



WORLD BANK GROUP
Environment, Natural Resources & Blue Economy

PROBLUE

THE WORLD BANK GUIDELINES FOR INVESTMENT IN SUSTAINABLE AQUABUSINESS



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FAO/WBG/ANAF Special Day

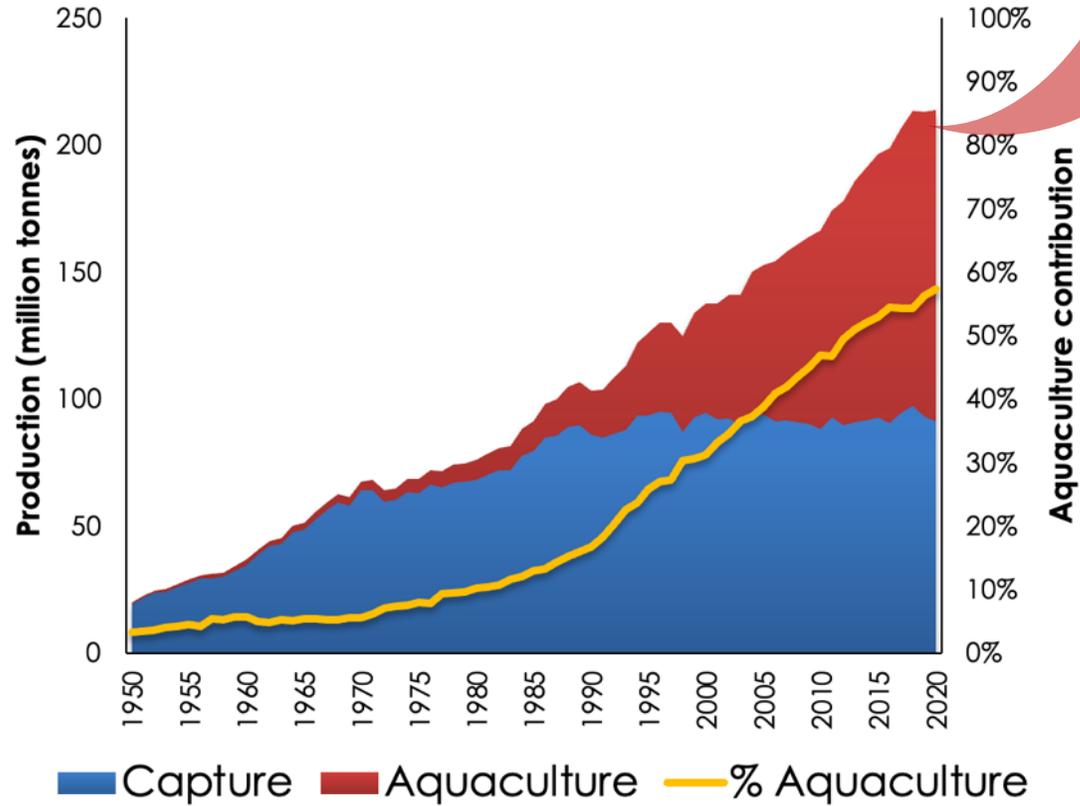


**WORLD
AQUACULTURE
Society**



AQUACULTURE – FASTEST GROWING FOOD SECTOR GLOBALLY

Global food fish and aquatic plants production



FAO (2022)

- Expected to continue its upward trajectory
- Recognising growth trajectory WBG established Global Aquabusiness Investment Advisory Platform (AquaInvest Platform)
- Aims to “distil and improve best practices in aquabusiness investment and development for economic, social and environmental sustainability”.
- Platform funded by PROBLUE. Key component of the Platform is preparation of Guidelines to promote sector growth through investment in sustainable aquaculture and aquaculture business development.

- Major global successes in aquaculture are **commercial, market-led and private-sector driven**
- Benefits of sustainable aquabusinesses include :
 - Food and nutrition security
 - Job creation, income generation, community empowerment, empowerment of women
 - Ecosystem health and services (e.g. seaweed)



Challenges to sustainable **AQUACULTURE BUSINESS DEVELOPMENT**



ENABLING ENVIRONMENT AND POLICY FRAMEWORK

An enabling environment and policy framework that can either catalyse or hinder growth: Often these challenges have not been acknowledged or appeared in the nascent and developing stages



ACCESS TO CAPITAL

Access to appropriate finance for start-ups and expansions (intensification and scale) and associated business literacy; Oftentimes, there is a disproportionate risk to business and the environment

THREATS POSED BY DISEASES

Aquaculture stakeholders identify disease and biosecurity risks as the top challenge to aquabusiness development, hindering investment and leading to business failures



CLIMATE CHANGE AND NATURAL DISASTERS

Climate change is reducing yields, increasing variability and risk, and reducing profitability in aquaculture, especially near the coast. Adaptation and resilience are essential to reduce exposure and vulnerability

INFORMATION ON INVESTMENTS AND INNOVATIONS

The lack of publicly available investment and innovation information and Lack of public data on investments, innovations and sustainability metrics impedes investors' ability to evaluate financial and environmental returns



HUMAN CAPACITY & KNOWLEDGE TRANSFER

A lack of human capacity and knowledge transfer in certain high-potential areas for aquabusiness development hinders growth

THE WBG GUIDELINES FOR SUSTAINABLE AQUABUSINESS DEVELOPMENT

- Developed to understand:
 - What attracts investment and promotes growth of the aquaculture sector?
 - Key considerations for aquaculture investors and developers (e.g. species and locations, market, climate change mitigations)
 - Roles of the public and private sectors in developing aquabusinesses



OVERVIEW GROUPS



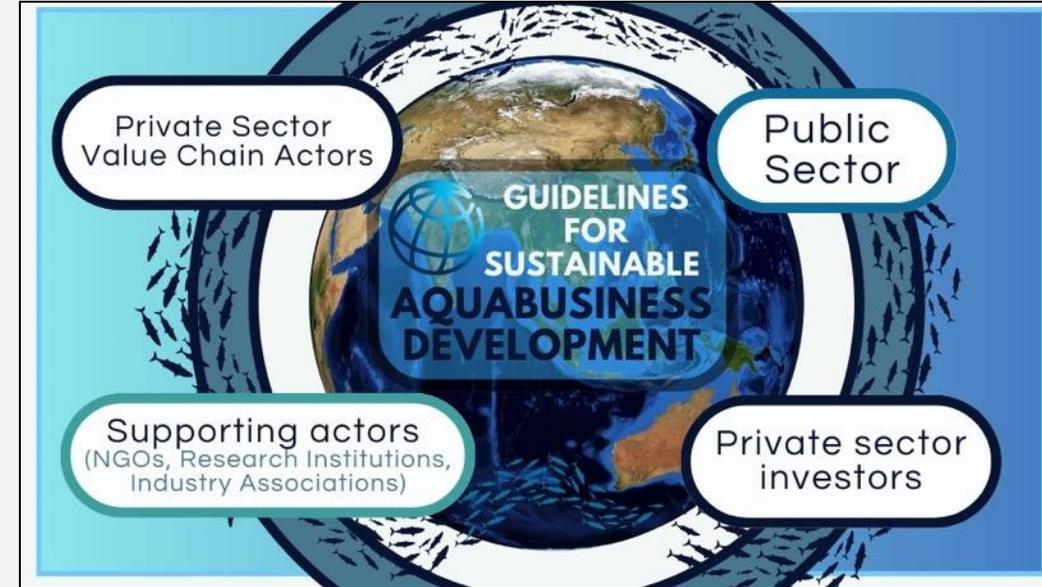
AqualInvest Platform



SCOPE AND AUDIENCE

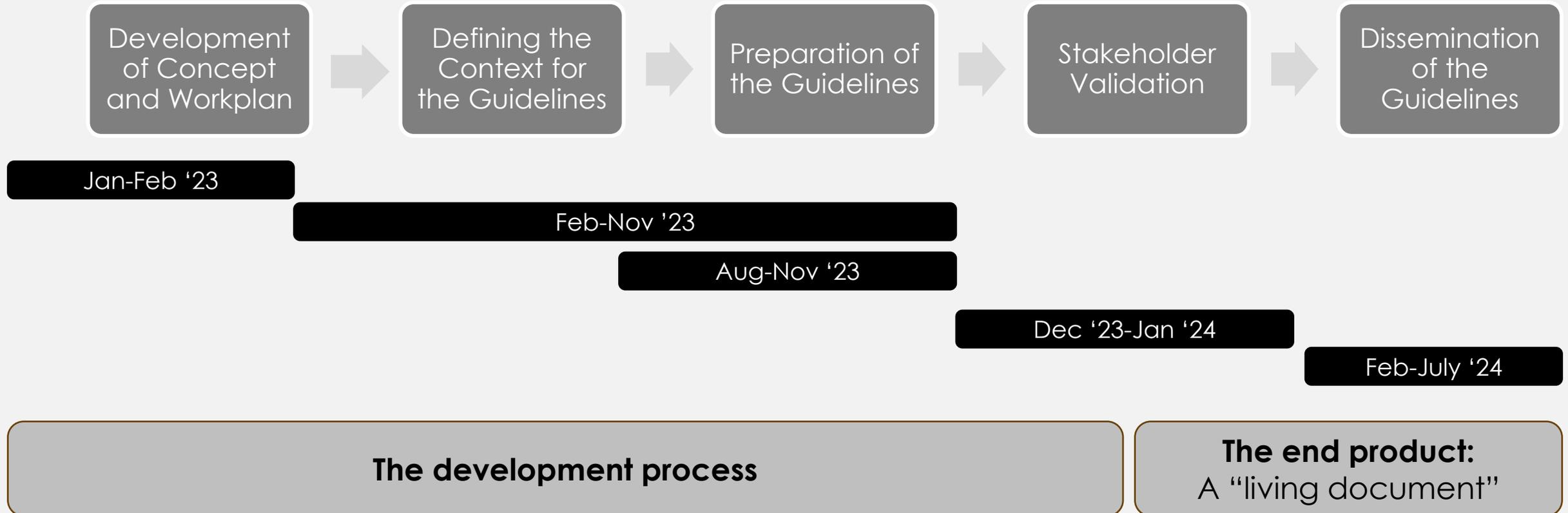
The **World Bank Aquabusiness Guidelines** will detail the requirements and enabling factors for investments in aquaculture

- Guidelines are global and will encompass the full value chain
- Apply to different species, production systems and scales
- Targeted to SELECT audiences (e.g. financial institutions, farmers, public sector)
- Accessible, user friendly, practical and adaptable (eg. For Africa, Asia, Americas etc) and obviously aligned with FAO EAA
- Living document (periodically updated with new knowledge)

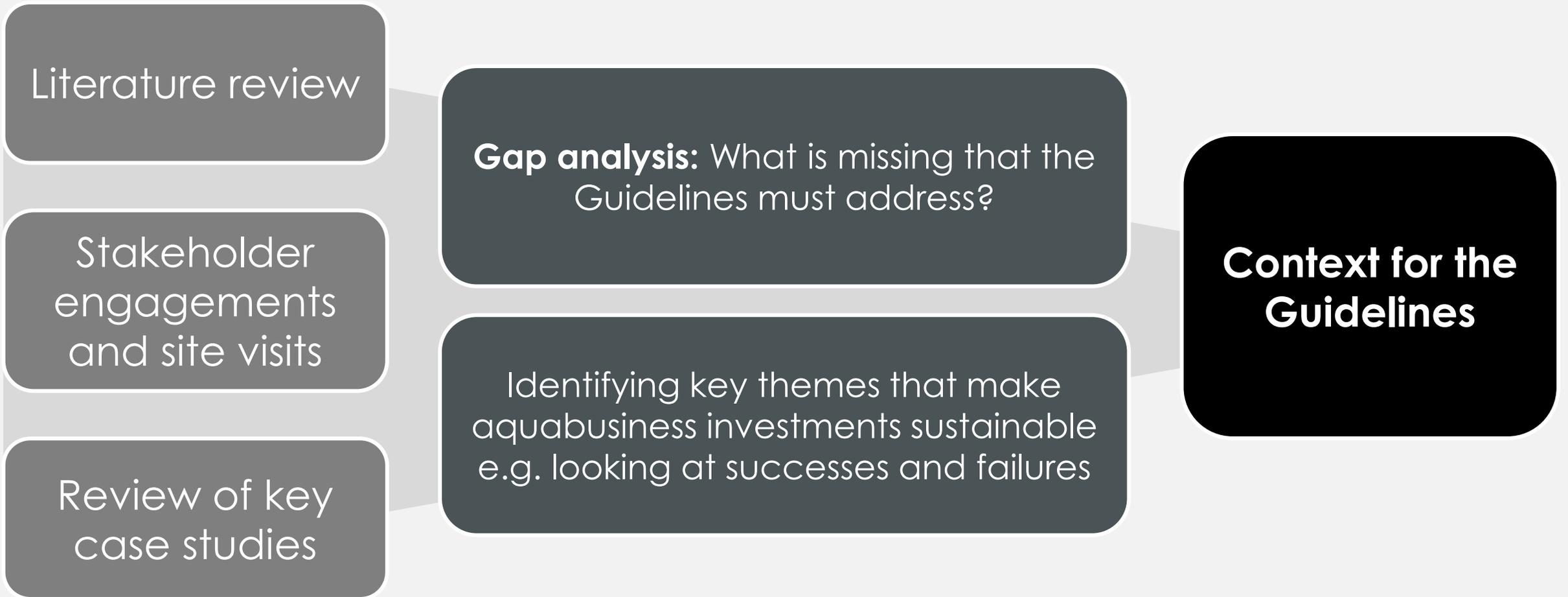


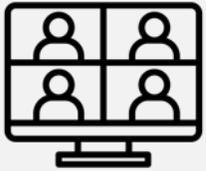
THE PROCESS

AS INCLUSIVE AND PARTICIPATORY AS POSSIBLE



DEVELOPING THE GUIDELINES (METHODS)





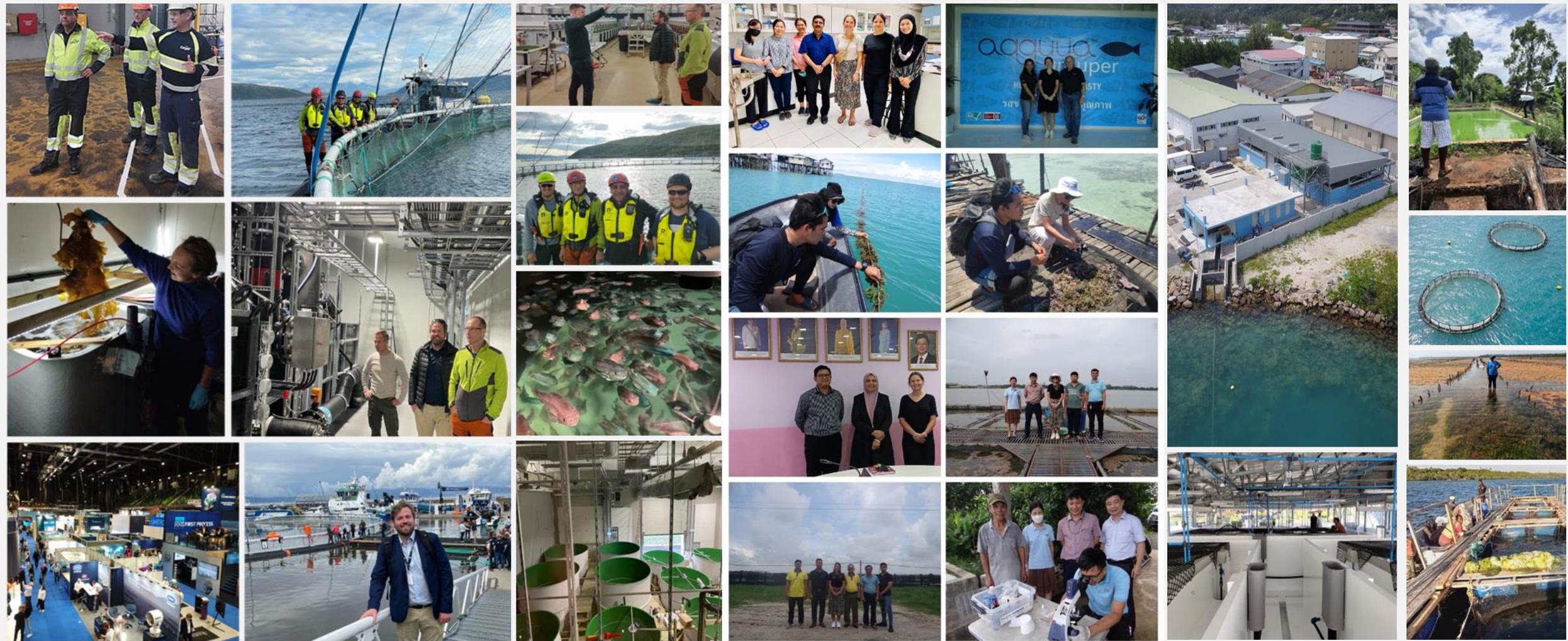
VIRTUAL STAKEHOLDER ENGAGEMENTS

- FAO NFI
- FAO ESP
- Aquaculture Stewardship Council (ASC)
- ASC Improver Programme
- WWF Global
- Global Seafood Alliance & The Center for Responsible Seafood
- GlobalGAP
- International Finance Corporation (IFC)



If included all then too messy

IN-PERSON ENGAGEMENTS AND SITE VISITS: MALAYSIA, THAILAND, VIETNAM, NORWAY, LESOTHO, BOTSWANA, SOUTH AFRICA, KENYA, SEYCHELLES, MAURITIUS, ZAMBIA

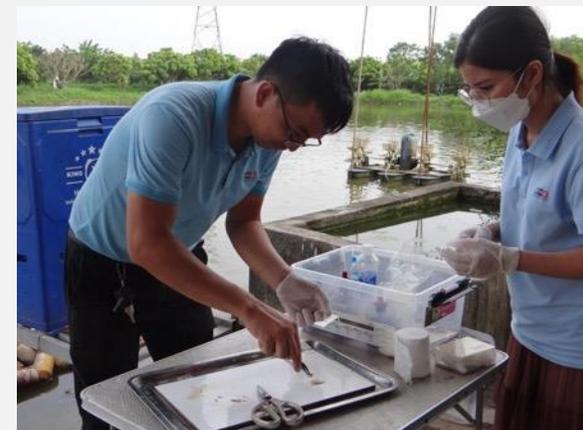


NEXT MISSIONS

- Early 2024
- Target countries:
 - Chile
 - Ecuador
 - Brazil
- `And more
- **Objectives:**
 - Identify commonalities and differences

KEY LEARNING I: PUBLIC SECTOR SUPPORT TO PRIVATE SECTOR SOLUTIONS

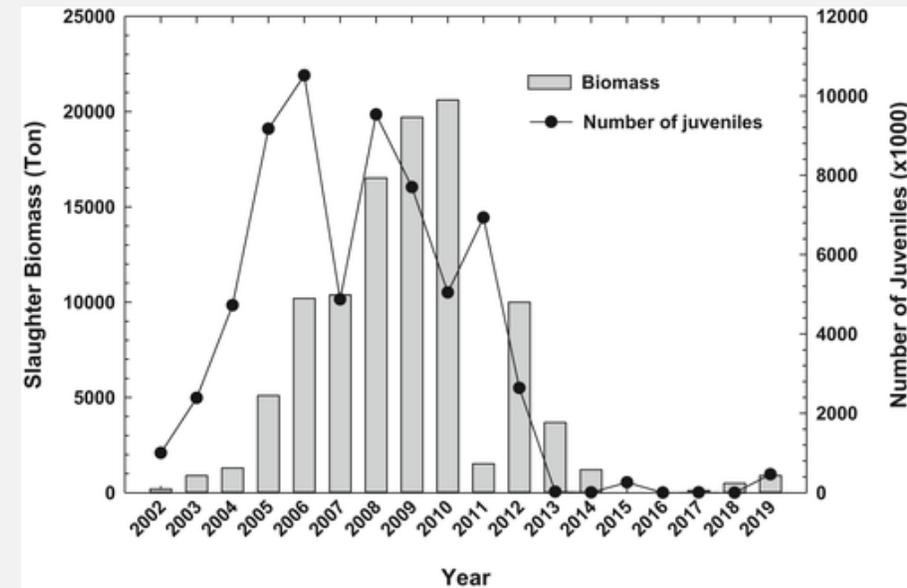
- **Disease** = major risk factor for aquaculture investments (e.g. Prawns WSSV Moz and Madagascar, ISA Chile)
- **Disease mitigation (Biosecurity services)** attractive for aquaculture investment **and** presents an opportunity for aquabusiness
- e.g., **VMC Mobile Lab's diagnostic services in Vietnam**
 - **Inefficient diagnostic** services major challenge
 - VMC Mobile Lab:
 - Free diagnostic services
 - **Supported** by the National University of Aquaculture and the Vietnam Seaculture Association



KEY LEARNING 2: NEED FOR R&D AND GOVERNMENT SUPPORT

• Cod farming in Norway

- Wave of bankruptcies in early 2000s
- Investors rushed to capitalise on cod market demand, despite **critical biological knowledge gaps**
- Poorly acclimated to culture environment, and **poor genetics, deformities, high mortality, high level of cannibalism**
- Focussed research, improved genetics and closed knowledge gaps
- In 2022 - 6th-gen domesticated stock = **reduced aggression, deformities, and losses**
- Current cod farming **cautious, experienced** farmers, strong **investor support**
- Public sector funding critical – backed the programme since 2003 despite the collapse and now look where they are



KEY LEARNING 3: IMPORTANCE OF KNOWLEDGE TRANSFER

- Example of large-scale rainbow trout operation in Lesotho
- Natural strategic advantage but zero knowledge at start
- **Global Know-How:** Experts from Norway and Chile
- **Training:** >100 employees in hatchery, nursery, production and processing and marketing.
- **Knowledge transfer contributed to establishment of a sustainable farm, leading to job creation, local economic growth and improved livelihoods.**



KEY LEARNING 4: ENABLING ENVIRONMENT FOR AQUACULTURE INVESTMENT

- Public sector responsible for creating an enabling environment for **sustainable** aquaculture investment
- **Good example - Iceland's new aquaculture policy – centred on environmental responsibility:**
 - **Stringent management** and monitoring measures
 - **Economic incentives** for best technologies and practices
 - License is linked to environmental best practices
 - Policy introduced a "reasonable fee" to be used by State and local authorities to finance infrastructure and services needed by the industry.

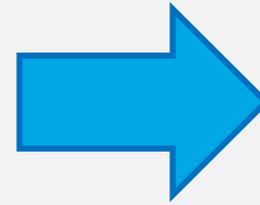


GUIDELINES FOR SUSTAINABLE AQUABUSINESS DEVELOPMENT

Guiding Principles



1. SOCIAL RESPONSIBILITY
2. ENVIRONMENTAL RESPONSIBILITY
3. NON-FOOD USE
4. SUPPORTING INDUSTRIES IN THE VALUE CHAIN
5. CAPACITY BUILDING & KNOWLEDGE TRANSFER
6. INVESTMENT TYPES, FINANCING & BUSINESS RELATIONS
7. BUSINESS PLANNING & MARKET-DRIVEN DEVELOPMENT
8. COST MANAGEMENT
9. NATURAL STRATEGIC ADVANTAGE
10. BIOSECURITY
11. FOOD SAFETY
12. OPERATIONAL & INVESTMENT ALIGNMENT
13. CERTIFICATION & STANDARDS
14. CLIMATE SMART AQUACULTURE
15. FISH WELFARE



**The Guidelines for
Sustainable
Aquabusiness
Development are now
being developed**

DANKIE



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