



Cluster development in the seafood industry: A strategy for economic development

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Two economic development approaches

- **Top down approaches, e.g., economic aid as government budgetary support**
- **Bottom up approaches, e.g., microfinance and entrepreneurship**

Problems with top down approaches

- **Large bureaucracy costs**
- **'Picking-the-winners' costs**
- **Corruption**

Example of misplaced Norwegian economic aid project

Fishery project in Kerala

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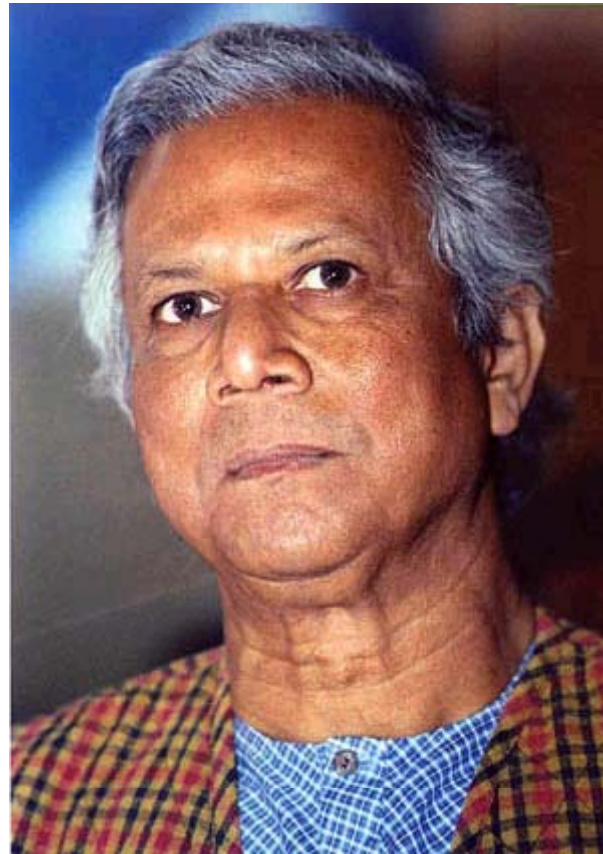
Fighting poverty through aid

- **Emergency and relief aid is a moral obligation**
- **Building legal and social institutions is a requirement for economic development**
- **Building necessary infrastructure is the next step**
- **Economic aid to governments creates dependencies and corruption**
- **Direct economic aid turns people into social clients**

Problems with bottom up approaches

- **Business development remains small scale**
- **Lacks business knowledge**
- **Lacks market access**
- **Lacks investment capital (equity)**

Economic development through local entrepreneurship: Microfinance



Fighting poverty through microfinance

- **Microfinance is simple, interest bearing loans to poor people with a drive to become economically independent**
- **Microfinance creates microfirms moving the family out of severe poverty**
- **Microfinance has most success among women**
- **Microfinance is based on small solidarity groups**
- **Microfinance should include life skills education**
- **Microfinance is viable business with minimal bad loans and losses**



Strømme
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Vi hjelper folk i gang.

Microfinance protocol Uganda

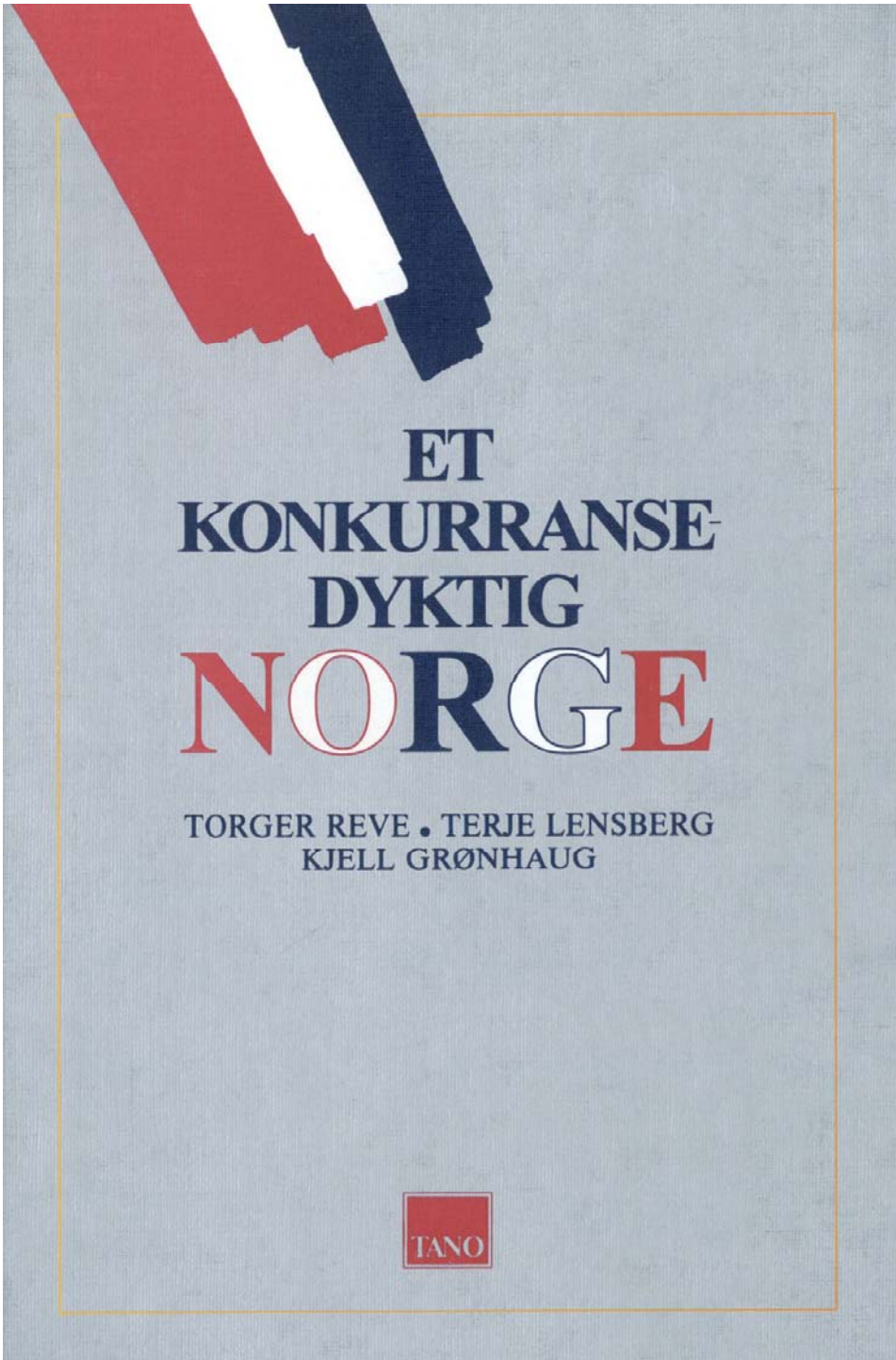
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Five stage business development

1. **Financial infrastructure development (e.g., Microfinance)**
2. **Business knowledge development (e.g., BI 101)**
3. **Market access development (e.g., Producer coops)**
4. **Risk capital development (e.g., Investment funds)**
5. **Industrial cluster development (e.g., Cluster initiatives)**

The economic development stages: Applying business knowledge to development

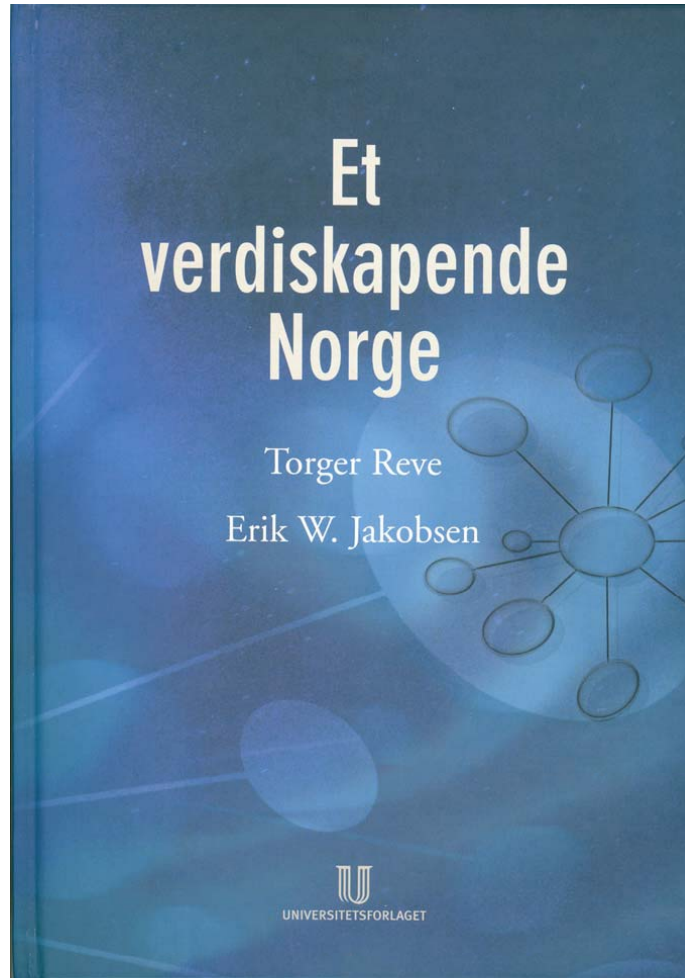
- 1. Microfinance creates a large pool of family based microfirms**
- 2. Talent finance develops the most promising microfinance entrepreneurs into fast growing SMEs**
- 3. Market finance develops marketing channels to bring local products to profitable markets, e.g. producer coops**



ET
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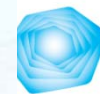


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A knowledge based Norway

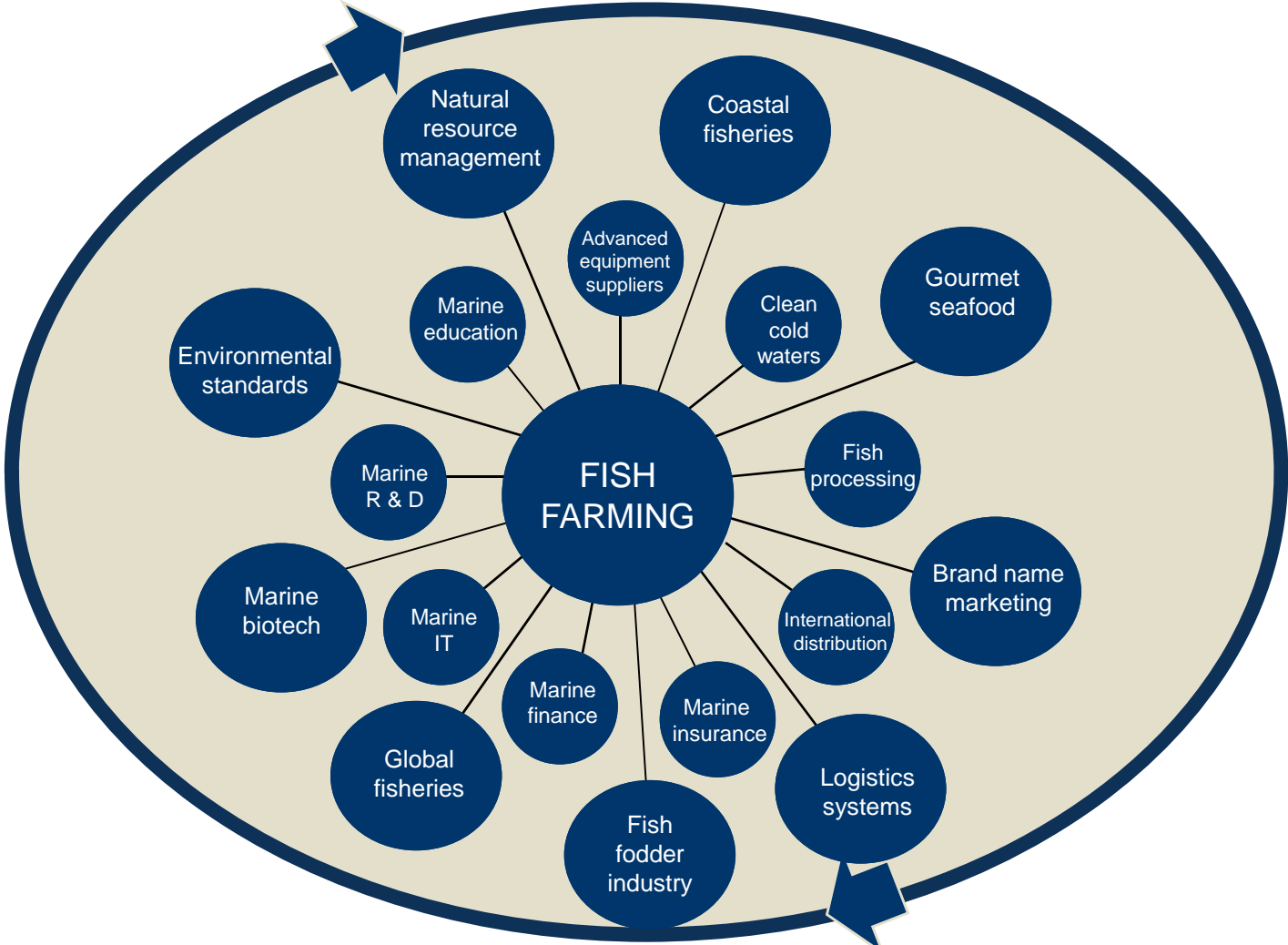
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The Norwegian Seafood Cluster



UPGRADING

INTERNATIONALIZATION



Torger Reve

What makes the Norwegian seafood industry a dynamic industrial cluster?

- Coastal fisheries since the stone ages
- Ocean fisheries by advanced maritime technology
- Leading position in salmon fish farming
- Protecting natural resource base and a clean ocean environment
- Global market position in many seafood markets
- Advanced marine biotech R&D
- Global seafood corporations with Norwegian ownership

What is an industrial cluster?

- **Geographical concentration of related companies**
- **Critical mass of companies in every part of the value chain or value network**
- **Closeness to demanding customers and advanced suppliers**
- **Leading edge research targeting the cluster**
- **Dynamic service providers serving the cluster**
- **Specialized labor and capital markets**
- **Close cooperation and keen competition**
- **Strong innovation and entrepreneurship**
- **Linkages to global markets and global clusters**

Dynamic industrial clusters are engines of value creation

- **Cluster firms have higher value creation**
- **Cluster firms have higher growth**
- **Cluster firms have higher productivity**
- **Cluster firms have higher salaries**

Source: Reve & Jakobsen (2001)

Dynamic industrial cluster are engines of innovation

- **Cluster firms have higher innovation capacity**
- **Cluster firms have higher commercialization rates**
- **Cluster firms have higher spin off activity**
- **Cluster firms have higher dynamism of change**

Source: Reve & Jakobsen (2001)

What advantages do companies have of belonging to an international cluster?

- Better access to competent people and innovative ideas
- Better access to specialized suppliers and demanding customers
- Better access to frontier research and development
- Better access to venture capital and competent investors
- Lower transaction costs of doing business



Firms take advantage of industrial upgrading and innovation

Industrial cluster development

- Clusters emerge through co-location mechanisms
- Clusters have specific business drivers locally
- Clusters attract industrial suppliers and commercial service providers creating an industrial milieu
- Clusters thrive on entrepreneurship, rivalry and cooperation
- Clusters have a cultural component that cannot be copied
- Clusters can be fertilized (not created) by government interventions

Implications for economic development interventions

- **Cluster initiatives should target already existing emerging clusters**
- **Cluster initiatives should mobilize local business resources**
- **Cluster initiatives should focus on business knowledge development, risk capital and specialized infrastructure**
- **Cluster initiatives should help attract talent and investors**
- **Cluster initiatives should create strong networks**
- **Cluster initiatives should facilitate branding**
- **Cluster initiatives should link local clusters to international markets and international clusters**

Industrial cluster development in the seafood industry?

- Fisheries have traditionally been dispersed non-cluster industry
- Scale economies and structural consolidation have created seafood clusters
- Some seafood regions have pioneered new species, new technology, new methods and new business models
- Norway could be a major provider of hard and soft technology for seafood cluster development
- Norway is at the same time an industrial investor with commercial interests in the global seafood industry

Economic development requires a combination aid, entrepreneurship and investments

- **Economic development first requires that some institutional and human fundamentals are in place (cf. Jeffrey Sachs)**
- **Economic development must take place from within, e.g. through local entrepreneurship (cf. Muhammad Yunus)**
- **Economic development needs business development, industrial clustering and foreign direct investments (cf. Michael Porter)**
- **Economic development requires that more countries in the south take advantage of globalization (cf. Thomas Friedman)**

Conclusions

- **Industrial development requires efficient bottom up strategies, starting with microfinance, business knowledge and risk capital**
- **Industrial development is highly accelerated when industrial clusters emerge**
- **Industrial clusters are bottom up industrial development processes creating network externalities**
- **Cluster initiatives can fertilize (not create) industrial clusters**
- **Traditional fisheries were non-cluster industries**
- **Modern seafood industries are rapidly clustering, and Norway plays an important global role in this development**