



# **Globalization and invasive plant species management in Africa**

**Michael Ansong, PhD**  
**Faculty of Renewable Natural Resources,**  
**KNUST, KUMASI-GHANA**

# Acknowledgement



**CODESRIA**



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# Outline

- ◆ Background
- ◆ Impact of invasive species on African countries
- ◆ The relationship between invasion process and management options
- ◆ Globalization as a Driver of Invasive Alien Species in Africa
- ◆ Number of established alien species in Africa
- ◆ Importance of policy direction, strong institutional and legal environment
- ◆ Propose a framework for mitigating key challenges associated with invasive species management in Africa
- ◆ Conclusion



# Background

- Humans have been moving plants around the world for centuries
- Some introduced species die out while others survived- termed as alien species
- Invasive alien species(IAS) are those that spread and cause damage

# Impact of invasive species on African countries

- For majority of IAS their negative impact outweighs their positive contributions
- Impacts include
  - ✓ reduce palatable fodder on pasture-lands
  - ✓ Poison livestock
  - ✓ Impact on fisheries
  - ✓ Increase production costs and reduce yields

# Globalization as a Driver of IAS in Africa

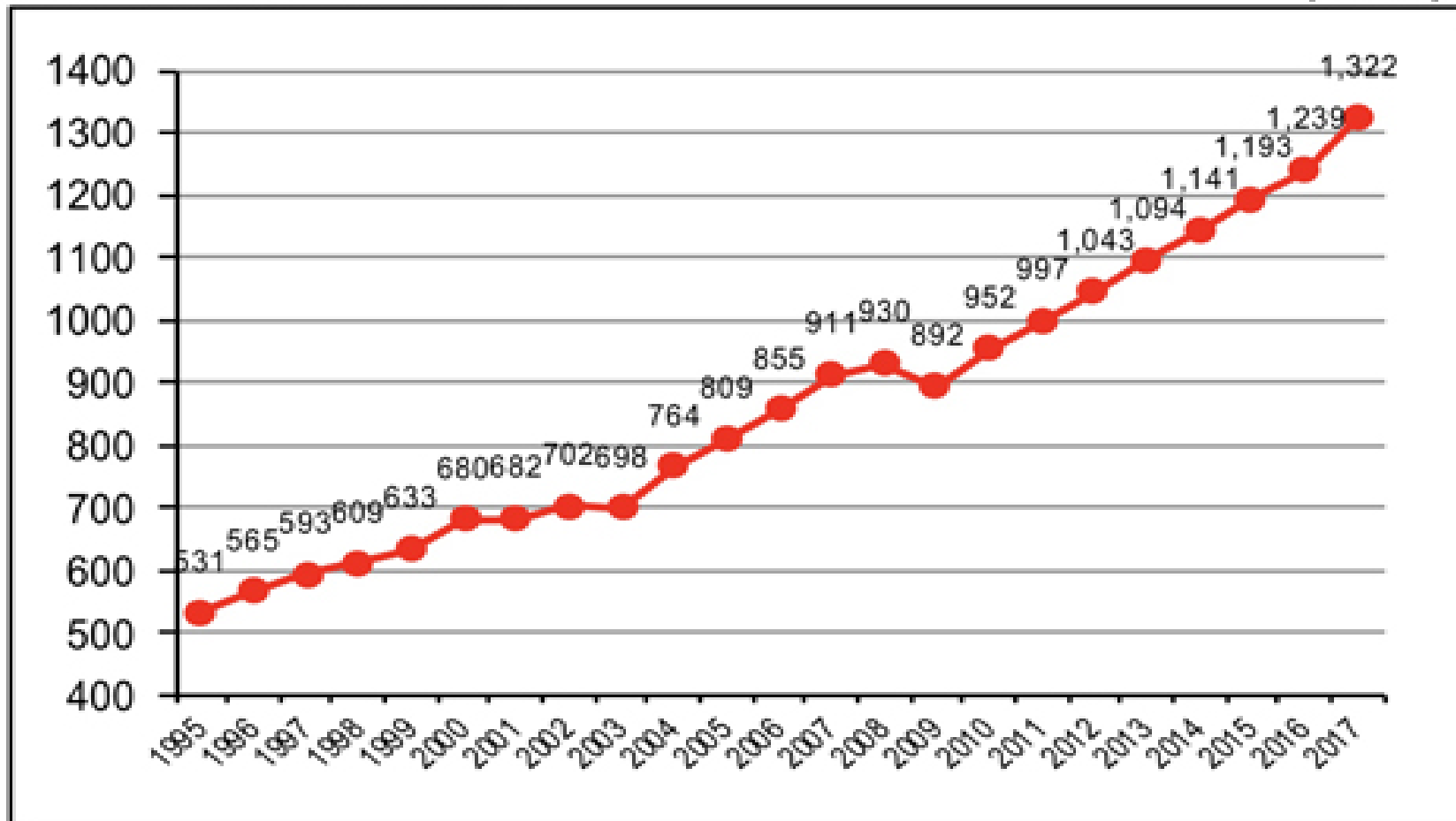
- Introduction and redistribution of IAS in and within the continent due to globalization
  - ✓ Increase in human movement
  - ✓ International trade liberalization through global and regional trade agreements (RTAs)



# World: Inbound Tourism

## International Tourist Arrivals

(million)



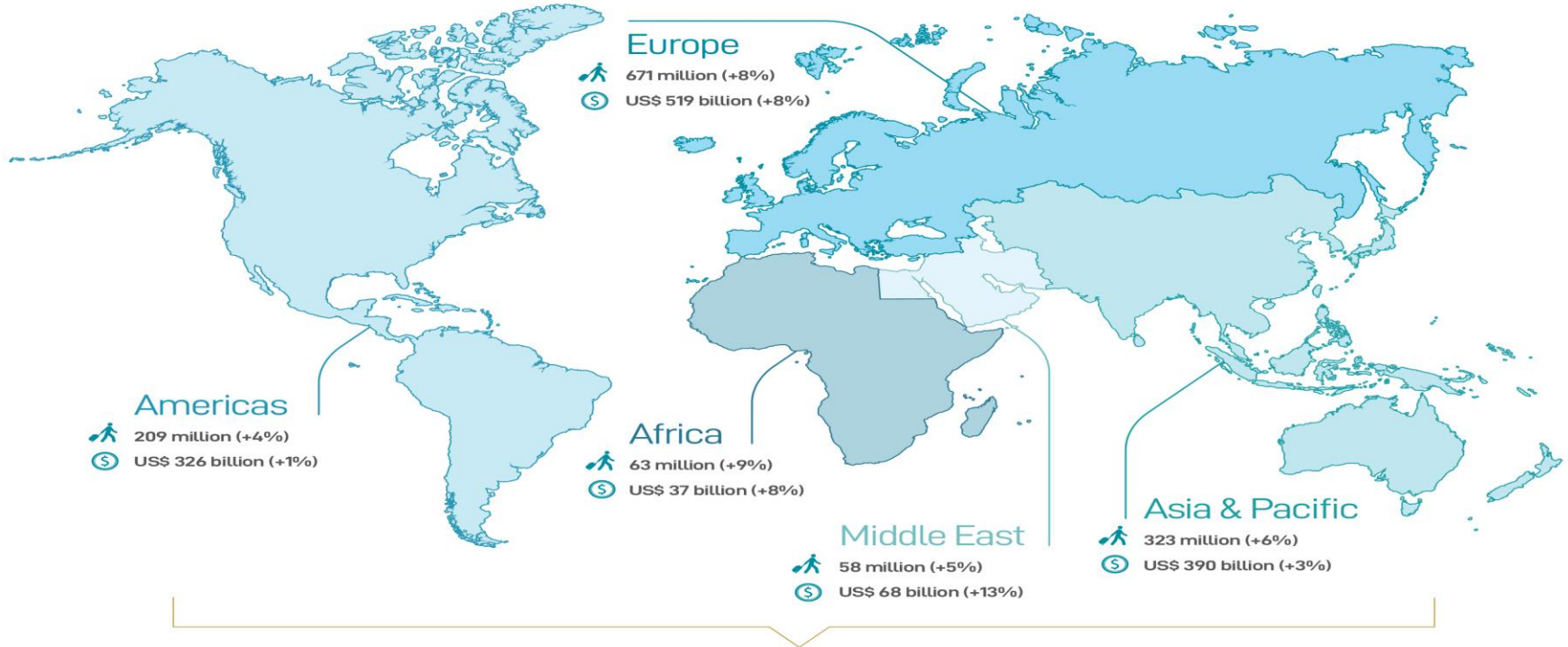
Source: World Tourism Organization (UNWTO) ©



# INTERNATIONAL TOURISM 2017

International tourist arrivals: 1,323 million

International tourism receipts: US\$ 1,340 billion\*

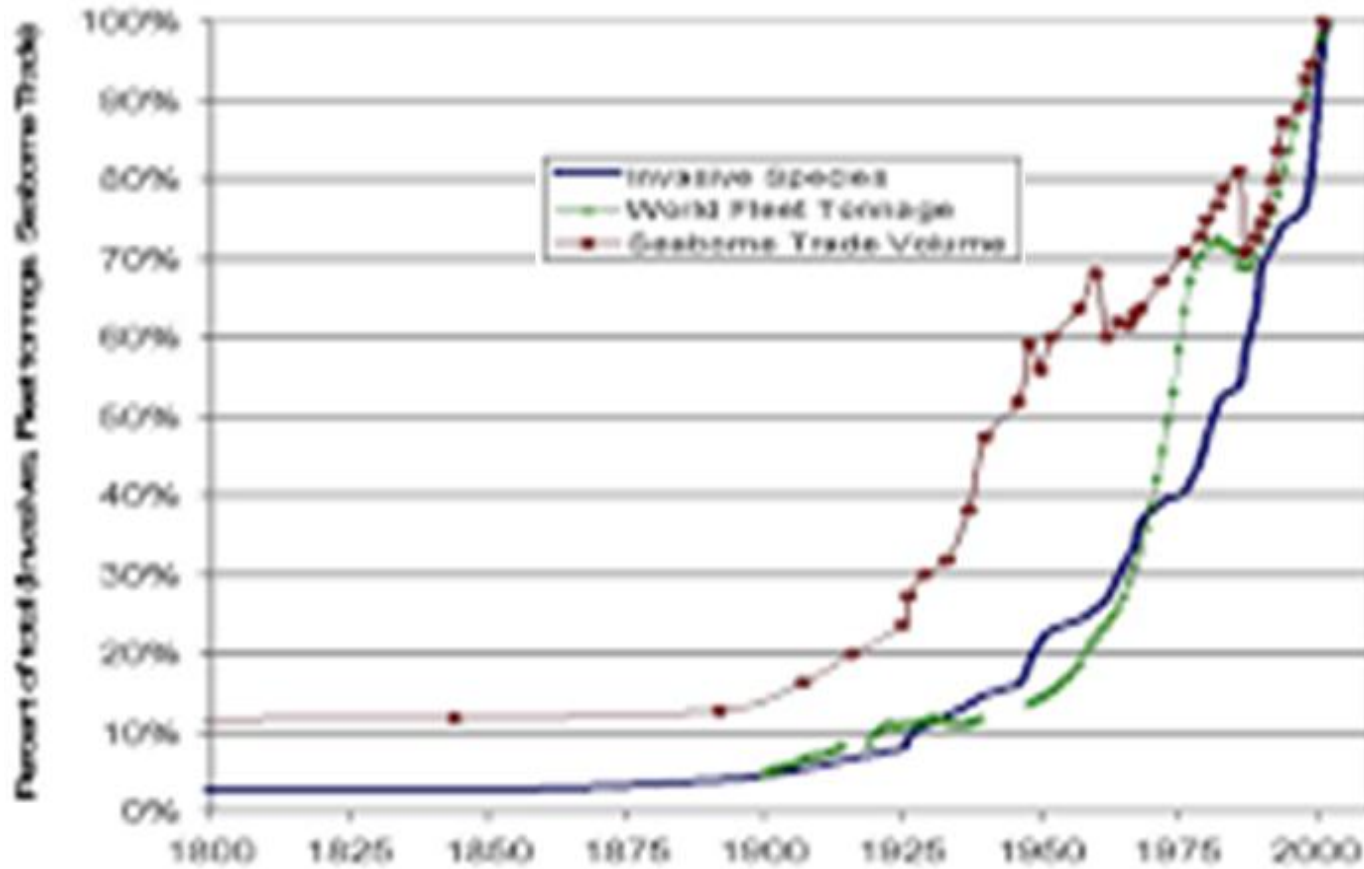


## WORLD ARRIVALS: 1,323 MILLION

Source: © UNWTO Tourism Highlights 2018 - World Tourism Organization (UNWTO), August 2018



# IAS and world trade



Increase in invasive species as world fleet tonnage and seaborne trade increased over time.  
Source: Gollasch and Erkki Leppäkoski 2007



# Number of established alien species in Africa

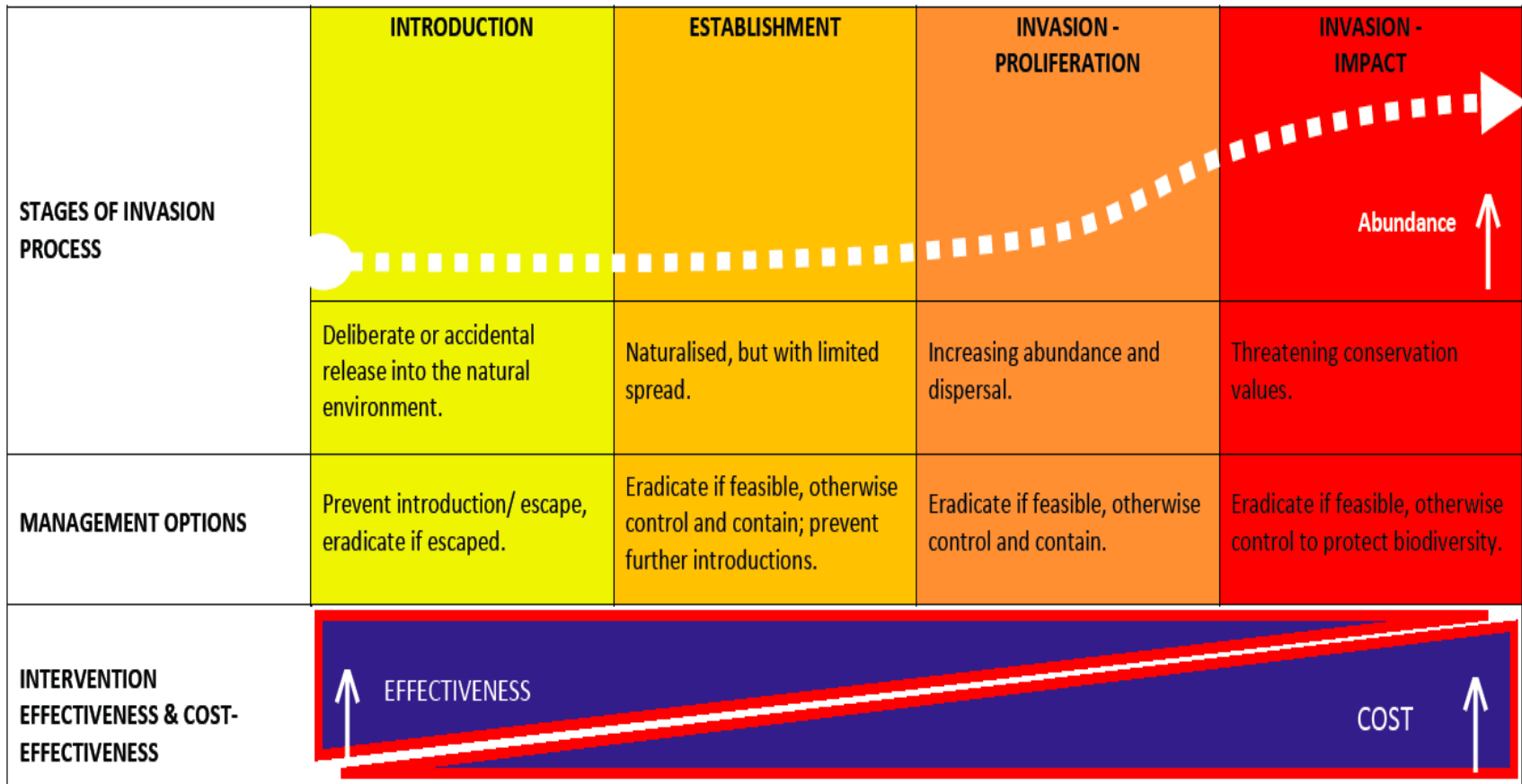
- Lack of accurate data
- Estimate of over 3,500 alien plants are established in African countries (Pysek et al. 2017)

# Number of established plants in African countries

Country	Number of species e	Country	Number of species
Algeria	328	Libya	147
Angola	227	Madagascar	517
Benin	333	Malawi	50
Botswana	170	Mali	74
Burkina Faso	149	Mauritania	84
Burundi	187	Mauritius	731
Cameroon	296	Morocco	410
Cape Verde	740	Mozambique	103
The central African Republic	57	Namibia	218
Chad	274	Niger	37
Comoros	100	Nigeria	193
Congo	56	Rwanda	229
Cote d'Ivoire	266	Sao Tome & Principe	314
DR Congo	522	Senegal	97
Djibouti	42	Seychelles	165
Egypt	179	Sierra Leone	76
Equatorial Guinea	187	Somalia	63
Eritrea	65	South Africa	1040
Ethiopia	421	Sudan	59
Gabon	94	Swaziland	315
The Gambia	11	Tanzania	157
Ghana	190	Togo	63
Guinea	86	Tunisia	225
Guinea Bissau	97	Uganda	152
Kenya	145	Zambia	84
Lesotho	206	Zimbabwe	238
Liberia	141		



# The relationship between invasion process and management options



Source: Invasive Species Council 2014



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# TRAVELERS: AVOID FINES AND DELAYS

**DECLARE**



**Fruits & Vegetables**



**Plants & Cut Flowers**



**Meat & Animal Products**



**Live Animals**

Foreign insects, plant and animal diseases, and invasive plants can be harmful to United States agriculture.



**EXPLOSIVES**



**BLEACH**



**ACIDS**



**POISONS,  
TOXIC**



**FLAMMABLE  
LIQUIDS**

Do not carry or import restricted or prohibited items into Tasmania



**Fruit and  
vegetables**



**Seafood, some  
animal products**



**Plant material,  
soil and seeds**



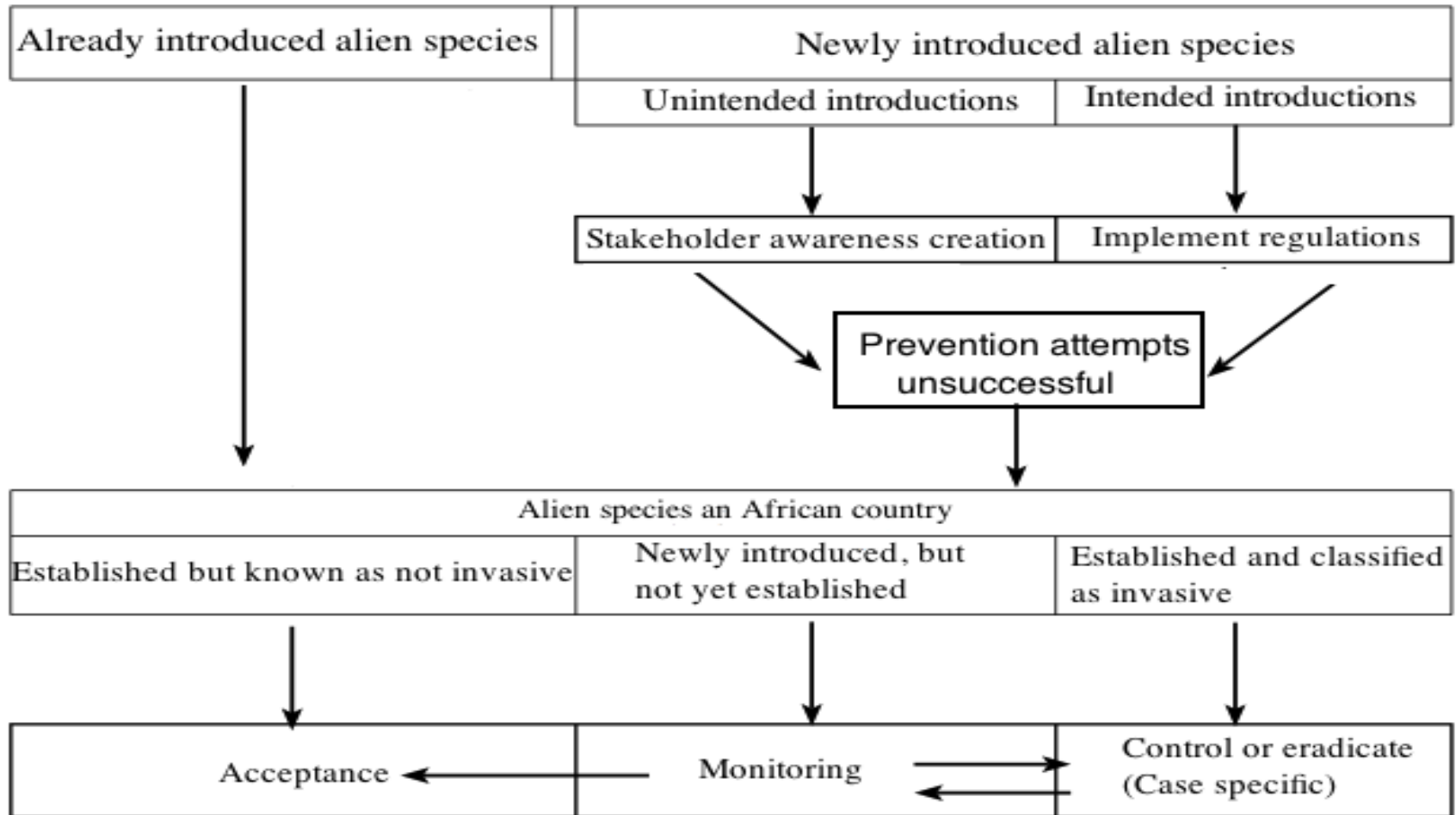
U.S. Customs and  
Border Protection

[www.cbp.gov](http://www.cbp.gov)

# Importance of policy direction, strong institutional and legal environment

- Regionally, there are no standardised recommendations and guidelines
- At national levels, there are inadequate policy frameworks and a general lack of technical capacity
- Need for institutions or authorities to facilitate information sharing, harmonize and coordinate national policies towards IAS

# Propose framework



Modified from Klingenstein and Diwani 2005





# Conclusion

- Continuous introduction, spread and establishment of many alien species on even remote part of the continent.
- Lack of technical capacity and funding to effectively implement control measures
- Need for management decisions including implementing preventive measures such as awareness creation and enforcing regulations can prevent future introductions.



# Acknowledgement



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# THANK YOU

Michael Ansong, PhD

Faculty of Renewable Natural Resources, KNUST,  
KUMASI-GHANA

[michael.ansong@canr@knust.edu.gh](mailto:michael.ansong@canr@knust.edu.gh)

[boatans@yahoo.com](mailto:boatans@yahoo.com)

