

# Logistics, Warehousing and Distribution of Agricultural Produce: How DHL can help

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## Introduction

Agricultural produce are goods representing the largest percentage of FMCG (fast moving consuming goods), they will deteriorate over a given time period if exposed to extreme temperatures (heat or cold), humidity, expanded time or other environmental conditions

- ✓ Fruits & vegetables
- ✓ Meat & sea food
- ✓ Live cut flowers and plants
- ✓ Goods requiring specific conditioning/monitoring

Fresh agriculture produce market is a buyer's market, consumers pay more attention to quality, safety, packaging, etc.

Worldwide ≈ 2,7 million tons of perishables

Main export continents: Latin America & Africa: up to 80% of all airfreight export

Main import continents area: Europe, North America, MEA & Asia

## Storage and Warehousing

The handling and management of the entire logistics process of produce need a temperature controlled supply chain

Products safety has direct impact on the consumer's health.

- Perishables (fruit & vegetables) are living products with limited shelf life after harvest:
- Continue process of respiration after harvest (CO<sub>2</sub>, H<sub>2</sub>O, heat)
- Heat up after harvest
- Rate of deterioration is determined by rate of respiration
- Rate of respiration is directly proportional with temperature

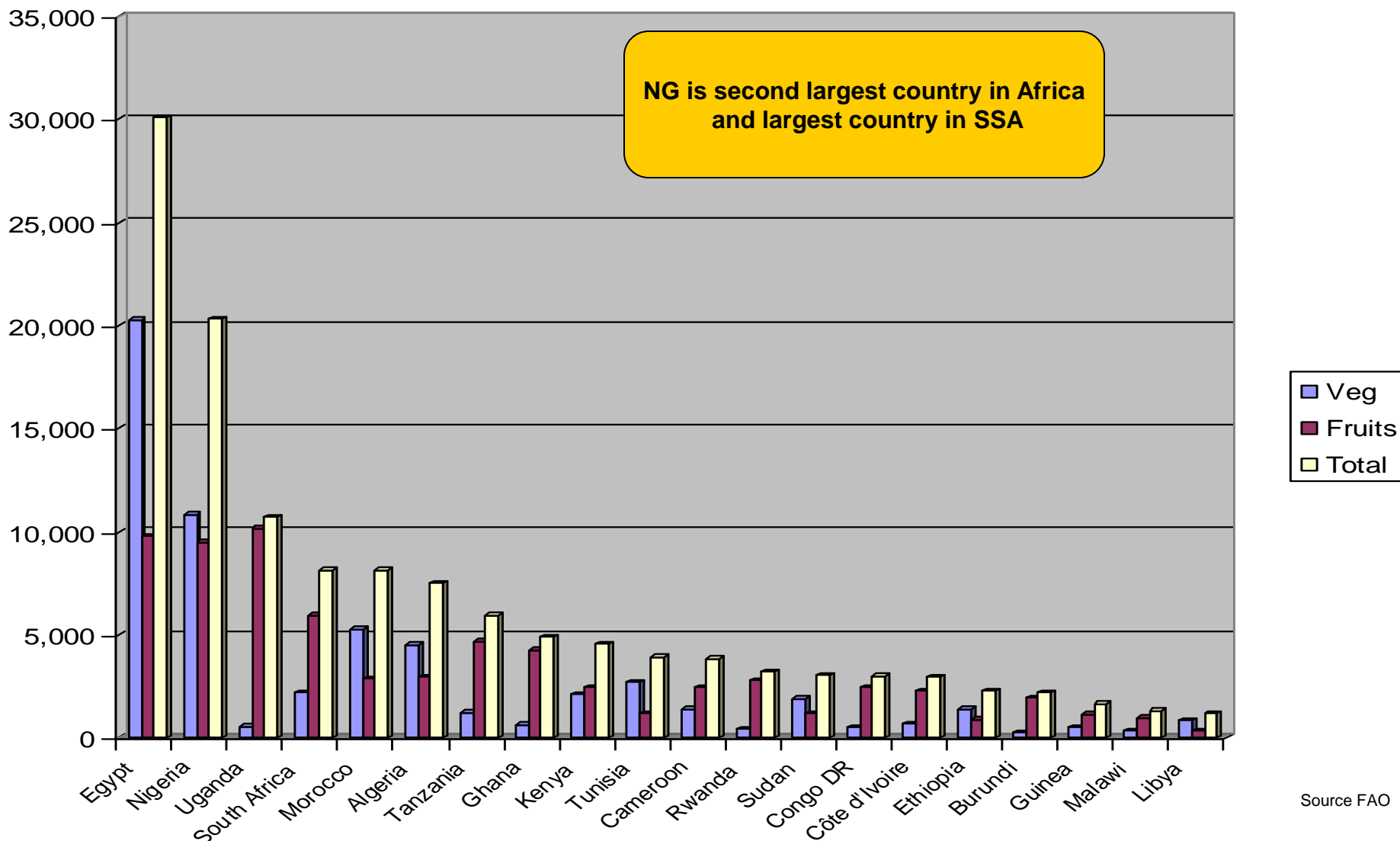
Responsibility of everyone involved from production to retail sale

A breakdown in temperature control will impact on final quality

Adequate warehousing

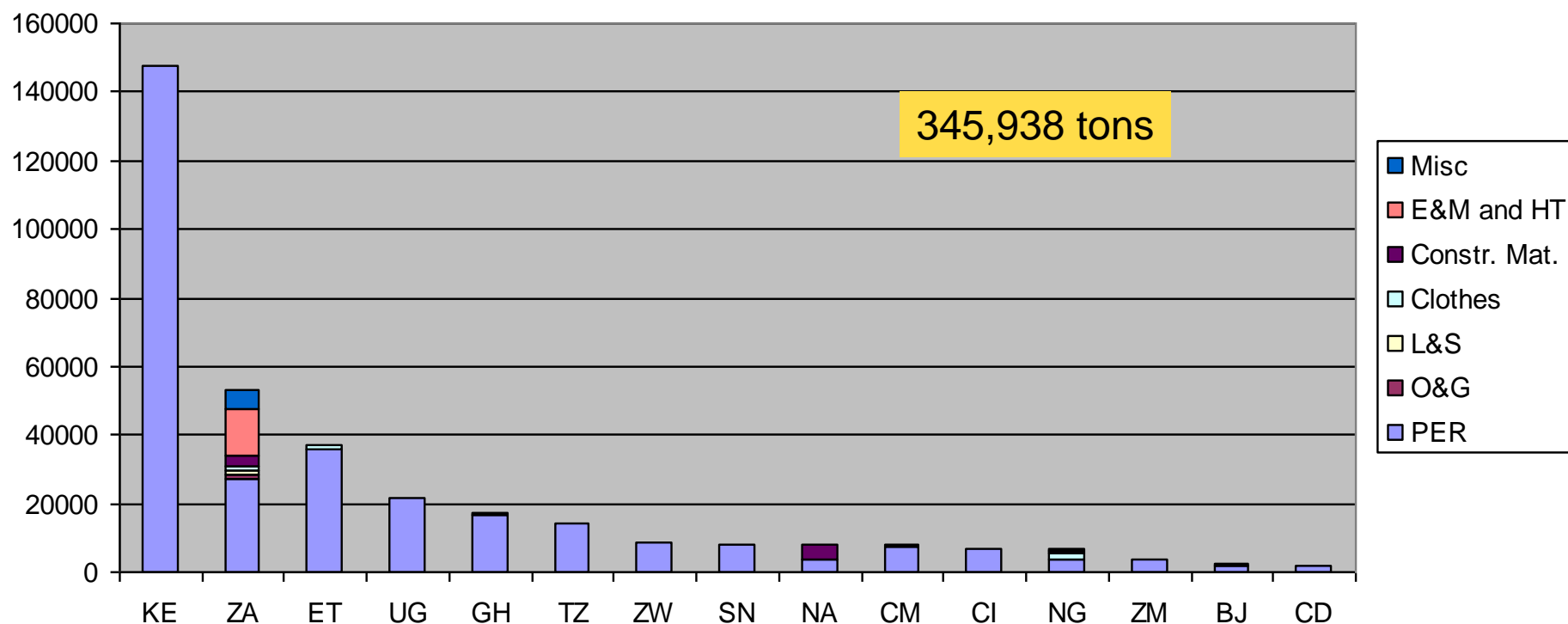
- Multiple cold stores that can be set to various temperatures
- Air conditioned working areas
- Cold rooms

## Africa production of Fresh Produce (1000) tons in 2010



## 2010 Export from SSA top 15 exporting countries by air to EU

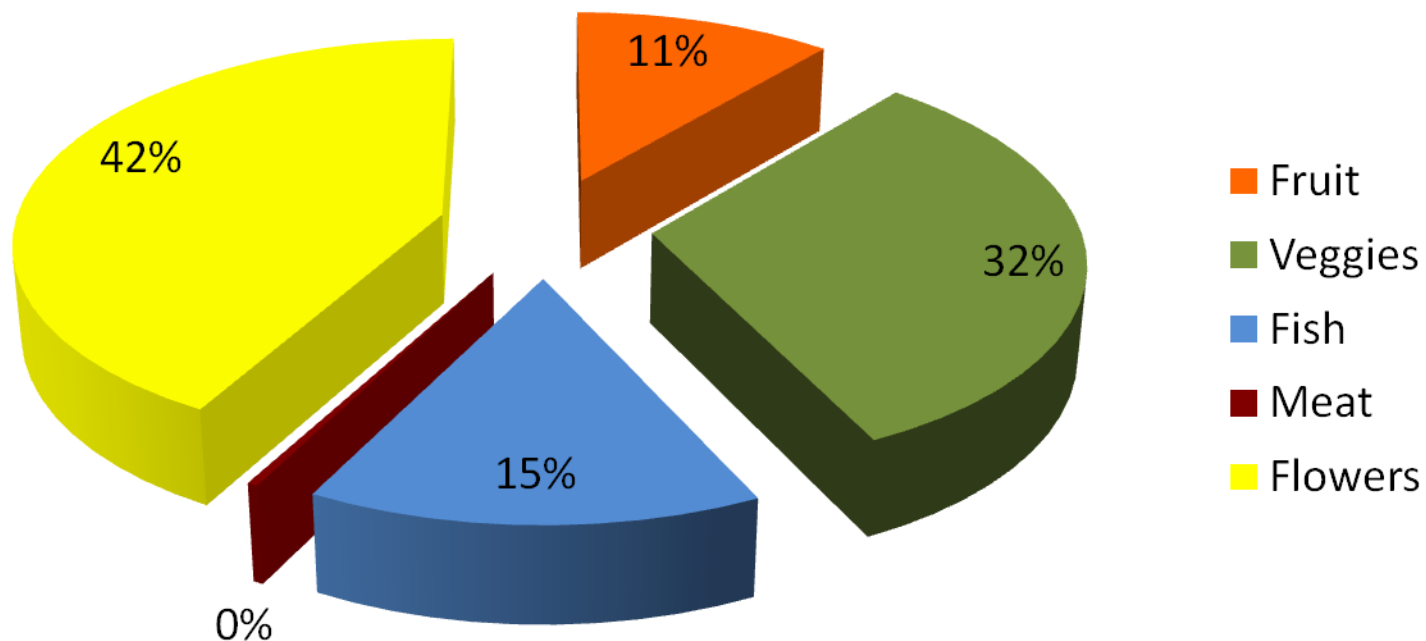
Top 15 countries represent 98% of exported tonnage



90% of exported commodities are Perishables

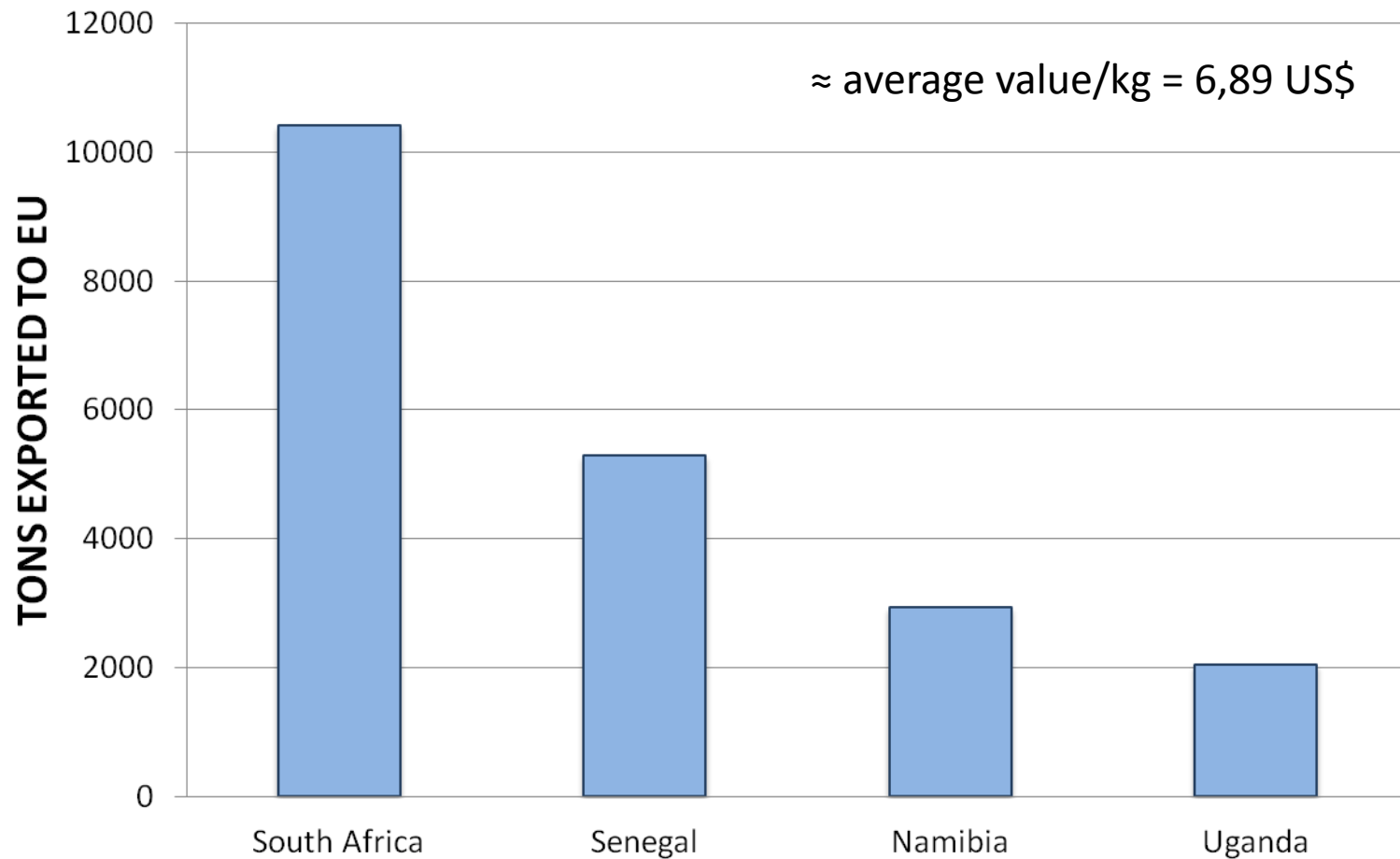
Source Eurostat

## Percentage of perishable products exported ex-Africa to EU



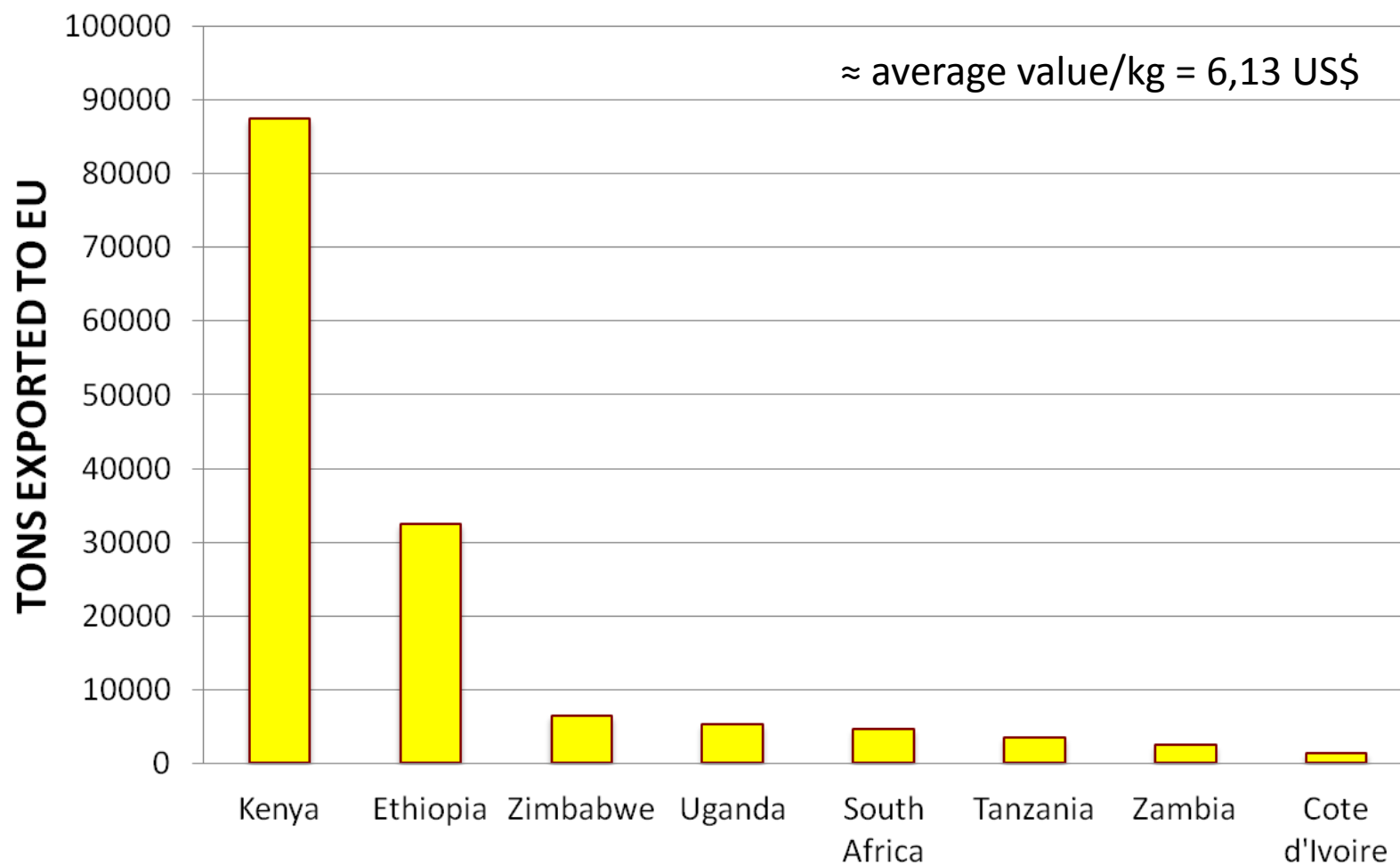
# AIRFREIGHT PERISHABLES 2010: AFR-> EU

Fresh fish



# AIRFREIGHT PERISHABLES 2010: AFR-> EU

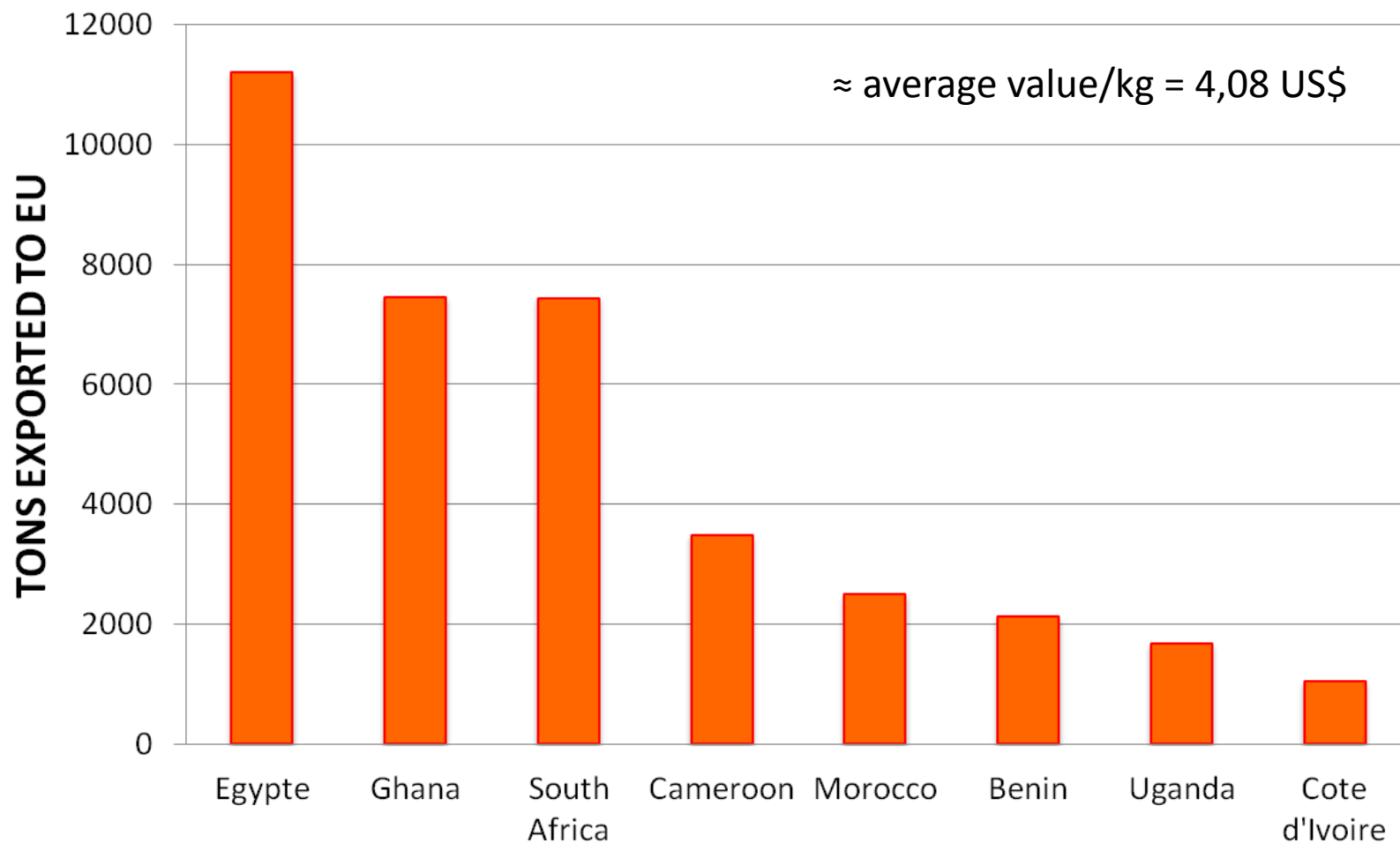
Flowers





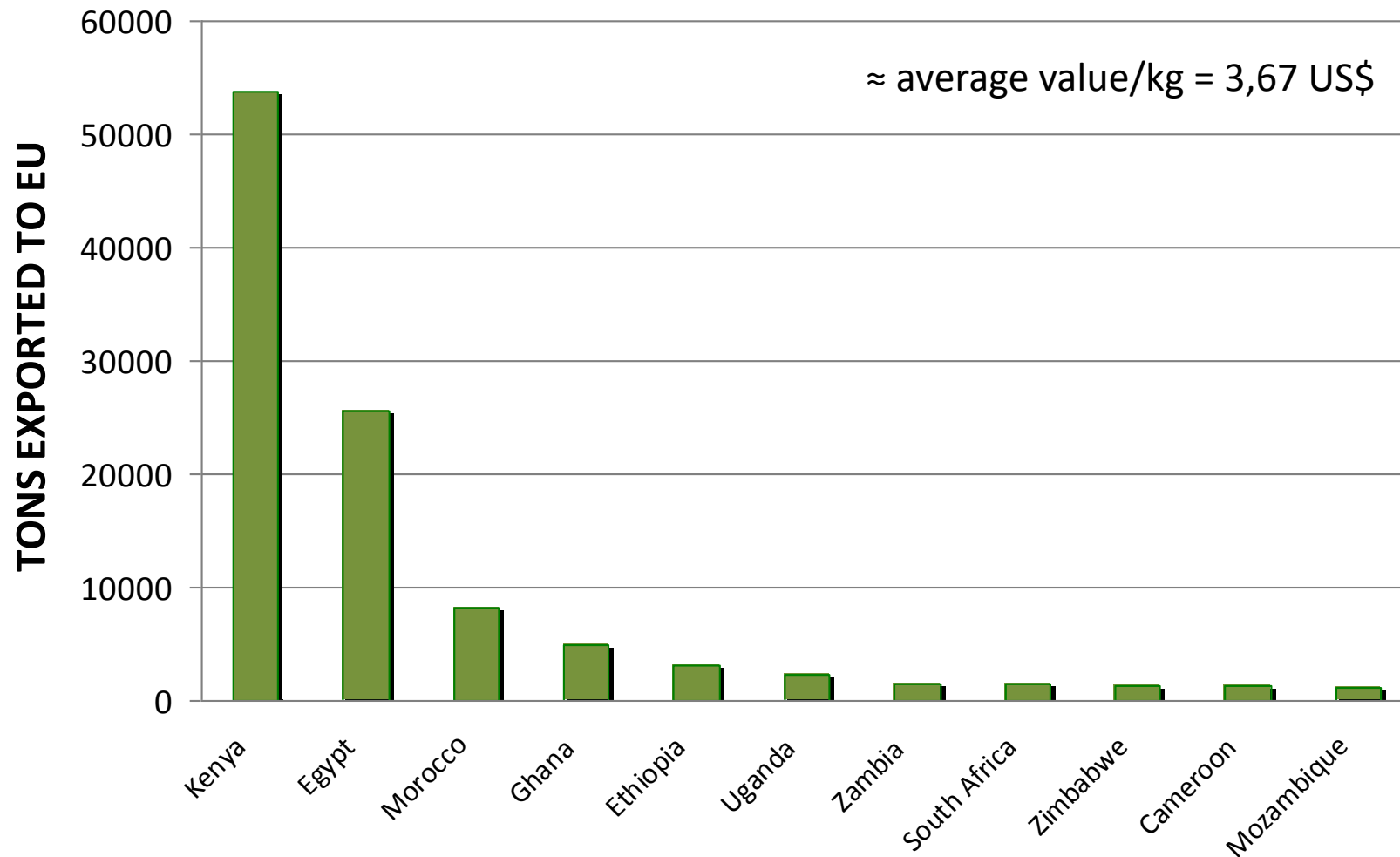
# AIRFREIGHT PERISHABLES 2010: AFR-> EU

Fruits



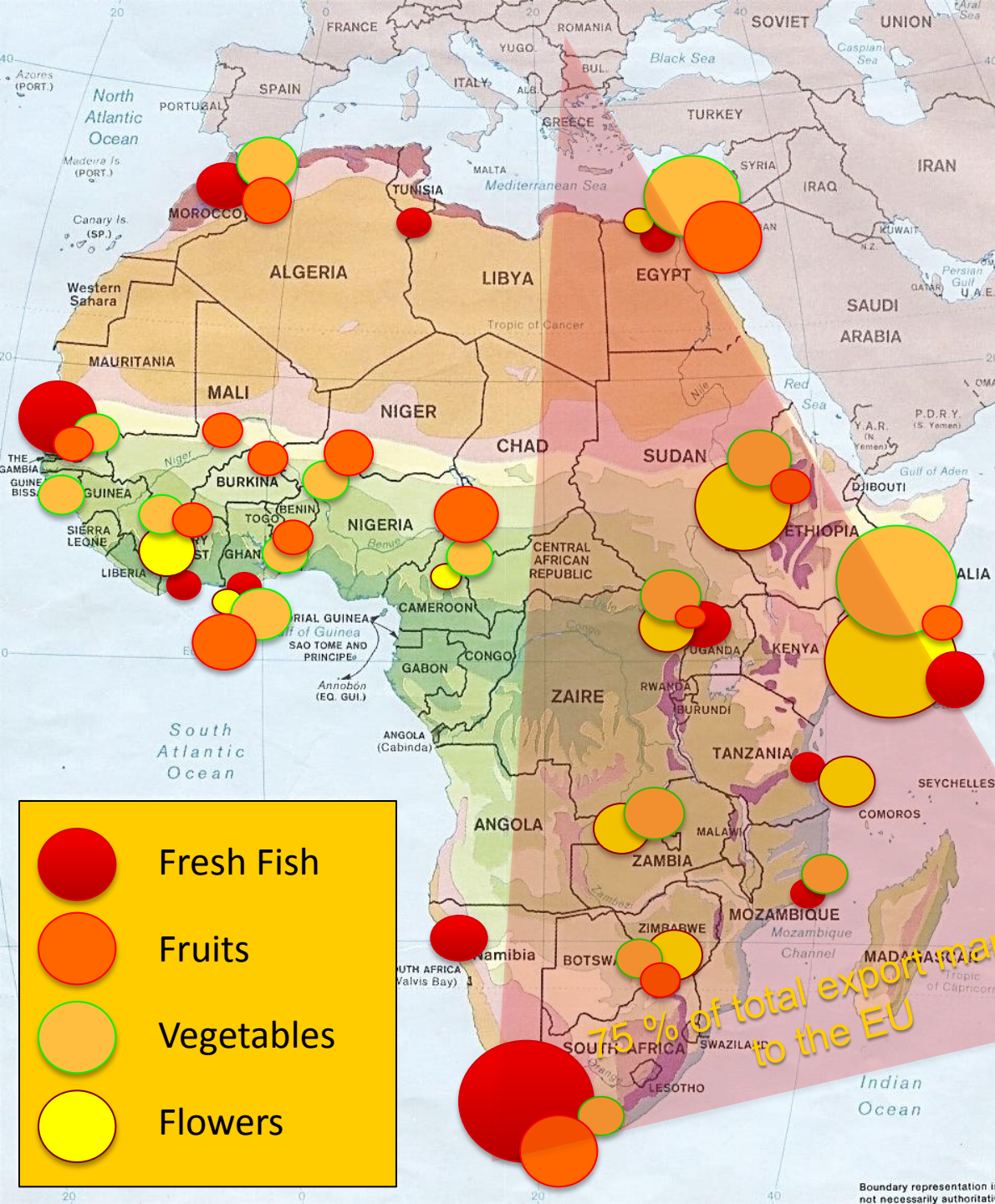
# AIRFREIGHT PERISHABLES 2010: AFR-> EU

## Vegetables



## Fast growing markets Africa (2007 in comp. 2011):

- Fish:
  - Kenya + 36%
  - South Africa: + 7%
  - Senegal: + 3,8%
- Vegetables:
  - Ethiopia: + 72%
  - Kenya: + 15%
  - Egypt: + 7%
- Fruits:
  - Ethiopia: + 245%
  - Cameroon: + 12%
  - Ghana: + 10%
  - Kenya: + 4,53%
- Flowers:
  - Ethiopia: + 455%
  - Kenya: + 188%
  - Tanzania: + 21%



## Summary

- ❑ NG is the largest SSA country producing perishables but it doesn't export
- ❑ NG farmers waste nearly 60% of their production due to:
  - ❑ Lack of decent road network from farms to the markets
  - ❑ Security
  - ❑ Check point
  - ❑ Non functional rail system
  - ❑ Non-availability of cold storage facility for preserving goods.
  - ❑ Market low buying power
- ❑ EU market is looking for new source of perishables globally
- ❑ Selling price between local market and EU market is 1 to 3 (or 4)
- ❑ Are we ready to export?



## DHL Solution



**We've Got The Planes**

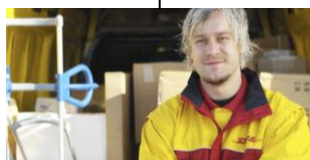
# DHL Aviation: a Business Unit of DHL Express

## DHL Aviation



### EXPRESS Division

### LOGISTICS Division



Worldwide express services – ranging from documents and parcels to pallets; our network consists of 5,000 branches and serves more than 120,000 destinations  
**DHL Express air network is run by DHL Aviation**



Worldwide logistics solutions for road, air and ocean freight, supported by a dedicated team of experts for industrial projects and sophisticated IT applications



Customized logistics solutions from consulting to supply chain design, from warehousing and distribution logistics to order management

# 16 DHL aircraft operating in SSA

## DHL Aviation

1 x Boeing 767  
50t



2 x ATR 72  
8t



2 x Boeing 727  
23t



1 x Antonov 32  
6.7t



2 x Beechcraft 1900D  
2.5t



4 x ATR 42  
4.5t



3 x Cessna 208B  
2.5t



1 x Cessna 406  
2.5t



Total payload for the area: 151.7t/day 5 days a week  
Except B767 flies 6 days a week

# Sub Saharan Africa Aviation - Network

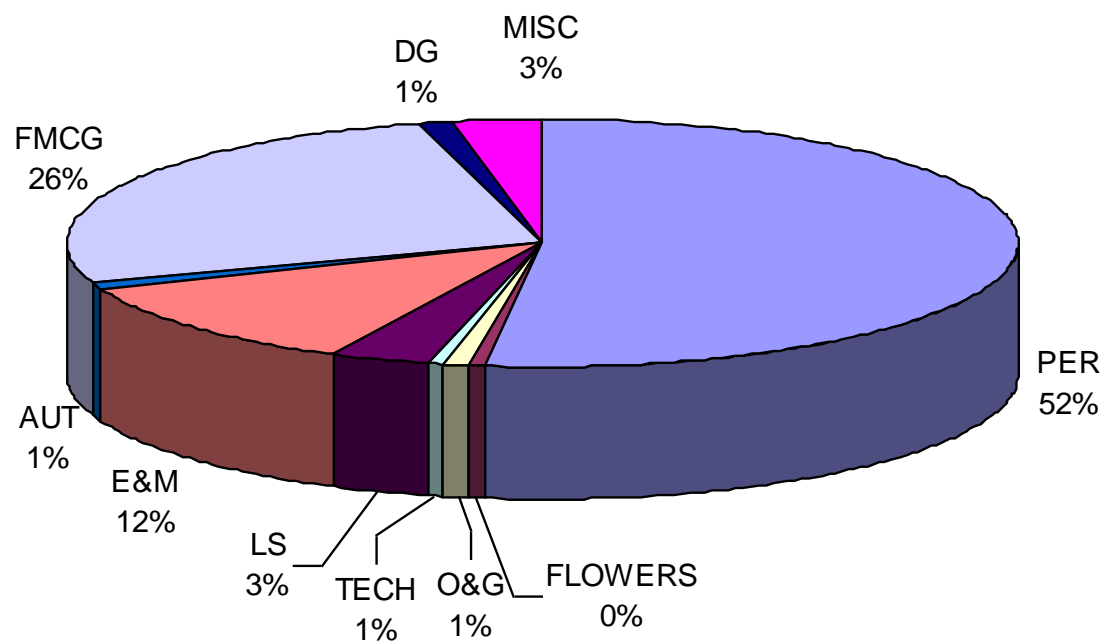
- B767
- B727 x 2
- ATR 72 x 2
- ATR 42 x 3
- B1900D x 2
- C208B x 3
- C406
- AN32
- B 737





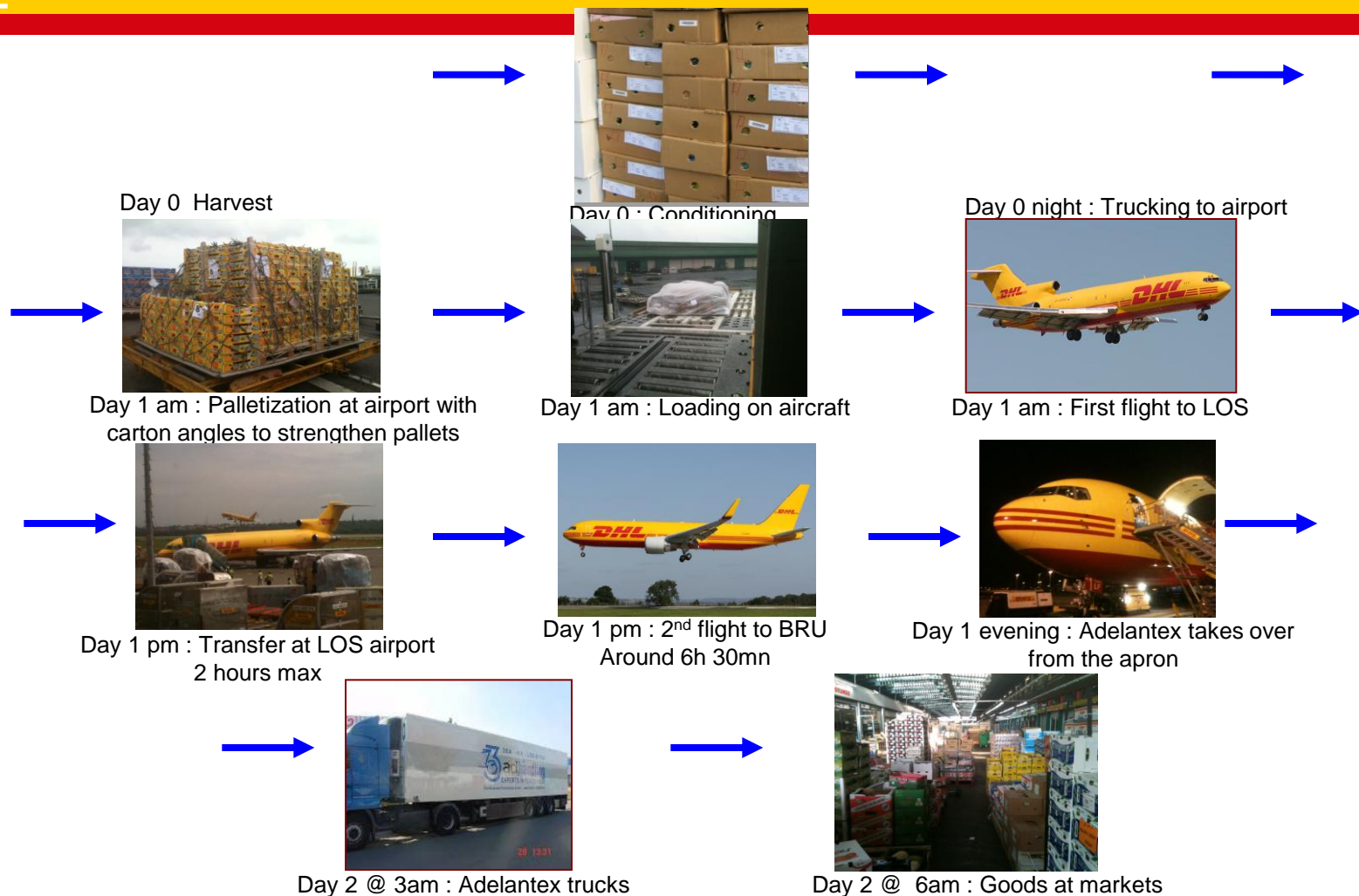
# Commodity carried by DHL Aviation from SSA

DHL Aviation



# Transportation of Perishables: The Supply Chain

## DHL Aviation



**Total Turn Around Time from Harvest to market: less than 48h**

## Conclusion

The needs to develop right product for the right market:

- Listen to requests of the market
- Certification (Group with AFGEAN)
- Respect regulations & comply with laws/requirements

Minimize production loss

- By optimizing cool chain & packaging
- Avoid loss of shelf-life to increase margins

Buffering seasonality by:

- Year-round production through different products
- Capability of peak handling & storage

Use experts in key-logistics & handling



THANK YOU FOR YOUR ATTENTION