance application, and in few cases, a basic EIA and associated report may be required. **The submission of a customised Generic EMP is the targeted approach for bush thinning activities that are a Category B.**
- A farmer not complying to either thresholds would be screened as a Listed A Activity. A Scoping Report followed by an EIA Report and EMP would be required as part of the Environmental Clearance application. The level of detail of the EIA would be determined through the scoping exercise.

The process is illustrated on Figure 1.

Recommendation: Comments from stakeholders and interested parties illustrate that there is not an agreed consensus on the proposed new Listed Activities and associated thresholds. Therefore, it is recommended that further consultation is undertaken in the form of a workshop with the key stakeholders and interested and affected parties.

Figure 1 – Bush thinning activities and requirements



6. REFERENCES

- Cunningham P, Detering F. (2017). Determining age, growth rate and regrowth for a few tree species causing bush thickening in north-central Namibia. *Namibian Journal of Environment*, 72 - 76.
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- Zimmermann I, N. M. (2017). The influence of two levels of debushing in Namibia's Thornbush Savanna on overall soil fertility, measured through bioassays. . *Namibian Journal of Environment* , 1 A: 52-59.

APPENDIX A: EMAIL TO STAKEHOLDERS

7. APPENDIX B: STAKEHOLDER FEEDBACK

Collated responses are provided in the table below.

STAKEHOLDER	KEY COMMENTS	RESPONSE
<p>Mr. John Pallett SAIEA</p>	<ol style="list-style-type: none"> 1. The proposed definitions for Category A and B are too ‘fuzzy’ and cannot be legally enforced. 2. It is not clear what is meant by “more than sustainable bush thinning area per annum”. In my opinion, there is no maximum area that can be thinned, as long as the thinning is done according to the guidelines (namely leave large and protected trees, leave a certain density of trees [that our booklet describes, depending on the biome]). 3. The definition of “sustainable bush thinning area per annum” is wrong. According to the proposed definition, in a 5,000 ha farm, you can harvest 250 ha of it per year, and that will be defined as “sustainable”. This definition says nothing about how you harvest, and the species you do not cut, and the density of trees left standing. 4. The phrase “may lead to environmental harm” is open to opinion and cannot be legally enforced. 5. “Excessive harvesting” should be defined according to the size and density of trees that are left in the harvested area. The Regulations should specify that all thinning of bush encroached areas should be done following sustainable bush harvesting guidelines (as described in the booklet). 6. It is wrong to define Category A projects as those that will do excessive harvesting, and Category B projects as those that “can be proved to not cause significant environmental harm”. 7. I need more time to think about how to define categories A and B so they make ecological sense and are legally enforceable. We proposed a size threshold in 2016, to make the definition straightforward. Size might not be the most appropriate criterion, so we should think about this one some more. 8. As an aside: The booklet should not be referred to as SAIEA’s. We compiled it, but the copyright and the citation should be MAWF and MET. This was purposely done so that it would be a Government publication with full Government support and involvement. 	<p>Revisions to the Categories have been revised and additional text has been included to provide further context behind the rational of the proposals.</p> <p>Definitions have been revised to ensure they are clearer and easier to understand.</p> <p>Listed Activity thresholds are not based on area size.</p> <p>The EMP shall include information such as protect trees.</p> <p>How the harvesting is to be undertaken has been included in the Listed Activities (Mechanical and manual, and chemical). The EMP will further detail this information which the decision of the ECC and the Forest Permit will be based on.</p> <p>“may lead to environmental harm” has been removed.</p> <p>The term Excessive Harvesting term has been clarified. It is based on the SEA. The TE takes in to consideration the height and density.</p> <p>Reference to the SEA has been revised throughout the report</p>

STAKEHOLDER	KEY COMMENTS	RESPONSE
<p>Mr. Axal Rothauge, Agri Consult Namibia</p>	<ol style="list-style-type: none"> 1. The control of encroacher bush for the purpose of regenerating/restoring/rehabilitating the ecological services provided by natural rangelands (such as grazing, borehole water yield, retention of topsoil, maintenance of biodiversity and landscape beauty) is not a forestry function and should not be subject to the Forest Act, even if by chance some of the “waste products” of bush control, such as wood happen to be covered by the Forest Act. “Encroacher wood” is clearly a different category of wood than “wood from natural forests and tree plantations” and its generation and use should be covered by an agricultural act (which we don’t have) or the Environmental Management Act (EMA). 2. As such, I don’t have a problem with the small print of Figure 1 but rather object to the principle that forestry (the Director of Forestry) is at all involved in the activities illustrated by Figure 1. These are clearly activities that do not impact forests in Namibia (which we also don’t have but I will not split that hair...) but rather have a huge impact on the farming environment (not covered adequately by any act but reasonably falling under the EMA as 70% of our land-environment is farmland and if that is not covered by the EMA- then what is?). 3. I therefore suggest that all the activities in Figure 1 be moved from the Director of Forestry to the Ministry of Environment & Tourism (they can nominate one of their existing directorates or create a new one to oversee this function) and are no longer governed by the Forest Act but rather by the EMA... 4. With a few exceptions such as protected tree species (which should enjoy protection in the whole country and not just where we have “forests”) and the limitation of utilising wood within 100 m of a river bank, to protect the riverine environment (there: another function of the EMA rather than the FA!!!). 5. The EMA should then be strengthened/expanded to regulate the use of (agricultural) toxic chemicals in the environment, in this case the use of arboricides, which are an integral part of encroacher bush control. 6. Finally, to have two different entities supervising control of encroacher bush will just create grey areas, confusion, duplication, raise the cost of bush control and cause one agent to be played off against the other (“he said ... she said” – scenario) at the expense of the (farmland) environment. 	<p>Commented noted, but out of the scope of this report.</p> <p>Commented noted, but out of the scope of this report.</p> <p>Commented noted, but out of the scope of this report.</p> <p>Compliance with FA has been included in the Listed Activities.</p> <p>Commented noted, but out of the scope of this report.</p> <p>Commented noted, but out of the scope of this report.</p>

STAKEHOLDER	KEY COMMENTS	RESPONSE
<p>Mr. Pieter Potgieter Namibian Charcoal Association</p>	<p>On page 11 point 2, what is the possibility to push the boundaries to 500 ha for only a harvesting permit? From 500 ha TO 5000 ha A Management plan and above 5000 ha a full EIA?</p>	<p>These points related to the information contained in the Forestry and Environmental Authorisations Process for Bush Harvesting Projects’ booklet (Southern African Institute for Environmental Assessment, 2017) and are not the proposed revised Listed Activities for Bush Thinning. Mr Stephan Bezuidenhout called Mr Potgieter to discuss confusion this on the 13th March and the report has been made clearer to ensure the text has helped guide the development of new Listed Activities.</p>
<p>Dr. Chris Brown CEO, Namibian Chamber of Environment</p>	<p>Section 3.3 Bullet 1 - How to address cumulative impacts, i.e. 5 adjacent projects of 140 ha each? Bullet 2 - Does location play a role? For example, bush clearing of just under 5,000 ha would be much more significant in a wildlife corridor in the Zambezi region than on a piece of uniform thornveld savanna in central Namibia. Section 4.2 Table 2 – The challenge is to define “significant” – it is often in the eye of the beholder. The cumulative impact of smaller-scale communal slash-and-burn is huge. Over time, one village can clear many hundreds of ha. Just because it is not done at one time (in one year) means that it is left out here. Similarly, many villages have their fields linking together, covering many thousands of ha cleared. There needs to be better ways of getting to grips with this. Table 3 – Point 1 in list A (which requires an EIA) says that large scale is more than 15 ha cleared. Small scale here in list B (which requires only a Scoping report and EMP) says 50 ha. This is inconsistent.</p>	<p>The first set of comments up until Table 6 are on the existing Listed Activities or those proposed by the DEA/MET/SAIEA for review. No response provided on these comments</p>

STAKEHOLDER	KEY COMMENTS	RESPONSE
	<p>What about adding 40 ha per year over many years? Section 4.3 Table 4 & 5 - sustainable bush thinning area per annum - I don't understand what this means.</p> <p>Section 4.4 Table 6, proposed definitions <i>'Bush thinning'* - The felling of selected trees under the guidance of Forestry permits and management plans based on the per SEA by SAIEA of large scale bush thinning and value addition activities in Namibia. - Suggest this should be trees, bushes and shrubs.</i></p> <p><i>'Bush encroachment'* - Bush encroachment is defined in this SEA (section 2.1, page 4) as thickening of woody bush due to human activities, in conjunction with natural events. Areas where there is thick bush, such as some areas of mopane scrub, are not automatically labelled as 'encroached' because in some areas this is the natural state of the vegetation. Areas are therefore defined as bush encroached only where bush thickening has been recorded in the recent past (approximately the last 20 – 60 years) and it can be ascribed to human activities such as overgrazing of livestock or manipulation of fire frequency.</i></p> <p><i>Thickening</i> - This is an inappropriate word in this context. Densification would be better. <i>in conjunction with natural events</i> - I cannot think of any natural events that lead to bush encroachment. <i>Thick</i> - dense <i>thickening</i> – densification <i>the last 20 – 60 years</i>) - Should be the past 100 years. <i>livestock</i> - ... such as the eradication and reduction of wildlife and their replacement by domestic stock, inappropriate livestock grazing management practices and the exclusion of fire and/or fire frequency and seasonality.</p> <p>Excessive Harvesting' – the live trees left standing after a bush harvesting operation are</p>	<p>This is defined in Table 6</p> <p>Definitions of the terms have been revised to make clearer and understandable.</p> <p>This is a definition taken from the SEA which undertook robust assessment and reporting, which therefore has been relied upon to prepare definitions.</p> <p>As above</p> <p>This point refers to how bush thinning would be undertaken. This is provided in the SEA and will be</p>

STAKEHOLDER	KEY COMMENTS	RESPONSE
	<p>less than the standard 'Tree Equivalent (TE) rainfall formula' (see SEA by SAIEA of large scale bush thinning and value addition activities in Namibia. Section 3.1.1 and Appendix B Annex 2).</p> <p><i>Excessive Harvesting</i> - Surely it is not just the number of trees, but also the species composition, size classes and spatial distribution of what remains? <i>Less</i> - fewer</p> <p><i>'Project Area'</i> – intended to be considered as farms or sections of farms. - This is not immediately clear. Do you mean that a "project Area" can be a farm, a number of farms or part of a farm?</p> <p><i>'Sustainable bush thinning area per annum'</i> – As an outsider to this sector, this term is really unclear to me and I cannot see where it is fully explained. To be sustainable it must surely encompass more than just a proportion of an area? I would think that what and how it is cleared, and what remains is just as, or more, important?</p>	<p>included in the EMP. Not to be addressed in the thresholds for the Listed Activity. Definitions of the terms have been revised to make clearer and understandable.</p> <p>Additional text in the report has been included to walk the reader through the thresholds and definitions.</p>
<p>Ian Galloway Director of Jumbo Charcoal Namibia</p>	<p>Jumbo would prefer a time frame of 20 years, however there is not sufficient evidence to support this request and therefore accepts the recommended time period of 25 years.</p>	<p>Comment noted.</p>
<p>Willem Enslin, Farmer</p>	<p>Ek sou graag wou sien dat afdeling B aktiwiteite in die diagram met n generiese EMP direk vir n harvesting permit kan aansoek doen en nie eers moet wag vir n sertifikaat nie.</p> <p>In die noorde groei bos baie vinniger en ek sou die tydperk vir volhoubare benutting eerder afbring na 12 tot 15 jaar. ek is al vir 15 jaar met 30 plus werkers op my plaas besig en het reeds twee maal deur 2 derdes van die plaas uitgedun en is nou eers met die laaste derde besig waarna ek oor n jaar weer in die ander twee derdes kan oes.</p> <p>Ek sou ook voorstel dat die hektare opgestoot word na 350 per jaar sodat die kappers nie te veel op mekaar gedruk word nie. Dit is dan wanneer hulle begin kompeteer vir die groot bome en mekaar vir verkeerde kap blameer.</p>	<p>Commented noted, but out of the scope of this report.</p> <p>There is no published evidence to support this request, hence (Cunningham P, Detering F, 2017).</p> <p>The proposed thresholds do not limit a farmer from thinning less than 350 ha per annum. See section 5 - Summary.</p>

STAKEHOLDER	KEY COMMENTS	RESPONSE
Peter Cunningham Environment & Wildlife Consulting Namibia	20 years for sustainability - would depend on the spp. in question though. My data show 26 years probably a better estimate (See: my growth rate note). This would however vary from area to area due to soils & rainfall, etc. and would have to be determined at farm level for best effects (this would also then add to the known data and eventually result in better estimate for growth rates for spp./area, etc.).	Time frame adapted accordingly (25 years).
Colin Lindeque General Manager Namibia Biomass Industry Group	<p>As I understand it, you do not suggest an upper threshold to enact a category A listed activity, unless it is considered "excessive harvesting", correct? But who determines whether it is "excessive harvesting", or whether it is "proven not to cause significant harm".</p> <p>In the document, it states "A farm with registered title deed size of less or equal to 5,000 ha / 20 years = 250ha of sustainable harvesting per annum" - The "less or equal" term is a bit confusing. So a farm of 3000 ha would have a sustainable harvesting threshold of 150 Ha per annum (120 ha, if 25 year cycle is used), and a farm of 30 000 ha would have a sustainable harvesting threshold of 1500 Ha per annum (1200 ha, if 25 year cycle is used), correct?</p> <p>There is no difference between thinning and clear felling. So, I assume it is just more difficult to justify the "proven not to cause significant harm" criteria for clear felling, correct?</p> <p>Is a farm automatically considered a management unit based on its title deed area? Or can a farm be comprised of several management units, or can multiple farms be considered a single management unit? And how does this affect the above sustainable harvesting thresholds?</p> <p>What will likely happen if a large scale harvester applies for thinning of an entire 5000 ha farm, over a three year period, assuming they leave the optimal standing density over the entire area?</p> <p>The thresholds are now on an annual basis, but when do they "reset"? Is it according to</p>	<p>Excessive harvesting would when bush thinning exceeds the TE recommendation on that specific areas per ha. Determination of impacts on the areas will be done by means of the EIA screening process.</p> <p>Correct</p> <p>Clear felling triggers a different listed activity and is not covered in this report.</p> <p>It will not affect the sustainable harvesting threshold as the calculation will be the same.</p> <p>See section 5 - Summary.</p> <p>If the farmer thins under the threshold and within</p>

STAKEHOLDER	KEY COMMENTS	RESPONSE
	<p>permit dates, clearance application dates, financial years, calendar year?</p> <p>For example, a harvester would like to avoid getting an environmental clearance, so they purposefully harvest just under the sustainable harvesting threshold during consecutive years. Firstly, is this possible? And secondly, is this what we want to encourage?</p>	<p>the recommended TE requirements, he is effectively harvesting responsibly and sustainably.</p> <p>It is the responsibility of the farmer to support his objective in the generic management plan.</p>
Mr Ibo Zimmermann	<p>Please find attached an article [(Zimmermann I, 2017) on the disruption caused to nutrient cycling by debushing with suggested solutions in the hope that they will eventually be addressed.</p>	<p>Reference has been included.</p> <p>The work in this report is based on the reference.</p> <p>Bush thinning should be married up with partially clearing areas and not totally cleared areas.</p>