

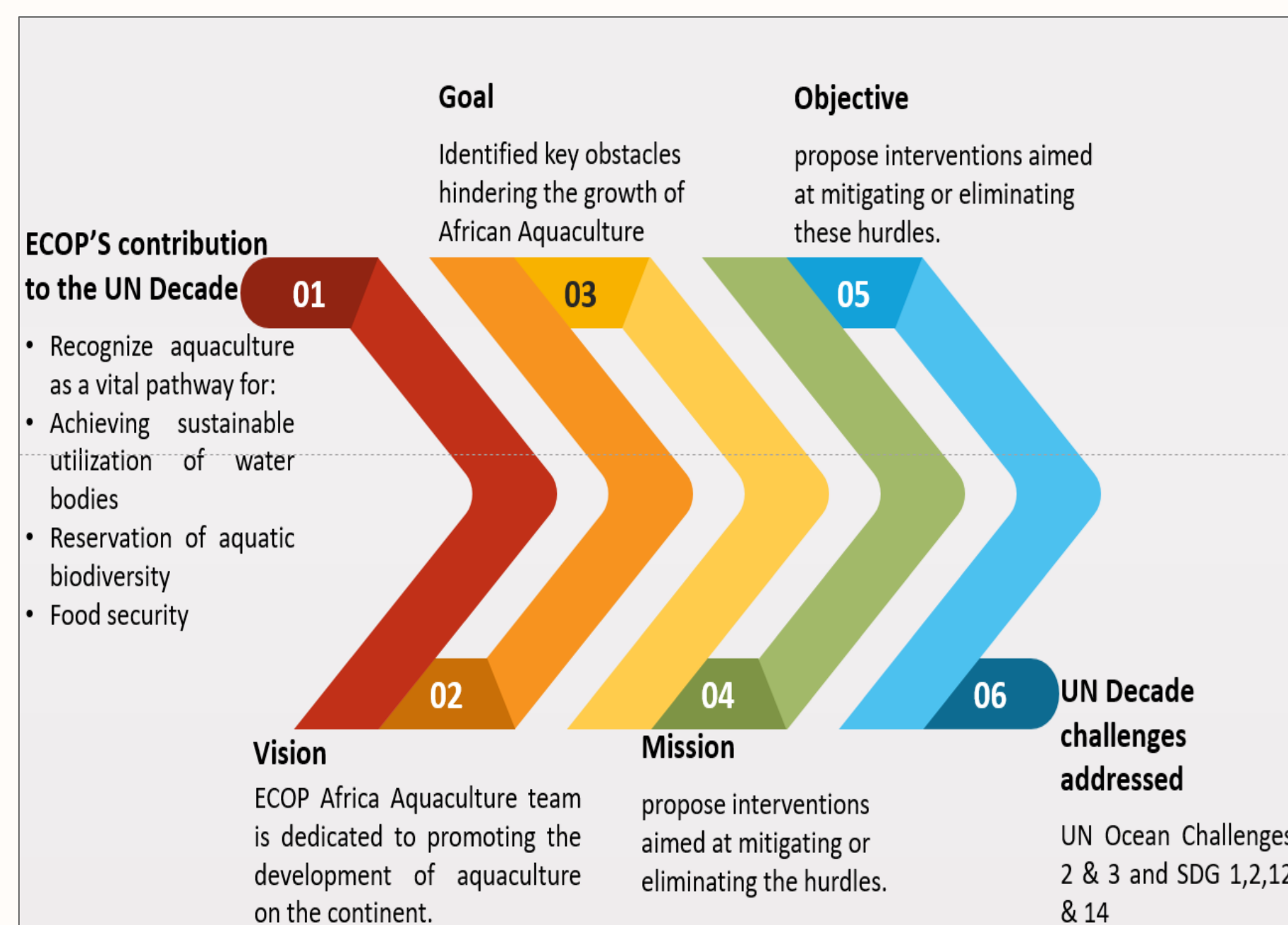
AFRICA OCEAN EXPERTS PERSPECTIVE OF AQUACULTURE CHALLENGES IN AFRICA

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OVERVIEW

INTRODUCTION

Africa Ocean Experts (A.O.E) team have a strong focus on **Aquaculture**.
The growing population makes this need even more urgent



Africa has achieved impressive double-digit growth in aquaculture, despite recent challenges from COVID-19 and diseases. However, the continent's high fish demand and declining capture fisheries highlight the urgent need for substantial growth in aquaculture production. Currently, most countries heavily rely on fish imports, impacting their national income. Aquaculture in Africa primarily utilizes semi-intensive systems like ponds, with limited intensive cage farms. The expansion of cage culture and availability of commercial feed have contributed to increased aquaculture production. Mariculture, though on a smaller scale, is practiced in countries like Egypt. Except for Egypt, aquaculture's contribution to fish production in Africa remains relatively low.

AQUACULTURE CONTRIBUTION TO FISH DEMAND AND PRODUCTION IN AFRICA

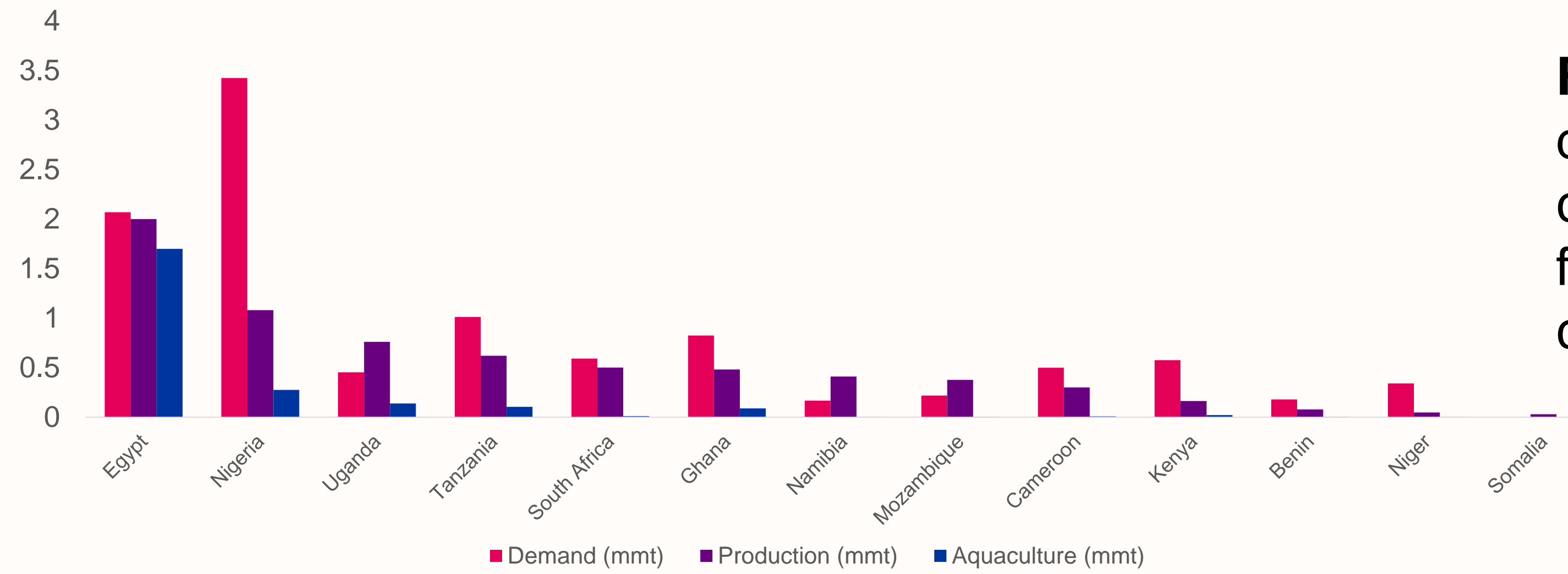


Figure 2. Insights into fish demand, production, and the contribution of aquaculture to fish supply in selected African countries.

To achieve adequate local fish production, significant increases in aquaculture production are required across the continent. Identifying and addressing critical limiting factors present an excellent opportunity for young professionals to contribute to the sector's growth.

CHALLENGES

Africa has great potential to meet its fish demand locally. This potential comes face to face with several hurdles

- Poor stocks of fish species and Diseases
- Low technical know-how of farmers and extension workers.
- These challenges are common across the continent.
- Africa Ocean Expert - Aquaculture task team identify seven classes of problems using 13 countries as a study sample.

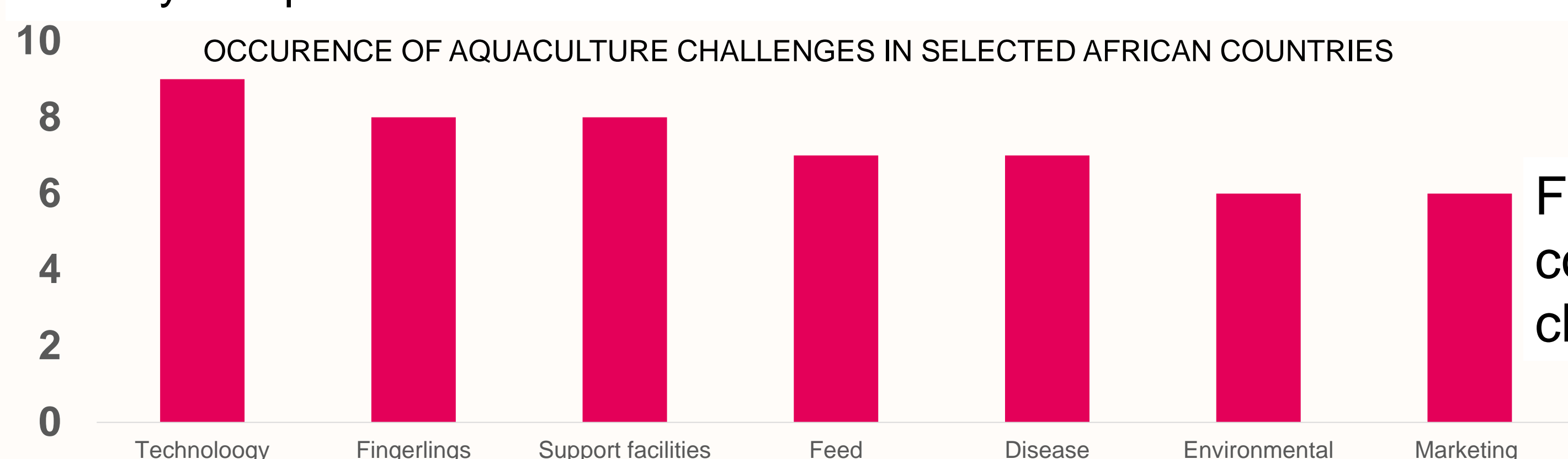


Figure 3. Occurrence of common aquaculture challenges in Africa

AOE INITIATIVES

Africa Ocean Expert HATCHERY:

Establish regional/national hatcheries with Africa Aquaculture Experts guiding farmers, and utilizing proceeds to sustain the project.

Internships, scholarships, and capacity building enhance Africa Aquaculture Experts impact and sector diversification.

Africa Aquaculture TRAIN:

Empower Aquaculture Experts as independent extension workers.

International support for visits to areas lacking technical know-how.

Exchange programs enhance expertise and knowledge transfer among farmers.

Africa Aquaculture Experts SEARCH:

Research support for Africa Aquaculture Experts in investigating identified aquaculture challenges in their respective countries and across the continent.

Project evaluation based on industry relevance and potential benefits for multiple countries.

Collaboration among Aquaculture experts in Africa from different countries fosters research-based development in the aquaculture sector.

SUMMARY

Africa's aquaculture industry holds great promise but faces obstacles including poor stocks, diseases, and limited technical know-how.

The Africa Ocean Experts- Aquaculture task team proposes solutions such as AOE HATCHERY for quality fingerlings, AOE TRAIN for extension support, and AOE SEARCH for research.

By implementing these interventions, the sector can become more sustainable and meet local fish demand.

Table 1. Detailed descriptions of aquaculture problems and suggested solutions

| CHALLENGE | DESCRIPTION | SOLUTION |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Less Productive Technology | Largely Semi-intensive Sector Inadequate Expertise Low Access to Modern Practices | Knowledge Sharing Education and Training |
| Seed Supply Challenges | Inadequate quality fingerlings Poor growing fish strains Low Expertise to Breed other species Discrepancies in Fingerlings trade. | National Hatcheries Encourage Private Sector Involvement Scholarships and Training of Breeding Experts Improved Regulation of Fingerlings Trade |
| Support Facilities | Inadequate Extension Service Lack of finance and credit facilities Weak industry-research linkages Weak value chain linkages Poor Infrastructure (roads, power, cold storage, etc.) | Enhanced Extension (Personnel & Logistics) Favorable Financial Packages Improved industry-research linkages Forming of National Farm Aggregates |
| Feed | High Cost of Quality Feed Low Quality of Local Ingredients High Cost of Feed Production Machinery High Cost of Imported Feedstuff | Government subsidies on imported inputs Farmers Associations Machinery Encourage Local Production of Feedstuff |
| Diseases | Unregulated Fish Import and Transport Lack of Proper Biosecurity Low Disease Surveillance and Diagnosis Capacity Inadequate Fish Health Expertise | Regulations and Enforcement Gross Biosecurity (national and farm level) Training and Education |
| Environmental Issues | Sustainability Concerns Land and Water Availability Environmental Pollution | Education Adopting Intensive Farming Techniques Regulations and Enforcement |
| Marketing | Weak Value Chain Linkages Low Business Approach to Farming Low Product Development | Farmers Associations, Use mobile Apps. Trainings should include Business Nodules Encourage Product Development |