



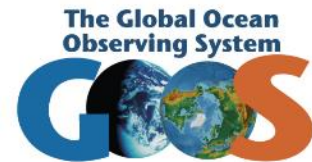
INTEGRATED VIEW OF SCIENCE, POLICY-MANAGEMENT, GOVERNANCE AND SECURITY IN COLOMBIA

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DIMAR

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INVEMAR



GOOS Steering Committee Seventh Meeting
Santa Marta, June 13-15, 2018

GEOGRAPHICAL CONTEXT



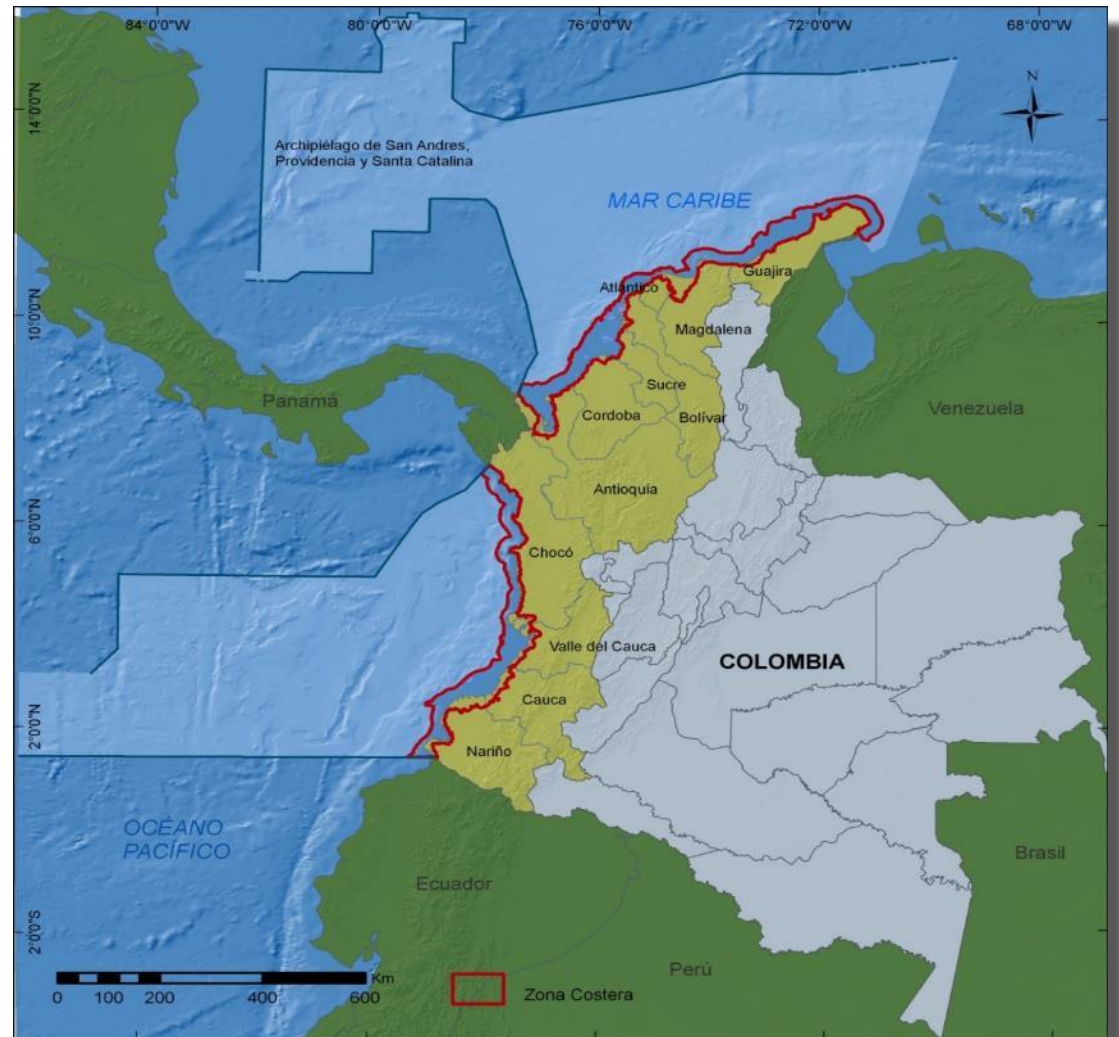
Marine and Coastal Zones

989.000 Km²

1 200.000 Km²

*Colombia is 50%
ocean*

INVEMAR, 2013. Informe del estado de los ambientes y recursos marinos y costeros en Colombia: Año 2012.



INTEGRATED VIEW OF MARINE SCIENCE



**COORDINATION OF INFORMATION FOR MARINE AND
COASTAL MANAGEMENT**

SCIENTIFIC SERVICES COORDINATION

ACADEMIC COORDINATION

**MARINE AND COASTAL
GEOSCIENCES
GEO-PROGRAM**

- Coastal and Marine Geology.
- Oceanography and Climate.

**BIODIVERSITY AND
MARINE ECOSYSTEMS
BEM-PROGRAM**

- Inventories, taxonomy and biology of species.
- Organization and Dynamics of Ecosystems.
- Biology and Conservation Strategy.

**MARINE ENVIRONMENT
QUALITY
CAM-PROGRAM**

- Assessment and Monitoring of Environmental Quality.
- Prevention and Protection of Coastal and Marine Ecosystems.
- Rehabilitation of Coastal and Marine Ecosystems.

**ASSESSMENT AND
RESOURCE USE
VAR-PROGRAM**

- Economic Valuation.
- Use and Sustainable Production.
- Marine Bioprospecting.

LABSIS - CDO - MHNMC - LABBIM - LABIMA - LABCAM

SiAM STRUCTURE



Modules

Biodiversidad Marina

Marine Biodiversity

Manejo Integrado de Zonas Costera

Integrated Coastal Zone Management

Monitoreo de Ambientes Marinos

Marine Environments Monitoring

Amenazas Naturales

Natural Hazards

Usos de los Recursos Marinos

Use of Marine Resources

Web services

Taxonomía y colecciones
Taxonomy and collections

Monitoreo y caracterización
Monitoring and characterization

Microorganismos
Microorganisms

Historia natural
Natural history

Documentos planeación, políticas y guías
Planning documents, policies and guides

Indicadores de gestión
Management indicators

Soporte a la toma de decisiones
Decision making support

Calidad ambiental marina
Marine environmental quality

Ambientes marinos costeros: manglares, corales, pastos, litorales, playas
Coastal marine environments: mangroves, coral reefs, sea grasses, coastlines, beaches

Oceanografía y clima
Oceanography and climate

Geológicas
Geological

Cambio climático mares y costas
Seas and coasts climate change

Erosión costera
Coastal erosion

Pesquerías artesanales
Artisanal fisheries

Caladeros de pesca
Fishing grounds

NATIONAL ENVIRONMENTAL SYSTEM OF COLOMBIA



SINA

NATIONAL ENVIRONMENTAL COUNCIL

Ensures consistency between development and environment
Approves national environmental policies

MINISTRY OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT (MADS)

Constructs and designs National Environmental Policies

Sustainable Development

Regional Autonomous
Corporations

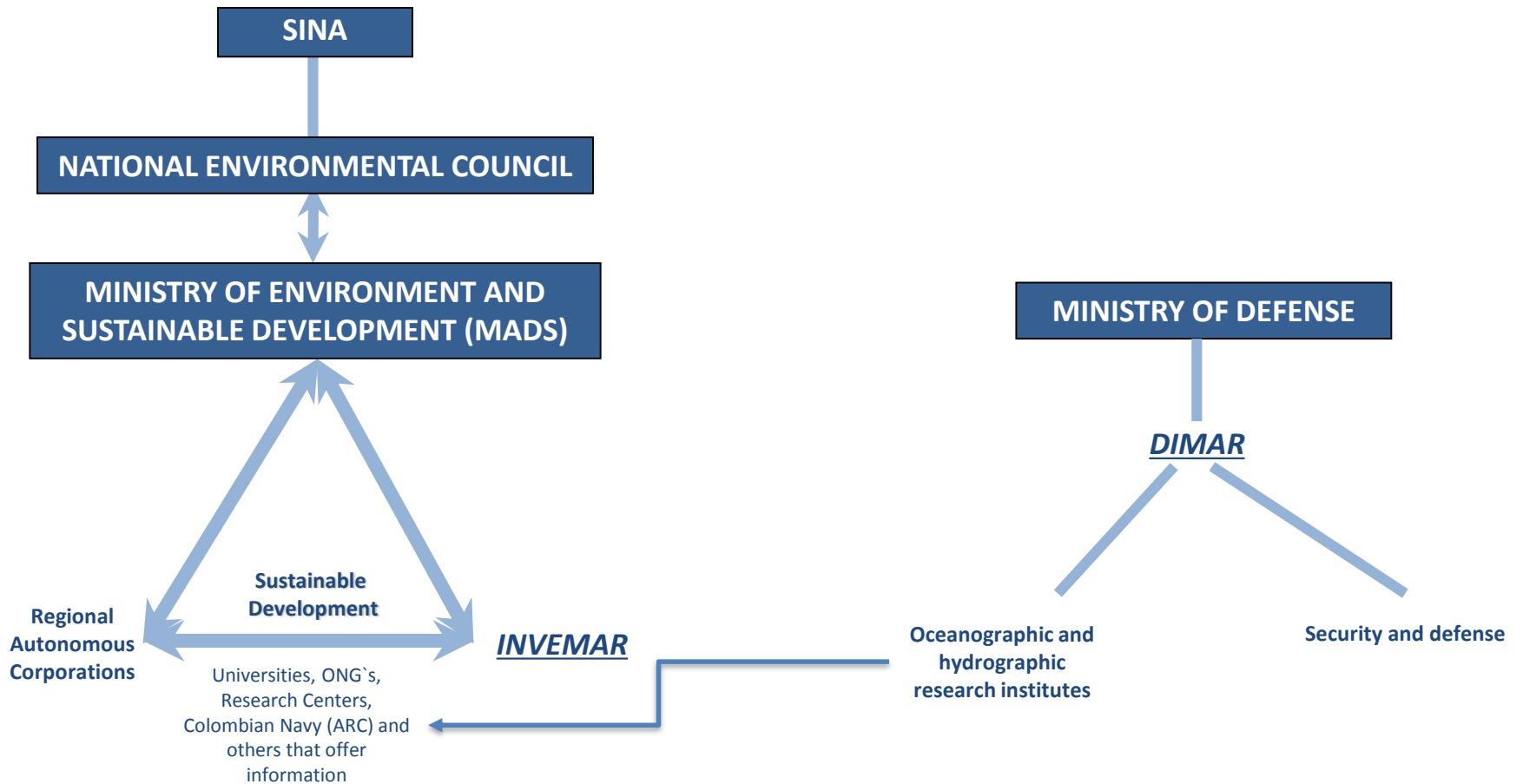
Departmental Environmental
Authorities
(Execute)

Universities, ONG`s, Research Centers, Colombian
Navy (ARC) and others that offer information

Research Institutes
Execute, advise and provide
information

IDEAM
IAvH,
INVEMAR,
SINCHI, IIAP

INTEGRATED VIEW



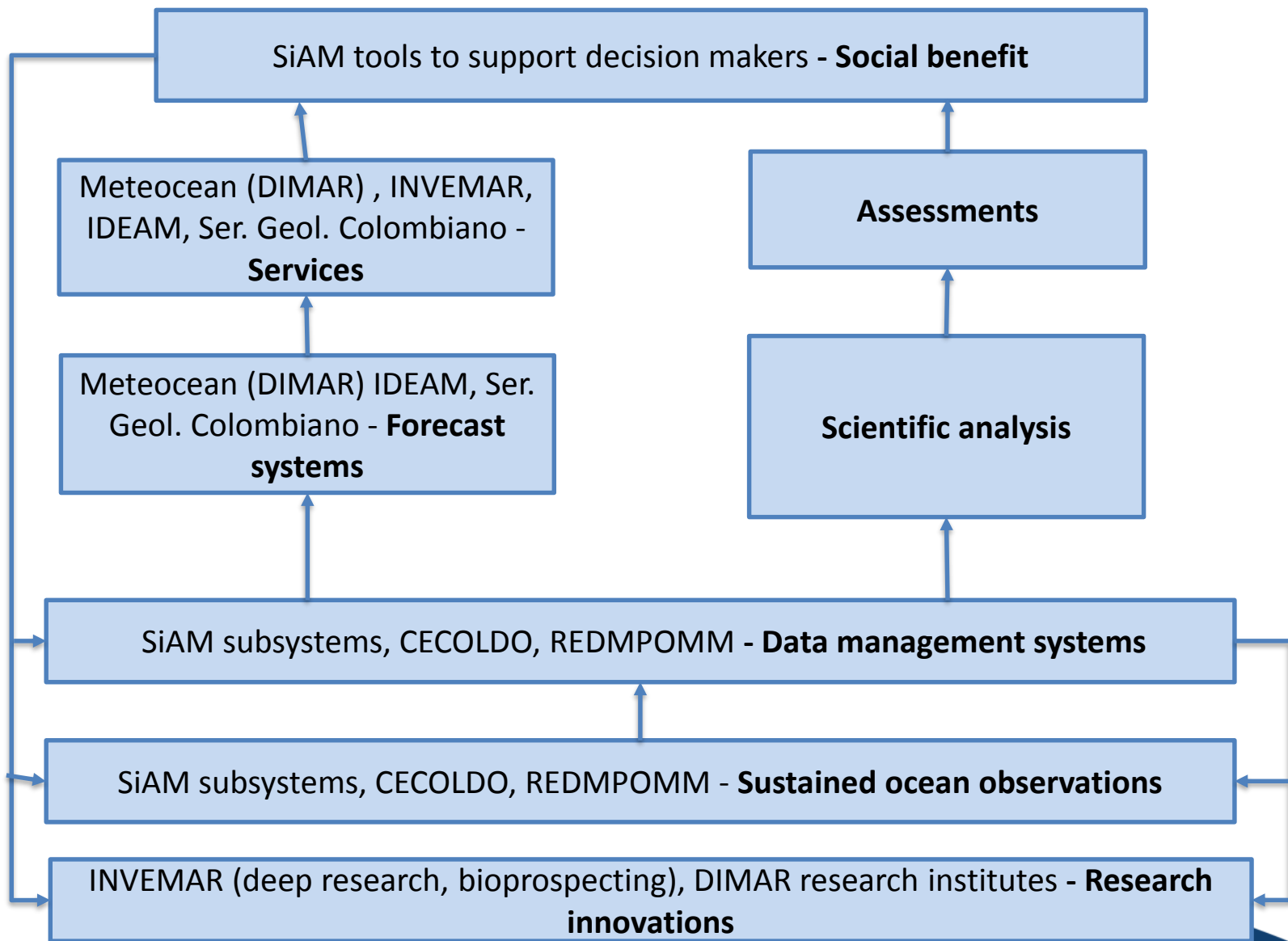
GOOS PRINCIPLES VS COLOMBIAN VISION



- User-Driven design - SiAM (ecosystems, natural hazards, productive activities –fisheries) and DIMAR information systems
- Sustained observations - SiAM Monitoring (water quality, coral reefs, mangrove, fisheries, meteocean, erosion)
- Regular evaluation – Annual report on status of marine environment
- Global standards and best practice – Colombian NODC, CTN Dioccean (GT-MIM and GT-MPGD)
- Open data – multi thematic database (SiAM), CECOLDO, REDMPOMM
- Capacity development – PhD and MSc education in marine sciences, RTC Latin America, cooperation, strategic synergies ??



VALUE OF OCEAN OBSERVATIONS: COLOMBIA





COLOMBIA 50% OCEAN towards achieving SDG 14



THANKS FOR YOUR ATTENTION



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INVEMAR is a leader of Marine Sciences and coordinates network in marine research Colombia



• Objective

- Research cooperation, exchange information, share lessons learnt and scientists from different disciplines working together

• Members

- Armada Nacional - DIMAR
- Universidad de Antioquia
- Universidad Nacional
- Universidad del Valle
- Universidad Jorge Tadeo Lozano
- INVEMAR
- Otros Interesados



UNIVERSIDAD
NACIONAL
DE COLOMBIA



**RESOLUCION MAVDT 2175
(December 11, 2007)**