Science and fisheries: main FAO activities and potential for collaboration

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Outline

- FAO mandate, objectives and strategy
- Evolving objectives
- Action required
- Policy implications
- Implications for science
- Potential for collaboration with PICES

1. The FAO

Mandate, Objectives and Strategy

The FAO mandate:
Article 1 of the FAO constitution refers to :

- **Information**: *from collection to dissemination*
- **Promotion of research**: *in all relevant disciplines*
- **Capacity-building**: *in research and management*
- **Conservation of natural resources**
- **Improvement of processing, marketing and distribution**
- **Adoption of policies**
- **Provision of technical assistance and advice**

The FAO strategic objectives :

- **Eradicating food insecurity and rural poverty**
- **Improving policy and regulatory frameworks**
- **Creating sustainable increases in food supply and availability**
- **Conserving natural resources for sustainable use**
- **Improving decision-making through the provision of information and assessments**

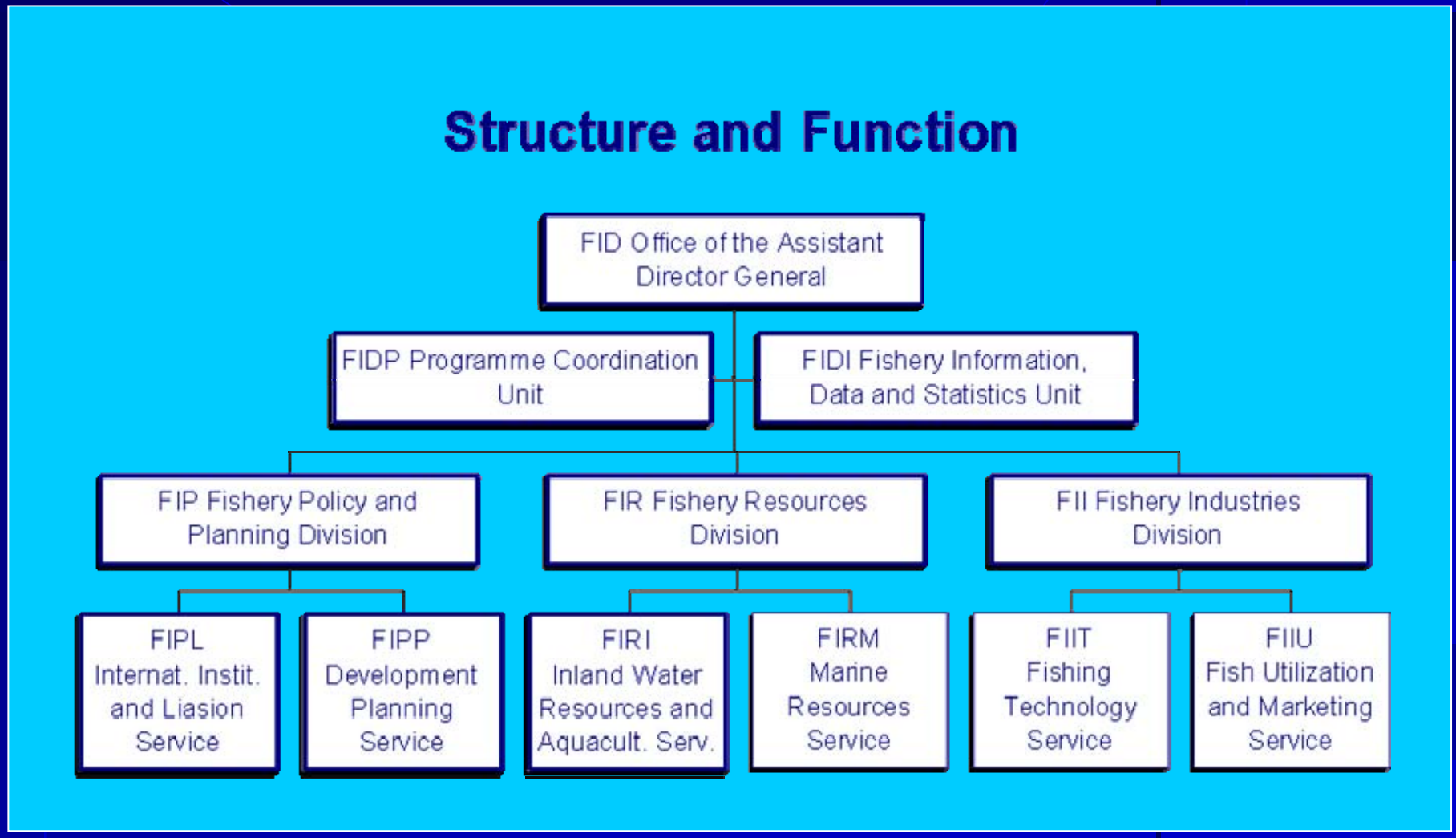
FAO looks for :

- **Excellence in its delivery**
- **Inter-disciplinarity in its approach**
- **Broad partnerships and alliances**
- **Improved management of the Organization**
- **Improved communication**

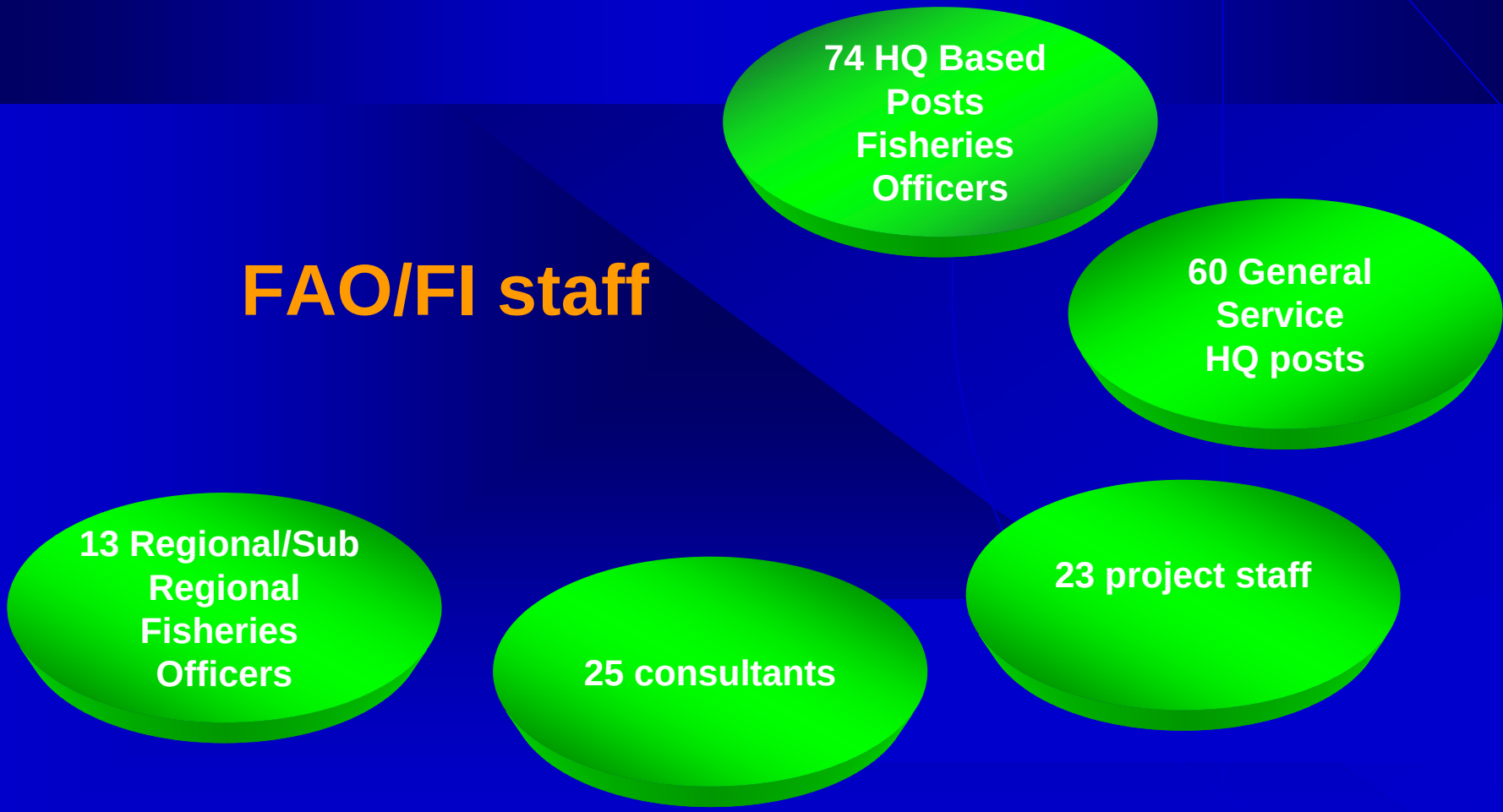
In practice FAO:

- **Collects and diffuses statistics**
- **Monitors world resources and fisheries**
- **Provides management advice**
- **Develops research & fisheries management capacity**
- **Promotes technology transfer**
- **Provides policy advice and technical assistance**
- **Provides a neutral forum and negotiation platform**

The FAO Fisheries Department



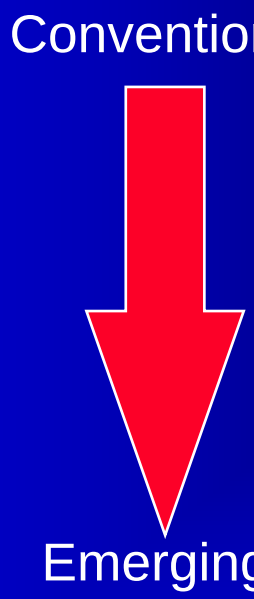
The FAO Fisheries Department



2. Evolving objectives for fisheries

Evolving objectives

Techno-economic objectives

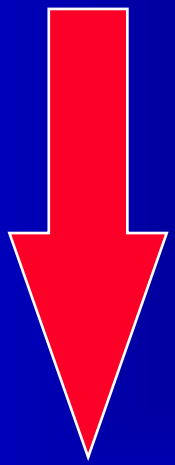


- Growth
- Maximum revenues
- Technological progress
- On-the -job safety
- Maximum efficiency

Evolving objectives

Bio-ecological objectives

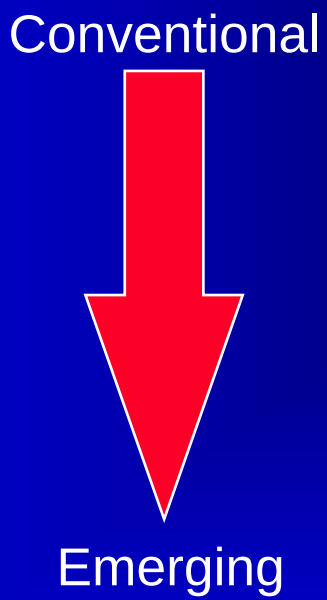
Conventional



Emerging

- Maximum catch (MSY)
- Safe spawning biomass
- Minimum waste
- Biodiversity protection
- Habitat protection
- Ecosystem health

Evolving objectives
Socio-cultural objectives



- Maximum employment
- Social peace, equity
- Food security & safety
- Institutional development
- Empowerment
- Long-term social welfare
- Cultural identity
- Ethical requirements

These general objectives provide common reference for action by FAO and other Organizations dealing with marine and inland water environments

3. Action required

to improve sustainability and
to maintain or increase supplies

Priorities for action

To improve sustainability

- Control capacity / reduce overcapacity (IPOA-capacity)
- Rebuild over-used / depleted resources (UN Agreement)
- Protect / rehabilitate habitats (Marine Protected Areas)
- Protect vulnerable / endangered species (IPOA-Sharks)
- Minimize waste (incl. Discards) (IPOA-Seabirds)
- Reduce / eliminate illegal fishing (IPOA-IUU)
- Improve monitoring (Possible IPOA-Status and Trends)
- Improve management capacity (The Code of Conduct)
- Move to EAF (Reykjavic Conference – Technical guidelines)

Priorities for action

To maintain or increase supplies

- Improve policies and management capacity (The Code)
- Develop sustainable aquaculture (FAO-NACA Conf.)
- Enhance capture fisheries productivity
  - Habitat modifications
  - Seeding, Ranching
- Tap unconventional resources
- Improve food quality & safety (HACCP)

4. Policy implications

and actions by Governments and Industry

Changes in policy

FROM:

- Open access
- Free access
- Sectoral isolation
- Technical measures
- Top-down Managt.
- Risk-prone approach

TO:

- Right-based systems
- User fees
- sectoral integration (ICAM)
- Economic incentives
- Participative managt.
- Precautionary approach

Action by Industry

- Improve responsibility
- Accept liability
- Request use rights
- Reduce capacity
- Reduce gear loss
- Reduce pollution
- Reduce gear impact
- Develop aquaculture
- Organise (NGOs)
- Increase participation
- Ensure food safety
- Improve compliance
- Provide better info
- Contribute to research

Action by governments

- Ratify agreements
- Suppress subsidies
- Reduce overcapacity
- Promote awareness
- Promote participation
- Coordinate RFBs
- Improve enforcement
- & decision-making
- Adopt precautionary approach
- Create oversight mechanisms
- Protect endangered species
- Rehabilitate environment
- Reduce land-based pollution
- Address conflict resolution
- Establish ICAM plans

5.Implications for science

Implications for science

- Monitor management performance
- Deal with uncertainty
- Look at all possible options
- Expand in socio-economics
- Study fishery system and ecosystem dynamics
- Contribute to the precautionary approach
- Develop rehabilitation schemes
- Develop impact assessment protocols
- Improve fishing technology
- Address climate change and variability

6. Potential for international collaboration

Areas for possible collaboration

Normative work

- Defining the new role of science
- Develop global scientific partnership
- Improve operational use of the FAO Code of Conduct for Responsible Fisheries
- Develop the “research” area of the Code
- Support the implementation of an Ecosystem Approach to Fisheries
- Help dealing with ethical issues

Areas for possible collaboration
Technical work (1)

- **Operationalize the precautionary approach**
  - Develop risk assessment and management approaches
  - Broaden the set of indicators and reference values
  - Develop participatory research

Areas for possible collaboration
Technical work (2)

- **Operationalize the ecosystem approach**
  - Elaborate indicators and reference points
  - Improve the concept of ecological “footprint”
  - Analyse genetic impacts of fishing
  - Improve / diffuse ecosystem valuation and “green” economics
  - Forecast impact of global climate change
  - Reduce gear impact on the environment and discards
  - Guidelines and protocols for species introductions and transfers
  - Contribute a scientific basis to traceability and ecolabelling

Areas for possible collaboration
Technical work (3)

- **Develop collaborative information systems**
  - improve the quality of fishery statistics (CWP)
  - develop further the Bibliographic databases (ASFA)
  - Contribute to the FAO biennial review
  - Resources and fisheries monitoring; FIGIS
  - Develop indicators and reference points
  - Develop GIS applications, geostatistics and spatial analysis
- **Fish as food**
  - collaborate on the fish-in-food model
  - food safety and food-borne diseases

Thank You