# TRENDS IN ARTISANAL FISH TRADE IN COASTAL KENYA: TRADE COMMODITIES, CHALLENGES, AND ORGANIZATION AMONG KEY STAKEHOLDERS

(Ongoing Study.....)

Globalfisher.org ,2010

**RESULTS** 

**Dealers** 

**Consumer markets (including chain stores and supermarkets)** 

Mama Karanga

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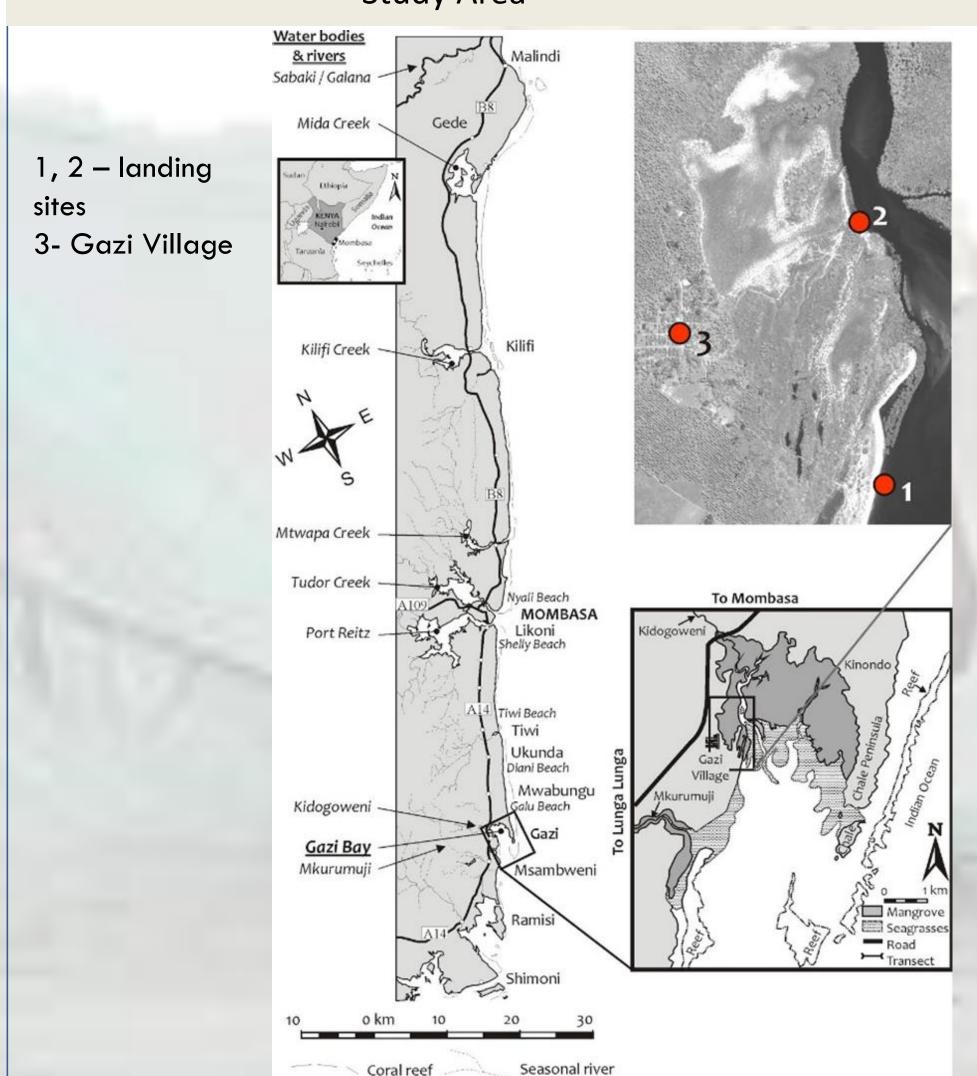
#### **BACKGROUND**

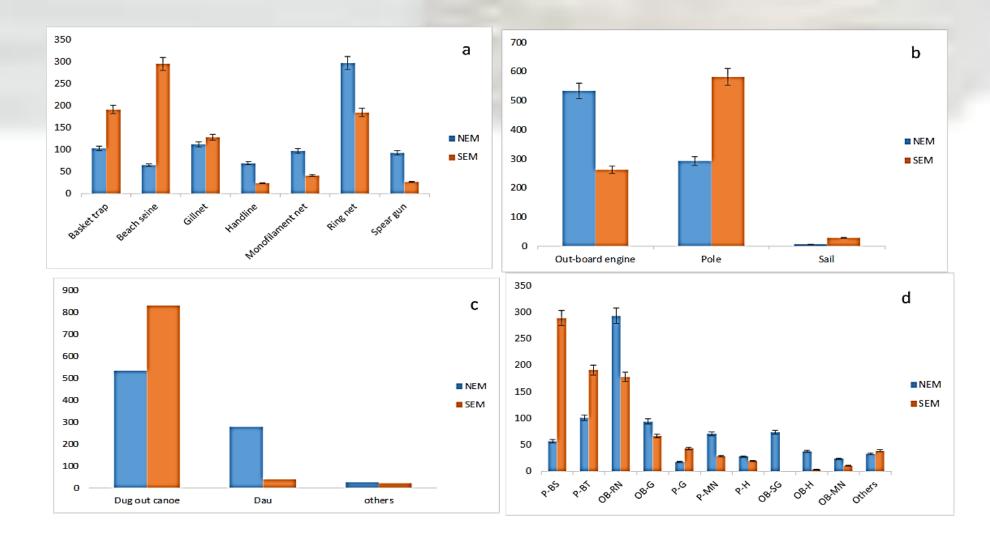
- Over 200,000 people along the Kenyan coast obtain their livelihoods by harvesting and trading in fisheries products (Matsue et al., 2014).
- The fisheries are artisanal dominated, with multispecies landings, seasonal catch variation, and dynamism in harvesting and post-harvest operations (Rudy et al., 2005; Nagelkerken, 2009).
- Fishing activities increase during the North Eastern Monsoon (NEM) and are low in South Eastern Monsoon (SEM) seasons (Wamukota, 2009).

# **METHODOLOGY**

- A. Key stakeholders identification (through Snowball method) and interviewing
- B. Landings' recording (season, family, gears and craft recorded between 6<sup>th</sup> January 2013 and 3<sup>rd</sup> April 2014 at Gazi landing site
- C. Total monthly catch weights and price recordings (obtained from the Gazi Beach Management Unit and Kwale County Fisheries Department)

## Study Area





Perennial river

Main road

Use frequency for (a) fishing gears, (b) Propulsion means, (c) fishing crafts observed and (d) propulsion gear combinations during the North Eastern Monsoon (NEM) and South Eastern Monsoon (SEM) seasons between year 2013 and 2014. Fishermen who did not use any propulsion were not included since they were relatively few. 'Other crafts' include Hori, Mashua and Outrigger canoe. Both Hori and Outrigger canoes were not observed during the SEM season. P-BS (pole-beachseine), P-BT (pole-basket trap), (OB-R)out-board engines-ringnet, out-board engines-gillnet (OB-G), P-G (pole-gillnet), P-MN (pole- monofilament net), P-H (pole- handline), OB-SG (out-board engines-speargun), OB-H (out-board engines-handline) and OB-Mn (out-board engines- monofilament net) and others. Other category of propulsion-gear combinations include Sails-gillnet, pole-speargun, pole-ringnet, sails-beachseine, sails-monofilament net, sails-speargun, out-board engines-beachseines and sail-handlines.

#### **OBJECTIVE**

- To exhaustively unveil the fish trade –
  with focus on processes of harvesting,
  processing and marketing.
- To compare frequency of boats, propulsions and fishing gears between seasons
- To compare amount of catch landed
   between seasons



**Small-scale Traders** 

ish Processing Compa



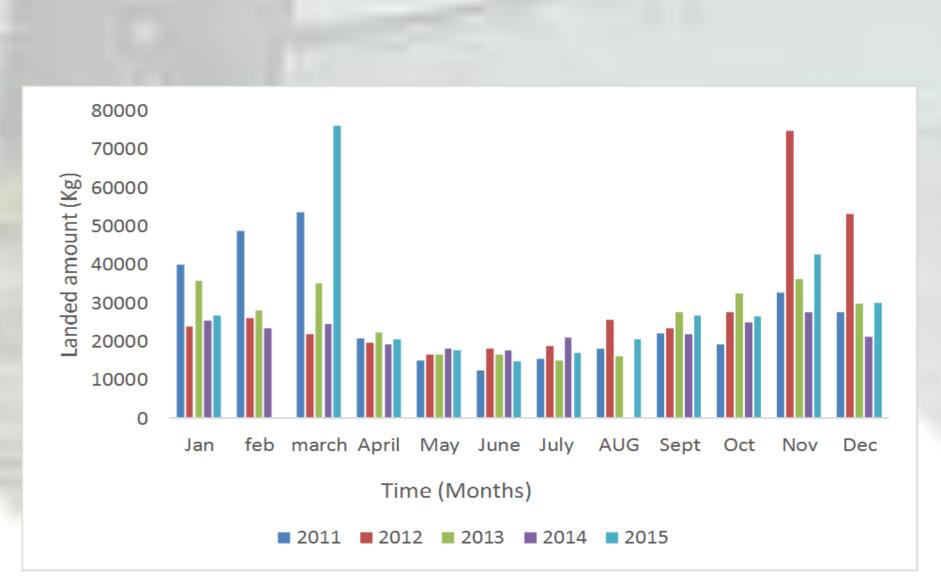
Direct capital (fishing gear, boats fuel, finance) injection

Fish (products) flow

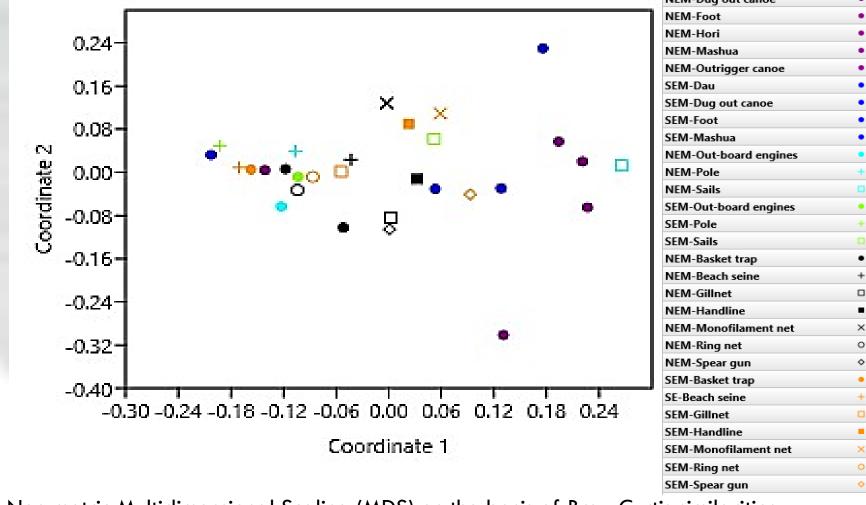
Description

#### Definition of stakeholder roles

- Fisherman captures fish and other aquatic animals, or gathers shellfish
- Dealer:
  - ✓ Buys fish in large amounts
  - ✓ Owns fishermen, gears and boats
  - ✓ Transports fish in relatively large amounts
  - ✓ Owns freezing facility and permanent structure shop
- Small-scale trader- Deals in relatively low fish and operate in temporary selling structure. Sell their fish row
- Mama Karanga small scale trader who cook fish prior selling
- Fish Processing Company-
  - ✓ Highly selective in species and size
  - ✓ Advanced processing of fish
  - ✓ May be involved in exporting



Total monthly landings in Kgs for period between years 2011 and 2015 showing high quantities in NEM (October to March) and relatively low SEM landings (April to September) for Gazi landing site.



Non-metric Multidimensional Scaling (MDS) on the basis of Bray Curtis similarities between samples of standardised data used to visualize differences in fish families composition between different gear, propulsion and craft types in NEM and SEM seasons

# DISCUSSION & APPLICATION

- South Coast Kenya fishery resources support an intense trading network
- Low catch amounts in SEM result to seasonal fluctuation in income, especially for communities that sorely depend on fish resources for livelihood
- Multispecies landings, multiple gears, propulsion and craft combinations are a source of challenge in studying and understanding tropical fishery resources

### References

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