



**Case study from the African Baobab Alliance (ABA):
A successful pan-African approach to biotrade**

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GeoMedia/GIZ

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Baobab – A Successful Pan- African Approach to BioTrade

Gus Le Breton
African BioTrade Festival
Sept 2023



AFRICAN
BAOBAB
ALLIANCE

About Me



WHO WE ARE

We are an Alliance of Baobab producers, traders and brands from around the world.

We are united in a common desire to develop the baobab industry.

We believe a strong baobab industry will create new economic opportunities for low-income rural communities in Sub-Saharan Africa.



TOTAL NUMBER OF MEMBERS

46



Breakdown by Category

Producers	20
Distributors	5
Manufacturers	2
Brands	12
Supporters	7



Breakdown by Region

West Africa	10
East Africa	4
Southern Africa	10
Europe/Middle East	17
North America	5



Countries represented

Abu Dhabi

Austria

Benin

Burkina Faso

Canada

France

The Gambia

Germany

Ghana

Guinea

India

Ireland

Kenya

Malawi

Mozambique

Namibia

Niger

Senegal

South Africa

Switzerland

UK

USA

Zimbabwe



WHY BAOBAB?

- Other BioTrade value chains in Africa that have a much bigger footprint (e.g. Gum Arabic, Shea Butter, Argan Oil)
- Most of these value chains have grown “organically”
- Baobab was the first BioTrade value chain to be deliberately and systematically developed for the benefits to smallholders in Africa



COMMERCIAL PRODUCTS FROM BAOBAB

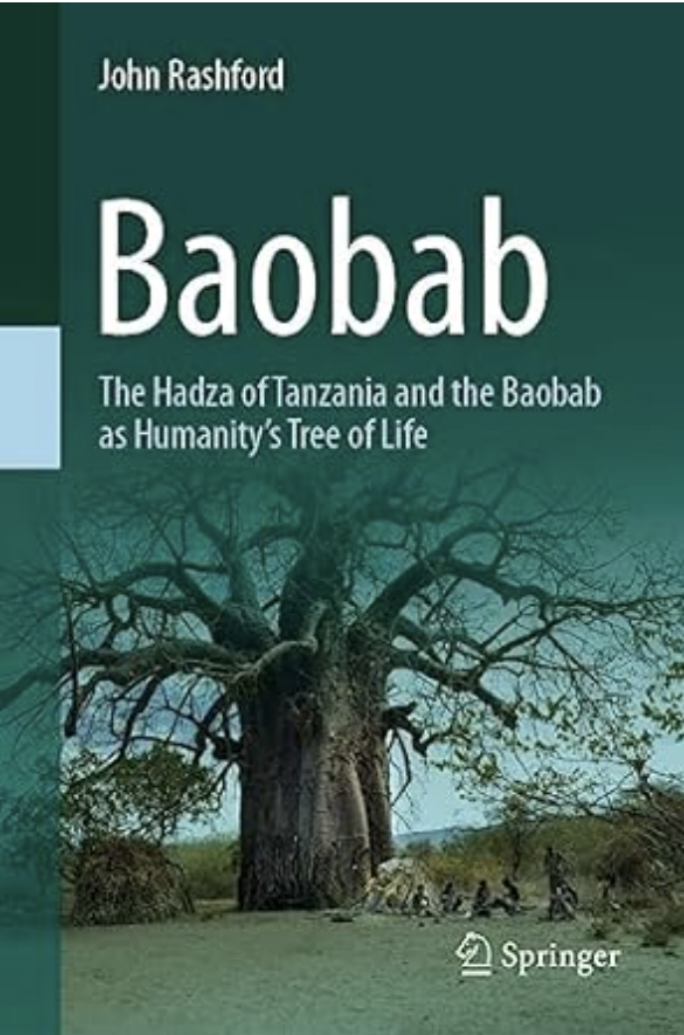
- Powder
- Seed oil
- Funicle
- Leaves
- By-products
 - Shells
 - Seedcake



EARLY COMMERCIAL DEVELOPMENT




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Roll over image to zoom in

Read sample

Baobab: The Hadza of Tanzania and the Baobab as Humanity's Tree of Life Kindle Edition

by [John Rashford](#) (Author) | Format: Kindle Edition

[See all formats and editions](#)

Kindle
\$43.74 - \$158.93

Read with Our **Free App**

Hardcover
\$167.29

1 Used from \$141.27
6 New from \$136.33

Modern humans, descendants of a founding population that separated from chimpanzees some five to eight million years ago, are today the only living representative of a branching group of African apes called hominins. Because of its extraordinary size and shape, the baobab (*Adansonia digitata* L.) has long been identified as the most striking tree of the mosaic savanna, the landscape generally regarded as the environment of hominin evolution. This book makes the case for identifying the baobab as the tree of life in the hunter-gatherer adaptation that was the economic foundation of hominin evolution. The argument is based on the significance of the baobab as a resource-rich environment for the Hadza of Tanzania.

✓ [Read more](#)

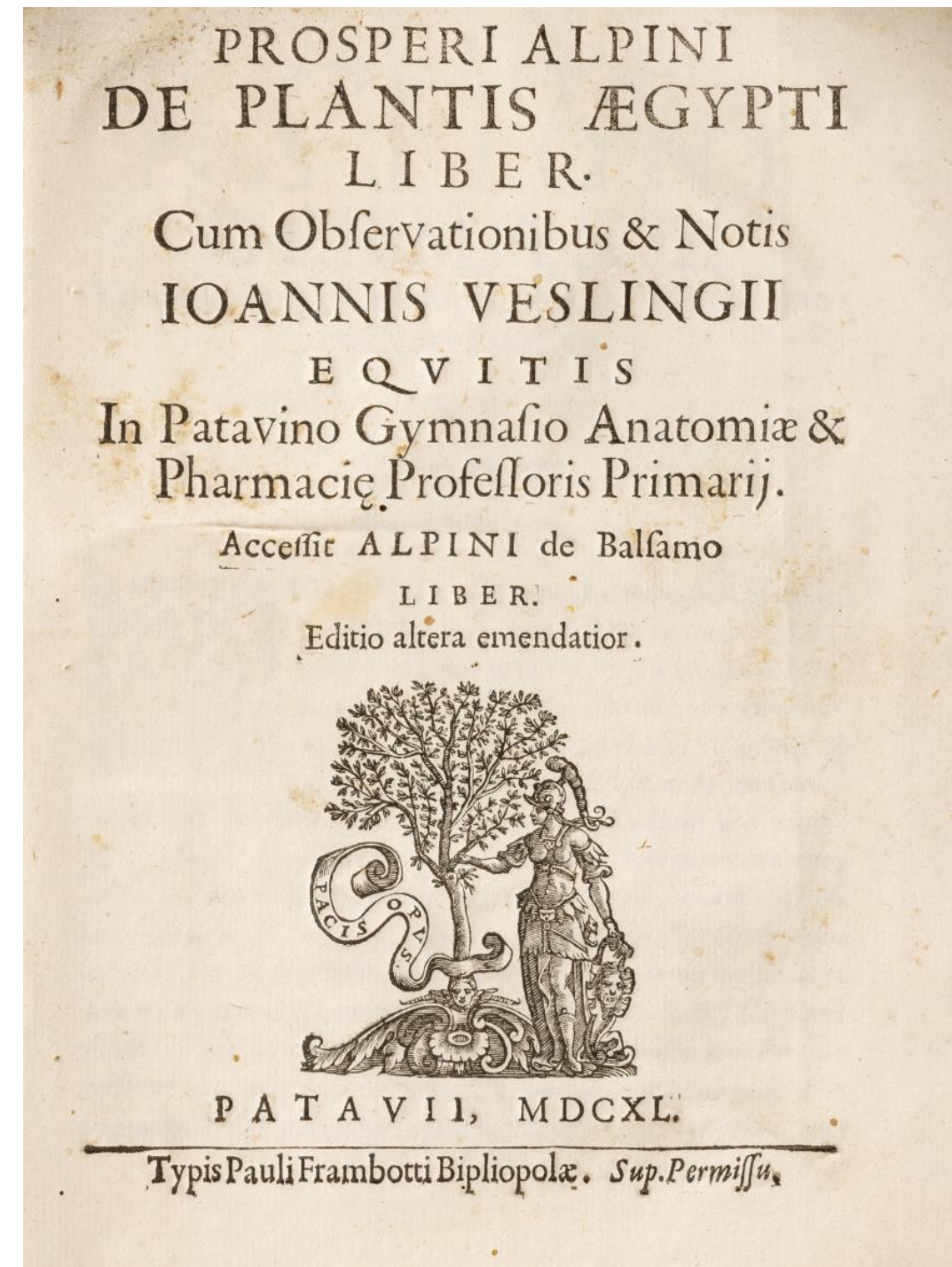
ISBN-13	Sticky notes	Publisher	Publication date	Language
 978-3031264696	 On Kindle Scribe ▾	 Springer	 June 28, 2023	 English

Read with the free Kindle apps (available on iOS, Android, PC & Mac), Kindle E-readers and on Fire Tablet devices [supported devices](#) ▾

Baobab fruit found in Ancient Egyptian tombs



First brought to Europe in
1580s by Prospero Alpini

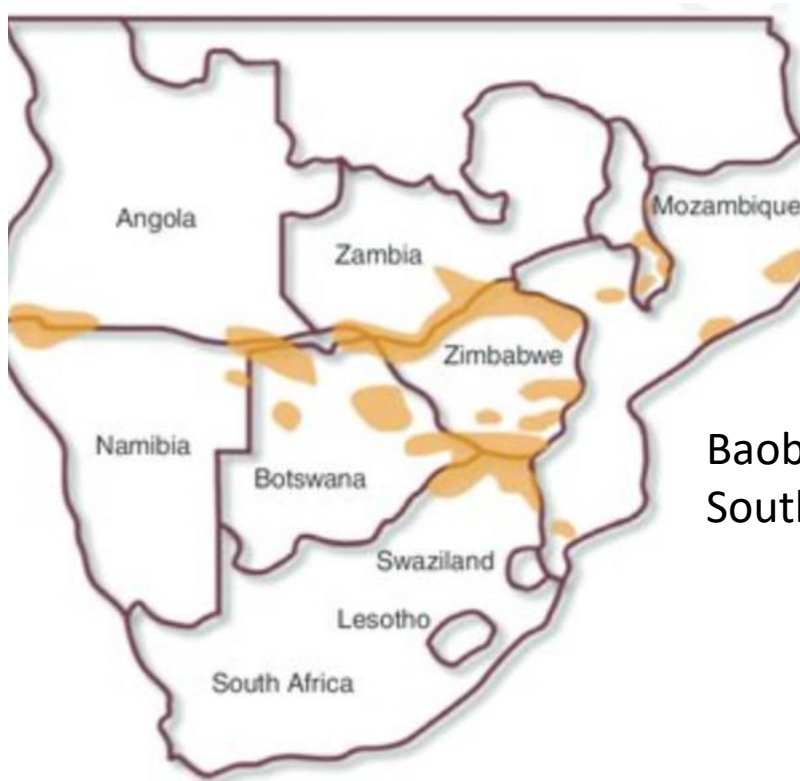


Initial commercial development in 1990s





First milestone was the formation of PhytoTrade Africa in 2001



Baobab distribution
Southern Africa



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ALLIANCE



Arthur Stevens RIP



LOCAL vs EXPORT MARKETS

- Strong stigma against local products within Africa
- Decision to focus on export
- Need to overcome regulatory barriers to export market entry



EARLY GROWTH

- Initial focus on cosmetic oil
- Lower regulatory hurdles to export market
- But relatively small volumes



EARLY GROWTH

- Biggest growth potential with powder
- But major regulatory hurdles to overcome



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EU NOVEL FOODS

Novel food

4 minutes read

Share:   

New kinds of food arrive on our table all the time. Increasing globalisation, ethnic diversity and the search for new sources of nutrients are the key drivers.

The notion of “novel food” is not new. Throughout history new types of food, food ingredients or ways of producing food have found their way to Europe from all corners of the globe. Bananas, tomatoes, pasta, tropical fruit, maize, rice, a wide range of spices – all originally came to Europe as novel foods. Among the recent arrivals are chia seeds, algae-based foods, baobab fruit and physalis (Peruvian groundcherry or Cape gooseberries)

EU NOVEL FOODS APPROVAL

- Process took 4 years (2004-2008), and cost approx. US \$0.5 million
- Once attained, followed up quickly by US FDA GRAS approval




The tree of life (and its super fruit)

The medicinal properties of the baobab fruit are the stuff of African legend. Claire Soares says it also tastes great and, thanks to an EU ruling, we will all be able to try some soon

SHARE



Thursday 17 July 2008 00:00 •  Comments











industry novel foods approval

id for thus novel fruit, which has
couple of years. *"We do anticipate a*
Dr Lucy Welford from PhytoTrade
products trade association that
port their dried baobab fruit, told
ustainable harvesting potential of baobab
n dollars, according to a [report](#) by Ben
il Resources Institute (NRI) for the Regional
: (RTFP). *"Baobab can be offered*
quantities," Bennett told
ovel foods approval] is wonderful news for
products that could come out of Africa," he
to show in Geneva. Bismarck Brada

nutritious, and might be imbued with the souls of dead chieftains. If you live in Europe, it could be headed to a smoothie near you.

The baobab tree -- thick-trunked icon of the African bush -- does not look appetising. But European firms may soon be using the pulp of its fruit as a flavouring for cereal bars or drinks, after it won European Commission approval as a novel food.

The decision in July has planted the gourd-like fruit on the product development radar of food processors. Trade and development experts hope that move -- a landmark for a wild-harvested

DEMAND CREATION

- Regulatory approval opened the door for sales, but not enough to actually sell the product
- Focus now shifted to a full-scale demand creation programme in target markets





Key Milestones

Pepsi launches Baobab Cola in Japan

22-Jun-2010 - Last updated on 16-Mar-2017 at 03:42 GMT



RELATED TAGS: Africa

Pepsi has launched a limited release version of Pepsi Baobab in Japan to join its exotic range that includes Pepsi Cucumber.



Baobab is said to have weight management benefits but the product marketing is less specific, stating, *"a cola with a liberating and refreshing flavor, taking as its motif the baobab tree that towers over the vast African continent."*

Baobab won EU novel foods approval in 2008 and grows primarily in South Africa, Botswana, Namibia, Mozambique and Zimbabwe.

Its nutrient profile includes vitamin C, riboflavin, niacin, pectin and citric, malic and succinic acids, while the oil also contains the vitamins A, D and E.

Key Milestones



Image from Aduna

Key Milestones

Coca-Cola turns to baobab in new low calorie soft drink brand

By Rachel Arthur [✉](#)

18-Jul-2016 - Last updated on 01-Aug-2016 at 08:19 GMT



Key Milestones



Key Milestones



Key Milestones

[Dairy, eggs & chilled](#) > [Fruit juice & drinks](#) > [All fruit juice & smoothies](#)



Innocent Plus Inner Winner Dragonfruit, Lychee & Baobab Juice 750ml



[Write a review](#)

CHILLED

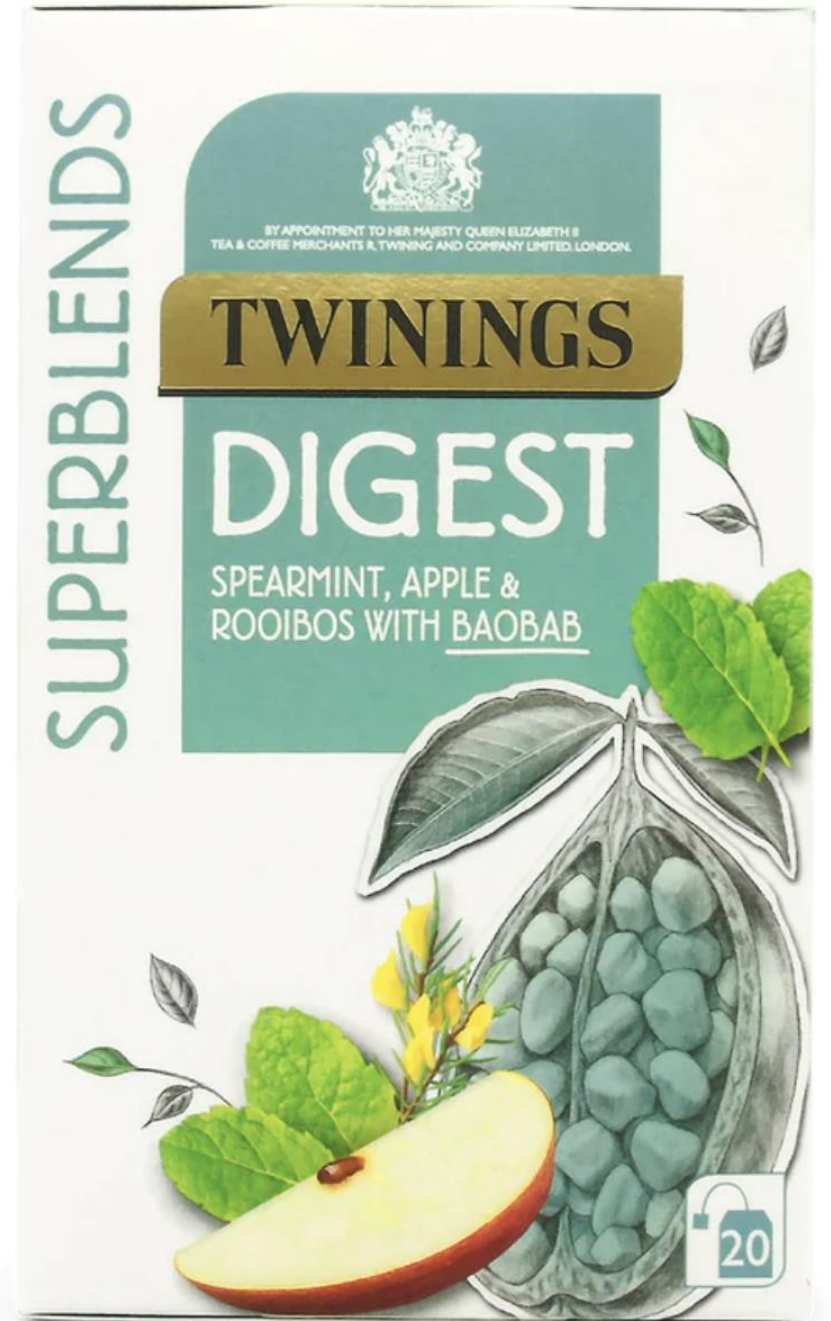
A Blend of Fruit Juices, Crushed Fruit, Apple Water, Chicory Root Extract, Baobab Puree + Added Vitamins

£3.80 51p / 100ml

Add



Key Milestones

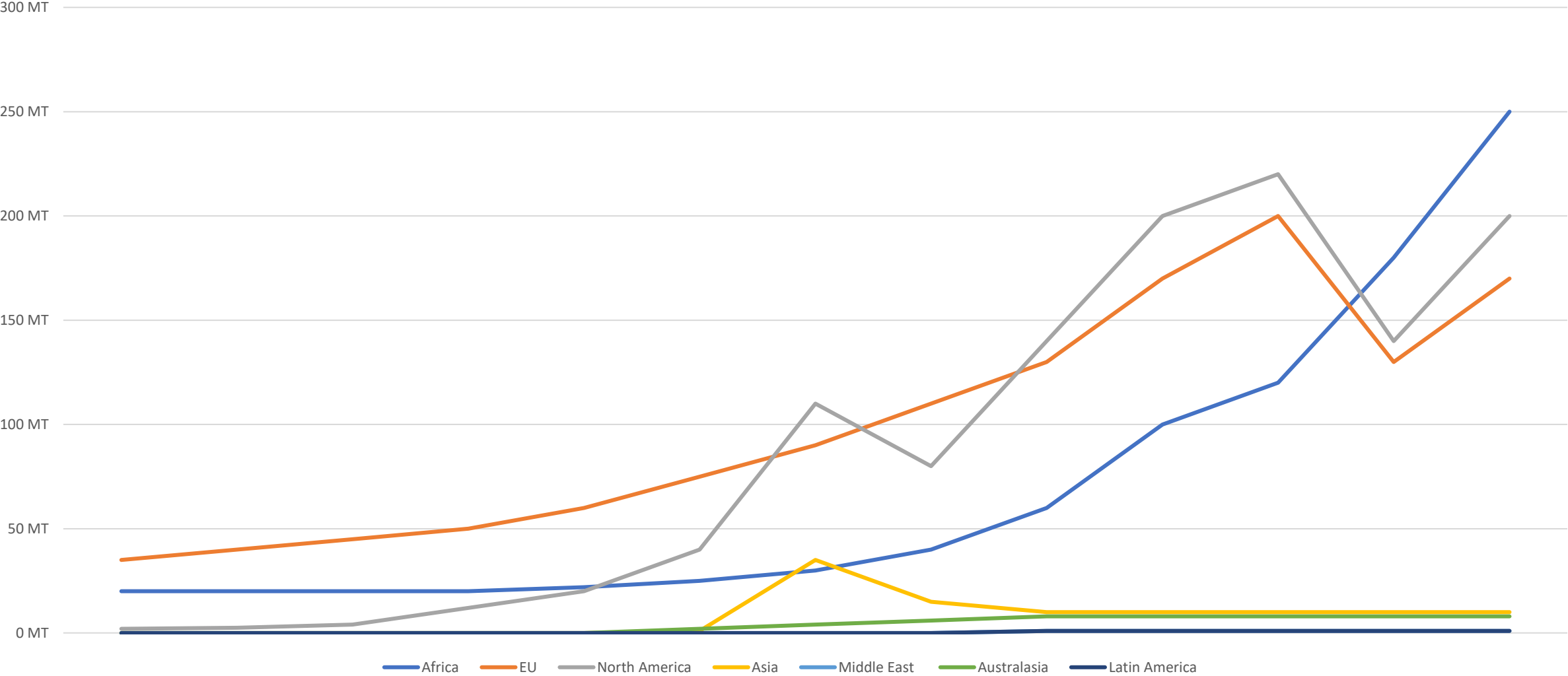


Key Milestones



	Estimated Size of Wholesale Baobab Powder Market 2010 - 22																							
Demand																								
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022											
Africa	20 MT	20 MT	20 MT	20 MT	22 MT	25 MT	30 MT	40 MT	60 MT	100 MT	120 MT	180 MT	250 MT											
EU	35 MT	40 MT	45 MT	50 MT	60 MT	75 MT	90 MT	110 MT	130 MT	170 MT	200 MT	130 MT	170 MT											
North America	2 MT	3 MT	4 MT	12 MT	20 MT	40 MT	110 MT	80 MT	140 MT	200 MT	220 MT	140 MT	200 MT											
Asia	0 MT	0 MT	0 MT	0 MT	0 MT	1 MT	35 MT	15 MT	10 MT	10 MT	10 MT	10 MT	10 MT											
Middle East	0 MT	0 MT	0 MT	0 MT	0 MT	0 MT	0 MT	0 MT	1 MT	1 MT	1 MT	1 MT	1 MT											
Australasia	0 MT	0 MT	0 MT	0 MT	0 MT	2 MT	4 MT	6 MT	8 MT	8 MT	8 MT	8 MT	8 MT											
Latin America	0 MT	0 MT	0 MT	0 MT	0 MT	0 MT	0 MT	0 MT	1 MT	1 MT	1 MT	1 MT	1 MT											
TOTAL	57 MT	63 MT	69 MT	82 MT	102 MT	143 MT	269 MT	251 MT	350 MT	490 MT	560 MT	470 MT	640 MT											
Percentage increase from previous year	10%		10%		19%		24%		40%		88%		-7%		39%		40%		14%		-16%		36%	
Average Producer Price per kg	US\$ 12	US\$ 12	US\$ 11	US\$ 10	US\$ 9	US\$ 9	US\$ 8	US\$ 8	US\$ 8	US\$ 7	US\$ 6	US\$ 5	US\$ 5											
TOTAL VALUE OF MARKET FOR RAW POWDER (\$000)	US\$ 684	US\$ 750	US\$ 759	US\$ 820	US\$ 918	US\$ 1,287	US\$ 2,421	US\$ 2,008	US\$ 2,800	US\$ 3,430	US\$ 3,360	US\$ 2,350	US\$ 3,200											
Demand																								
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022											
TOTAL VALUE OF MARKET FOR RAW POWDER (\$000)	US\$ 684	US\$ 750	US\$ 759	US\$ 820	US\$ 918	US\$ 1,287	US\$ 2,421	US\$ 2,008	US\$ 2,800	US\$ 3,430	US\$ 3,360	US\$ 2,350	US\$ 3,200											

Baobab Powder Sales By Region 2010 - 2022



INTRODUCING THE ABA

- In 2018, a group of Baobab stakeholders got together and established the African Baobab Alliance
- Registered as a Non Profit Organisation in South Africa
- Run on a voluntary basis by the members





A large, gnarled baobab tree stands in a dry, open landscape. The sun is setting behind the tree, creating a dramatic silhouette and a warm, golden glow. The sky is a mix of orange and blue, and the ground is covered in dry grass and small shrubs.

Baobab (*Adansonia digitata*) Sector Development Plan

August 2021

IMPACT GOALS

- 1 million rural African women benefit from the annual sale of Baobab fruit;
- 10 million hectares of Baobab woodland are effectively conserved and managed;
- 300 million tonnes of carbon are sequestered every year in actively managed baobab woodland; and
- The Baobab industry is worth over US\$1 billion/yr to Africa.



Objectives

To promote the growth of the baobab industry for the benefit of baobab harvesters across Africa



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OUR OBJECTIVES

- To grow the demand for baobab in local and international food and cosmetic markets.
- To improve the competitiveness and sustainability of the baobab industry.
- To promote the adoption of common quality practices and standards across the baobab industry.



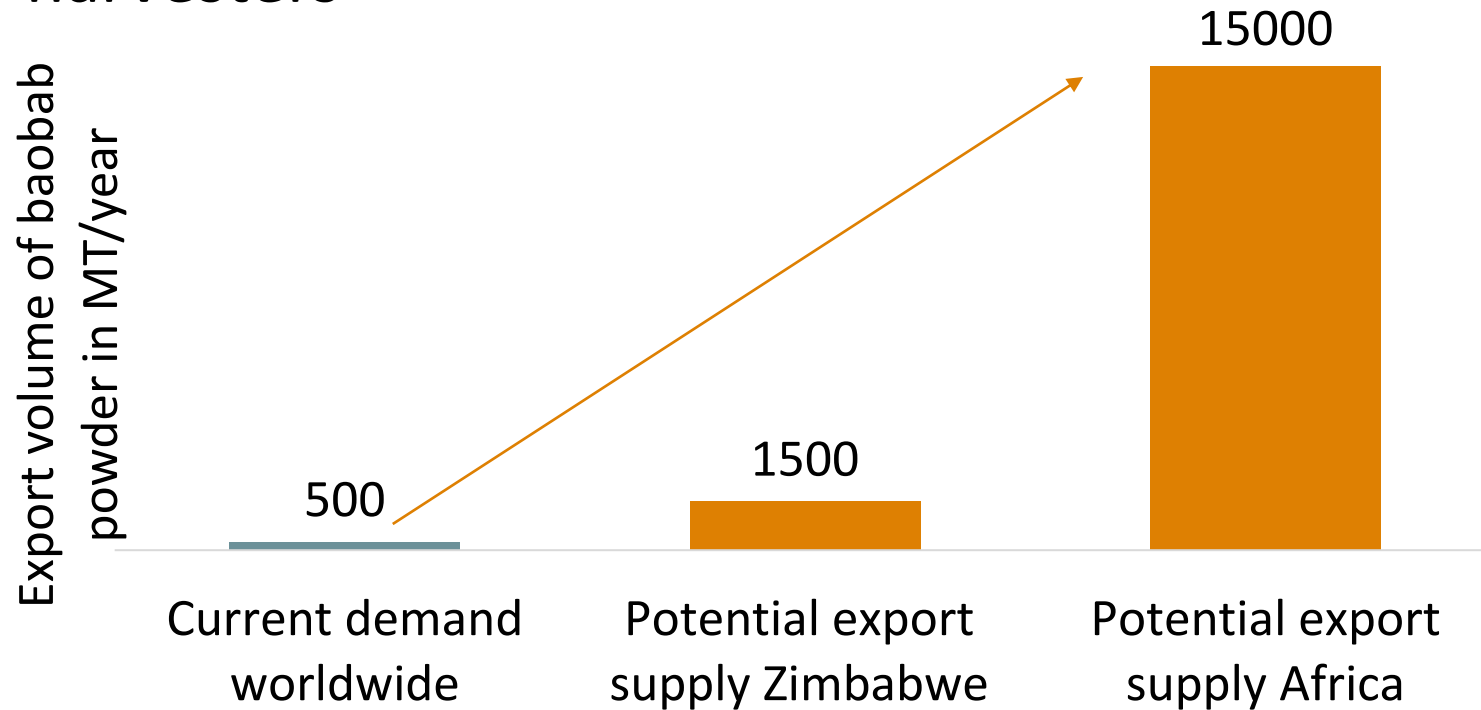
OUR OBJECTIVES

- Clear example of a multi-stakeholder partnership to enable transboundary collaboration



THE POTENTIAL

The development of the baobab industry is still very early stage, and has the potential to benefit many thousands of rural African harvesters



Key challenges

- Baobab remains largely unknown to western consumers, requiring a major marketing drive raise awareness.
- There has not been enough scientific research to validate the health benefits of consuming baobab.
- Low quality standards for baobab fruit products are eroding the trust in the fruit and lowering demand on manufacturer side.
- Variable regulatory requirements in different producer countries



GROWING THE DEMAND FOR BAOBAB PRODUCTS

- Developing and rolling out targeted consumer marketing campaigns to create awareness about baobab fruit, their health benefits and positive social impact

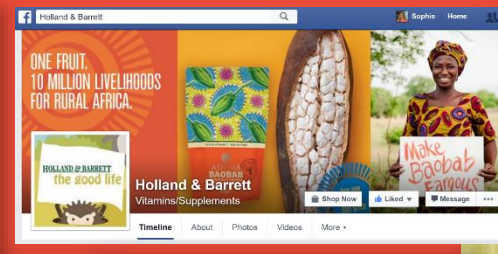


#MAKEBAOBABFAMOUS

From obscurity to trending superfood!

2013

Today



Total reach of campaign:

129 MILLION!

GROWING THE DEMAND FOR BAOBAB PRODUCTS

- Promoting and carrying out research and development to validate the health claims of baobab products



Exploring the effects of Baobab fruit powder on gut health

Image: African Baobab Alliance

Research has been identified as a priority for the development of the Baobab sector. This brochure highlights the **steps required to complete this research project.**

Baobab fruit powder

Is natural & organic

Is indigenous to Southern Africa

Is rich in nutrients

Has anecdotal health benefits



Oxford Brookes University

Summary

This project will take the form of two work packages (WP) which are separate yet related.

WP1: This will be a randomised controlled crossover trial over a total of 16 months in 30 people with pre-diabetes who will attend three one day testing session at Oxford Brookes University. They will consume on alternate days with at least a 2 day washout period, bread rolls with: high dose of baobab added, low dose of baobab added or a control roll. Measures of glycaemic response, insulin response and satiety will be measured.

WP2: This will be a 20 month total randomised placebo controlled double blinded trial in which 30 people with pre-diabetes will consume either baobab fruit powder (n=15) or a control powder (n=15) added into a beverage (water or milk) for four weeks daily in their own homes. They will attend a baseline and a final testing visit in which similar measures will be taken as above.

Both trials will determine whether baobab fruit as a functional food additive can improve glycaemic response and insulin sensitivity, and reduce hunger in people at with pre-diabetes and therefore reduce the risk of developing type 2 diabetes and associated comorbidities.

GROWING THE DEMAND FOR BAOBAB PRODUCTS

- Educating manufacturers about the technical features and potential applications of baobab products



SPORTS NUTRITION –

Baobab's nutrient mix is perfect for sports nutrition

Hydration

- Baobab is high in Potassium and Magnesium, key electrolytes that help keep the body hydrated

Supports Recovery

- Baobab is high in Vitamin C and Antioxidants which may assist in preventing aching muscles and speed up recovery. Studies have suggested that Vitamin C can improve adrenal gland function, helping the body maintain balanced cortisol levels, a hormone that can cause muscle breakdown. Vitamin C helps the body build muscle and boosts the production of collagen, a connective tissue that helps repair blood vessels, tendons, and skin.

Improve Bone Density and Strength

- Baobab is a good source of Calcium which plays a crucial role in maintaining and restoring bone density and strength.

Slow Release Energy

- Slow-release (or low GI) carbohydrate foods provide a slower and more sustained release of energy. Research has shown Baobab significantly slows the glycemic response of simple carbohydrates suggesting its potential in slow energy release food and beverage products.

Example

Tribal Sports Nutrition

Sports energy smoothies and gels with Baobab



Monk Nutrition

Organic Energy Gel with agave and Baobab



Other:

Electrolyte beverages, fortified post-workout powders, slow-release carbohydrate gels

PRODUCT IDEAS SUMMARY

Yoghurts, Probiotics & Prebiotics

As well as enhancing flavours, there are other attributes that make Baobab a highly desirable and functional ingredient in yoghurts, yoghurt drinks and probiotics. (1) It is a prebiotic. (2) It ensures more probiotic reaches the colon.

Yoghurts

- Baobab is 88% soluble and has a small particle size (< 144 micron) which allows it to sit 100% in suspension when in a yoghurt or yoghurt drink format. Last year Yeo Valley produced a limited edition [Baobab & Vanilla Yoghurt](#).

Yoghurt drinks

- Last year Danone has released a probiotic Baobab yogurt drink under its [Actimel](#) brand. Mixing Baobab (prebiotic) with live cultures (probiotic) helps to enhance the survivability of bacteria.

Probiotics

- Baobab's powdered format allows it to be easily blended with probiotic bacterial cultures, which typically are also powdered and then compressed into tablets or filled into capsules.

Prebiotics

- Nexira have combined Baobab with gum acacia to create a powdered prebiotic blend called [Inavea](#).

IMPROVING SUSTAINABILITY & COMPETITIVENESS

- Establishing a strong network of baobab producers, to ensure a common commitment to quality and create an effective and efficient baobab industry



Video Guides



If you are new to Baobab processing and marketing, check out our simple, three part video guide for new producers here:



IMPROVING SUSTAINABILITY & COMPETITIVENESS

- Setting sustainability standards for the harvesting of baobab fruit





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BUILDING A WORLD WHERE BIODIVERSITY, PEOPLE, AND BUSINESS THRIVE IN HARMONY THROUGH SUSTAINABLE WILD HARVESTING

fairwild.org

Standard Principles

1

Wild collection and conservation requirements

- Maintaining wild resources
- Preventing negative environmental impacts
- Sustainable harvesting practices

2

Legal and ethical requirements

- Compliance with laws, regulations and agreements
- Respecting customary rights

3

Management and business practices

- Applying good and fair management practices
- Applying good and fair business practices

4

Relationship with the collectors

- Fair contractual relationships with company collectors
- No discrimination against collectors
- Child labour avoidance
- Respecting customary rights
- Fairtrade benefits for collectors' communities

5

Fair labour conditions for workers in the collection company

- Fundamental principles and rights at work
- Good and healthy working conditions

6

Buyers commitment

- Fair prices and fair trade premium
- Quality-conscious behaviour

7

Sustainable and transparent supply chains

- Supply chain traceability from the collector to the final consumer;
- Long term and durable business arrangements

COMMON QUALITY STANDARDS

- Developing definitive quality standards for baobab powder and baobab oil



5 Standard for baobab fruit pulp

5.1 Definition

Baobab fruit powder is the naturally dried powder found in the endocarp of Baobab fruit (*Adansonia digitata* L.).

5.2 Production

It is required that only the closed, dried and ripe fruits are harvested. The fruit should only be opened once in a designated and controlled processing area. Once opened the dried powder is separated from the fruit-fibers, seeds and shell. The separated powder is ground, sieved and packaged in food grade containers. No other ingredients or food-additives are used. The production-process must follow good manufacturing practices and good hygiene-standards, as well as allow full traceability of the product.

5.3 Sensory description

Light, off-white, dry and free flowing powder. Clean, slightly acid smell. Sour, slightly sweet, aromatic taste. It is partially soluble in cold water.

5.4 Granulometry

Natural baobab powder is 99% w/w finer than 149 micron (Mesh 100).

5.5 Applications

Baobab fruit powder is used as a food-ingredient to provide nutrients and taste for sweet and savoury foods or hot or cold drinks.

5.6 Legal

Baobab is US-GRAS and registered as approved novel food in Europe.

CAS number: 91745-12-9

EINECS number: 294-680-8

COMMON QUALITY STANDARDS

- Supporting producers to attain minimum quality standards under the label of the African Baobab Alliance



Training Materials for Members

2.1 Microbiological

The bacteria that cause food borne illnesses are naturally present everywhere in our environment therefore one has to be aware and know ways of preventing bacterial food contamination

2.1.1 Measures taken to prevent microbial contamination

- i. Moisture prevention- If a product or raw material is dry or has low water levels microbes can't grow easily
- ii. Sanitation- if equipment is kept clean, it takes away bacteria's food source thus preventing the microorganisms from growing.
- iii. Avoiding cross contamination- preventing bacteria from moving from one place to another controls their spread and growth. It is important to control cross contamination from raw to cooked product and to use
- iv. Good personal hygiene practices - good personal hygiene practises e.g. Proper washing of hands before handling food and after using the toilet should be done always to avoid spreading bacteria e.g. E.Coli.

🍏 Proper handling of baobab fruits at harvest



COMMON QUALITY STANDARDS

- Establishing an easy-to-use fingerprinting technique to monitor and prevent adulteration of both powder and oil





Baobab research: Using Near-infrared spectroscopy to determine baobab fruit powder quality

ABA and ABS

- Most baobab producer countries are signatories to the Nagoya Protocol
- Few baobab producer countries currently have clearly defined pathways to Nagoya Protocol-compliance
- Customers, especially in the cosmetics sector, are now seeking evidence of compliance
- Lack of compliance will hinder growth of the sector



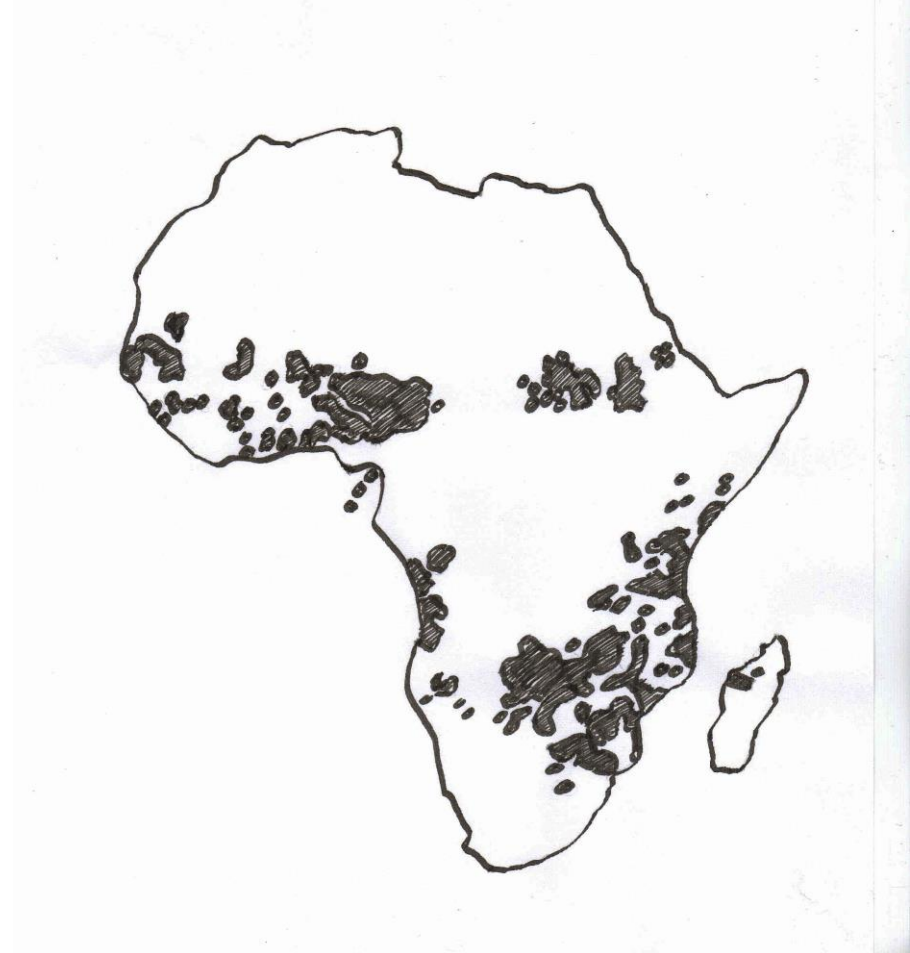
ABA and ABS

- We are actively exploring ways to address this, recognising that Nagoya Protocol-compliance will become a key competitive advantage for companies in the future



CONCLUSION

- Baobab is a rare example of a genuinely Pan-African resource



CONCLUSION

- Everyone in Africa is a potential brand ambassador for Baobab



CONCLUSION

- The Baobab Sector is still work in progress
- The first BioTrade value chain in Africa to be subject of systematic development
- So far, it's working!





Thank you!

For more info please see
www.africanbaobaballiance.org