

アフリカの若者のための産業人材育成イニシアティブ (ABE イニシアティブ)

「修士課程およびインターンシップ」プログラム

2019 年度入学 審査に係る書類一式

【Application Form 目次】

1. Personal Information
2. Educational Background
3. Present Organization and Nomination
4. Work Experience
5. Medical History
6. Declaration

【添付資料】

1. Annex1_ Career Plan after Graduation
2. Annex2_ Research Plan
3. Annex2-attachment_ Declaration of Desired University Placement
4. 卒業証明書
5. 成績証明書
6. 身分証明書
7. 病状診断書 (該当者のみ)
8. 英語試験公式スコア証明書 (所持者のみ)

<審査における留意事項>

➤ 英語スコア

第 5 パッチ受験時の TOEFL ITP スコアにつきましては、本紙と併せてお送りする候補者リスト (マッチング審査表) に記載していますので、ご参照下さい。また、公式スコアを提出している候補者については、証明書を最終ページに添付しています。

➤ 仮証書

卒業証明書・成績証明書が仮証書 (Provisional Certificate) となっている応募者がいる可能性がございます。国の事情により、本証書の発行までに数カ月～数年かかる場合がございますので、貴学の規定を踏まえ審査をお願いいたします。選考プロセスの中で本人に発行時期についてご質問いただくことも可能です。

➤ スーダンにおける卒業・成績証明書の発行及び公証印制度

当該国では、卒業・成績証明書は生涯に 1 部しか発行されず、公証印制度もございません。そのため、出願時には写しの提出にてご了承いただきたく、ご検討の程お願い申し上げます。

➤ 本人が希望する教員以外が指導教員となる場合

本人が希望する教員以外が指導教員となる場合は、研修員への意向確認も含め、貴学内で適宜ご判断頂きますようお願いいたします。

➤ 研究生の受け入れ

修士課程への入学を前提に、研究生として受け入れていただくことも可能です。研究生としての在学期間は最長 6 ヶ月です。

➤ 審査終了後の人数調整

合格者リストご提出後、予算の状況によっては合格者人数の最終調整を行う場合がございます。

**Master's Degree and Internship Program of African Business Education Initiative for Youth
(ABE Initiative) for FY2019
APPLICATION FORM**

Reg.No H2004

Instruction

1. Handwritten form is not acceptable
2. Fill in the form in English
3. It is a MUST to fill all the YELLOW columns (Please write "N/A" if not applicable)
4. Write years in western calendar
5. Write proper nouns in full without abbreviation
6. Sign all pages on the bottom of right-hand corner after printing
7. Check your application form using the check list at the bottom of this application form

1. Personal Information

1-1. Title

Master's Degree and Internship Program of African Business Education Initiative for Youth (ABE Initiative)

1-2. Number (Not need to fill in. JICA will inform after selection Procedures)

J						
---	--	--	--	--	--	--

1-3. Information about the applicant

Family Name	[REDACTED]		
First Name	[REDACTED]		
Other Name (if any)	[REDACTED]		
Sex	Male	Date of Birth (Day/Month/Year)	23 / Feb / 1988
Nationality	Mozambican	Age (As of 1/1/2019)	31
Resident Country	Mozambique	Religion (if any)	Catholic
City/Town	Maputo	TEL (Primary)	[REDACTED]
State/Province	Maputo	TEL (Secondary)	[REDACTED]
Email	[REDACTED]	Passport possession	Yes

1-4. Contact Person in Emergency

Name	[REDACTED]		Relationship	Wife
Province & Country	Maputo	TEL	[REDACTED]	Email

Name of Applicant: [REDACTED]

Signature: [REDACTED]

2. Educational Background

Instruction

1. Exclude kindergarden education and nursery school education.
2. Preparatory education for university admission is included in upper secondary education.
3. If you attended multiple schools at the same level of education due to moving house or readmission to university, modify level column and write the schools in the separate rows.
4. Any school years or levels skipped or repeated should be indicated in the Remarks column.
5. End date for Higher Education should match with the date on the graduate certificate which you submit.
6. Academic Degree must be filled for Higher Education level. (If not obtained any degree, write "N/A").

Level	Name of School	Province, Country	Years of schooling	From (Month)(Year) To (Month)(Year)		Academic Degree
	Faculty / Department					
Primary Education	Tihovene Secondary School	Gaza, Mozambique	8 years	From Feb / 1994		
				To Dec / 2001		
Lower Secondary Education	Mapai Secondary School	Gaza, Mozambique	4 years	From Feb / 2002		
				To Dec / 2005		
Upper Secondary Education	Joaquim Chissano Secondary School	Gaza, Mozambique	2 years	From Feb / 2006		
				To Dec / 2007		
Higher Education	Eduardo Mondlane University	Inhambane, Mozambique	3 years	From Feb / 2008		Bachelor of Agricultural Production
	Rural Development Higher School			To Dec / 2010		
				From /		
				To /		
				From /		
				To /		
				From /		
				To /		
Total Years of Education:				17	years of schooling	

6.

Remarks:	
-----------------	--

Name of Applicant

Signature:

1) Language Proficiency

English Proficiency	Listening	Good
	Speaking	Good
	Reading	Good
	Writing	Good
	Certificate (if any) ex. TOEFL, IELTS Please attach copy of official certificate	5,5
Mother Tongue ex. French	Portuguese	
Other Language (if any)		
Proficiency of the other language		

Excellent: Refined fluency skills and topic-controlled discussions, debates & presentations. Formulates strategies to deal with various essay types, including narrative, comparison, cause-effect & argumentative essays.

Good: Conversational accuracy & fluency in a wide range of situations; discussions, short presentations & interviews. Compound complex sentences

Extended essay formation.

Fair: Broader range of language related to expressing opinions, giving advice, making suggestions.

Limited compound and complex sentences & expanded paragraph formation.

Poor: Simple conversation level such as self.

2) Have you ever been awarded a scholarship for studying abroad?

No	Name of scholarship				
	Duration	From		To	

3) Are you currently applying for any scholarship(s), other than ABE Initiative?

No	Name of scholarship				
----	---------------------	--	--	--	--

4) Have you ever participated in any training course in your country or abroad including any offered by JICA?

No	Name of the course				
	Country you visited		Name of the Institution or agency		
	Duration	From		To	

Name of Applicant: _____

Signature: _____

3. Present Organization and Nomination

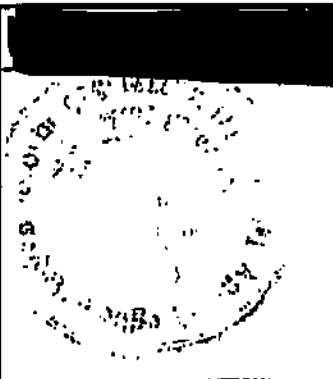
3-1. Present Organization and Position

Type of Organization	Local Government	If others, specify	
Organization	Provincial Directorate of Agriculture and Food Safety of Maputo		
Department / Division	Provincial Rural Extension Services		
Position	Technology Transfer Officer		
Date of employment	24 / Sep / 2012	Date of assignment to the present position	19 / Aug / 2016
Province & Country	Maputo-Mozambique	TEL	[REDACTED]
		Email	[REDACTED]

Category of Organization	Type of Organization	Description
A. Private Sector	Private	Private company including Private school
	National Government	Ministry or Federal Institution
B. Ministry / Government Institution	Local Government	Governmental Institution run by state/province or city/town
	Public Enterprise	Government-owned corporation or facilities
C. Higher Education	University	Either public or Private University
D. Others	NGO/Private(non-profit)	NGO or non-profit organization
	Self-employed	Freelancer (if you own a company, chose "Private")
	Fresh Graduate	Just graduated or will Graduate soon from University and not working
	Unemployed	not working
	Others	Any status not applying to all above

3-2. Confirmation of the nomination by the applicant's present organization

I agree to nominate this person on behalf of our organiza

Date	14-11-2018	Signature	[REDACTED]
Name	[REDACTED]		
Department / Division	Provincial Rural Extension Services		
Position	Department Boss		
TEL	[REDACTED]		
Email	[REDACTED]		

Name of Applicant: [REDACTED]

Signature: [REDACTED]

4. Work Experience

Provide the information of your work experience following the most recent one.
The first row (most recent one) will be filled automatically if 4-1 is correctly filled.

Organization	Department	Position	Period of Working	From / To	Full Part	Type
Provincial Directorate of Agriculture and Food Safety of Maputo	Provincial Rural Extension Services	Technology Transfer Officer	2 years 3 months	From Aug / 2016 To Oct / 2018	Full	B
Provincial Directorate of Agriculture and Food Safety of Maputo	Provincial Rural Extension Services	Planing, Monitoring and Evaluation Technician	4 years 0 month	From Sep / 2012 To Aug / 2016	Full	B
World Food Program	Production and social support	Field Monitor	1 year 6 months	From May / 2011 To Sep / 2012	Full	A
Economic Society of Agrarian Producers and Processor, Lda	Agrarian Projects	Production Projects Technician	2 years 8 months	From Nov / 2012 To Jun / 2015	Part	A
				From / To /		
				From / To /		
				From / To /		

**For the type of organization, please choose from the followings:

- A. Private Sector
- B. Ministry / Government Institution
- C. Higher Education and TVET (Technical and Vocational Education and Training) Institutions
- D. Others (non-profit organization etc.)

*Please refer to Category of Organization on page 5 (4. Present Organization and Nomination)

Total years of full-time job experie 7 and 8 months

Total years of part-time job experie 2 and 8 months

Name of Applicant

Signature:

5. Medical History

5-1. Present Medical Status

a) Do you currently use any medicine or have regular medical checkup by a physician for your illness?

No	Name of illness, and condition	
	Name of medicine	

If yes, please attach your doctor's letter (preferably, written in English) that describes current status of your illness and agreement to join the program

b) Are you pregnant?

No	Months of pregnancy	months	Expected date of delivery	
----	---------------------	--------	---------------------------	--

c) Are you allergic to any medication or food?

No	What are you allergic to?	
----	---------------------------	--

d) Please indicate any needs arising from disabilities that might necessitate additional support or facilities.

--

Note: Disability does not lead to exclusion of persons with disability from the program. However, upon the situation, you may be directly inquired by the JICA official in charge for a more detailed account of your condition.

5-2. Past Medical History

a) Have you had any significant or serious illness?

No	If yes, please specify	
----	------------------------	--

b) Have you ever been a patient in a mental clinic or been treated by a psychiatrist?

No	If yes, please specify	
----	------------------------	--

5-3. Other Medical Problems

If you have any medical problems that are not described above, please indicate below.

--

Name of Applicant

Signature:

6. Declaration

I, **Jose Mateus Nampunda Junior**,

declare that I apply for the Master's Degree and Internship Program of African Business Education Initiative for Youth (ABE Initiative) with a full understanding of the "General Information for ABE Initiative", especially the articles stipulated below:

(1) APPLICATION

1. all the information answered and provided in this application form by me, is true and accurate to the best of my knowledge and ability. My application will be cancelled if any information is proven to be false.
2. all the information provided by me in this application form had been approved by my supervisor in my organization (Required only for Governmental Officials (including public organizations) and/or Educators.)
3. an application form which is incomplete or missing any necessary document(s) will be deemed ineligible and not considered.
4. the selection procedure and results rest entirely with JICA as the secretariat of ABE Initiative. No inquiries or objections by applicants regarding the result of the selection process will be considered.

(2) OBJECTIVE OF THE PROGRAM

When I am accepted for the program, I agree

1. that the objective of the program which is written in G.I. Therefore, I will participate in observation tours of companies, summer internship, and post graduate internship as designated by JICA,
2. that I am required to contribute to the development of my nation's relationship with Japan after completing the Master's course and internship in Japan,
3. that the objective of the program is not provision of employment in Japan upon completion of the program.

(3) JICA's GUIDELINES

When I am accepted for the program, I agree

1. to invite my family (spouse and children only) on my own responsibilities for all expenses and necessary procedures after 6 months upon arrival in Japan to follow JICA's Guidelines,
 2. all the information answered in 5. MEDICAL HISTORY is true, and to accept that medical conditions resulting from an undisclosed pre-existing condition may not be financially compensated by JICA and may result in termination of the program,
 3. to carry out such instructions and abide by such conditions as may be stipulated by both the nominating government and the Japanese Government regarding the program,
 4. to follow the program, and abide by the rules of the institution or establishment that implements the program,
 5. to refrain from engaging in political activity or any form of employment for profit or gain,
 6. to return to my home country at the end of the activities in Japan on the designated flight schedule arranged by JICA,
 7. to discontinue the program if JICA and the applicant's current organizations agree on any reason for such discontinuation and not to claim any cost or damage due to the said discontinuation,
 8. to consent to waive exercise of my copyright holder's rights for documents or products that are produced during the course of the program, against duplication and/or translation by JICA, as long as they are used for the purposes of the program,
 9. to approve the privacy policy and the copyright policy in the G.I.
- JICA's Information Security Policy in relation to Personal Information Protection
- JICA will properly and safely manage personal information collected through this application form in accordance with JICA's privacy policy and the relevant laws of Japan concerning protection of personal information and take protection measures to prevent divulgation, loss or damages of such personal information. Any information able to identify individuals that is acquired from applicants/participants shall be entered into and stored in Portal WebSite, used or analysed within the scope of ABE Initiative Programs and activities of concerned parties: JICA, JICE, Japanese Universities and registered Japanese enterprises.
 - Unless otherwise obtained approval from an applicant itself or there are valid reasons such as disclosure under laws and ordinances, etc., and except for the following 1.-3., JICA will neither provide nor disclose personal information to any third party. JICA will use personal information provided only for the purposes in the following 1.-3 and will not use for any purpose other than the following 1.-3 without prior approval of an applicant itself.
 1. To provide ABE initiative to the participants,
 2. To provide ABE initiative to the participants from developing countries under the Citizens' Cooperation Activities.
 3. In addition to 1. and 2. above, if the government of Japan or JICA determines necessary in the course of technical cooperation.
10. to observe Japanese laws and ordinances (including, for example, such as 'Sexual Harassment') during my stay, if I violate, will return the total amount or a part of the expenditure required for ABE Initiative depending on the extent of the violation,
 11. to understand that JICA does not assure issuance of Japan entry visa even after JICA decide to accept me.
I understand the Embassy of Japan will decide it according to necessary formalities upon the submission of visa application from each participant.

Name of Applicant: _____

Signature: _____

DATE (Day / Month / Year):

19 / 11 / 2018

Check List

Please check the following BEFORE printing

Page	Check Point	Applicant	JICA
All	Are all the Yellow columns (MANDATORY) filled?	Yes	✓
1	Is the full name written as shown on the Passport? (National ID is acceptable if the applicant does not own a Passport)	Yes	✓
	Is the date of birth same as on the Passport or ID?	Yes	✓
	Is your age between 22 to 30? (If not, check your age at JICA website once in charge of your country)	Yes	✓
2	Is the screening years corresponded to the years specified in University Diploma and Academic Transcript?	Yes	✓
	Is the name of the degree same as in the "University Diploma" and "Academic Transcript"?	Yes	✓
	Is the total screening years over minimum academic years for bachelor's degree? (your total schooling years)	17 years	✓
	If the screening years does not match with the regular academic period, is it explained in the Remarks column?	No	~
3	Is the applicant applying for any scholarship other than ABE Initiative?	No	-
4	Is the name of organization, department, and position correctly mentioned? (No abbreviation is allowed)	Yes	✓
5	Is the working history and period correctly filled?	Yes	✓
Annex 2 Research Plan	Is the research plan written with enough amount of words? (Extreme lack of words may not be accepted)	Yes	✓
	Is the "Title", "Introduction", "Objective" and "Conclusion", respectively followed?	Yes	✓

Please check the following AFTER printing

Page	Check Point	Applicant	JICA
All	Is there a signature on the bottom-right corner of all pages?	Yes	✓
1	Is the applicant's photo attached on the Application form?		✓
4	Is there official stamp/signature of current organization?		✓
7	In the Declaration Form, is the signed date within the application period?		✓
University Diploma	Is the notary seal affixed to University Diploma? The copied document of original one is approved only with the original notary seal affixed. *The notary seal: To officially notarize the copied document, affixed by authorized public institutions or lawyers.		✓
	Is the name and date of birth as shown on the Passport or ID? If not, please describe the reason in the letter.		✓
	If not written in English, is the official English translation attached?		✓
Academic Transcript	Is the notary seal affixed to Academic Transcript for all the grades earned in the university? Is the name and date of birth as shown on the Passport or ID? If not, please describe the reason in the letter.		✓
	If not written in English, is the official English translation attached?		✓
	Is the copy of valid Passport (or National ID) attached? If not written in English, French, Portuguese or Spanish, is the official English translation attached?		✓
Photos	Are 2 photos attached on page 1 of Application Form?		✓

Please check the following BEFORE submission

Page	Check Point	Applicant	JICA
All	Are all attachments submitted?		✓

Reg.No 113 004

Name of Applicant: [REDACTED]

ANNEX 1: Career Plan after Graduation

Please describe your idea /plan to utilize your knowledge, skills and experiences that you would obtain in Japan after returning to your home country in 400-500 words.

Please be reminded of the aim of the ABE Initiative which expects the participants to contribute to the development of industries of their home countries, to utilize the networks which are built up during participants' stay in Japan, and to continue to foster good relationships between their countries and Japan.

Japan is an example of a world level in different development terms sectors including agriculture developing strategies specific and efficient development of rural economy

While I was currently working in a government institution, in this is the liner of various instruments designed to change the scenario or course of things, I mean the reduction of poverty that plagues most of the country's population, and the fact that most of the Mozambican population depends on agriculture, with the knowledge acquired after the studies are very important in various aspects.

a). First, I will develop my intellectual ability to see, analyze and provide critical and positive benefits of different ideas related to my area of operation and not so;

b). With the baggage acquired in Japan , will bring greater dynamism into my sector , sharing with other colleagues exemplary model development undertaken by Japan, but translate them first to Mozambican reality because the realities are different;

c). Also as a young man with aspirations to be a great entrepreneur created through creation of a company related to land area during their stay in that country, will always be attentive to local youth initiatives in order to learn/get experiences with pretension to analyze whether it would be feasible to catch those models and come home to create mechanisms to undertake and employ more compatriots thereby reducing the unemployment rate increasingly rises in the country.

1/2
Name of Applicant

[REDACTED]

*Please sign all the pages on the bottom of right-hand corner.
* HANDWRITTEN FORMS will not be accepted

Req. No MZ 004

Mozambique is an absolutely young parents and the lack of opportunities and technologies appropriate to give young people wider visions of development prevents the creation of changes within communities. Reason, an opportunity to study in a nation like Japan, close to enjoying the modern technology of development and particularly in agriculture, would give me great intellectual subsidies to develop the country.

With the collaboration between japan and Japanese companies I think it will be an opportunity for the chance to develop practical activities that surely helped to acquire more capacity to act with prudence in the performance of my obligations. This learning can be by stages pathway for the formation both here in Mozambique as well as in Japan or in other countries where they are operating these companies.

2/2

Name of Applicant: _____

*Please sign all the pages on the bottom of right-hand corner.
* HANDWRITTEN FORMS will not be accepted

Req. No M2009

ANNEX 2: Research Plan

Write a brief research plan of your proposed Master's thesis in about 500 words. At the selections, this research plan will be used to evaluate your academic ability and motivation, and to match you with university courses/supervisors you desired.

If plagiarism or fraud is discovered after selection, the candidate will be disqualified retroactively.

(1) Title:

Potential of Atriplex nummularia (halophyte plant) in recovery of soils with saline-sodic contamination.

(2) Research Plan (about 500 words):

I. INTRODUCTION

Population growth and economic pressure for food production have contributed significantly to expansion degraded by salinity soils, which in turn is referenced as a consequence of the absence of a correct irrigation management as well as a functional drainage system (RIBEIRO *et al*, 2003).

One of the great challenges of humanity is to make the operating activities of sustainable natural resources as soil degradation problems related applications-agricultural systems without proper planning and management are now evident, especially in arid and semiarid regions precipitation environmental degradation, due to high salt concentrations in the soil, causing a reduction of considerable productive power of world agriculture to land mainly crops already established and/or derail the exploration of new agricultural areas.

The salinization of soils in Mozambique, directly affects agricultural production and the environment by reducing the quality of the soil which in turn reduces the production capacity, thereby increasing food insecurity levels causing chronic malnutrition in children under five years mainly in arid and semi-arid areas. These processes are somehow related to the weak power of adoption of techniques by small farmers (which is most) for the recovery of degraded or affected by salinization farmland, as not always such techniques require more costly alternatives, as the use of corrective chemical and/or using machinery to open drainage channels

1/7

Name of Applicant: _____

Thus, the use of vegetation that tolerate high salinities as the use of halófitas plants case of *Atriplex nummularia*, is an alternative capable of producing large quantities of biomass that can be used to power various animals, avoiding areas to be abandoned in consequence of their degradation. Because of the points made above, it is intended with this study was to evaluate the potential of *Atriplex nummularia* in recovery of soils with salt-sodium contamination, as an alternative technique specifically for soils of the southern region of Mozambique.

1.1 Objectives

1.1.1. General objective:

- ✓ Assess the potential of *Atriplex nummularia* in recovery of soils with saline- sodic contamination

1.1.2. specific objective:

- ✓ Compare chemical properties of the soil before and after the experiment;
- ✓ Quantifying at different stages of crop experiment variation extraction of Na⁺ and Cl⁻ the plant ;
- ✓ To analyze the variables of sorption soil complex ([Ca.sup.2 +], [Mg.sup.2 +], [K.sup.+], Sum of bases) and total organic carbon, stable between the beginning and end of the experiment.

II. FUNDAMENTATION

Soil salinization is a problem that is growing worldwide, and it is believed that some billion hectares of land are changed by salts. Much of all irrigated areas of the world suffer from reduced production due to excess salts (Keffer & UNGAR, 2002; HORNEY et al., 2005).

Excess salts in soil problems have been known for a long time, but its magnitude and intensity have increased, resulting in alarming expansion of degraded land area by salinity. These problems are the use of marginal lands and inadequate irrigation management consequences (Ribeiro et al., 2003). Salinity is a term that describes an overflow situation of soluble salts in the soil or root environment where the plants are growing in this soil group are saline-sodic soils and sodic soils

*Please sign all the pages on the bottom of right-hand corner.
* HANDWRITTEN FORMS will not be accepted

Reg. No 112 004

The traditional classification for these soils was proposed by Richards (1954) in accordance with the electrical conductivity characteristics of the saturation extract (CEes), pH of the saturated paste and exchangeable sodium percentage (ESP).

Despite the expansion of areas with these problems, recovery procedures are not well used (QADIR et al., 1998). Thus, more appropriate management practices to control the salinity of long-term soil become crucial in a soil cultivation program affected by salts, mainly aimed at sustainability, besides being alternative land use and recovery.

Among the techniques recovery of saline- sodic soils, the application of chemical improvers, and soil washing are widely used, by acting directly on the correction of problems such soils from the plants (Montenegro, 2004). Despite the extensive disclosure of the use of gypsum with water depth and saline-sodic soil recovery technique, this may be inefficient if the leaching of soluble salts and Na + exchangeable is restricted by a low permeability of the soil profile thanks to the high clay and dispersed to the soil matrix (QADIR et al., 1998). In cases where no hindrance occurs in the soil may be leached freely, there is the possibility of loss of nutrients such as K, together with the leaching blade. Moreover, the recovery of soils with gypsum and irrigation is costly, hindering its application for producers with low income (subsistence farmers).

Thus, the soluble salts using Phytoextraction halophytes (plants that grow in situations of excess salts in the soil) is a low-cost alternative to recover the saline soils, non- aggressive to the environment. According to Qadir et al. (2007) phytoremediation is an efficient strategy for recovery saline-sodic soils with performance comparable to the use of chemical improvers.

Qadir et al. (2001) concluded that the recovery phytoextraction shows effects comparable to the application of plaster, barnyard manure or irrigation water treated with sulfuric acid. They also observed that the phytoremediation obtained cost of deploying and driving less than the cost invested to treatments with chemical improvers.

For the success of salt Phytoextraction in saline - sodic soils, the plants must be tolerant to excess salts and high biomass production in this condition. Furthermore, they must accumulate high salt content in the shoot, aiming to make possible the removal of salts with the harvest of plants.

3/7

Name of Applicant: 



The plants are halophytes adapted to high levels of salinity in the soil and are able to accumulate high amounts of salts in their tissues (Zhu, 2001). For these characteristics can be used for remediation of soil affected by salts (MIYAMOTO et al . , 1996)

Among the halophytes, the *Atriplex* genus comes up highlighting in semi -arid regions by its easy establishment, important protein support, constant production of fodder and good acceptability by cattle (Aganga et al., 2003). The *Atriplex nummularia* can be used as an important forage resource dietary supplementation of ruminants, thanks to its nutritional value (around 17% protein) and high digestibility (70%) , as well as being also used as an ornamental plant in landscaping and floriculture (MAIA et al . 2003; SILVA et al , 2003) and also presents soluble salts absorption rates reaching 1.15 t ha⁻¹ y⁻¹ (PORT et al., 2001).

2.1. The *Atriplex nummularia*

The Chenopodiaceae family comprises more than 100 genera and 1490 species including annual or perennial herbs and shrubs, sometimes timber (JOLY, 1997). These species are native in almost all over the world, but their occurrence is more pronounced in arid and saline areas, including mangroves, salt spray areas or marine rocks. Its distribution is spontaneous occurring on all continents and many islands. In addition, more genera are distributed in coastal and desert regions, and *Atriplex nummularia* of the species belonging to the genus.

Taxonomically this species has the following classification

- ✓ Kingdom: Eukaryota
- ✓ Division: Magnoliophyta
- ✓ Class: Magnoliopsida
- ✓ Order: Caryophyllales
- ✓ Family: Chenopodiaceae
- ✓ Genre : *Atriplex*
- ✓ Species: *A. nummularia* Lind

The *Atriplex nummularia* is a species from Australia that has adapted very well in the semi-arid regions of South America, particularly Argentina, Chile, and Brazil, in the Northeast. Among the Chenopodiaceae family species about 15 % of those interested in animal production, *Atriplex*

*Please sign all the pages on the bottom of right-hand corner.
* HANDWRITTEN FORMS will not be accepted

Req. No M12 004

nummularia is the saltbush, popular name given in Brazil to plants of the genus *Atriplex*, one of the most important as forage.

Yerba salt stands out for forage potential, constituting as an alternative food source, and can be incorporated into animal feed in the form of hay, and in order to ensure consumption and promote the neutralization of the salt, with the provision it must be combined with another type of feed (PORTO et al, 2001).

An important factor about the species of the genus *Atriplex*, is that many species are able to complete their life cycle in quite harmful environmental conditions such as drought, high temperatures and high salinity (RAMOS J. et al, 2004) *Atriplex* the plant genus are considered to be "authentic halophytes", or need salts (NaCl, KCl, MgCl NaSO₄ etc) in soil to complete its life cycle (OH Bonilla et al, 2000).

III. METHODOLOGY

For the materialization of this project, the experiment will be conducted in University of greenhouse in pots with soil 8kg, filled with samples of the 0-20 cm layer of a Fluvisol sodium saltic that may be one from an area with salinization processes and well advanced sodification and with similar climatic conditions of the area south of Mozambique.

Soil samples will be taken before planting the seedlings and the harvest time the plant *Atriplex nummularia*. For soil samples, salinity is measured by the electroconductivity of the extract of the saturated paste, obtained by pressure as Claessen recommendations (1997). They will also be made quantitative estimates of accumulated salts in the plant tissues, through the determination of total ash, following recommendations Silva (1990).

The material will be submitted to nitroperchloric digestion to determine the levels of Na by flame photometry. The ability of plants to extract Na⁺ will be evaluated by the transfer factor (TF), defined as the ratio between the concentration of Na in the leaves and soil (SAEFL, 1998).

The experimental design to be used will be a randomized block, with a total of three blocks where each block will consist of four installments, in which will be planted 16 seedlings in each. Seedlings to use in the experiment will be obtained by vegetative propagation through cuttings process. The

577

Name of Applicant: _____

Req. No 112004

mother plants from which cuttings to produce seedlings will be taken, will come from a Germplasm Bank Location. For rooting substrate used is a mixture of dried leaves or small twigs and earthworm compost (humus) in plastic cups with a capacity of 300-350 cm³. There will be four reviews of growth and Na contents made in plant and soil, at 50, 80, 110 and 140 days after transplanting of *Atriplex nummularia*. The water used for irrigation in this experiment are artificially prepared so as to provide electrical conductivity for the recommended treatment using the distillation with addition of CaCl₂.2H₂O and NaCl salts, being the predominant salt in the areas affected in Mozambique.

The results will be submitted to the premise of the normal distribution test, and then made analysis of variance by F test and the comparison between the means by Tukey test using SISVAR software version 3.1 (FERREIRA, 2000).

IV. BIBLIOGRAPHIC REFERENCE

Aganga, A.A.; MTHETHO, JK & TSHWENYANE, S. *Atriplex nummularia* (Old Man Saltbrush): The potential forage crop for arid regions of Botswana. *Pakistan J. Nutr.*, 2: 72-75, 2003.

BONILLA OH, TABOSA JN, GALINDO FAT, AZEVEDO NETO AD. *Atriplex* - New forage for salinated soils in semi-arid northeast. Recife: IPA, 2000; P. 25

CLAESSEN, M.E.C, Org. Manual of soil analysis methods. 2. rev Ed. Current, Rio de Janeiro: EMBRAPA - CNPS, 1997. 212p. (EMBRAPA-CNPS. Document 1). FERREIRA, D. F. SISVAR system for statistical analysis: guidance manual. Lavras, Federal University of Lavras, Department of Mathematical Sciences, 2000. 37 p.

HORNEY, R.D.; TAYLOR, B.; MUNK, D.S.; ROBERTS, B.A.; LESCH, S.M. & PLANT, R.E. Development of practical site-specific management methods for reclaiming salt-affected soil. *Comp. Electr. Agric.*, 46:379-397, 2005.

JOLY AB. Botany: Introduction to plant taxonomy. 4th ed. Editora Nacional, Sao Paulo; 1977
KEIFFER, C.H. & UNGAR, I.A. Germination and establishment of halophytes on brine-affected soils. *J. Appl. Ecol.*, 39:402-415, 2002.

MIYAMOTO, S.; GLENN, E.P. & OLSEN, M.W. Growth, water use and salt uptake of four

6/7

Name of Applicant:

[REDACTED]

*Please sign all the pages on the bottom of right-hand corner.
* HANDWRITTEN FORMS will not be accepted

Reg. No 17 004

halophytes irrigated with highly saline water. *J. Arid Environ.* 32:141-159, 1996.

PORTO, e.r.; AMORIM, M.C.C. & SILVA JUNIOR, L.G.A. Use of brackish water desalination waste for saltbush Irrigation (*Atriplex nummularia*), *R. Bras. Eng. Agric. Amb*, 5: 111-114, 2001.

QADIR, M.; QURESHI, R.H. & AHMAD, N. Horizontal flushing: A promising ameliorative technology for hard saline-sodic and sodic soils. *Soil Till. es*, 45:119-131, 1998.

QADIR, M.; GHAFOR, A. & MURTAZA, G. Use of salinesodic waters through phytoremediation of calcareous saline-sodic soils. *Agric. Water Manag*, 50:197-210, 2001.

QADIR, M.; OSTER, J.D.; SCHUBERT, S.; NOBLE, A.D. & SAHRAWAT, K.L. Phytoremediations of sodic and salinesodic soils. *Adv. Agron.*, 96:197-247, 2007.

RAMOS J, LOPEZ MJ, BENLLOCH M. Effect of NaCl and KCl salts on the growth and solute accumulation of the halophyte *Atriplex nummularia*. *Plant and Soil*. 2004; (258): p. 163-68.

RIBEIRO, M.R. ; FREIRE, F. J. & MONTENEGRO, A.A.A. halomórficos soils in Brazil: occurrence, genesis, classification, use and sustainable management. In: CURI, N; MARQUES, J. J. ; WILLIAM, L.R.G. ; LIMA, J. M. ; LOPES, A.S. & ALVAREZ V. , V.H. , eds . *Topics in soil science*. Viçosa, Brazilian Society of Soil Science, 2003. v.3. p.165-208 .

RICHARDS, L. A. *Diagnosis and Improvement of Saline and alkali Soils*. Washington DC<US Department of Agriculture, 1954. p. 160. (USDA Agricultural Handbook,60).

SILVA, D.J. *Food analysis: chemical and biological methods*. 2.ed. Viçosa : UFV, 1990. 185p. y

ZHU, J.K. Plant salt tolerance. *Trends Plant Sci.*, 6:66-71, 2001.

By: José Mateus Nampunda Júnior

7/7

Name of Applicant: [REDACTED]

[REDACTED]

32

AFFIDAVIT



A QUEM POSSA INTERESSAR

Eu, [redacted] Tradutor Ajuramentado e Intérprete, Moçambicano, devidamente autorizado pelo Tribunal Judicial da Província de Maputo, residente na Matola, declaro por este meio, para todos efeitos, que a tradução em anexo – feita de Português para Inglês, composta por 1 página devidamente certificada pelo carimbo que uso oficialmente, é do meu inteiro conhecimento. Declaro ainda que o documento traduzido contém o mesmo teor que o documento original, e tem o mesmo vigor e efeito.

O documento traduzido é uma Certificado de Conclusão do Curso emitido pela Universidade Eduardo Mondlane.

TO WHOM IT MAY CONCERN

I, [redacted] the undersigned Sworn Translator and Interpreter, Mozambican, duly authorized by the Judicial Court of Maputo Province, resident of Matola, hereby declare, for all intents and purposes, that the attached translation from *Portuguese language to English language*, which consists of 1 page, fully certified with the stamp I use, is to the best of my knowledge and belief. I further declare that the contents of the translated document are the same as the contents of the original document, and they bear the same force and effect.

The translated document is a Course Completion Certificate issued by Eduardo Mondlane University.

Signed under my hand and seal
[redacted]
(Tradutor Ajuramentado e Intérprete)
[redacted]
Sworn Translator and interpreter
MOZ

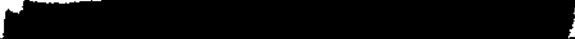
[redacted] Sworn Translator and Interpreter – Contact Details: Cell [redacted]
– E-mail: [redacted] Maputo, Mozambique

Declaration of desired university placement

- 1) All applicants are required to specify first, second and third choice of Universities by reference to "2-(1): University Information for the Applicants".

Priority	Graduate School Code	Name of Selected University	Graduate School	Course/Program/Degree	Supervisor of choice
1	4801G	TOTTORI UNIVERSITY	GRADUATE SCHOOL OF SUSTAINABILITY SCIENCE (DEPARTMENT OF DRYLAND SCIENCE)	SPECIAL PROGRAM IN ENGLISH MASTER OF AGRICULTURE	Dr. Sadahiro YAMAMOTO
2	1001C	THE UNIVERSITY OF TOKYO	GRADUATE SCHOOL OF AGRICULTURAL AND LIFE SCIENCES	DEPARTMENT OF GLOBAL AGRICULTURAL SCIENCES	Dr. Kenzō ODAKA
3	2601A	UYEUNOMIYA UNIVERSITY	GRADUATE SCHOOL OF REGIONAL DEVELOPMENT AND CREATIVITY	GRADUATE PROGRAM IN AGRICULTURAL & RURAL ECONOMICS	

Name of Applicant: 

Signature: 

M2004



UNIVERSIDADE EDUARDO MONDLANE

..... [Redacted] Sistemas de Informação

pela Universidade de Oslo, Director do Registo Académico da Universidade Eduardo

Mondlane, **CERTIFICO**, de harmonia com despacho exarado em requerimento que

fica arquivado nesta Direcção, que [Redacted] R, filho de

José Mateus Nampunda e de Cristina José Cossa, natural de Xai-Xai, distrito de Xai-Xai,

Província de Gaza, concluiu nesta Universidade a Licenciatura em **PRODUÇÃO AGRÍ-**

COLA, no dia seis de Dezembro do ano dois mil e dez, com a classificação final de

TREZE VALORES.....

..... E por ser verdade, mandei passar a presente certidão que assino e autentico com

o selo branco desta Universidade.....

..... E, eu [Redacted], funcionária do quadro desta mesma

Universidade a extraí e conferi.....

..... Direcção do Registo Académico da Universidade Eduardo Mondlane em Maputo

23 de Junho de 2011.....

[Handwritten signature]

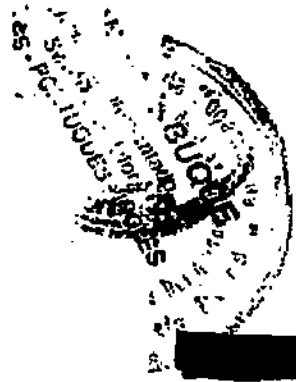
PRIMEIRO DE ... DA BEIRA

É fotocópia ... apresentado

16 19 1990

[Handwritten signature]

...	1713	2800 ml
...
Soma	...	...
Selo de Verbo	...	...
Cofre	...	...
Despesa	...	...
Registo n.º	...	...



9

EDUARDO MONDLANE UNIVERSITY

[REDACTED] Doctorate in Information Systems by the University of Oslo, Director of the Academic Registrar's Office of Eduardo Mondlane University, hereby, **CERTIFIES**, in accordance with the registry filed in this Office, that [REDACTED] [REDACTED] n to José Mateus Nampunda and Cristina José Cossa, from Xai-Xai, district of Xai-Xai, Gaza Province, completed at this institution the Bachelors of **AGRICULTURAL PRODUCTION**, on December sixth of two thousand and ten, with the final mark of **THIRTEEN**.....

Attesting to the veracity of this information, I authorized the issue of this certificate which I sign and authenticate with the steel stamp of this University.....

And, I, [REDACTED] office staff of this University extracted and checked it

The Academic Registrar's Office of Eduardo Mondlane University in Maputo

June 23, 2011

Signed (illegible)

PRIMEIRO CARTÃO NOTICIAL DA BEIRA

É fotocópia exatíssima do original que me foi apresentado
está conforme o original

Beira, aos 16/11/2018

[Handwritten signature]

CONTAS

Artigo n.º 113	2800	ml
" " "	2800	ml
" " "	2800	ml
Saldo de Verba	9300	ml
Despesa	9300	ml
Registo n.º	9300	ml



AFFIDAVIT

A QUEM POSSA INTERESSAR

Eu, [redacted] Tradutor Ajuramentado e Intérprete, Moçambicano, devidamente autorizado pelo Tribunal Judicial da Província de Maputo, residente na Matola, declaro por este meio, para todos efeitos, que a tradução em anexo – feita de Português para Inglês, composta por 2 páginas devidamente certificadas pelo carimbo que uso oficialmente, é do meu inteiro conhecimento. Declaro ainda que o documento traduzido contém o mesmo teor que o documento original, e tem o mesmo vigor e efeito.

O documento traduzido é uma Certificado de Cadeiras Feitas emitido pela Universidade Eduardo Mondlane.

TO WHOM IT MAY CONCERN

I, [redacted] the undersigned Sworn Translator and Interpreter, Mozambican, duly authorized by the Judicial Court of Maputo Province, resident of Matola, hereby declare, for all intents and purposes, that the attached translation from *Portuguese language to English language*, which consists of 2 pages, fully certified with the stamp I use, is to the best of my knowledge and belief. I further declare that the contents of the translated document are the same as the contents of the original document, and they bear the same force and effect.

The translated document is a Subject Certificate issued by Eduardo Mondlane University.

Signed under my hand and seal

[redacted]
(Translator Signature)

[redacted]
Sworn translator and interpreter

conheço a assinatura, [redacted]
e certifico que o [redacted] signatário tem
[redacted] poderes para este ato.
Maputo... 05/12/2016
Seq. N. 879
[Handwritten signature]

[redacted] – Sworn Translator and Interpreter – Contact Details: Cel [redacted]
E-mail: [redacted] Maputo, Mozambique



9

EDUARDO MONDLANE UNIVERSITY

██████████, Doctorate in Information Systems by the University of Oslo, Director of the Academic Registrar's Office of Eduardo Mondlane University, hereby, **CERTIFIES**, in accordance with the registry filed in this Office, that ██████████
██████████ born to ██████████ ██████████ from Xai-Xai, district of Xai-Xai, Gaza Province, successfully completed the following subjects of the Bachelors of **AGRICULTURAL PRODUCTION**, taken at this University:

Year	Level	Subject	Mark
2008	I	Mathematical Analysis	15 (fifteen)
2008	I	Physics	12 (twelve)
2008	I	Informatics I	17 (seventeen)
2008	I	English I	15 (fifteen)
2008	I	Research Methodology	14 (fourteen)
2008	I	General Chemistry	14 (fourteen)
2008	I	General Agriculture	10 (ten)
2008	I	English II	13 (thirteen)
2008	I	Agrometeorology	14 (fourteen)
2008	I	Algebra and Optimization	14 (fourteen)
2008	I	Sciences and Soil Fertility	14 (fourteen)
2008	I	Vegetal Physiology	10 (ten)
2008	I	Introduction to Economics	13 (thirteen)
2008	I	Informatics II	12 (twelve)
2008	I	Production Practices I	12 (twelve)
2008	I	Production Practices II	12 (twelve)
2008	I	Biology	14 (fourteen)
2008	III	Agricultural Practices II	12 (twelve)
2009	I	Agricultural Botany	12 (twelve)
2009	II	Irrigation and Drainage	10 (ten)
2009	II	English III	15 (fifteen)

2009	II	English IV	15 (fifteen)
2009	II	Crops Production I	10 (ten)
2009	II	Agrohydrology	12 (twelve)
2009	II	Agrarian Equipment	15 (fifteen)
2009	II	Energy Sources In Agriculture	12 (twelve)
2009	II	Fruticulture	12 (twelve)
2009	II	Phytopathology	14 (fourteen)
2009	II	Agricultural Plagues	16 (sixteen)
2009	III	Horticulture	13 (thirteen)
2009	III	Crops Production II	11 (eleven)
2009	III	Pastures and Fodders	12 (twelve)
2009	III	English V	15 (twelve)
2009	III	Agricultural Practices III	13 (twelve)
2010	II	Geographic Information Technology	12 (twelve)
2010	III	Enterprise and Business Management	15 (fifteen)
2010	III	Rural Extension	16 (sixteen)
2010	III	Weed Control	10 (ten)
2010	III	Statistics and Agricultural Experiments	14 (fourteen)
2010	III	Rural Planning and Development	12 (twelve)
2010	III	Agrarian Products Conservation Technology	15 (fifteen)
2010	III	Improvement of Plants	14 (fourteen)
2010	III	Agroforestry Systems	16 (sixteen)
2010	III	Course's Final Paper	14 (fourteen)



Attesting to the veracity of this information, I authorized the issue of this certificate which I sign and authenticate with the steel stamp of this University.....

And, [redacted] office staff of this University extracted and checked It

The Academic Registrar's Office of Eduardo Mondlane University in Maputo.....

June 23, 2011.....

Signed (illegible)

16/11

PC IVTA
 3
 2800

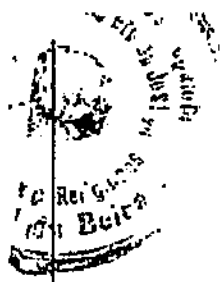


UNIVERSIDADE EDUARDO MONDLANE

906

..... [redacted] Doutorado em Sistemas de Informação
pela Universidade de Oslo, Director do Registo Académico da Universidade Eduardo
Mondlane, CERTIFICO, de harmonia com despacho exarado em requerimento que
fica arquivado nesta Direcção, que [redacted] lho
de José Mateus Nampunda e de Cristina José Cossa, natural de Xai-Xai, distrito de
Xai-Xai, Província de Gaza, obteve aprovação nas seguintes disciplinas do Curso de
Licenciatura em PRODUÇÃO AGRÍCOLA, efectuadas nesta Universidade:.....

Ano	Nível	Disciplina	Classificação
2008	I	Análise Matemática	15 (quinze valores)
2008	I	Física	12 (doze valores)
2008	I	Informática I	17 (dezasete valores)
2008	I	Inglês I	15 (quinze valores)
2008	I	Metodologia de Investigação	14 (catorze valores)
2008	I	Química Geral	14 (catorze valores)
2008	I	Agricultura Geral	10 (dez valores)
2008	I	Inglês II	13 (treze valores)
2008	I	Agrometeorologia	14 (catorze valores)
2008	I	Álgebra e Optimização	14 (catorze valores)
2008	I	Ciências e Fertilidade do Solo	14 (catorze valores)
2008	I	Fisiologia Vegetal	10 (dez valores)
2008	I	Introdução à Economia	13 (treze valores)
2008	I	Informática II	12 (doze valores)
2008	I	Práticas de Produção I	12 (doze valores)
2008	I	Práticas de Produção II	12 (doze valores)
2008	I	Biologia	14 (catorze valores)
2008	III	Práticas Agrícolas II	12 (doze valores)
2009	I	Botânica Agrícola	12 (doze valores)
2009	II	Rega e Drenagem	10 (dez valores)



2009	II	Inglês III	15 (quinze valores)
2009	II	Inglês IV	15 (quinze valores)
2009	II	Produção de Culturas I	10 (dez valores)
2009	II	Agrohidrologia	12 (doze valores)
2009	II	Equipamento Agrário	15 (quinze valores)
2009	II	Fontes de Energia na Agricultura	12 (doze valores)
2009	II	Fruticultura	12 (doze valores)
2009	II	Fitopatologia	14 (catorze valores)
2009	II	Pragas Agrícolas	16 (dezasseis valores)
2009	III	Horticultura	13 (treze valores)
2009	III	Produção de Culturas II	11 (onze valores)
2009	III	Pastos e Forragens	12 (doze valores)
2009	III	Inglês V	15 (quinze valores)
2009	III	Práticas Agrícolas III	13 (treze valores)
2010	II	Tecnologia de Informação Geográfica	12 (doze valores)
2010	III	Gestão de Empresas e Negócios	15 (quinze valores)
2010	III	Extensão Rural	16 (dezasseis valores)
2010	III	Controlo de Infestantes	10 (dez valores)
2010	III	Estatística e Experimentos Agrícolas	14 (catorze valores)
2010	III	Planeamento e Desenvolvimento Rural	12 (doze valores)
2010	III	Tecnologia de Conservação dos Produtos Agrários	15 (quinze valores)
2010	III	Melhoramento de Plantas	14 (catorze valores)
2010	III	Sistemas Agro- florestais	16 (dezasseis valores)
2010	III	Trabalho de Culminação do Curso	14 (catorze valores)

..... E por ser verdade, mandei passar a presente certidão que assino e autentico com o selo branco desta Universidade.....

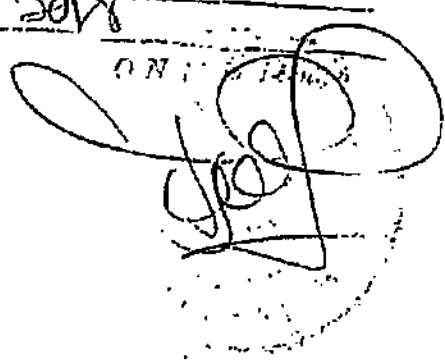
..... E, eu [redacted], funcionária do quadro desta mesma Universidade a extraí e conferi.....

..... Direcção do Registo Académico da Universidade Eduardo Mondlane em Maputo

23 de Junho de 2011.....

[redacted signature]

PRIMEIRO... NOTARIAL DA REIRA
É fotocópia... original que me foi apresentado
está em...

Boleto nº 16
M... 2017
D N ...


Nº 3 ... 2800 ml
... 2800 ml
S 10 de Ve 5 ...
Cont ...
Total ... 2800 ml
Registro nº, 2017 ml

IELTS™

Test Report Form

ACADEMIC

NOTE Admission to undergraduate and post graduate courses should be based on the ACADEMIC Reading and Writing Modules.
GENERAL TRAINING Reading and Writing Modules are not designed to test the full range of language skills required for academic purposes.
It is recommended that the candidate's language ability as indicated in this Test Report Form be re-assessed after two years from the date of the test.

Centre Number **ZA001** Date **25/MAR/2017** Candidate Number **011203**

Candidate Details

Family Name [REDACTED]
First Name [REDACTED]
Candidate ID [REDACTED]

Date of Birth **23/02/1988** Sex (M/F) **M** Scheme Code **Private Candidate**
Country or Region of Origin [REDACTED]
Country of Nationality **MOZAMBIQUE**
First Language **PORTUGUESE**

Test Results

Listening [REDACTED] Reading [REDACTED] Writing [REDACTED] Speaking [REDACTED] Overall Band Score [REDACTED] CEFR Level [REDACTED]

Administrator Comments

[REDACTED]

Centre stamp [REDACTED] Validation stamp [REDACTED]

Administrator's Signature [REDACTED]

Date **07/04/2017**

Test Report Form Number [REDACTED]

