





Sri Lanka is Small island consist of 1 770 km coastal line Contribute 530,920 metric tons (2016)

- Marine 457 MT
- Inland 74 MT

Consist more than 14 deep sea fishing harbors 1.8% for the National GDP

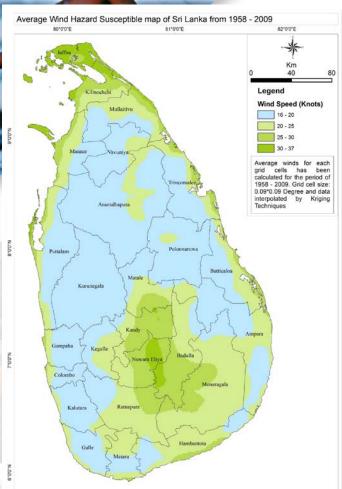


#### INTRODUCTION

Extreme, unpredictable weather with heavy storms and changing rainfall patterns are common evils of damaging fishing communities in southern coast of Sri Lanka

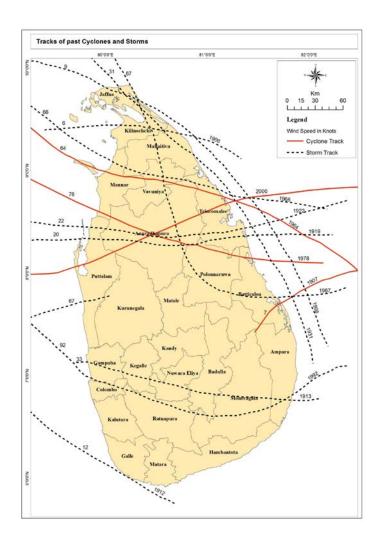
- Global climate change has profound implications for marine ecosystems, economic and social systems while coastal communities in the frontline of it
- Based on the changes of climatic conditions, there are mainly two seasons, off season from June to August and peak season October to February

# Average Wind Hazard Susceptible map of Sri Lanka from 1958 - 2009

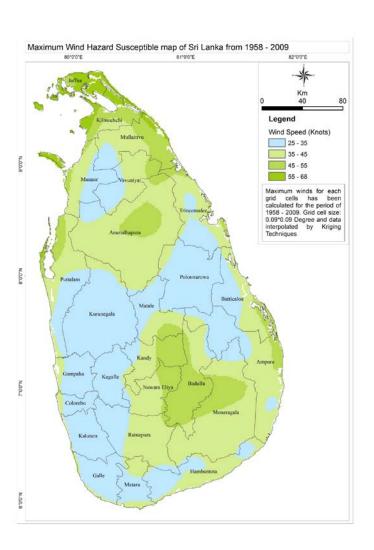


**Average Wind Hazard** 

#### **INTRODUCTION**



Tracks of Past Cyclones and Storms

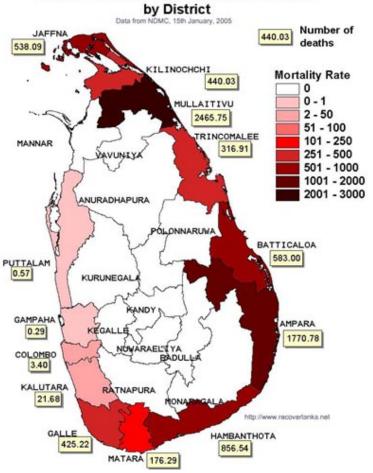


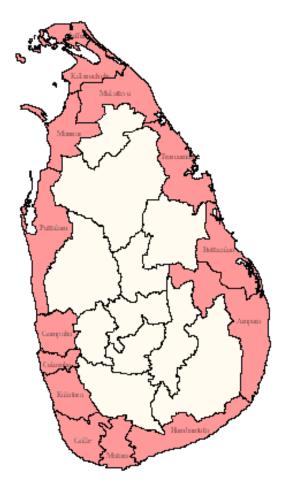
**Maximum Wind Hazard** 



#### **INTRODUCTION**

#### Tsunami 2004 Disaster - Number of Deaths





**Death occurred by tsunami** 

Districts Vulnerable to Coastal Hazard



#### **Research Problem**







 Find out whether the fishermen are malleable or non-malleable in labor and whether they are engaging other income generating activity during the affected period and off season is more timely relevant with the huge impact of climate change

#### **Research Location**

**Kudawella In Hambanthota District Southern province** 





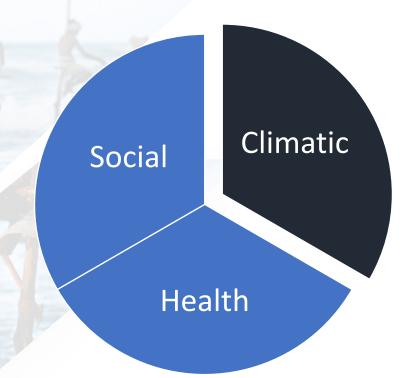




- 1) To investigate the responses of fishermen and women on climate shocks i.e. Cyclones, Storms, Heavy rains
- 2) To Identify the physical, social & motivational attitudes on vulnerabilities & capabilities of fishermen & women in a disaster situations.
- 3) To Develop strategic intervention: Skill inventory of fisherman

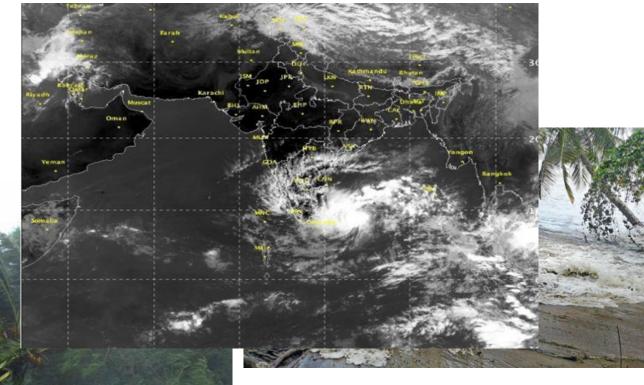
"Shock is an event that can trigger decline in well-being, which can affect individuals(illness, death), a community, a region, or even a nation (natural disaster, macroeconomic crisis)"

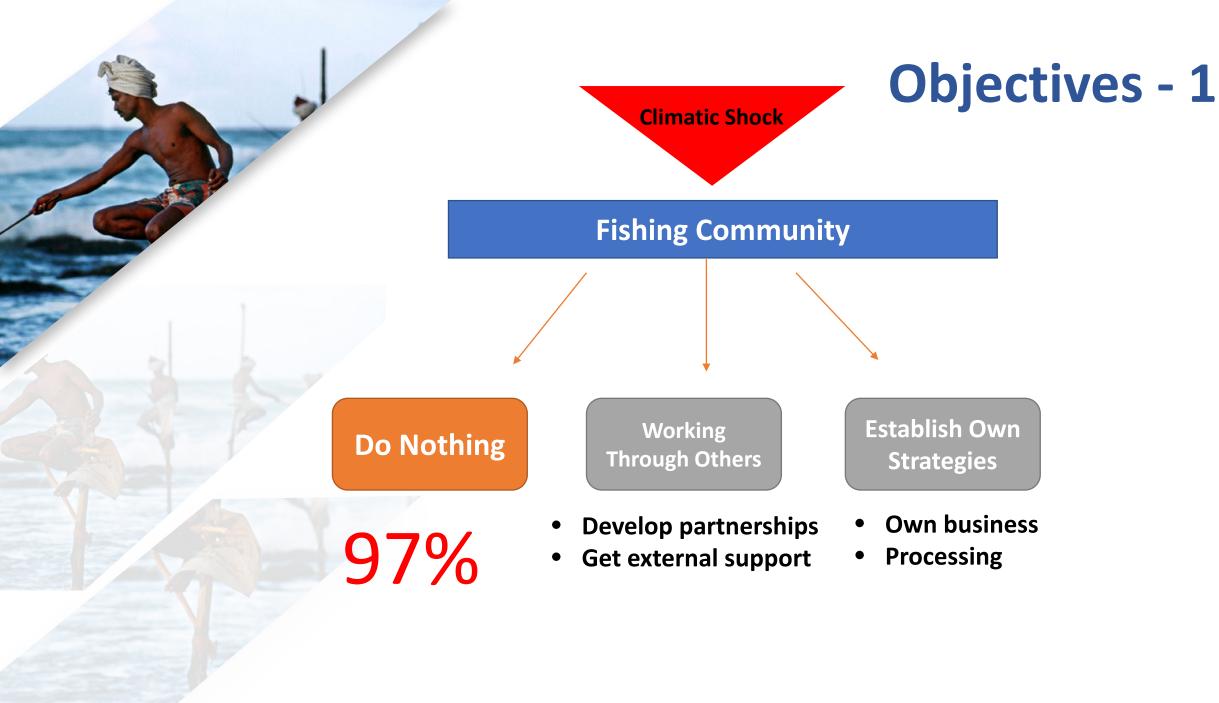
(World Bank, 2000-01)



#### **Climatic Shock**









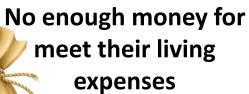
Borrowing Money



NO INCOME



- NO MONEY FOR FOOD
- EDUCATION
- BASIC NEEDS



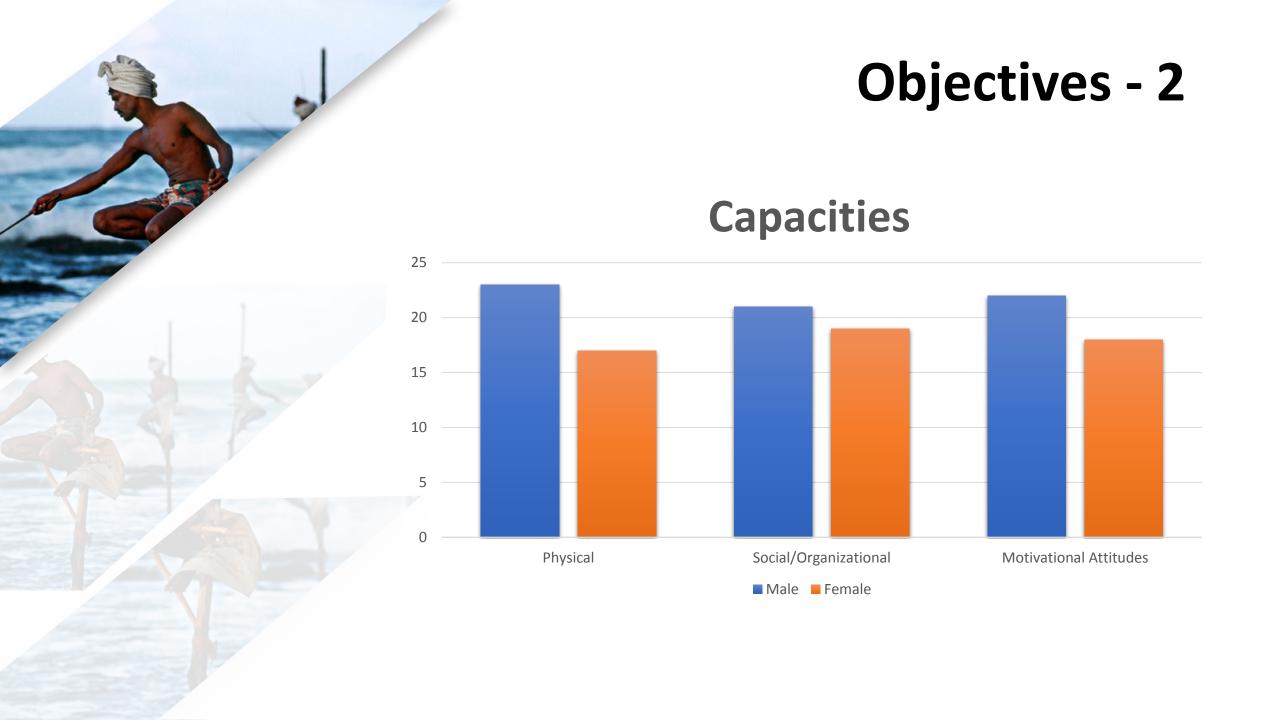


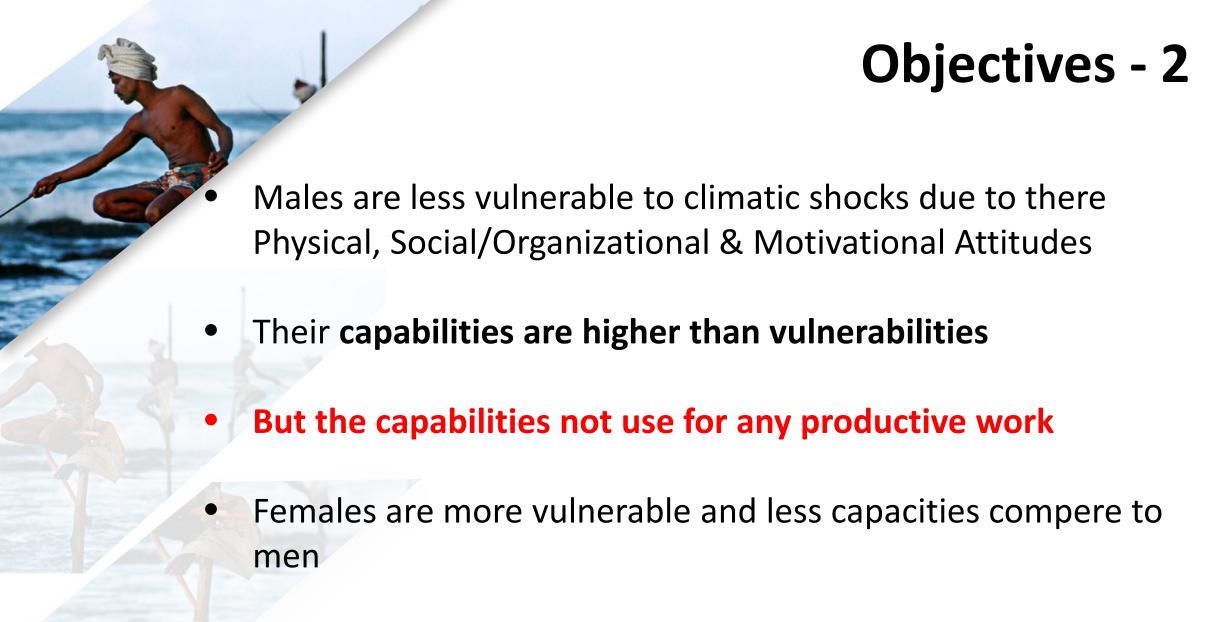


What are,
Vulnerabilities...??
Capacities...??

Used a scoring system to identify the levels

### Objectives - 2 **Vulnerabilities** 25 23 20 21 21 19 15 10 Physical Social/Organizational Motivational Attitudes ■ Male ■ Female







Fishing community have more capabilities other than their main income source

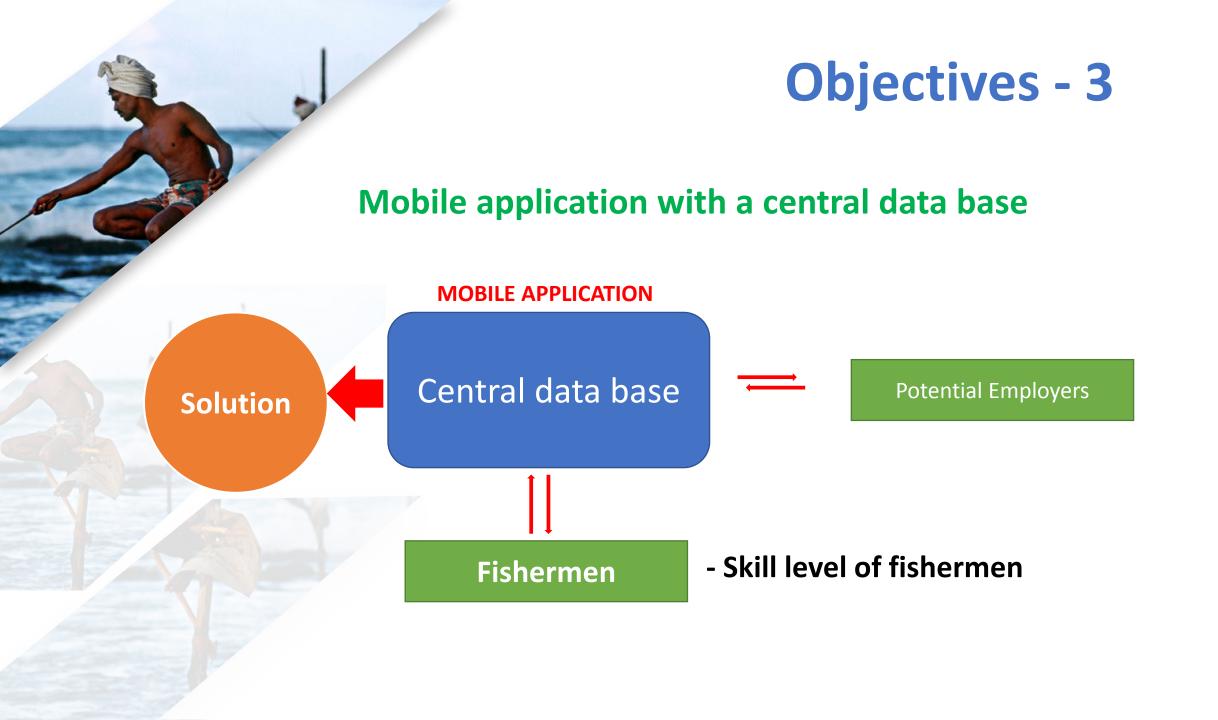
- Borat repairing
- Carpentry
- Taxi driving
- House building contracts
- **But** most of the time in off season they spend time without any productive work



#### Main reason

- Lack of knowledge & information Part time /
   Seasonally jobs
- Not willing to do a job

 Developing a Skill Inventory can be use as a solution to find jobs





# Conclusion

- 97% of fishermen are not using other strategies to overcome the effect
- Females are higher malleable in labor than men.
- Males are less vulnerable than females
- Males have higher capabilities than females
- Developing a skill inventory make a open connections between potential employer and fishermen.



Develop a prototype to test it practically.

- Further it can generalize after prototype installation.
- Further the mobile application can be developed as a disaster alert system
- Disaster preparedness level can be influenced by more trainings and workshops

#### Reference

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