Invasive Aquatic Species on the Atlantic Coast of Cameroon: A Need for Policy Formulation

Presented by: Baninla Yvette

Supervisor: Prof. Zhu Xiaoqin

Introduction and Background

Invasive Aquatic Species (IAS) is defined as any non-indigenous species knowingly or unknowingly transported and released by human activities into an environment other than it native habitat.

(Petersen et.al., 2005)

Introduction…Problem Statement

Meaningful new commitments to combat IAS threats have not so far been forthcoming

We believe the world is looking at IAS as if it is a fiction

IAS threats are moving faster than efforts to combat it

IAS is a defining issue of our age

The search to preserve the marine world from various forms of pollution has been the subject of most academic debate

Introduction …Support for Problem Statement

Cameroon is struggling with complex and valuable Invasive Aquatic Species problems.

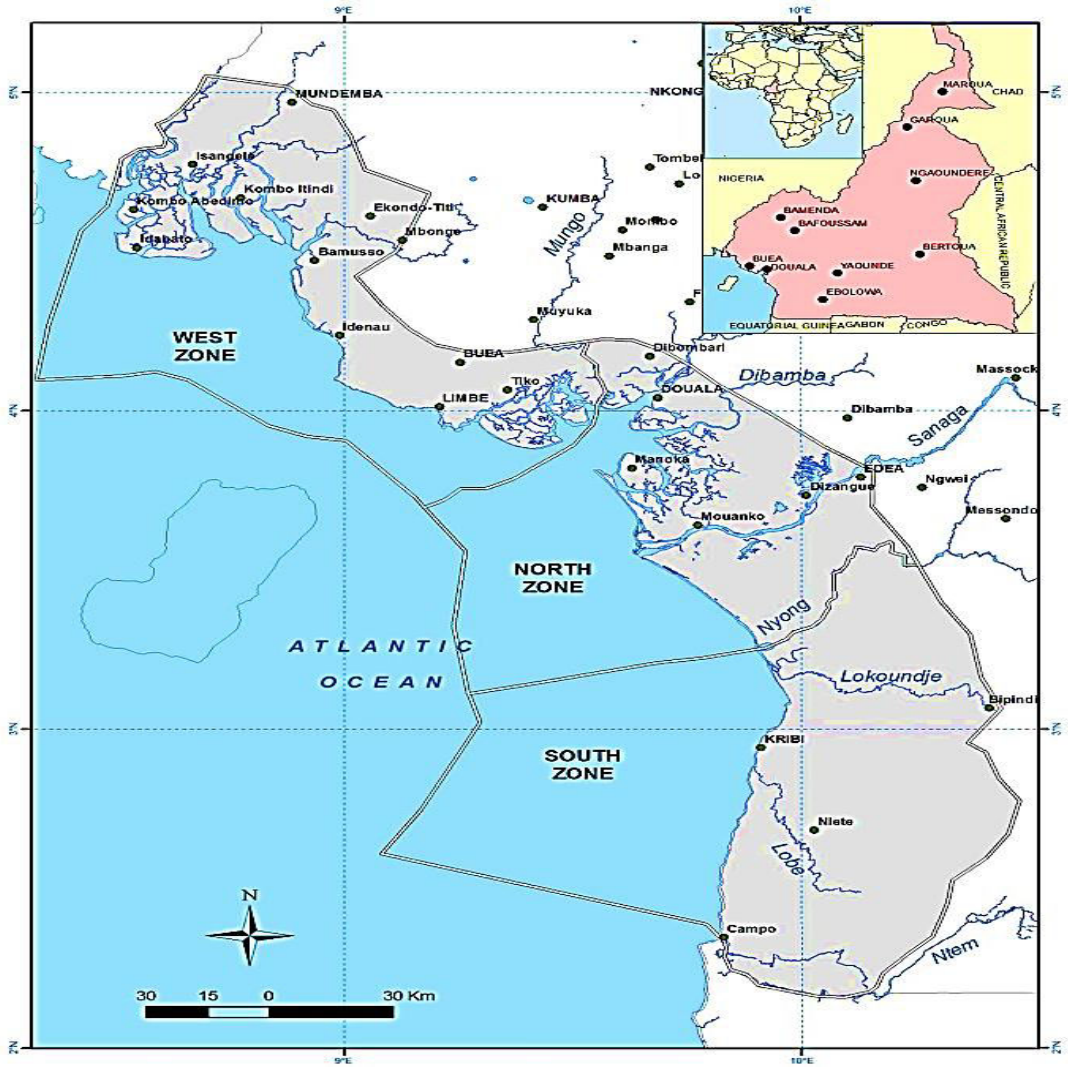
Unfortunately, there is no proper governmental management or any policy framework to deal with this problem.

The urgent and growing threats of IAS would ultimately define the contours of our motherland more dramatically than any other issue

It is time for the government of Cameroon to take this threat seriously

This thesis tries to answer the burning universal question of whether policy can stop the spread of IAS

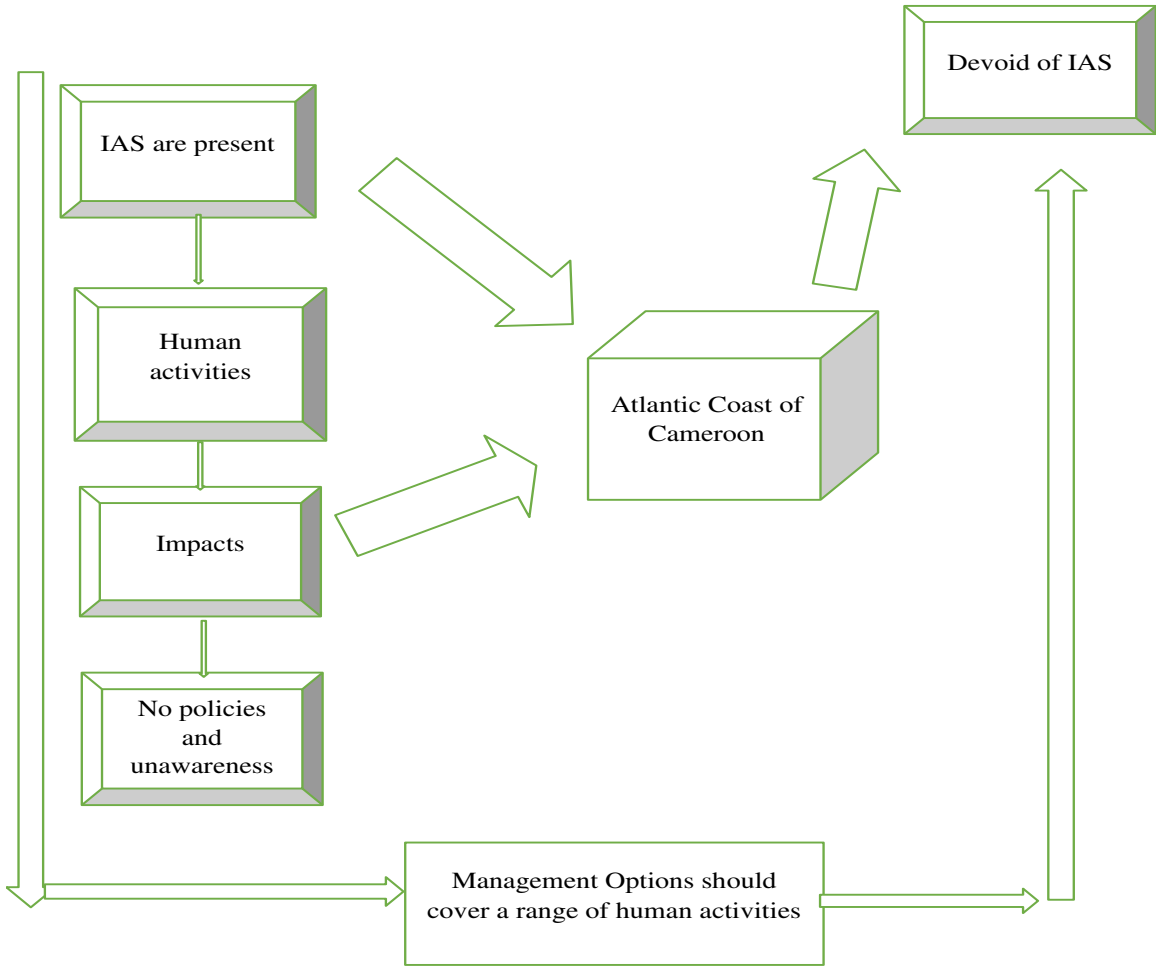
Introduction….Study Area



Introduction…Research Objectives

- Identify Alien Aquatic Species on the Atlantic coast of Cameroon.
- Outline the different vectors of Invasive Aquatic Species.
- Portray the impacts of IAS on the Atlantic coast of Cameroon.
- Examine the management efforts and constraints faced.
- Emphasize on the formulation of policies as a tool to mitigate unwanted species

Introduction…Hypotheses
Diagrammatical Representation of Hypotheses



Research Method & Design

A quantitative and qualitative research method was used to collect data

A hypothetic-deductive approach was also employed

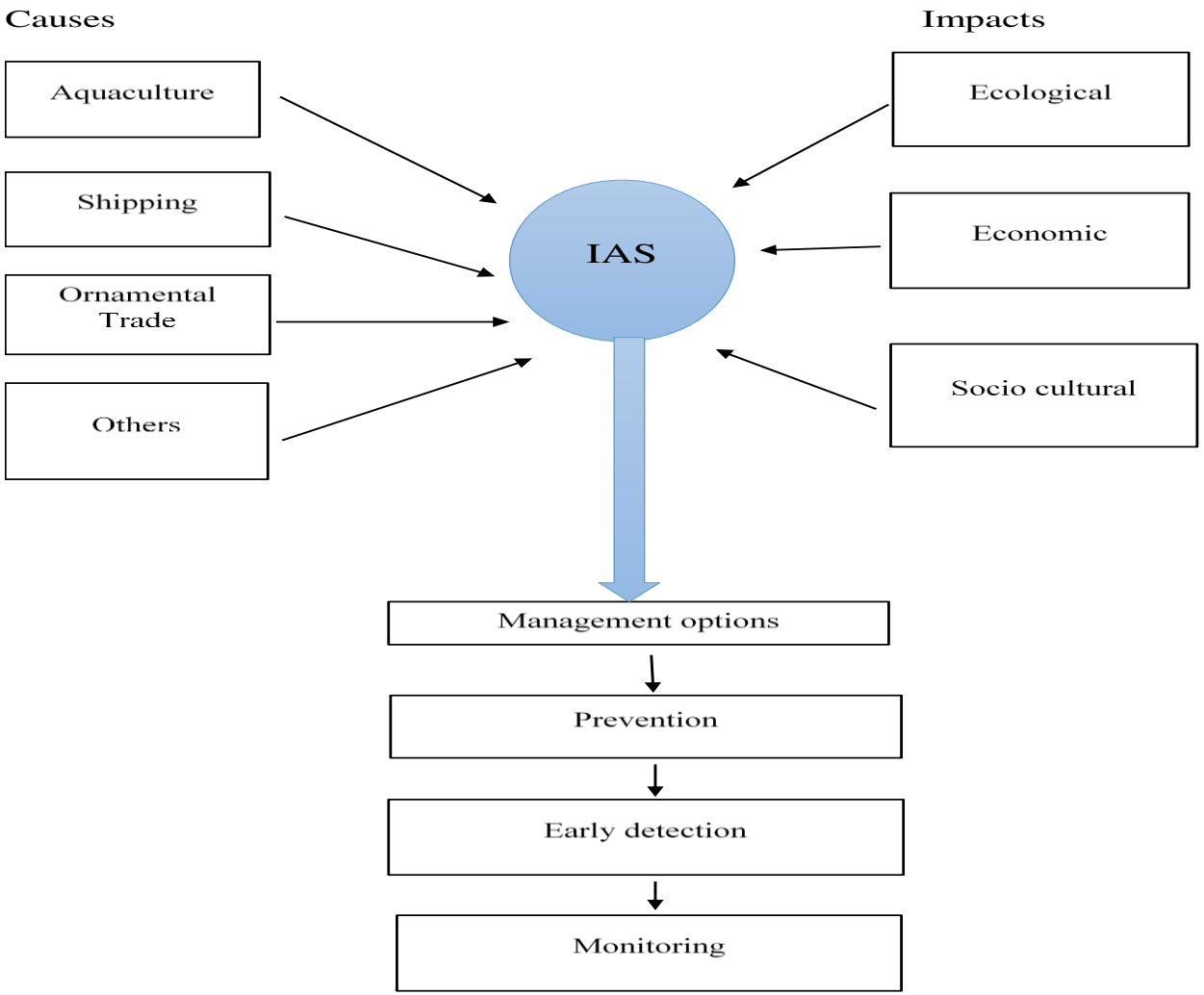
Secondary documents were explored

Questionnaires, interviews, personal observations and fieldtrips

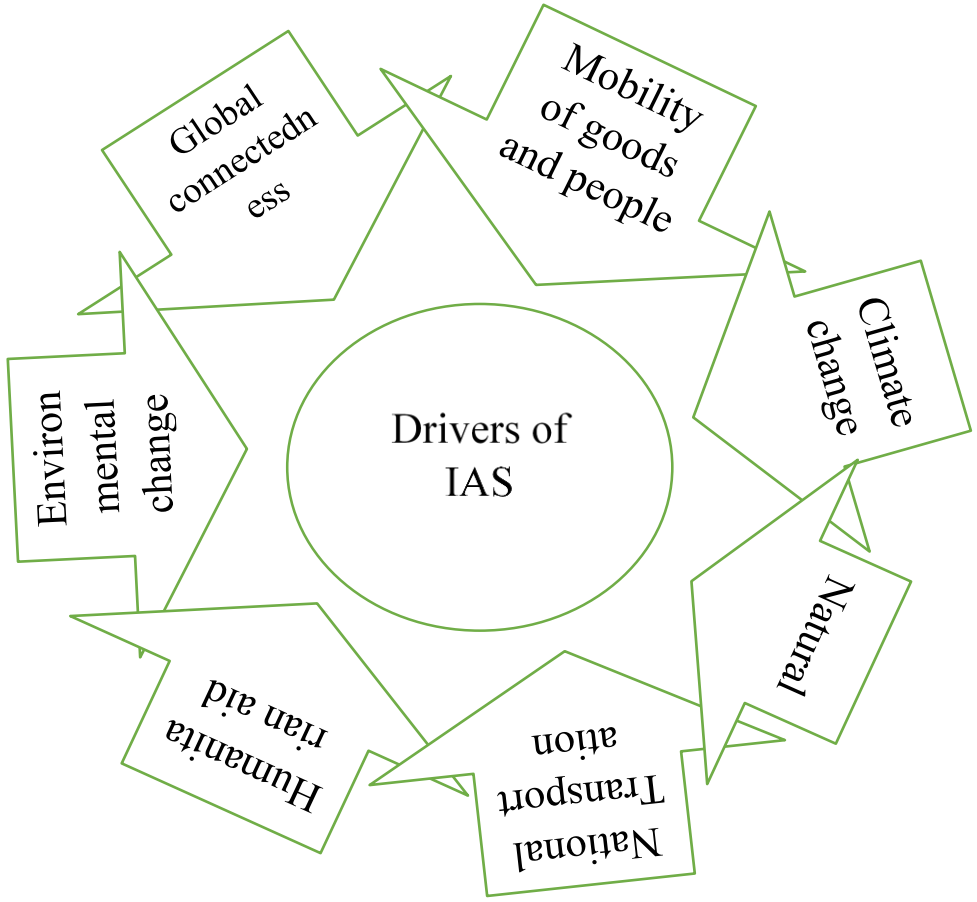
Simple random sampling technique was used

318 questionnaires were distributed, 309 successfully received

Literature Review



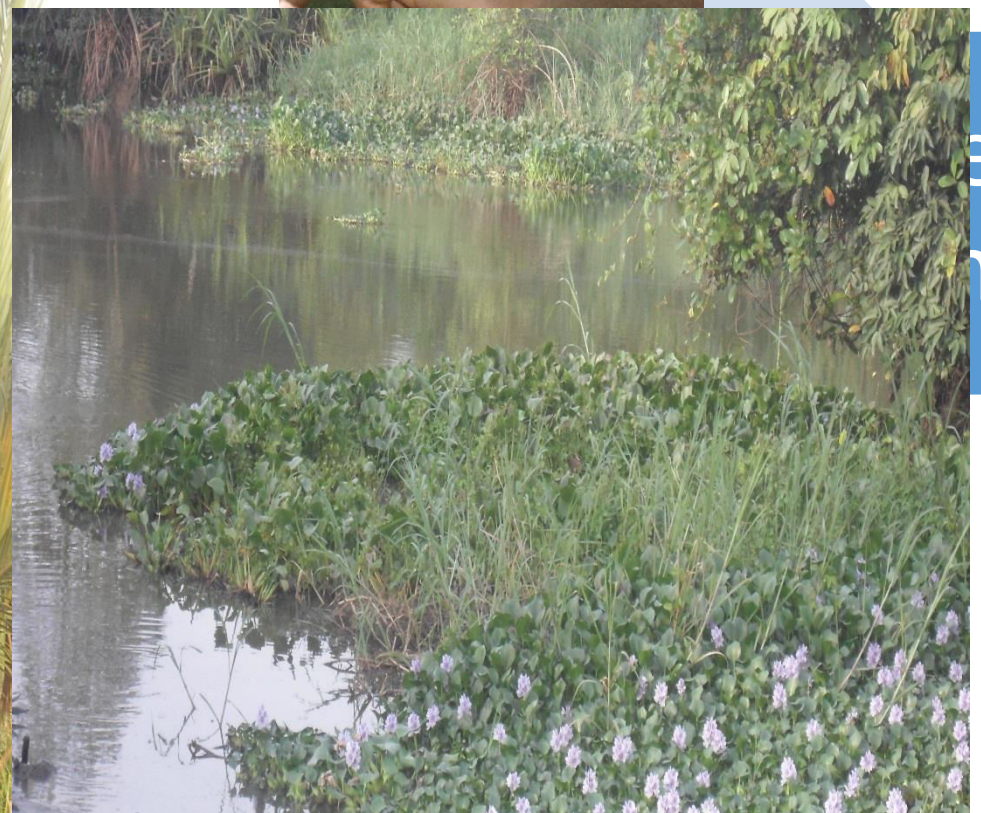
Presentation of Findings…Drivers of IAS



Presentation of Findings

Q1. W ecies
fou n?





Presentation of Findings

Q2. What are the different vectors or pathways for this spread?

Q2. Vectors /Pathways

Shipping

Fishing

Sea Trade

Aquaculture

Presentation of Findings

Q3. What are the environmental impacts of IAS on the Atlantic coast of Cameroon

Environmental Impacts

- The three identified IAS bring negative ecological, economic and social impacts.
- However there are some positive impacts
- But the negative impacts far outweigh the positive impacts

Impacts IAS on the coast of Cameroon







Presentation of Findings

Q4. How are IAS managed in Cameroon and what are the constraints faced

Management of IAS on the coast of Cameroon

The different species identified are being managed differently

Methods used are

Water Hyacinth(Chemical method, manual weeding)

Tiger Prawns (There has been international and regional legislation e.g. Consortium on Shrimp Farming, FAO code of conduct on sustainable shrimp farming, Abuja Convention)

Management of IAS

Nypa colonization has barely begun to be an issue in Cameroon. So far there is no management strategies adopted by the government nor concerned groups.

These management have face a number of constraints

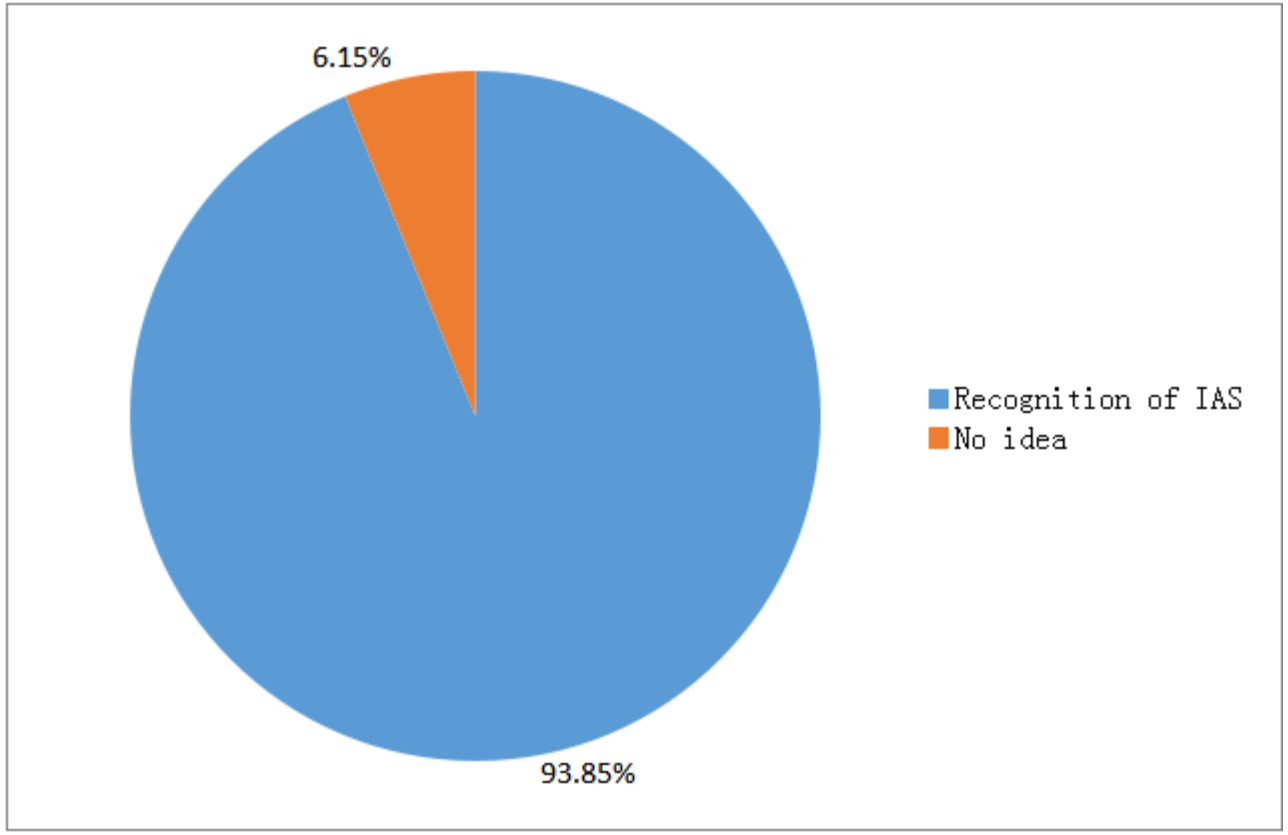
Presentation of Findings

Q5. Can policies serve as a tool to mitigate the spread of these IAS?

42.7% of respondents agreed that policies could be the best means to stop the spread of IAS. This therefore answers the burning universal question of whether policies can stop the spread of IAS.

Results and Discussions

Hypothesis 1: Alien Aquatic Species are Present on the Atlantic Coast of Cameroon



Results and Discussions

Hypothesis 2: The Presence of IAS along the coast is as a result of Human Activities

Activity	Douala coastal area (no)	Limbe coastal area (no)	Kribi coastal area (no)	%
1-Commerce in fishing	25	28	15	22
2-Aquaculture	7	2	3	3.88
3-Shipping	20	11	9	12.94
4-N.G.O worker	11	5	6	7.11
5-Fishing(fisher men)	27	30	22	25.56
6-Recreational boating	6	1	2	2.91
7-Sea traders	21	18	15	17.4

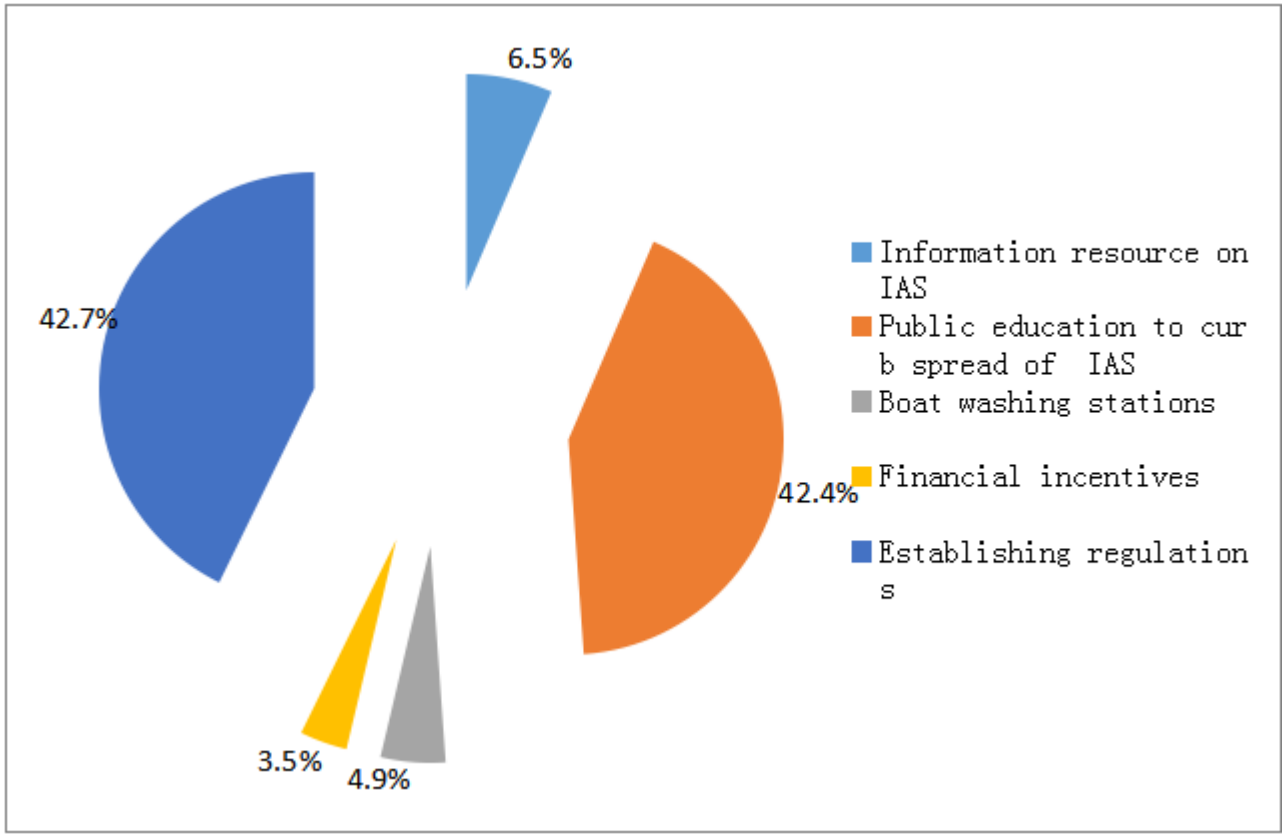
Results and Discussion

Hypothesis 3: Invasive Aquatic Species have Impacts on the coastal Environment of Cameroon

Variable	Respondents	
	No	%
Very significant	28	36.36
Significant	39	50.64
Minimal	7	9.11
No impact	3	3.89
Total	77	100

Results and Discussion

Hypothesis 4: Lack of Policies and Awareness have Exacerbated the Spread of IAS

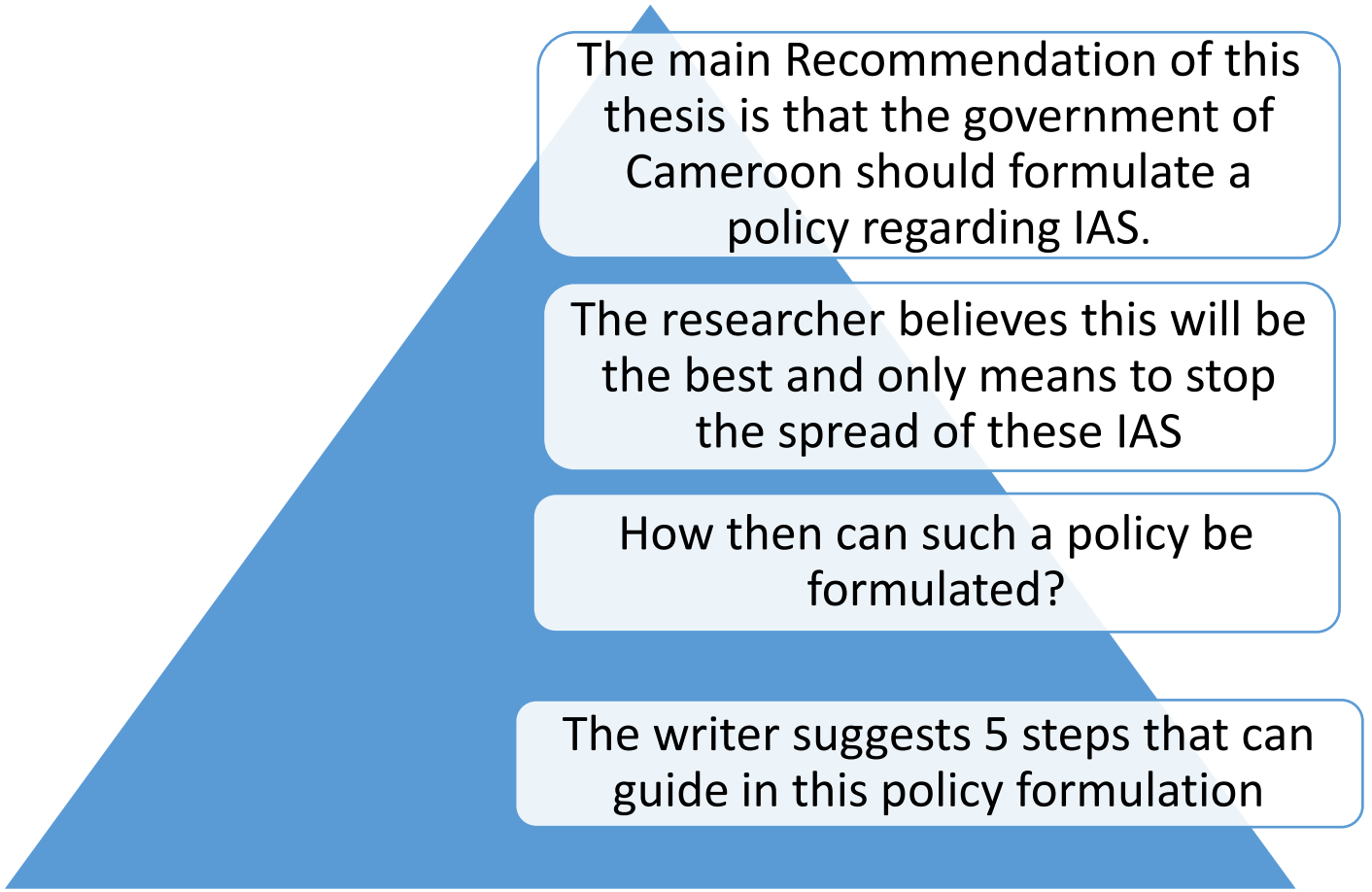


Results and Discussion

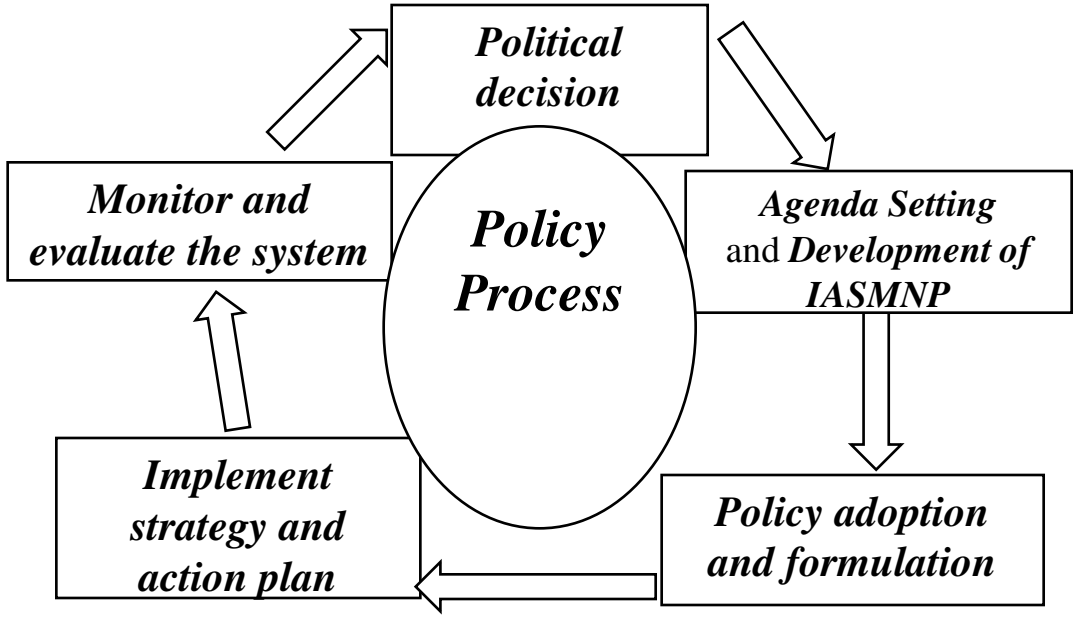
Hypothesis 5: Management Objectives should envelop all fields of human activities

Most respondents agreed that policies be formulated. However most fishermen and concerned individuals were skeptical that policies will affect their lifestyle. This indicates that there is bound to be conflict because there is no way for policies to be formulated without affecting their way of life.

Recommendation for action



Recommendation for action



Conclusion

Increased awareness can reduce the spread of IAS

A well developed and implemented national framework is the most excellent way to alleviate, curtail and ultimately abolish the spread of IAS.

The paper holds that the Atlantic Coast of Cameroon should not be abused but preserved and utilized.

Limitation and Outlook for further studies

For the fact that this work does not address all issues related to IAS on the coast of Cameroon, the author would be grateful for the prospective research in this light to go beyond her speculation.

It is solicited that further studies be carried out in the domain for the better understanding of the pathways, impacts and management.

Acknowledgement

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The End

Thank You

Xie Xie

Merci

Beri Ven