

**Institut de Recherche pour le Développement
The Research Institute For Development**

**Presented by
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IRD

Ex-ORSTOM

International cooperation; applied research in land/marine activities, “technology” and know-how transfer

Worldwide implantation: Noumea (New Caledonia), Papeete (Tahiti) for the Pacific Ocean

Organised in Research Units (UR) and Service Units (US)

Noumea Center: Wide spectrum of activities on geology (land, marine), soil sciences, botany, biotechnology, coastal and offshore oceanography, remote sensing

Funding: national, international, local (private and public)

Noumea Center: ~150 people

“Sustainably developing and managing the use of ocean resources”

UR COREUS

COREUS = Coral Reef Ecosystems and Uses (reef fisheries)

Ecosystem Approach of Reef Communities and their Uses in the South Pacific

IRD Research Unit created in 2001

New Caledonia, France and French Polynesia

Conceived and led by Jocelyne Ferraris (France) and Michel Kulbicki (Noumea)

COREUS's core group: 5 scientists, 3 technicians, 4 PhD students

COREUS-enlarged group: collaborations with France, New Caledonia and International public and private institutions (Pacific, USA...)

Regional studies agenda 2001-2005:

Comparison of the structure of the fish communities in Pacific Islands, with an emphasis on commercial species.

Definition of ecosystem-level indicators of anthropogenic pressure and management results (MPAs) on fish communities in New Caledonia.... and transfer to other countries

Characterisation and mapping of habitat and geomorphology of Pacific Islands using remote sensing, eventually for fishery resource biomass up scaling

Comparison of the structure of the fish communities in Pacific Islands, w/ an emphasis on commercial species.

Definition of ecosystem-levels indicators of anthropogenic pressure (fisheries) and management results (MPAs) on fish communities in New Caledonia and transfer to other countries

Characterisation and mapping of habitat and geomorphology of Pacific Islands using remote sensing for fishery resource biomass up-scaling

= f(biological communities, physical structure of reefs, human actions)

Regional studies agenda 2001-2005:

Comparison of the structure of the fish communities in Pacific Islands, w/ an emphasis on commercial species.

ProcFish SPC program (consistent protocols and data sets throughout the Pacific)

Compilation of existing databases on fish communities throughout the Pacific (data may be heterogeneous)

Databases on local and global forcing factors

PROCFish/C

Pacific Regional Oceanic and Coastal Fisheries / Coastal Component

ProcFish expected outputs

Main goal: better management of coastal marine resources in the Pacific, for and with the local human communities

After the on-going collection of ecological and socio-economics data, comparison of contrasted situations in terms of

Reef environments,

Fish and invertebrates' communities and stocks,

Fishing pressure,

Management practice,

Should yield a set of models that could inspire future legislations towards sustainable reef fisheries in the Pacific Islands

Regional studies agenda 2001-2005:

Definition of indicators of anthropogenic pressure (fisheries) and management results (MPAs) on reef communities in New Caledonia and.... transfer to other countries

Regional studies agenda 2001-2005:

Characterisation and mapping of habitat and geomorphology of Pacific Islands using remote sensing for resources biomass up scaling

Conclusions

UR Coreus

Testing methods to describe synthetically and consistently coastal ecosystems structure and functioning in contrasted environments (from pristine to stressed) in order to derive indicators of coastal status. Generalisation in different regions.

Better geographic/physical characterisation of Pacific islands and reef environments using remote sensing (geomorphology, habitats, bathymetry)

Ecological characterisation: community structure, trophic spectra and networks, and relationships with local and global forcing factors

Scaling-up at island and archipelago-scale the fishery resources available by coupling existing or on-going databases (SPC's Demecofish, Procfish) with remote sensing products