



Scaling up technologies through value chains

Scaling Up Adoption and Use of Agricultural Technologies
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**Research
Program on
Aquatic
Agricultural
Systems**



Outline

- Fish value chain
- Engagement with actors
- Important drivers
- Obstacles and actions

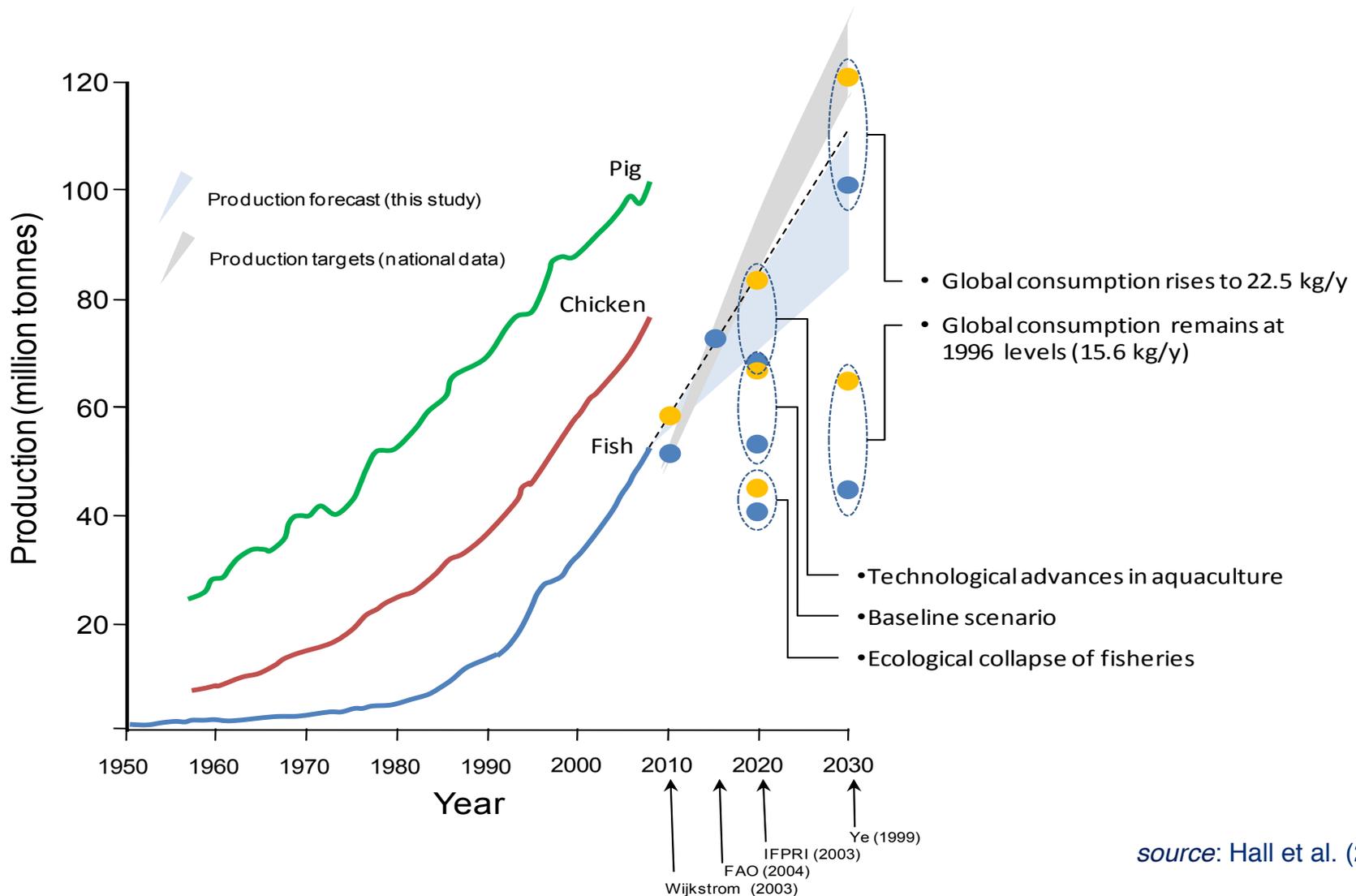


Wealth and population growth are major drivers for animal source food consumption, including fish

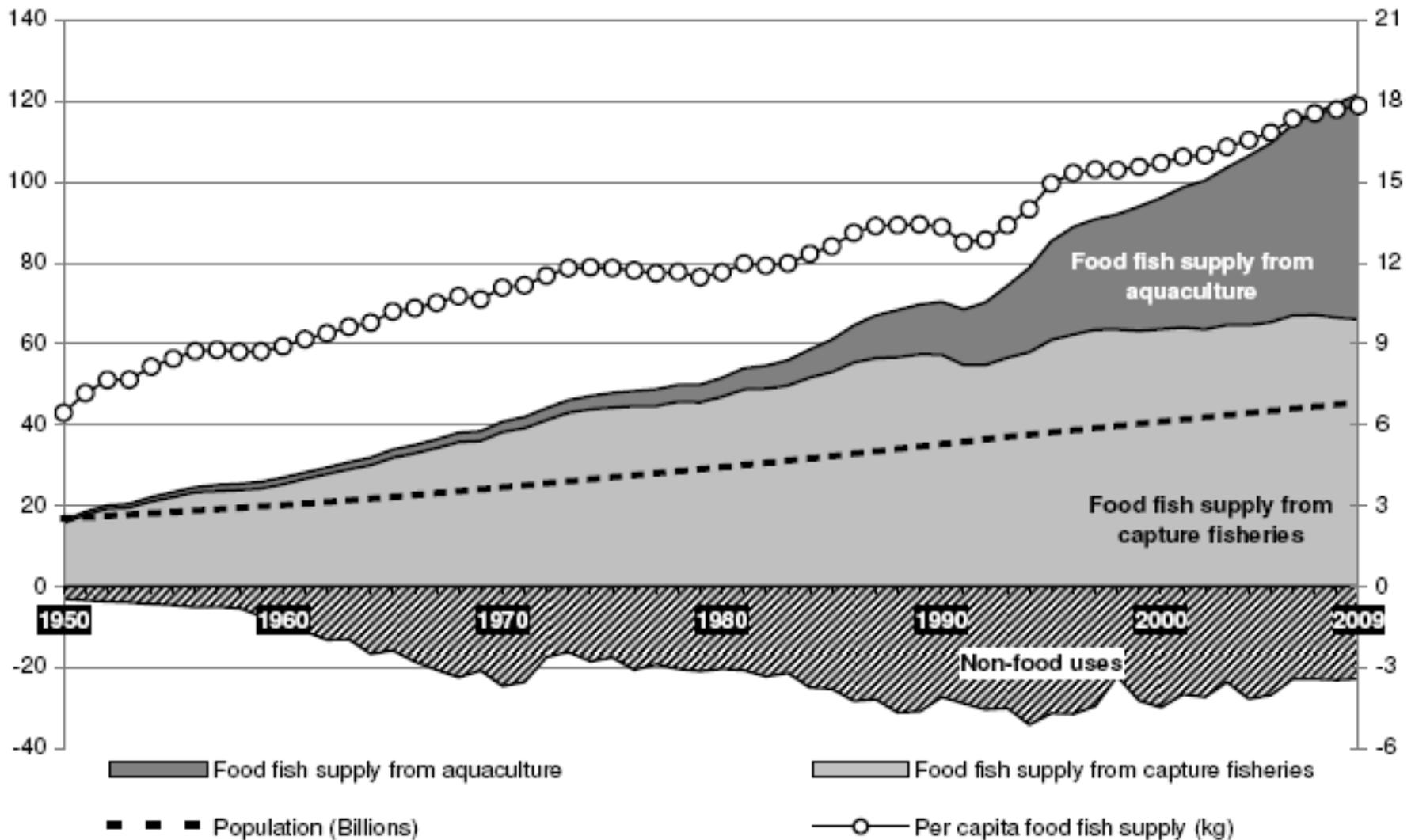


Fish demand is growing

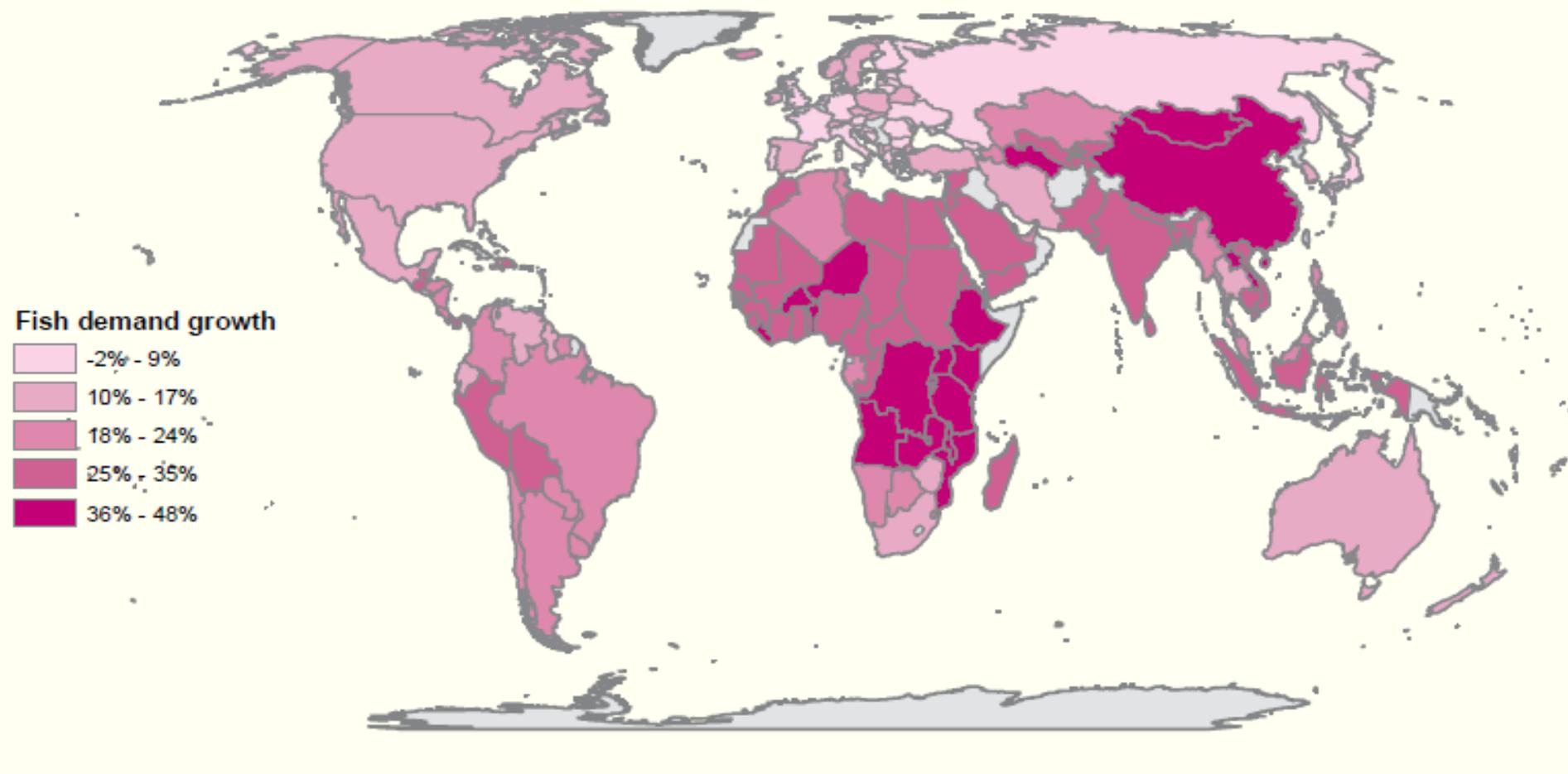
.. along with other animal sources foods



Aquaculture is growing to meet demand



Future fish demand (2007-2015)



source: FAO - Cai (2011)

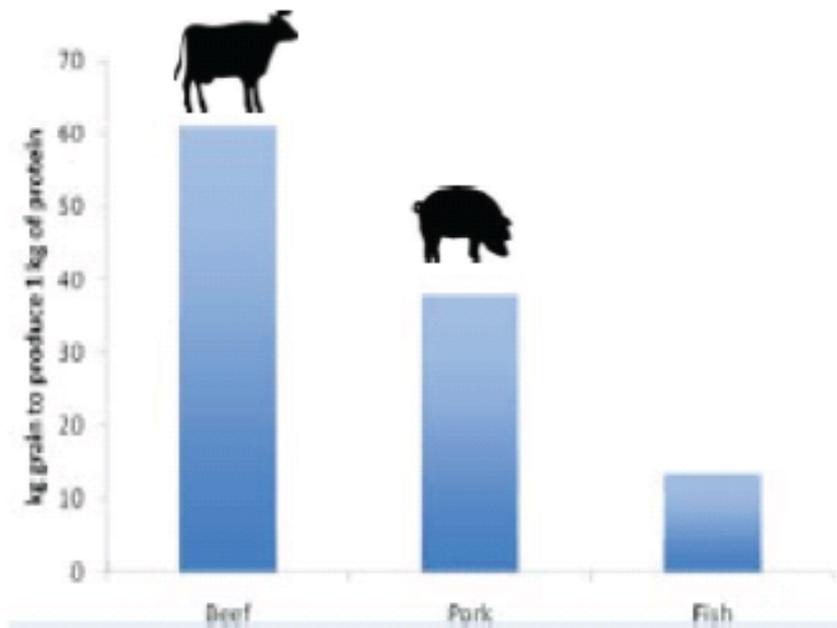
Small-scale, wild, fisheries will remain important for the poor, food and nutrition



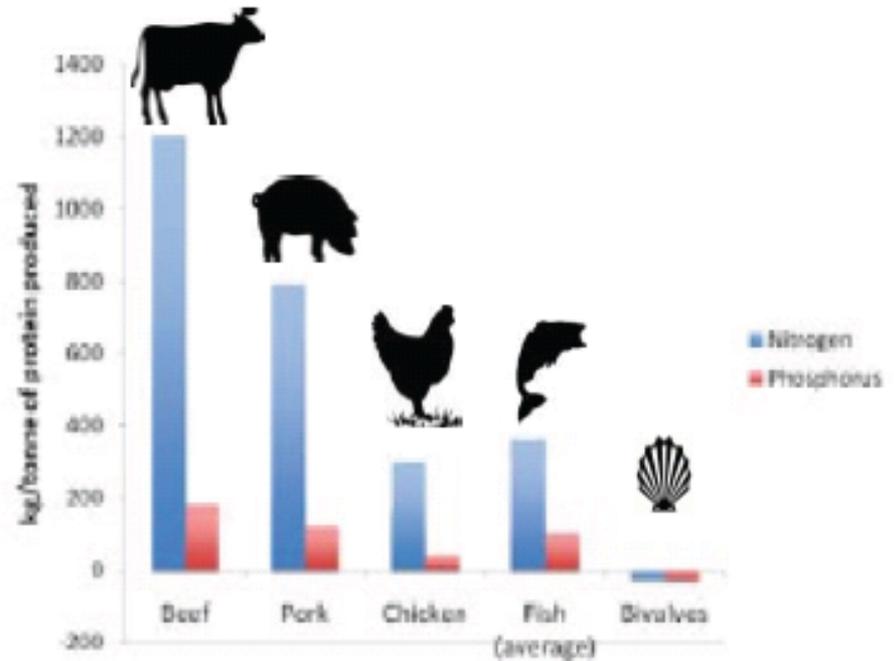
Aquaculture growth is necessary to “feed the future”



Farmed fish compares well with other animal source foods



Conversion Efficiency



Emissions

Fish value chains



Value Chain for Farmed Fish

Inputs



Seed

Breeding centers improve target species through selective breeding that result in productivity gains for farmers. Multiplication centers and hatcheries use these broods to produce fry and fingerlings for farmers.



Feed

Feed supplements natural food production in smallholder ponds or provides complete nutritional requirements in more commercial operations. Feed is usually the single greatest cost to farmers.



Extension Services

Participatory development of technologies, capacity building and access to information on markets, prices and technologies are necessary to improve productivity and profits.



Financing

Smallholders and small to medium enterprises require ready access to affordable credit in order to purchase seed and feed and maintain healthy fish ponds.

Production



Producers

Small and medium scale, commercially oriented fish farmers constitute the core of the value chain delivering more quality fish by and for the poor.

Processing and Distribution



Processors

Fish is a highly perishable commodity. In the absence of ice, it has to be sold quickly. Smoking, drying or salting will extend shelf life and, if done to meet quality standards, improve food safety.



Distributors

Traders and wholesalers play a major role in the value chain by accumulating products and selling them to markets, retailers, and restaurants. Small-scale producers, who tend not to produce much or who are in remote locations, cannot always themselves access markets directly.

Marketing



Retailers and Food Service Providers

In domestic supply chains, fish is commonly sold by retailers to consumers in local wet markets. Other retailers include supermarkets and hypermarkets at home and abroad. An additional key outlet for fish is food service providers such as restaurants, schools and hospitals.

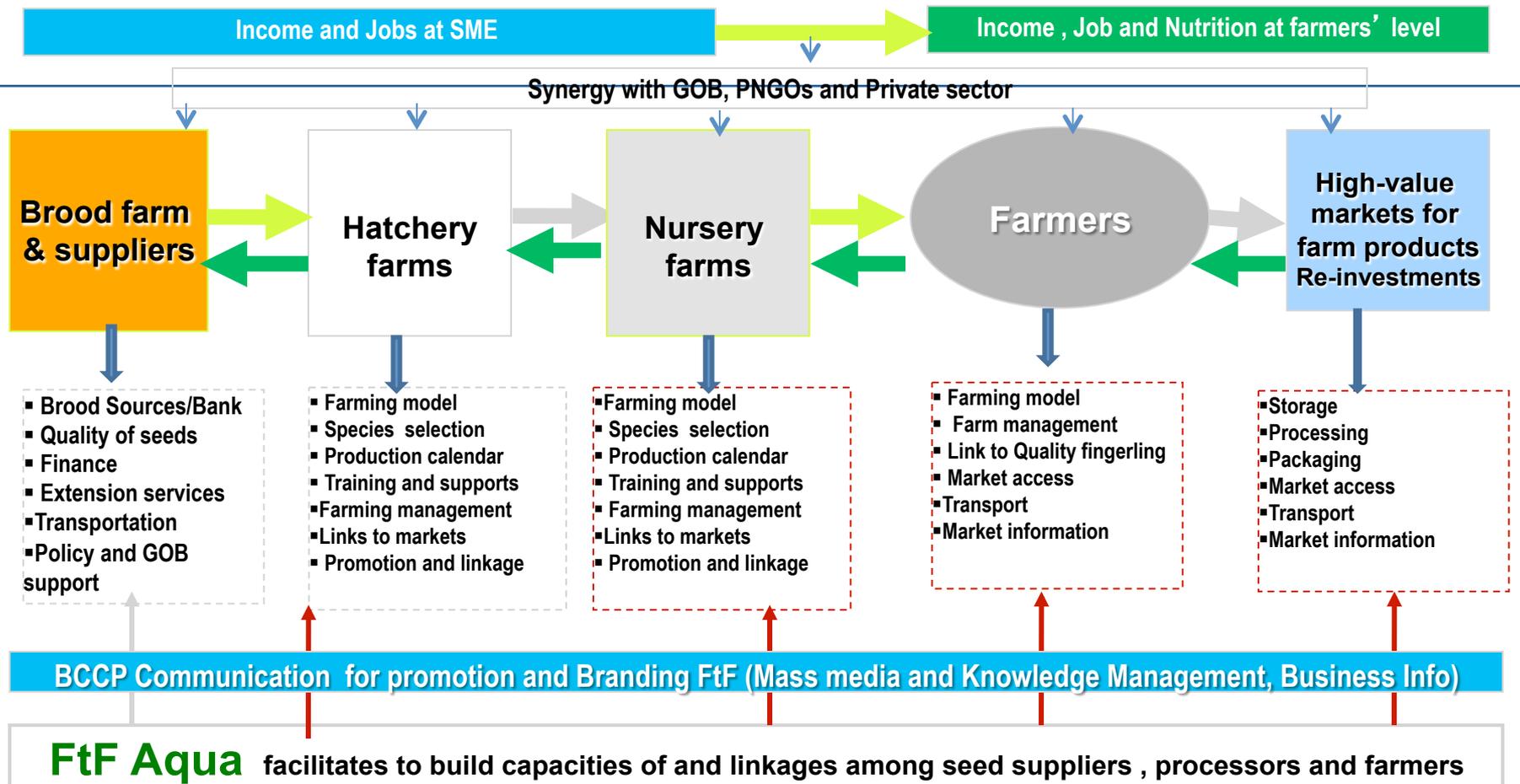
Consumption



Consumers

Fish is the dominant animal source food for many poor in Asia, Africa, and Latin America. For some, fish comprises up to 75% of their daily protein intake and is an essential source of vitamins and micronutrients such as calcium, vitamin A, iron, and zinc. Farmed fish is an increasingly important means of meeting food and nutrition needs.

Bangladesh – Feed the Future Aquaculture



Enterprises and organizations that provide the goods, services, information, and credit required for smallholder production

Enterprises & organizations that provide the goods, services and information, required to move small farm production from field to consumer at economically rewarding prices

Household production unit that consumes inputs to cultivate crops for self-consumption and for sale to output markets

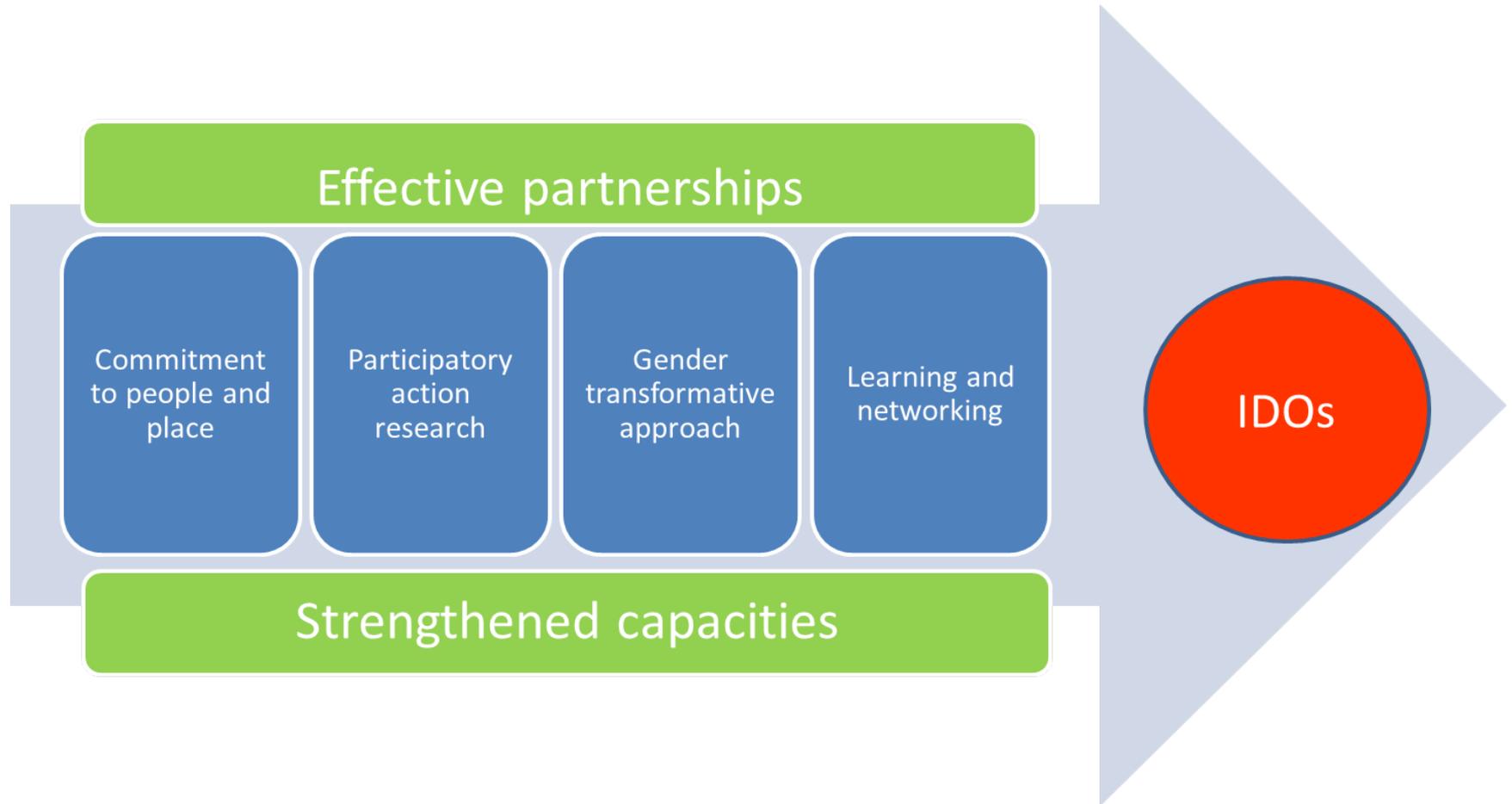
FtF – Aquaculture - WorldFish innovations in South West Bangladesh

Components	Objectives
1. Fish and shrimp seed	Dissemination of improved quality lines of fish and shrimp seed
2. Household aquaculture	Improving the nutrition and income status of farm households
3. Commercial aquaculture	Increasing investment, employment and fish production through commercial aquaculture
4. Institution and policy	Support to regulatory reform and institutional capacity building for sustainable aquaculture growth





The AAS Approach: Programmatic Theory of Change



Engaging with development partners essential to success and scaling

Save the Children:

ACDI/VOCA:

SPRING:

HKI:

BSFF: Association

Private sector:

Hatcheries, traders, feed
companies, farmers

Public sector:



Important drivers

- Markets and demand in Bangladesh
- Community demand
- Income generation
- Technology options
- Farmer motivation (and “ownership”)
- Funding



The spaces...

- Policies
 - Finance
 - Environment
 - People and innovation
 - Organizations
-
- RinD Process and Partnerships



Obstacles and actions for coordinated value chain development (and scaling)

- Organizations
 - “team” > sustainable organizations
- Small holders/equity
- Business models
- Whole “package” approach
- Pro-poor (urban) markets
- Learning and networks
- Partnerships





Thankyou

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WorldFish and CGIAR Research Program on Aquatic Agricultural Systems (AAS)

