



**ASSESSMENT OF SOCIO-ECONOMIC VALUE OF
SMALL PELAGIC FISHERY IN MAFIA ISLAND,
TANZANIA**

**BY
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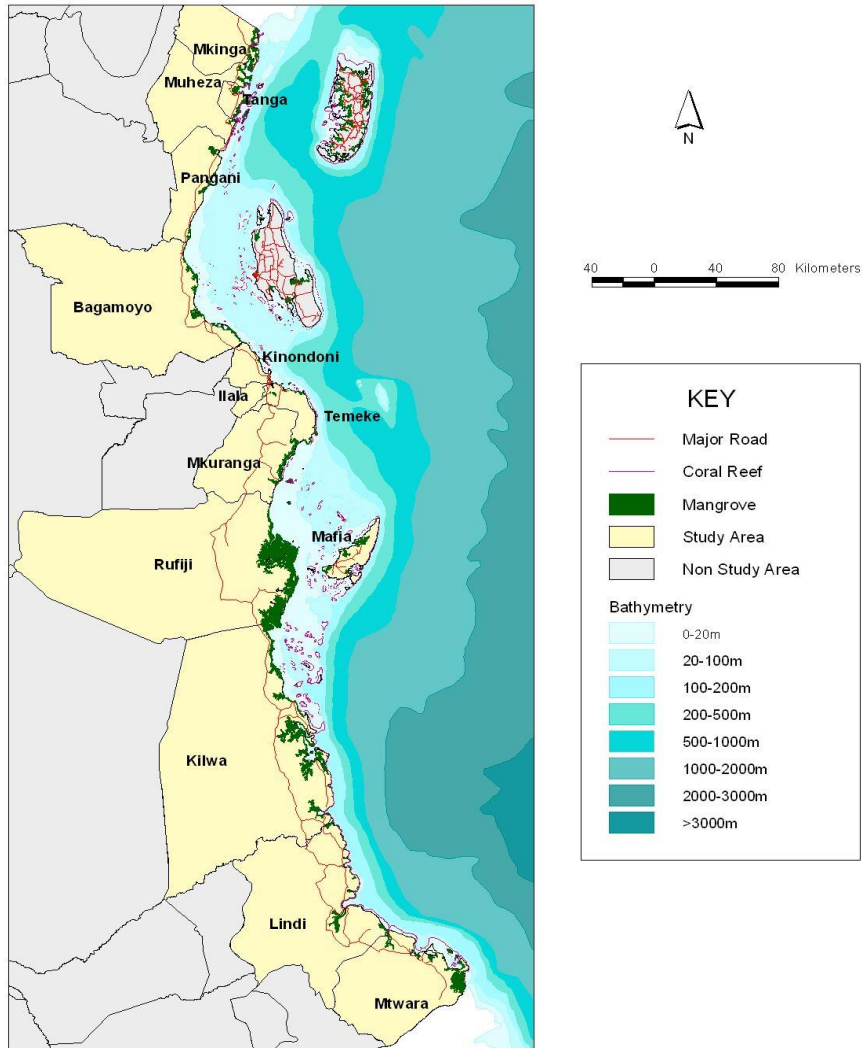
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Overview of Tanzania Fisheries Sector



- Lake Victoria- 51%
- Lake Tanganyika – 41 %
- Lake Nyassa- 20 %
- Coastline of 1424 km long
- EEZ -223,000 km²;
- Diverse river system; and
- GDP 2.5% contribution

Overview of Tanzania Marine Water



- Consist of eighteen coastal districts
- Artisanal & Industrial
- Artisanal** – small scale 95% production
- Free access – License
- Using small sized vessels and gears non mechanized but employs less technology
- These are the most important fisheries as it support majority of the fishing communities
- Artisanal ; Most small pelagic:



Problem statement

GOV: PRIORITY TO SMALL PELAGIC FISHERY

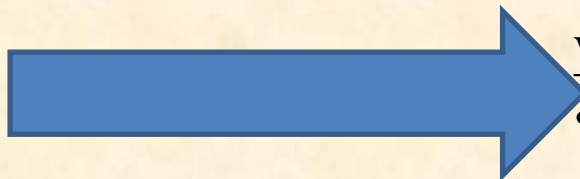
- Source of revenue
- Foreign exchange earnings



- HOPE FOR INCREASING;
- employment
- Nutritional dietary
- poverty
- food security

FISH NATURE

- Overexploitation

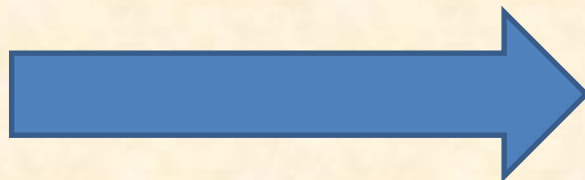


WASTAGE OF SCARCE RESOURCE

- Biological
- Social
- Economical

MINIMIZE COST OF INTERVENTION FAILURE

- Planner
- Researcher
- Administrators
- Environmental stakeholders



INFORMATION

- Biological
- Social
- Economic

Significance of the Study



Body of knowledge

- Socio-Economic value of small pelagic fishery

Appropriate fisheries resource management options.

- Researchers, Policy makers, fisheries resources managers and stakeholders .

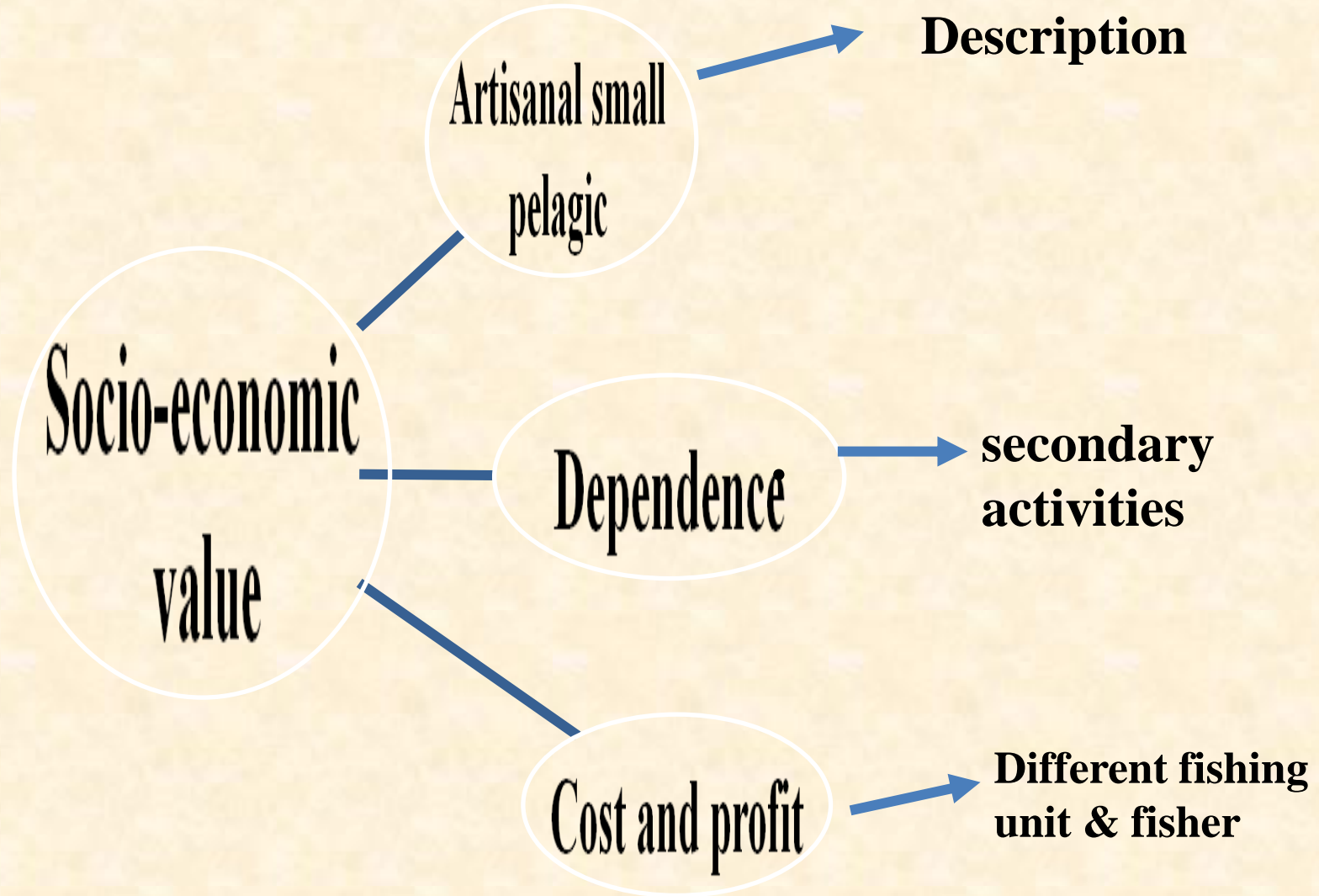
Small pelagic fishers

- To understand the returns of their investment (make decision)

Future studies

- Baseline information for comparison.

Objectives of the Study



RESEARCH METHODOLOGY



- Study Area :



- Incredible marine biodiversity
- About 350 species of fish including small pelagic species
- Best fishing ground
- The population is 46,438
- Mafia is about 48 km long and 17 km wide .
- More than 700 and migrant fishers
- Fish Production is **3,325.74 Mt**
- Majority of the people are poor
- Result will shaded the light to what is happening to other coastal community.

DATA COLLECTION & ANALYSIS



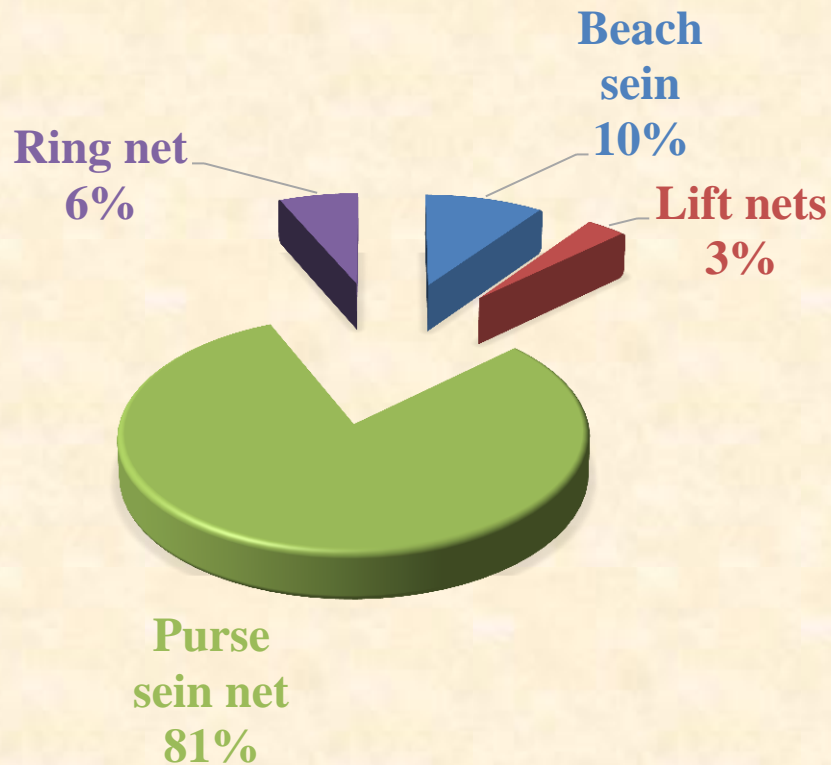
Data collection

- **Secondary data** was obtained from review of various documents (books, journals and reports and CAS data base).
- **Primary data** on the cost of production were collected from the study area through a designed questionnaire

Data Analysis

- **Discriptive stastistics** were used to discribe small pelagic fishery & Dependant in Mafia,
- Data about the cost of production were analysed using **SAS softwere**,
- Regression** (production cost & U-effort)
- Analysis of covariance**- (Level of Sign.catch, cost & effort)

Type of fishing Gear



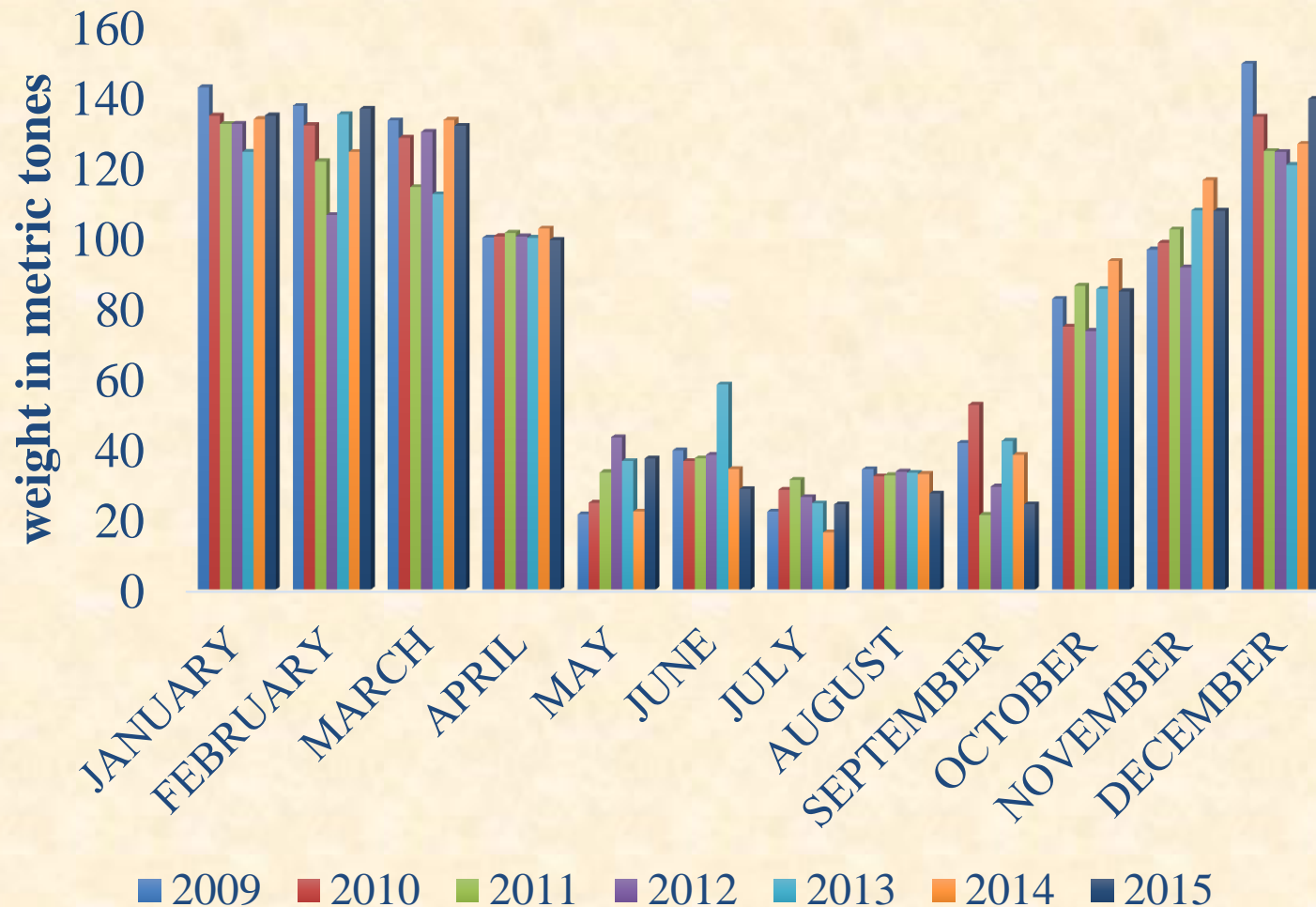
Operation of Purse sein net

- Night
- lighted dinghies
- Dimensions: 100 m - 150 m long & 15 m deep .
Mostly >10 m vessel
- High man power

Catch in Mafia



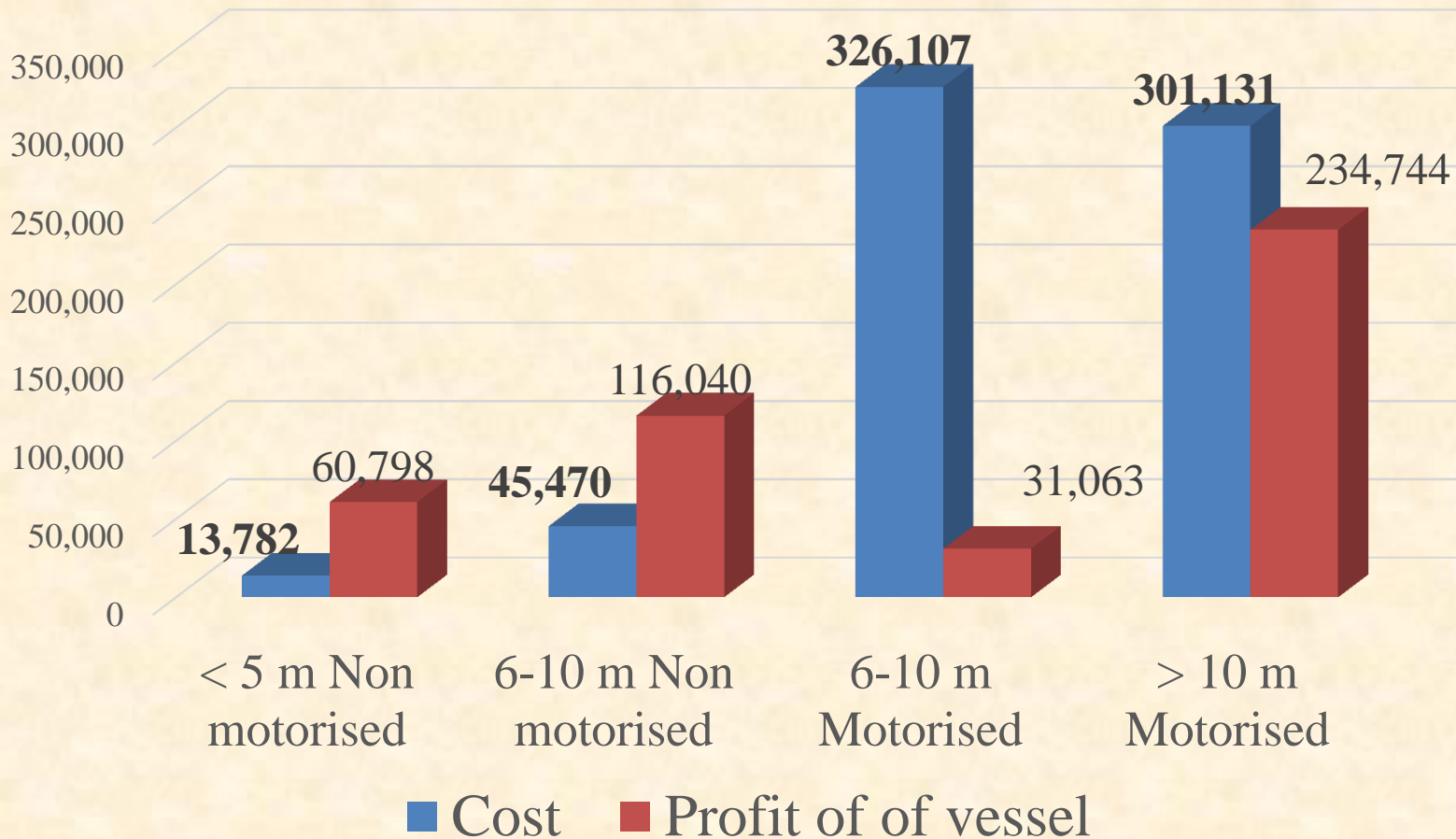
Small Pelagic



OPTIMAL FLEET OPERATION

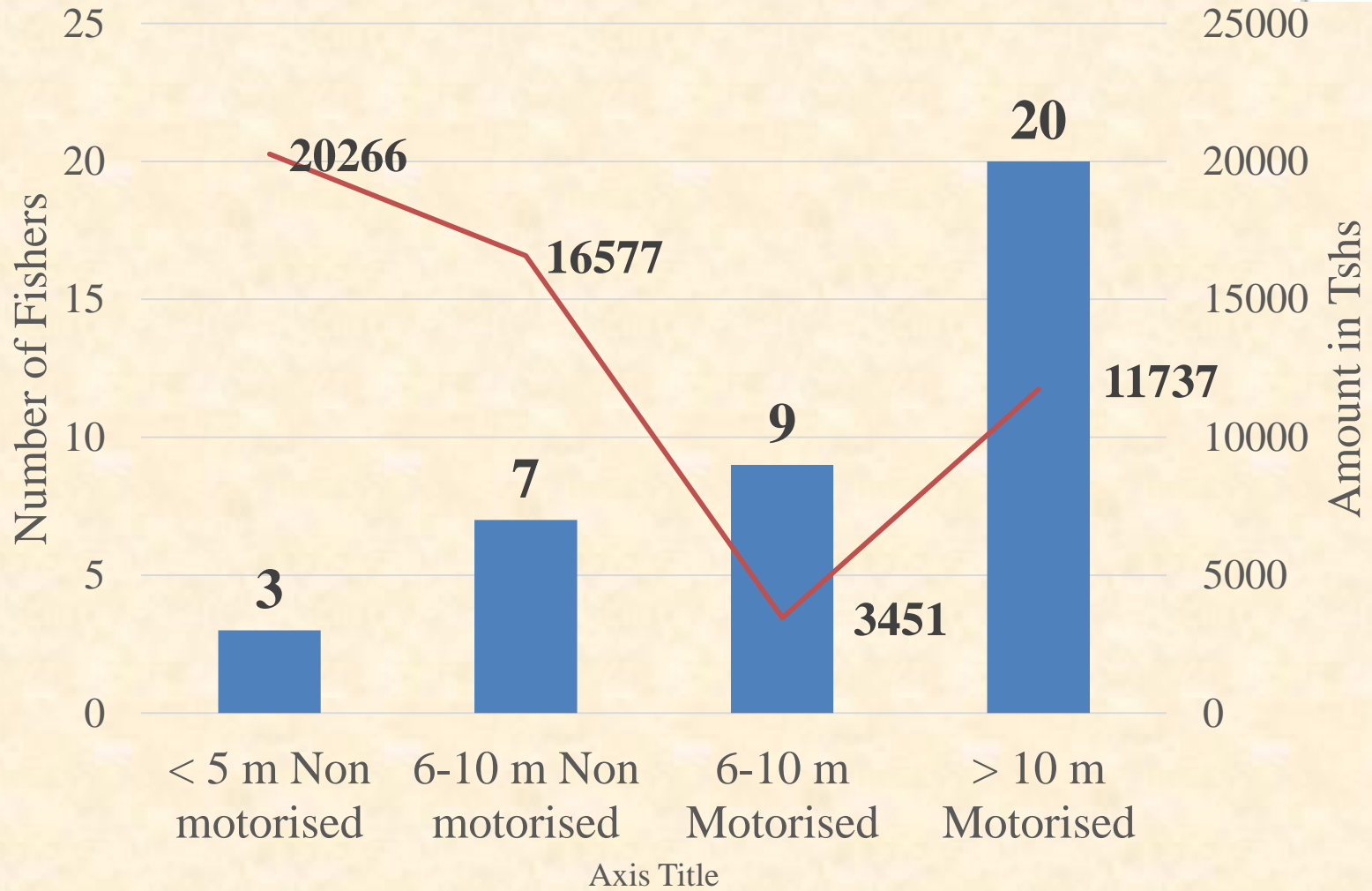


Cost and profit per vessel



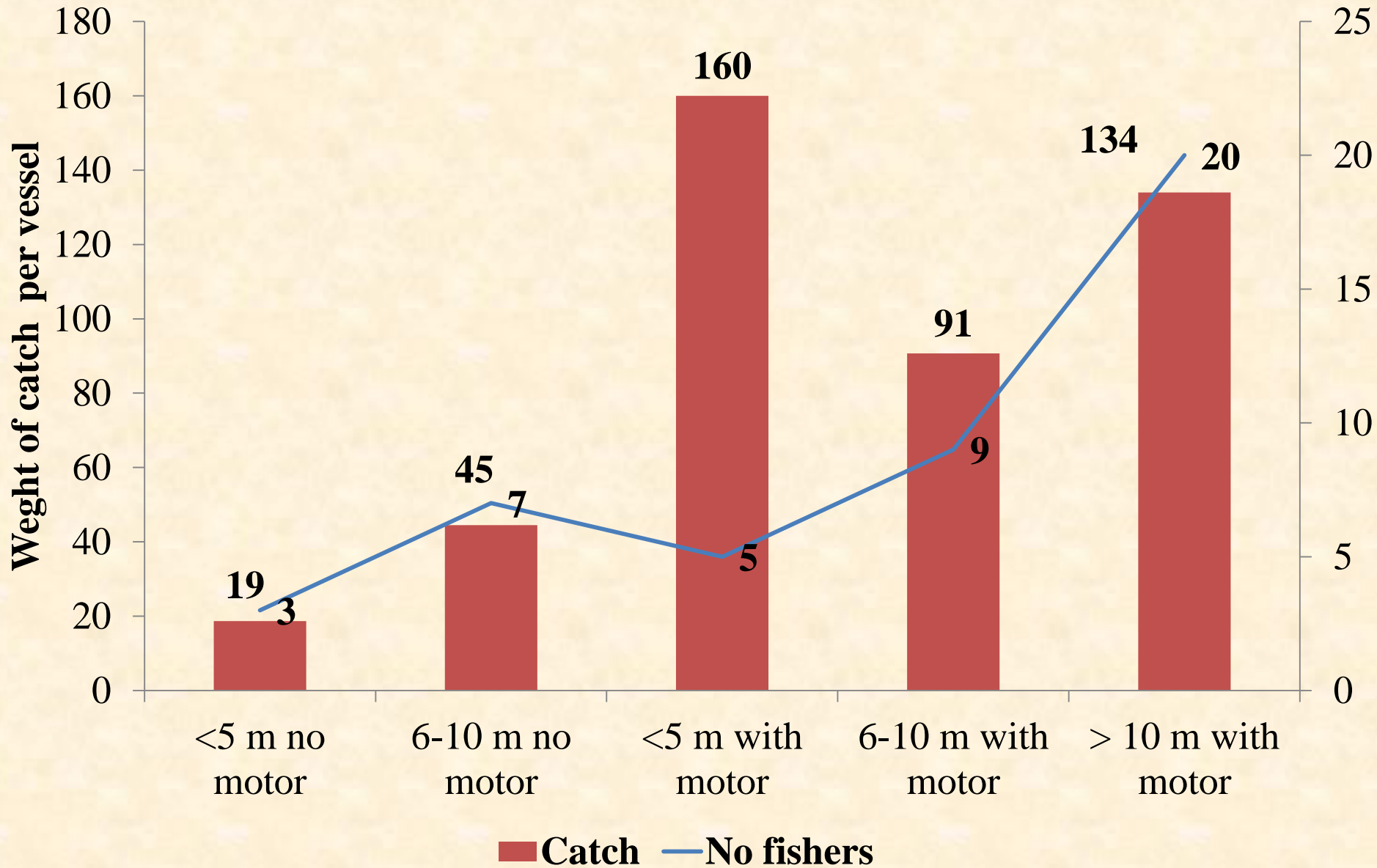


profit per fisher



■ Number of fishers — Profit per fisher

Crews and catchability



Recommendation and conclusion



Recommendations

- Policy focus on smaller vessels and ways to reduce overall effort cost
- Gear according to size of vessel
- Reduce cost of Production (motorised- HP <40)
- Reduce number of fishers on vessel for more profit sharing

Conclusion

- Alternative employment activities
- Capacity building to fisher: Act & Regulation, Fish hygiene & good manufacturing practice, Record keeping & saving.
- Gov. Investment: Infrastructure such as cold store, Draining racks, ice plant at the landing site. (value, Post harvest)

Benefit generated should not be ignored



THANKS

**May God Bless You
ALL**