

# Exploring the Potential of Biotope for Transitioning to a Green Economy

An economic perspective

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# Definition

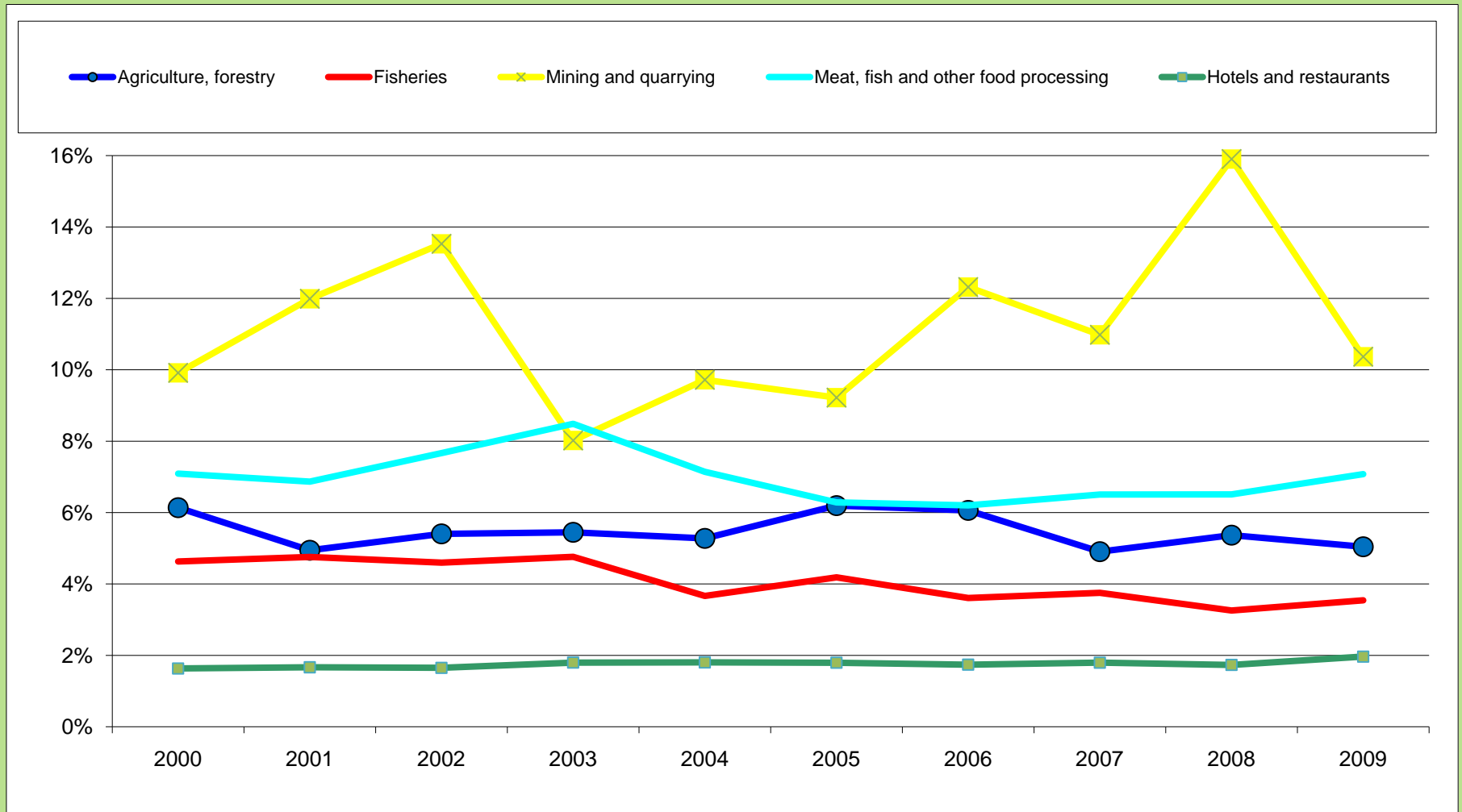
## Green Economy

- Economic sectors that build on and enhance the earth's natural capital or reduce ecological scarcities and environmental risks
- include renewable energy, low-carbon transport, energy efficient buildings, clean technologies, improved waste management, improved freshwater provision, sustainable agriculture and forest management, sustainable fisheries

## Bio trade

- Activities derived from native biodiversity
- Criteria: Economic, social, environmental sustainability
- Species that develop, occur naturally or have existed in a country for many years

# Structure of the Namibian Economy



# Sectors related to Biotrade

- Agriculture
  - Traditional: Livestock, grain, horticulture
  - Novel products: Medicinal plants, oils, Mopane worms, Kalahari silk worm, etc. [grapes / dates]
- Fisheries (Marine fisheries, marine aquaculture) [inland aquaculture]
- Tourism (Export of services)
  - Landscape, wildlife viewing, hunting
  - Conservancies

# Trade statistics



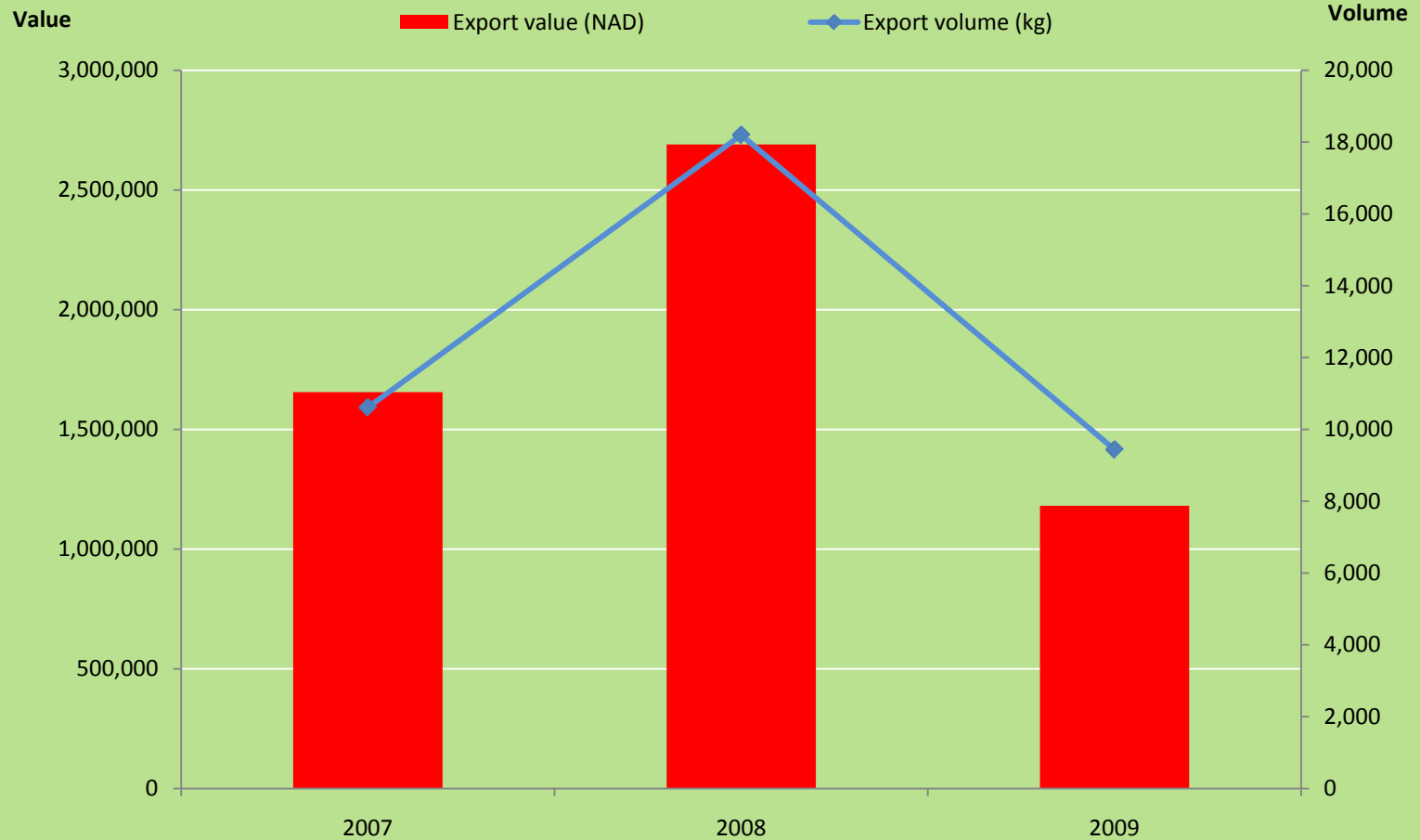
# Export markets

- Livestock on-the-hoof to South Africa
- Most of fish, beef and grapes exported
- Some horticultural produce exported to RSA
- Tourism – [Angola (33%)], RSA (26%), Europe (21%)
- Export market traditionally EU (Quota-free, Duty-free)
  - Fish, beef, grapes
  - 90% of Devil's Claw exported to EU
  - Economic Partnership Agreement negotiations ongoing – creates uncertainties

# Export value

	2008	2009
Agriculture	1,495,000,000	n/a
Fish	240,000,000	n/a
Agricultural processing	1,615,000,000	n/a
Fish processing	4,745,000,000	n/a
Tourism	3,273,000,000	n/a
Devil's Claw	21,500,000	12,161,541
Marula oil	905,000	564,113
Kalahari Melon	921,250	616,948
Commiphora	304,270	250,520
Ximenia Oil	863,800	?
Hoodia	?	?

# New products – NP Oils



# Employment

	2008	2009
Agriculture	102,636	102,636
Fish	12,720	12,720
Manufacturing	23,755	23,755
Tourism	13,132	13,132
Devil's Claw	? (1,900)	2,354 (800)
Hoodia	?	310
Marula oil	3,000	1,368
Kalahari Melon	1,600	1,554
Commiphora	?	535
Ximenia Oil	363	491
Inara	?	?
Mopane worms	?	?
Kalahari silk		57 (180)

# Investment

# Permits

- Import permits required for controlled grains (maize, wheat, millet)
- Permits to collect, trade and export Devil's Claw required
- Export levy of 15% to 30% charged on live sheep exports replaced the permit system in July 2010
- SPS measures

# Potential – Limitations

## Traditional products

- Livestock farming
  - Limited carrying capacity due to poor soil fertility, variable rainfall and bush encroachment
  - Karakul pelt and wool production increasingly lucrative
  - Diversification into milk production (fodder production under irrigation)
  - Niche markets (FAN meat)
  - Combine livestock farming with tourism / game farming / hunting
- Crop production
  - Rain-fed crop production limited due to climatic conditions
  - Green Scheme – irrigation schemes hold potential but land use conflicts could arise
  - Impact on water resources (usage, pollution?) and soil
  - Potential of organic produce?

# Potential – Limitations

## Novel products

- Devil's Claw
  - Namibia is main producer, first exports in 1962
  - Low local value added (potential to add value?)
  - Demand dropped in 2009 due to economic crisis and oversupply in 2008
- Hoodia
  - High potential for cultivation
  - Local processing (capsules)
  - Demand??
- Ximenia Oil
  - Allergic reaction when kernels mold

⇒ Is there a sustainable market

⇒ Diversified or monopolistic market

# Information verification and need

- Relevant products
- Production volume and value
- Employment
- Investment in novel products
- Trade opportunities and barriers (licensing, permits, export-import restrictions, SPS requirements)