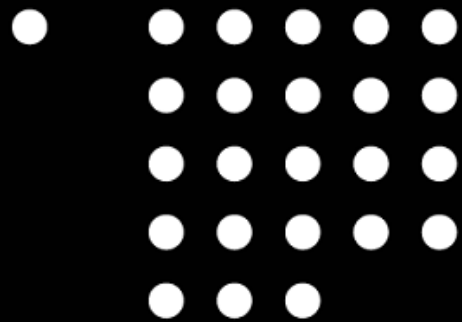




Fachhochschule Köln
Cologne University of Applied Sciences



Institute for Technology and Resources Management
in the Tropics and Subtropics



Technology and Resources Management



International Master Program

Study Program

Basic Modules



Environ

Environ

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Team work



Electives

Water



Land



Planning



Energy



Master Thesis

MSc TERMA (MSc TERMA VN)



Focus Areas



Water
Management



Environmental
and Land Use
Management



Urban and
Regional
Management



Renewable
Energy
Management

International and Interdisciplinary



**Prof. Dr.
H. Gaese**

**Agricultural
Sciences, Project
Management &
Evaluation**



**Prof. Dr.
J. Hamhaber**

**Regional
Management,
Regional
Planning**



**Prof. Dr.
J. Roehrig**

**Water resources
management,
Geographical
Information
System**



**Prof. Dr.
L. Ribbe**

**Integrated land
and water
resources
management**



**Prof. Dr.
S. Schlüter**

**Environmental
and Resources
Economics,
Agriculture**



**Prof. Dr.
M. Sturm**

**Water supply
and Sanitation**

and 30 guest professors from other scientific areas of the Cologne University of Applied Sciences, the University of Bonn, the University of Cologne, Universidade de São Paulo, Pontificia Universidad Catolica de Valparaíso, Public and Private Institutions





Qualification for jobs in:

International Organisations

MSc – ENREM



Environment and Resources Management
for Latin American and German young professionals

Environment and Resources Management for Latin American and German young Professionals

International Master Program

double degree in Mexico and Germany

courses, internships and technical field visits

living and learning in Mexico and Germany

training on project management and
intercultural communication

insight in current projects
of international cooperation

10 German + 10 Mexican + 10 Latin American
Participants

Study Program

1st Semester

**Sustainable
Management**

Ecology

**Environmental
Management**

**Introduction to
Statistics**



**Location:
Mexico**

2nd Semester

Two Electives

Thesis Work

**Multidisciplinary
Seminar**

Thesis Seminar



**Location:
Mexico**

3rd Semester

Four Electives

**Special Topics
(Elective)**

Thesis Seminar



**Location:
Germany**

4th Semester

Field Research

**Elaboration and
Submission of
Master Thesis**

Colloquium



**Location:
Germany or
Mexico**

Electives (Major Areas)

Prevention and Control

Environmental Assessment

Renewable Natural Resources

Environmental Management

Environmental Toxicology



Location: Mexico

Water Resources Management

Env. And Land Use Management

Renewable Energy

Urban and Regional Management

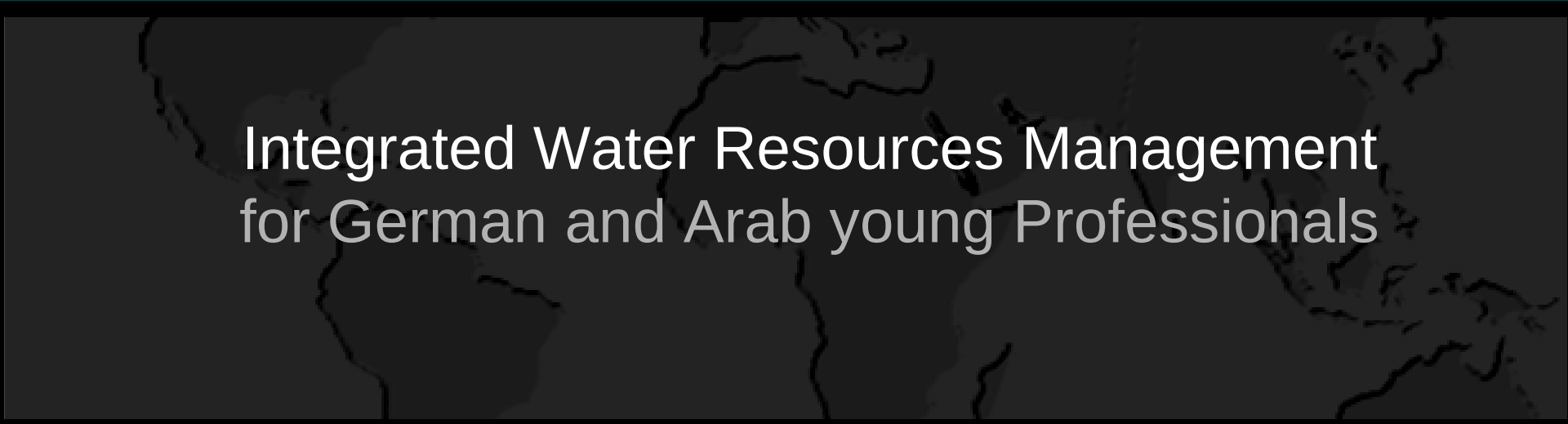


Location: Germany

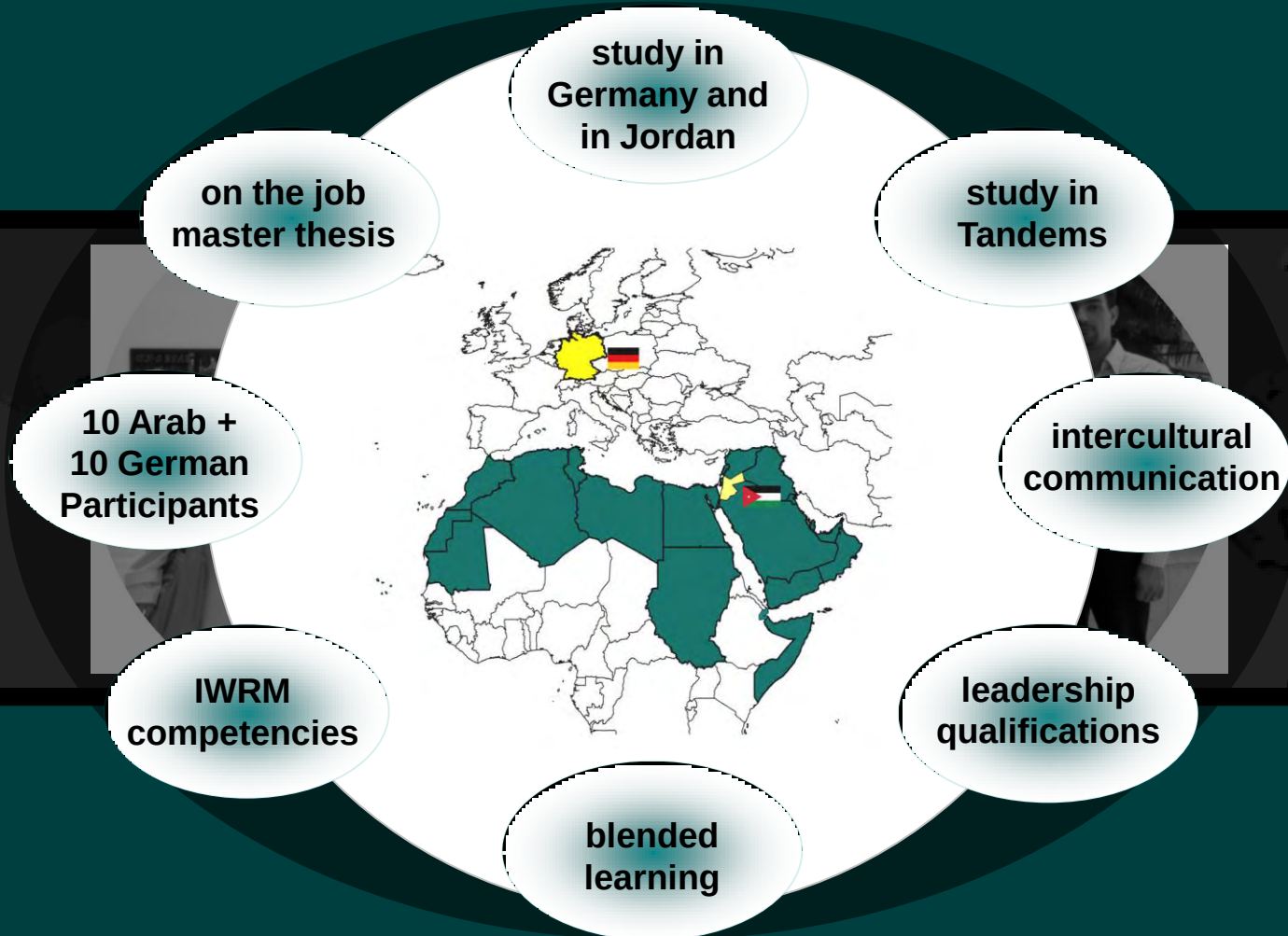


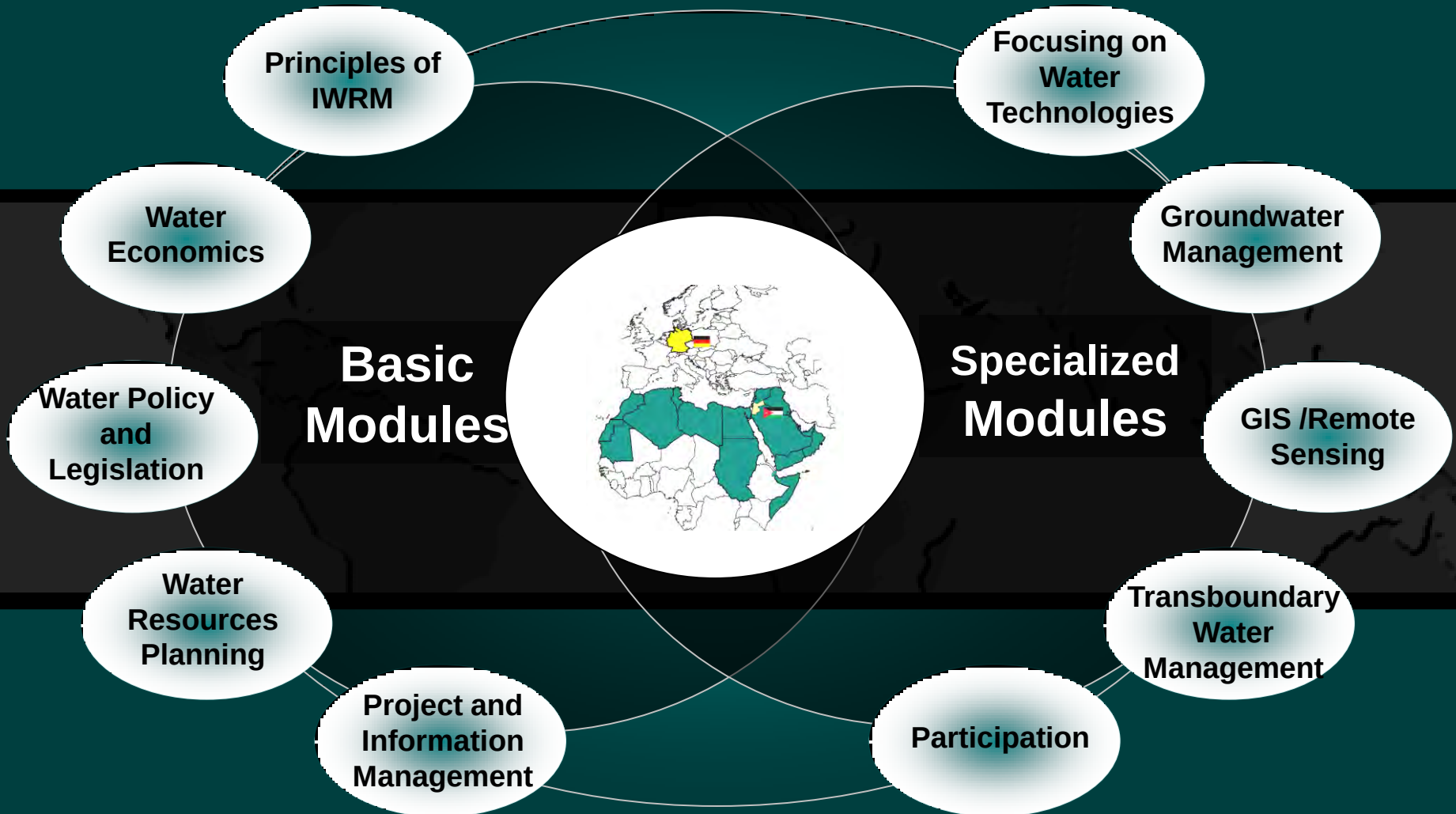
Qualification for jobs in:

NGO's
environmental and development sectors



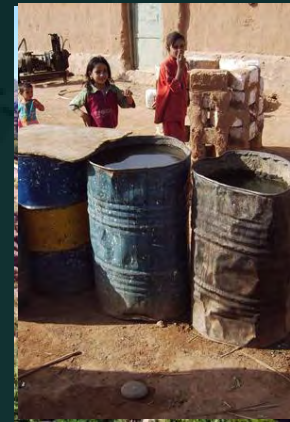
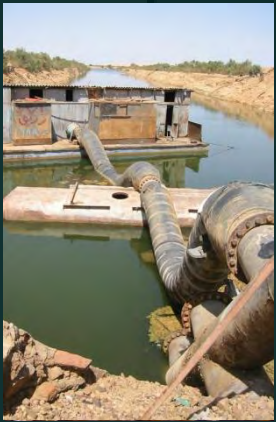
Integrated Water Resources Management for German and Arab young Professionals





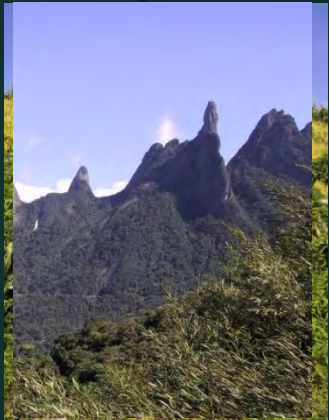


Water Management



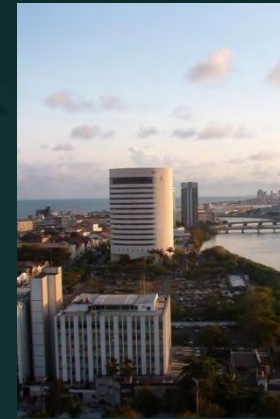
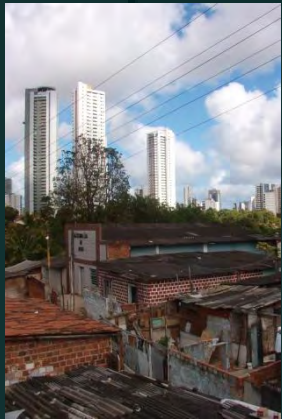
Integrated Water Management Systems
for the Lake Nasser Region, Egypt

Land Use Systems



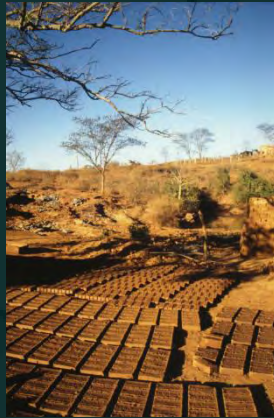
Potential analysis and development for an integrated processing of cashew
in Ceará, Brazil
Climate Change, Landscape dynamics, Land use and Natural Resource in the
Atlantic Forest of Rio de Janeiro

Urban Planning & Sustainable Architecture



Emerging Megacities: Open Spaces –
Potential for Nature Orientated Living

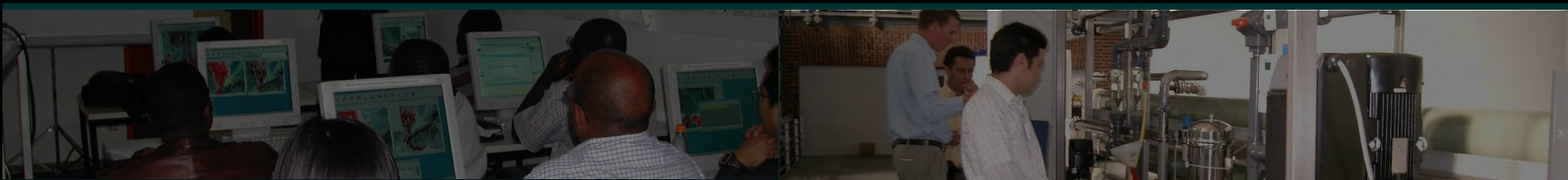
Building Techniques & Renewable Energy



Solar air conditioning for the tropics



Cooperation

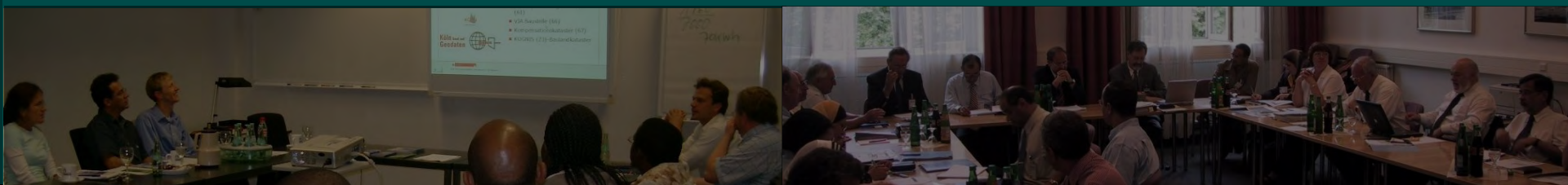


Universities

Private sectors

NGOs

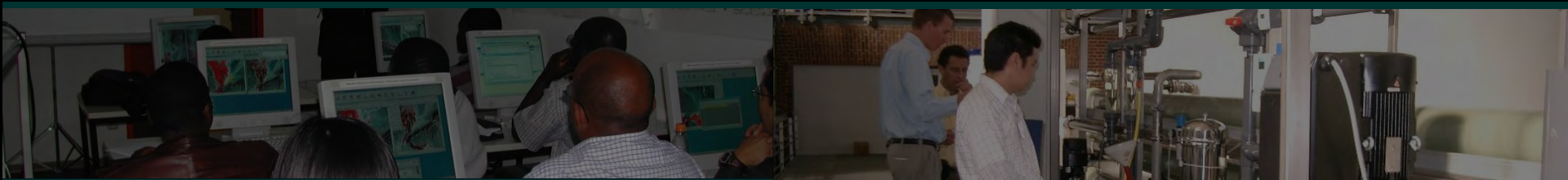
Public authorities



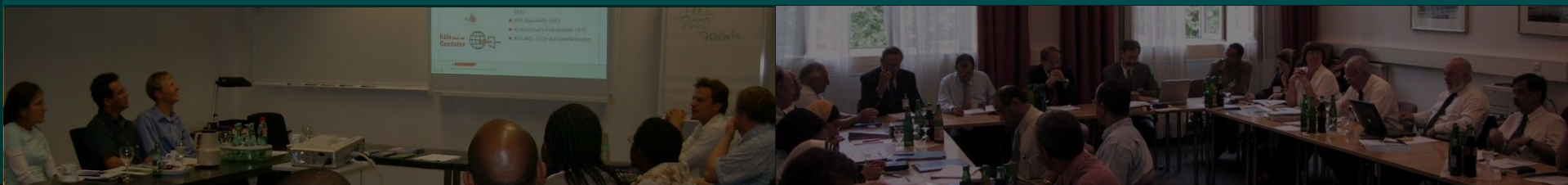


ITT is...

Cooperation



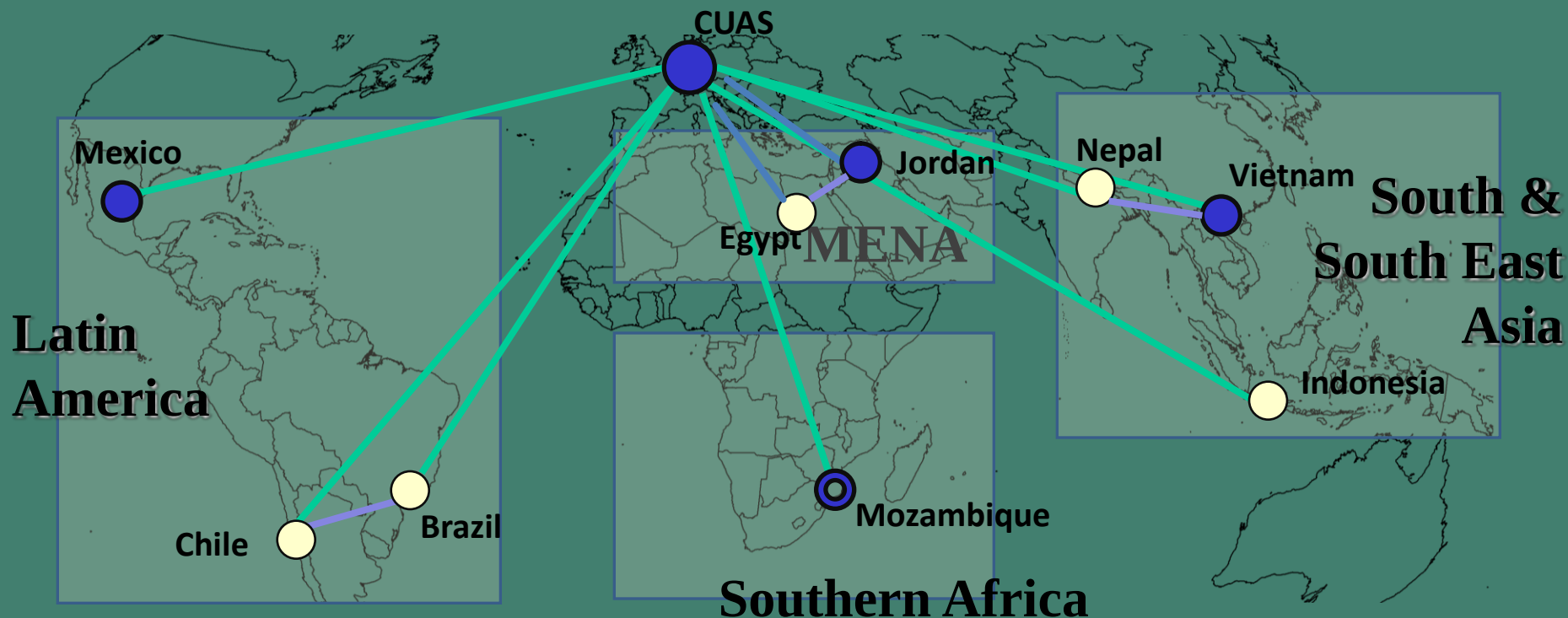
Consultancy for technical, financial and scientific
Exchange of Master students
International research projects
in or from a partner country



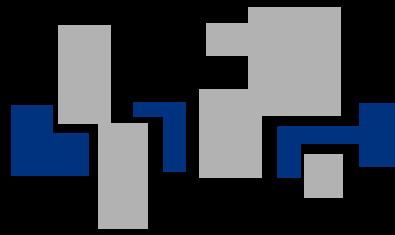


ITT is...

Partnership



Worldwide Partners of the ITT



ITT is...

Communication

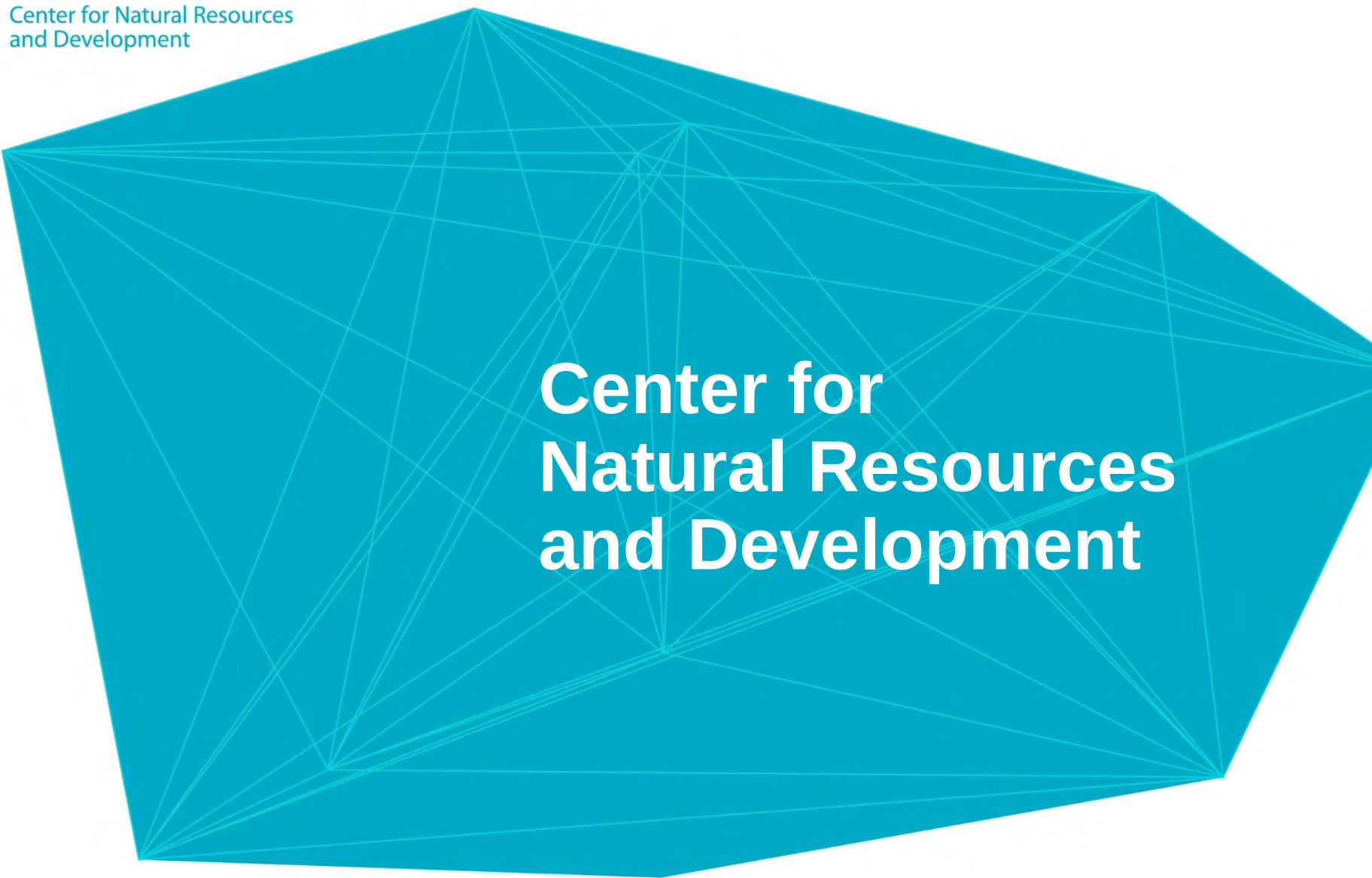


Establishing and
broadening connections

Alumni Networks

CNRD

Center for Natural Resources
and Development

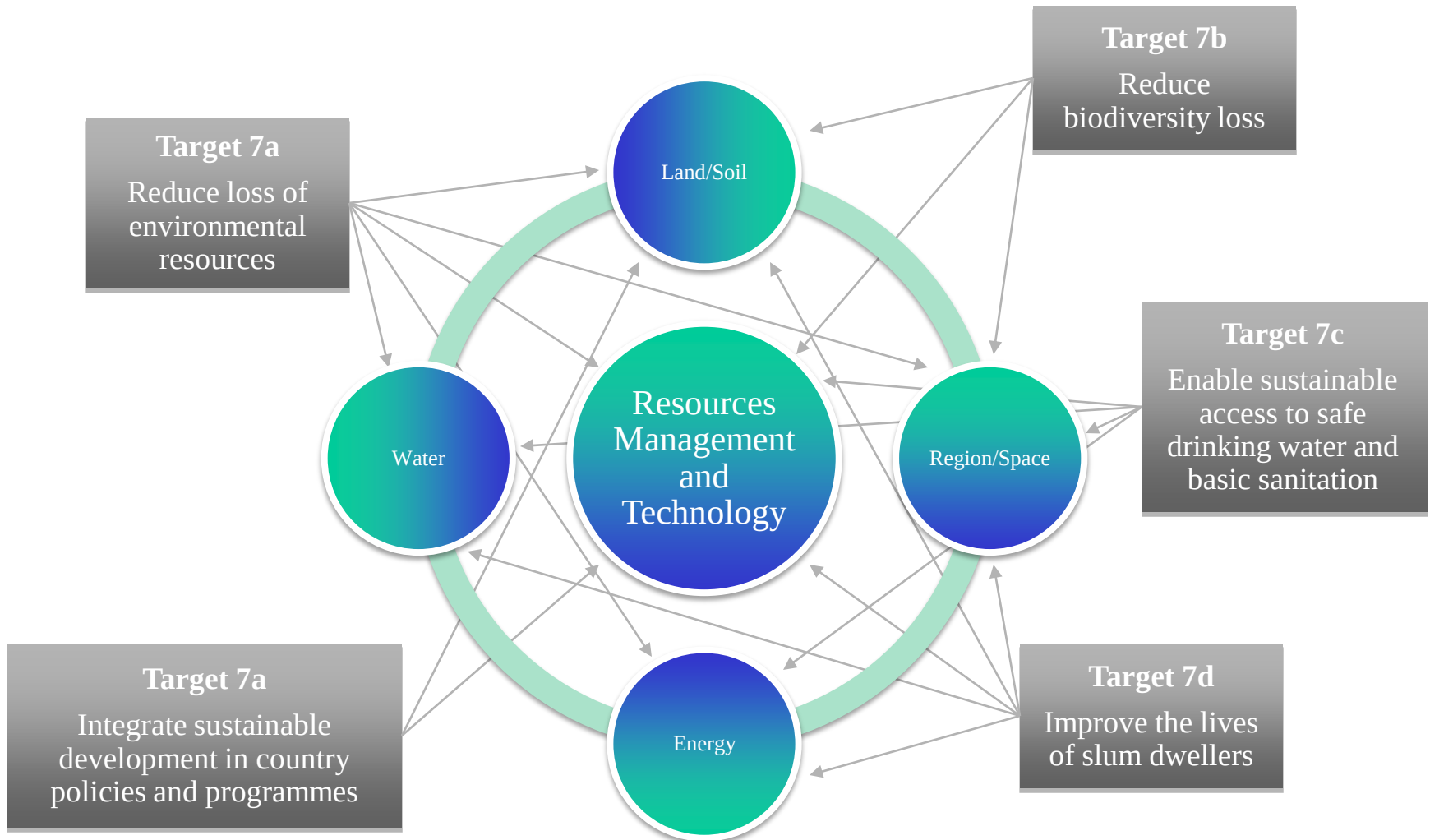


Center for Natural Resources and Development

General concept of CNRD

- Orientation towards MDG 7 targets of UN
- Integration: land, water, energy and regional management
in education and research
- Competence centers in four target regions with south-to-south connection

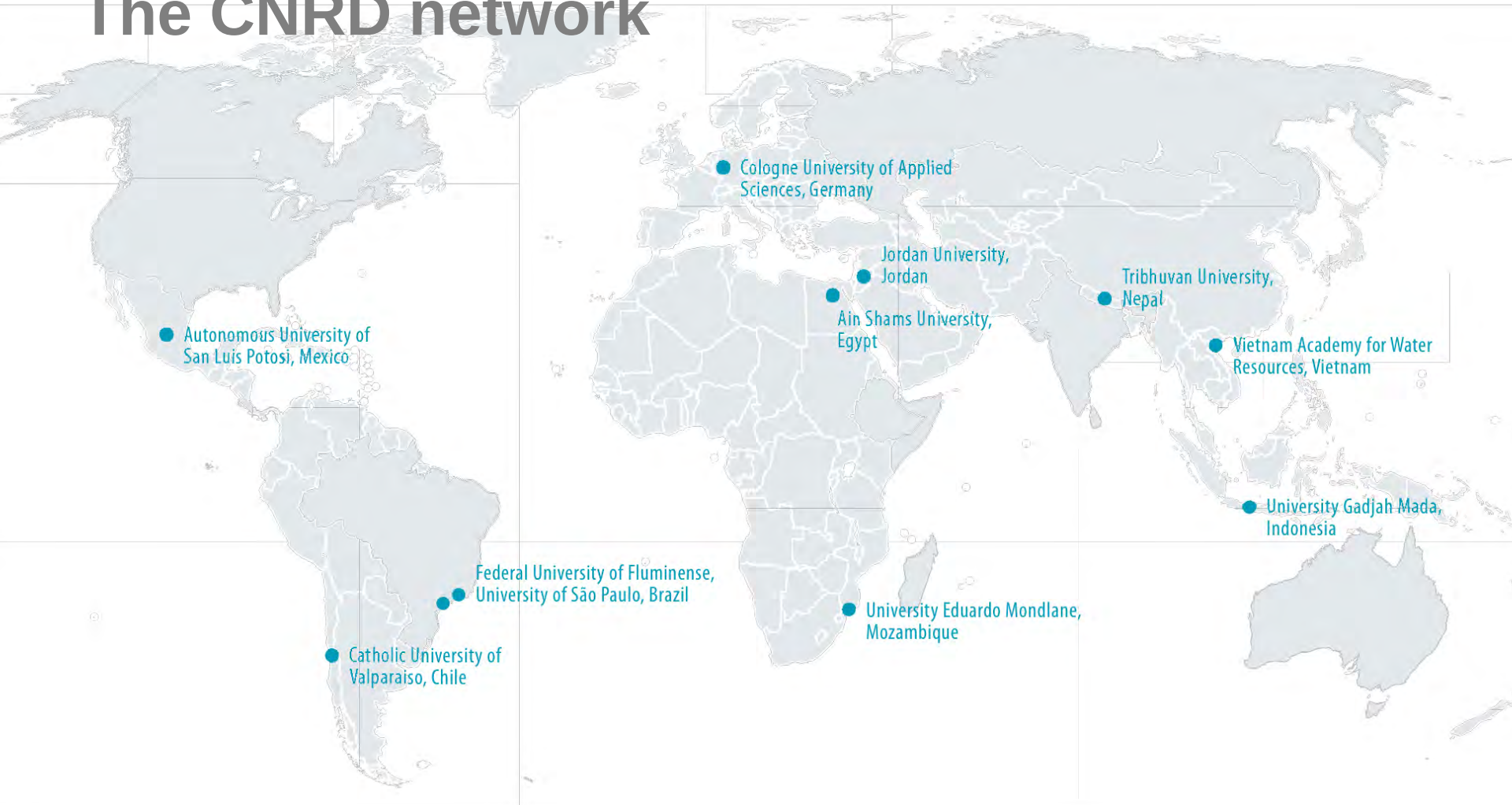
General concept of CNRD



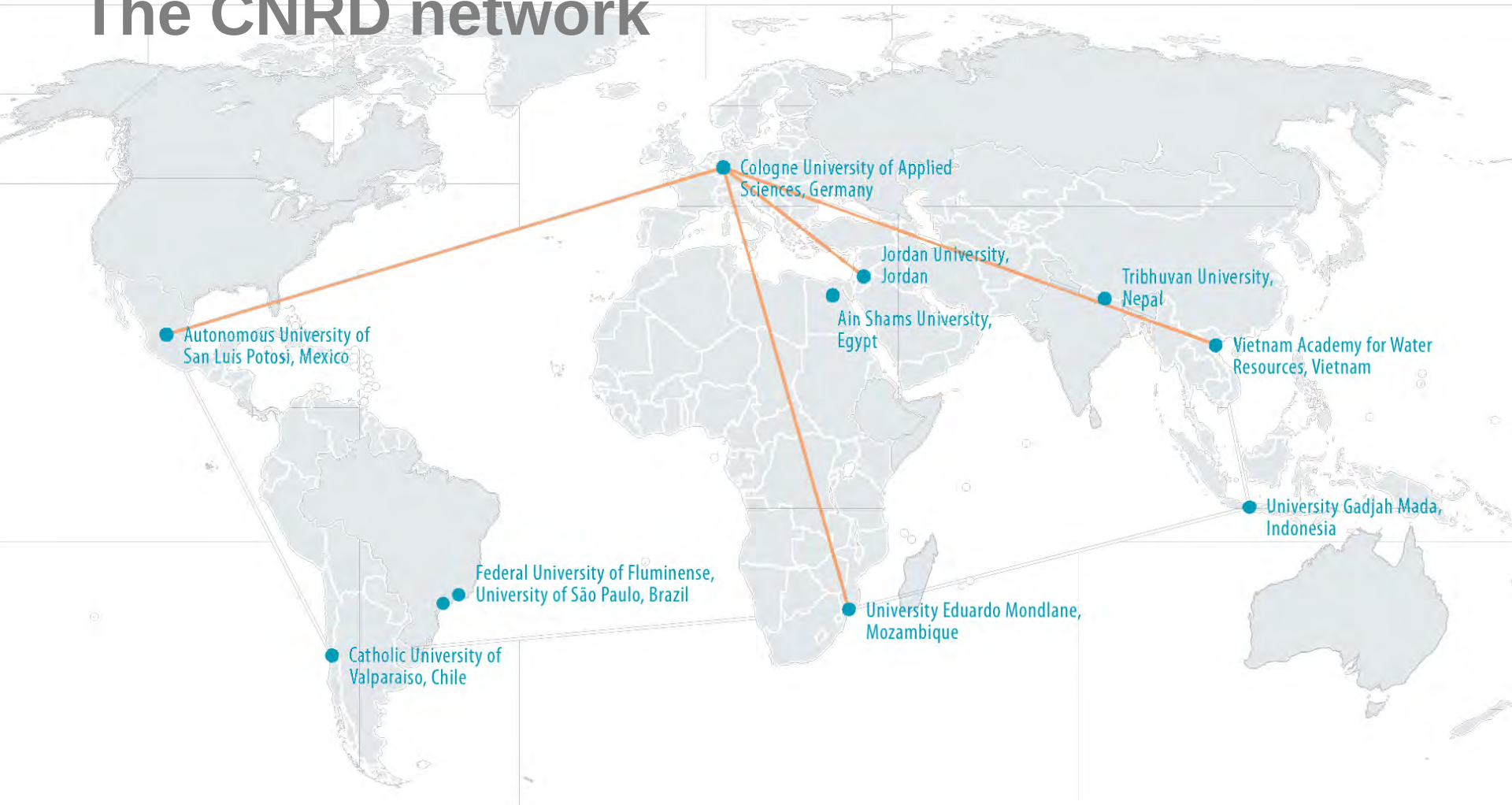
Objectives of CNRD

- Unite and expand network of expertise
- Global coverage of MDG7 master courses
- Foster innovative research
- Develop capacities for life long learning
- Provide for dialogue and knowledge transfer
- Build virtual knowledge center

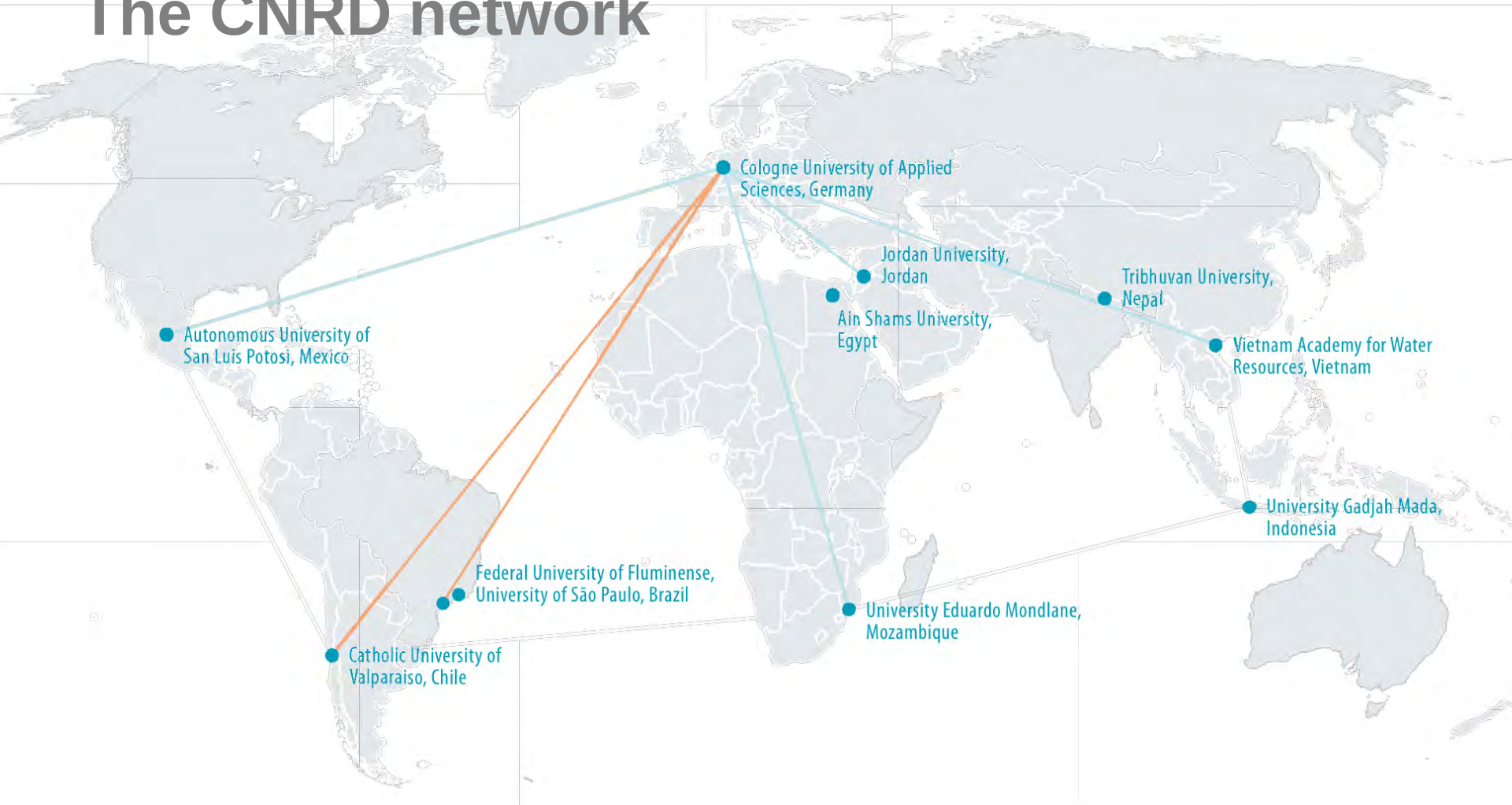
The CNRD network



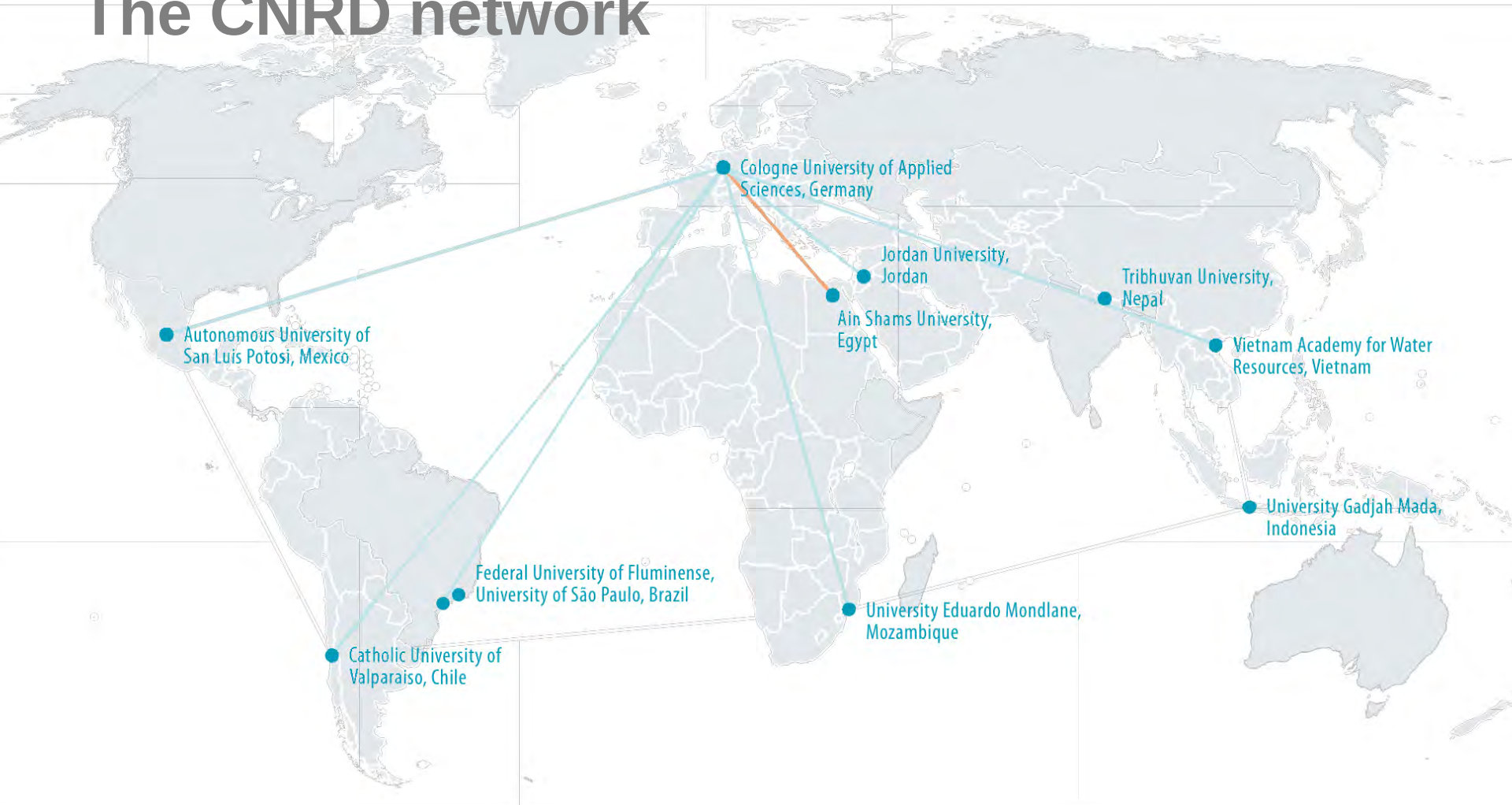
The CNRD network



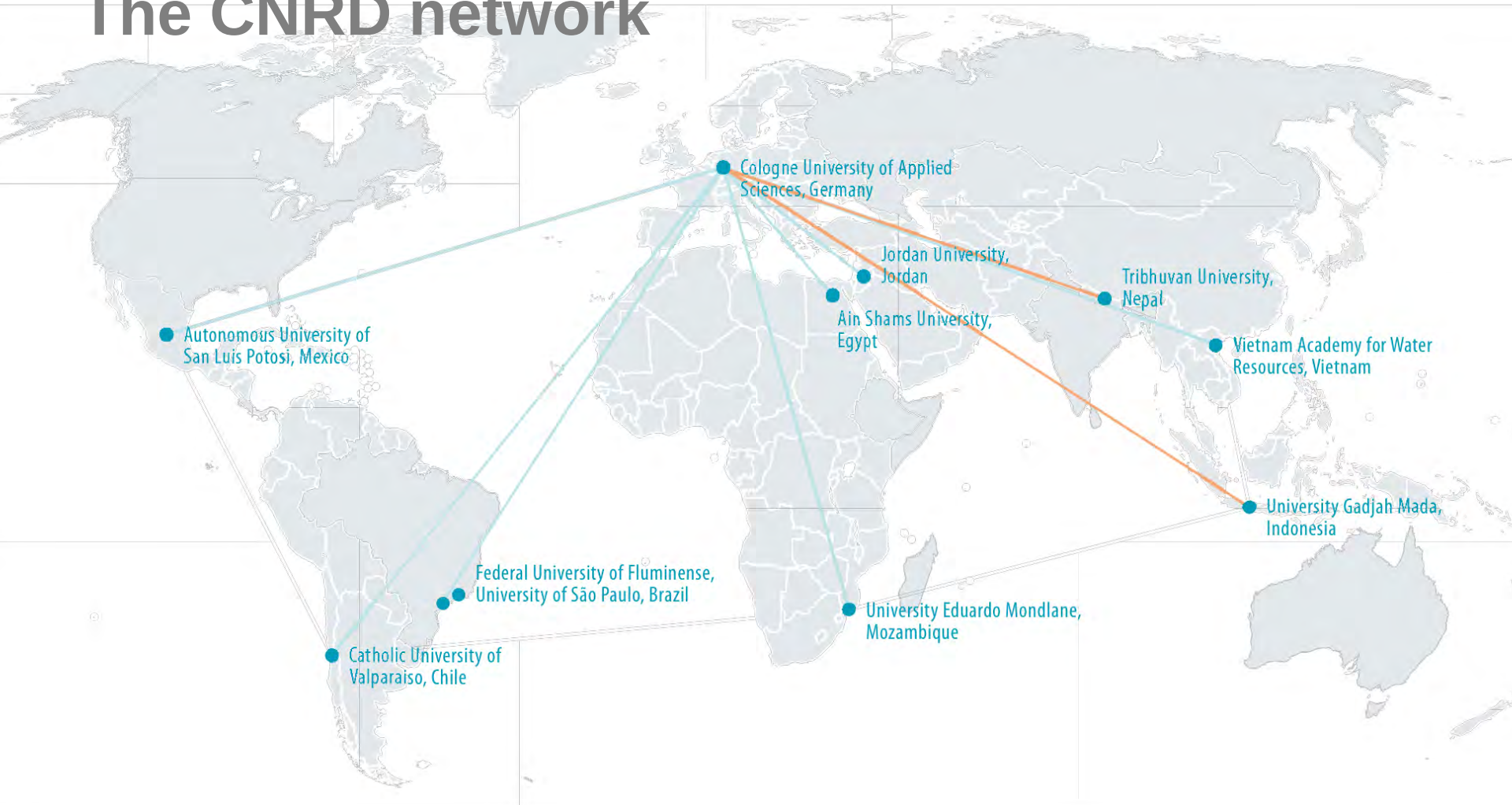
The CNRD network



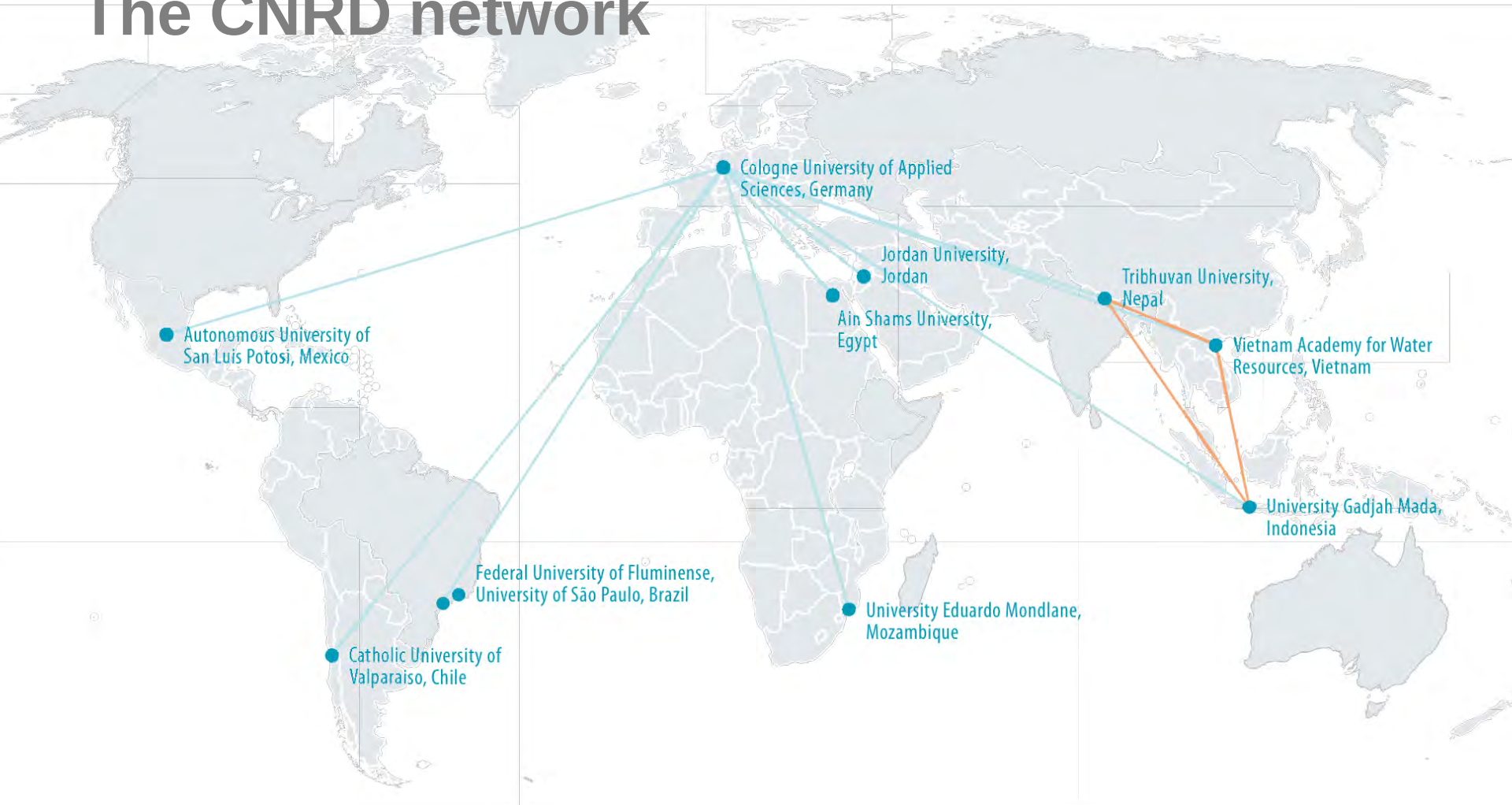
The CNRD network



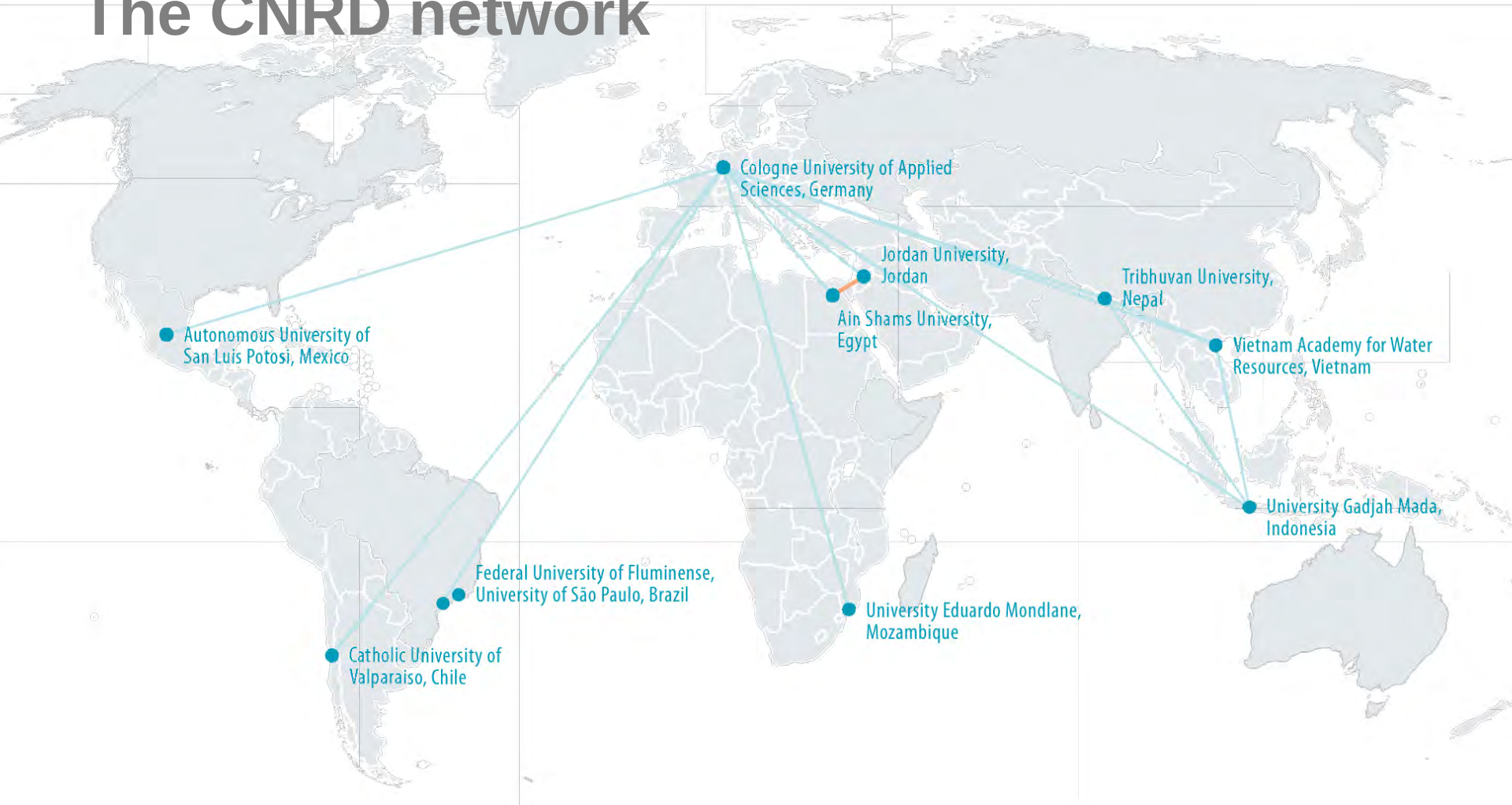
The CNRD network



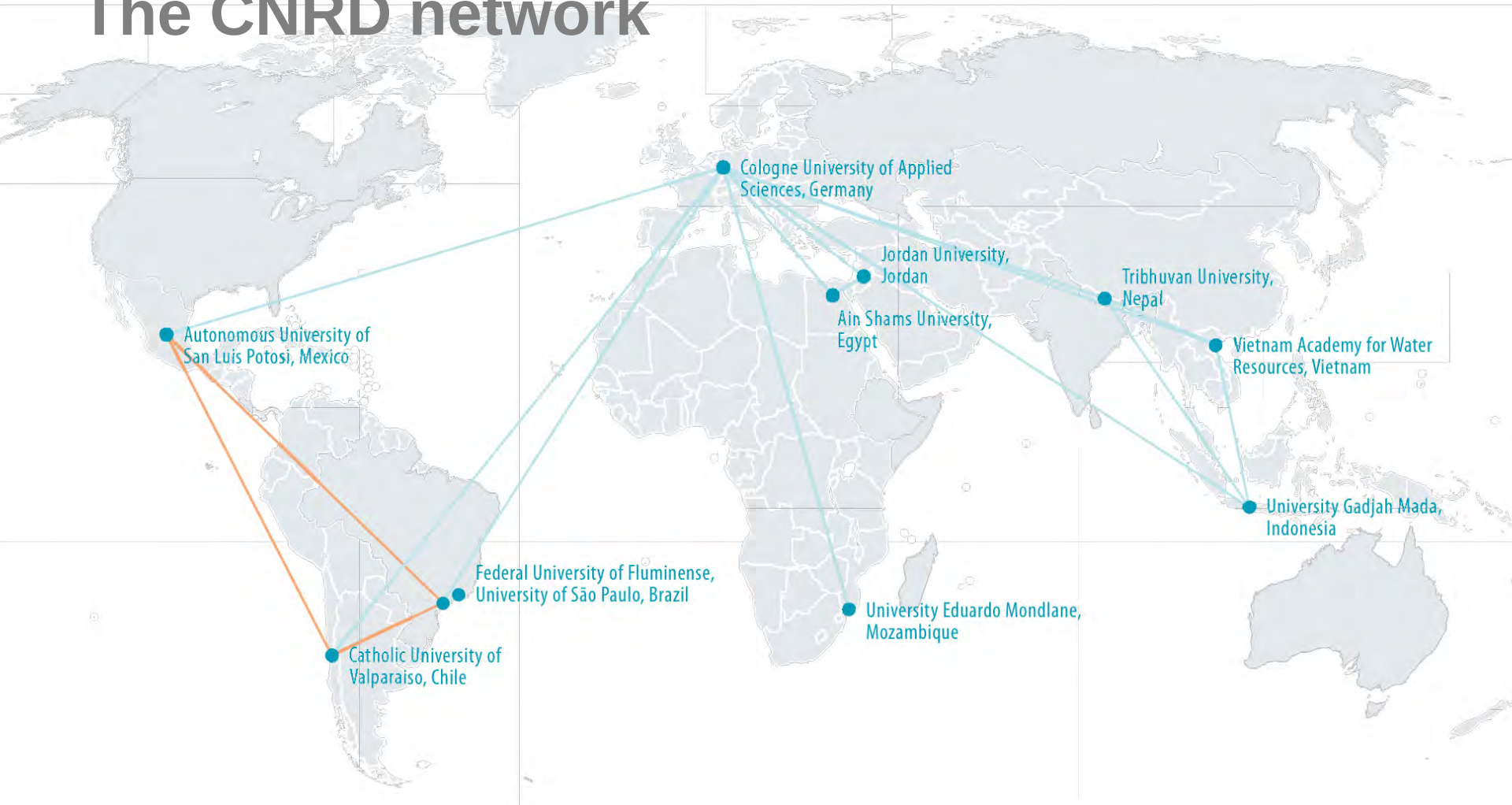
The CNRD network



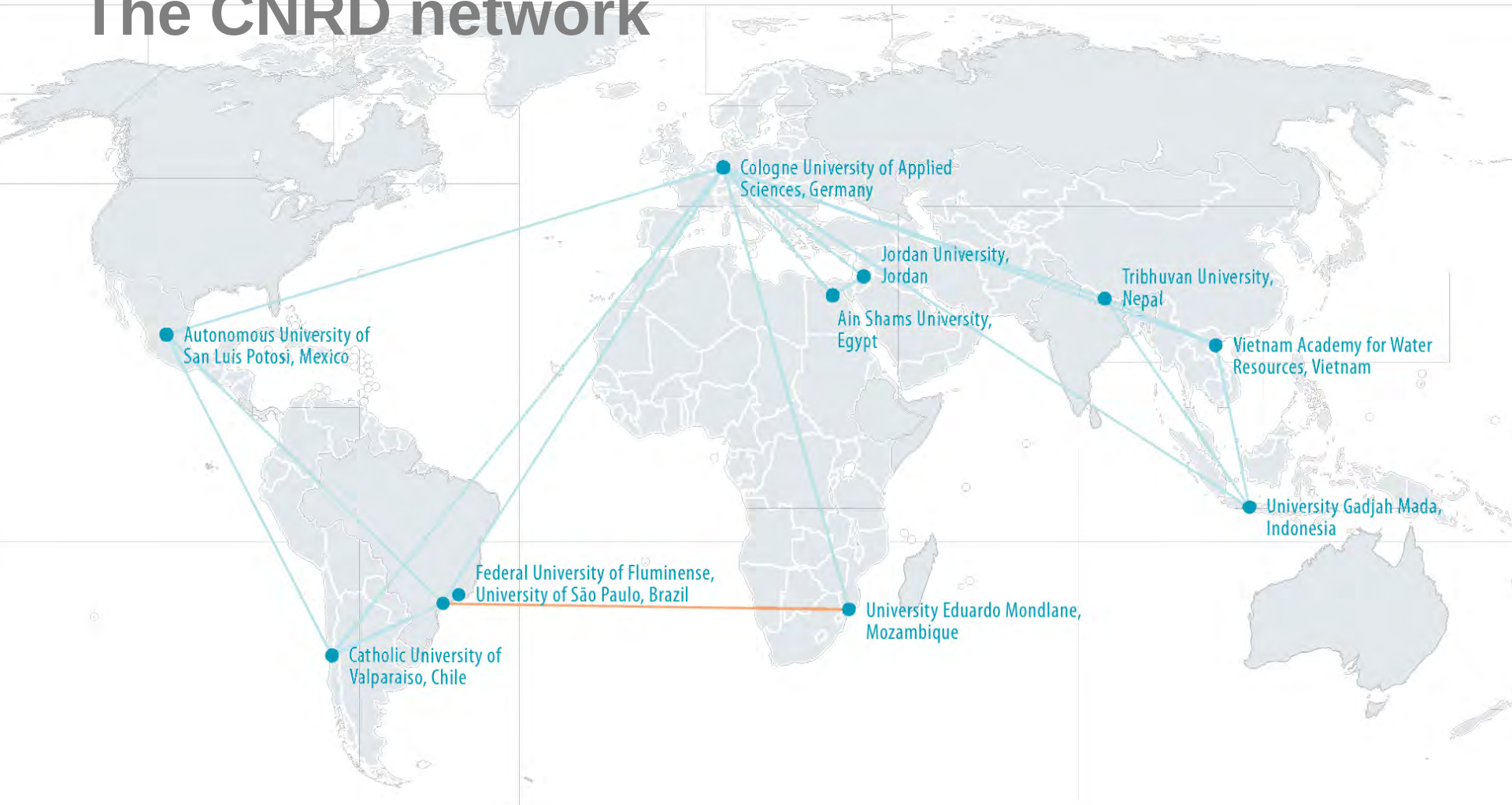
The CNRD network



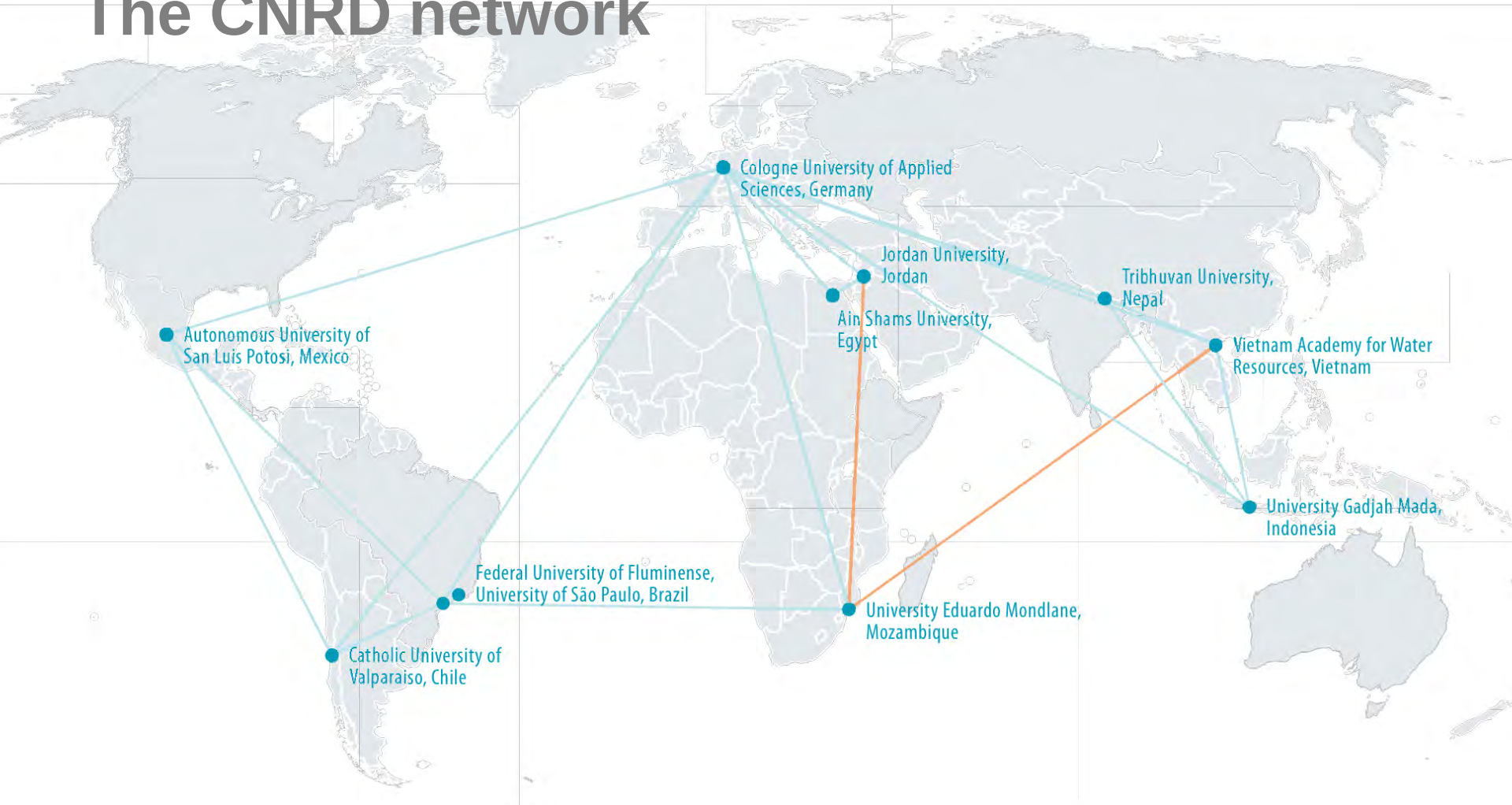
The CNRD network



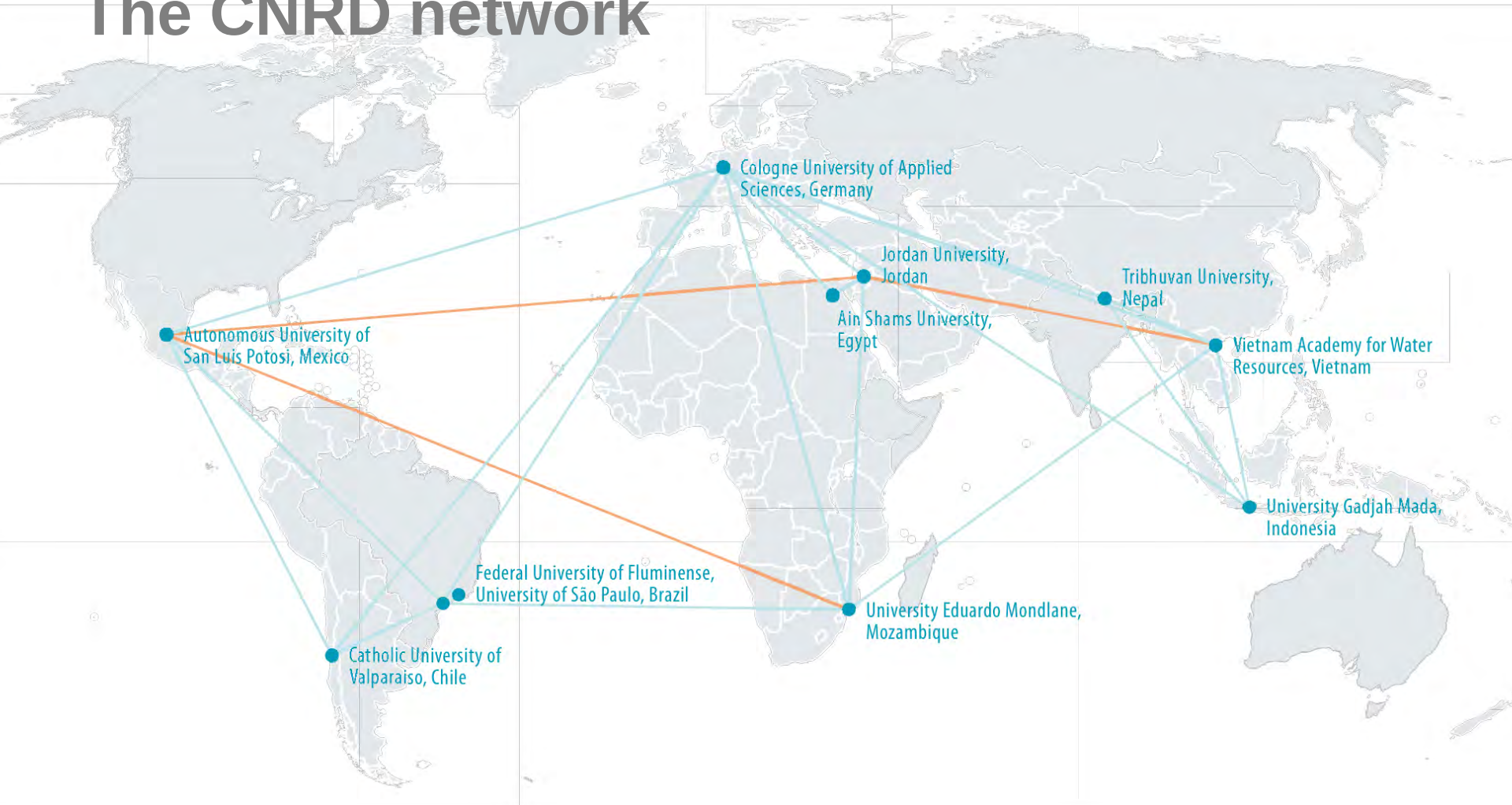
The CNRD network



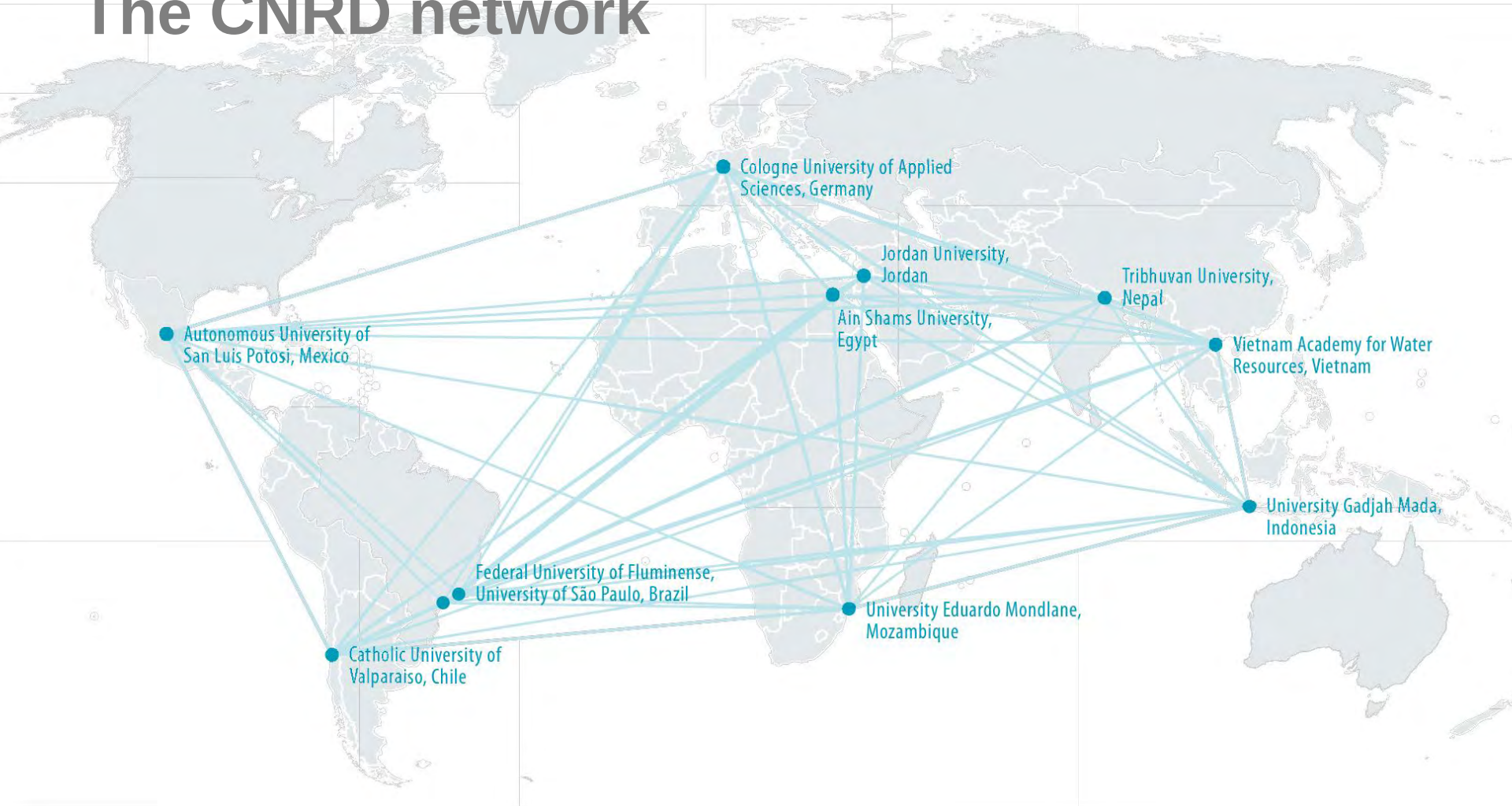
The CNRD network



The CNRD network



The CNRD network

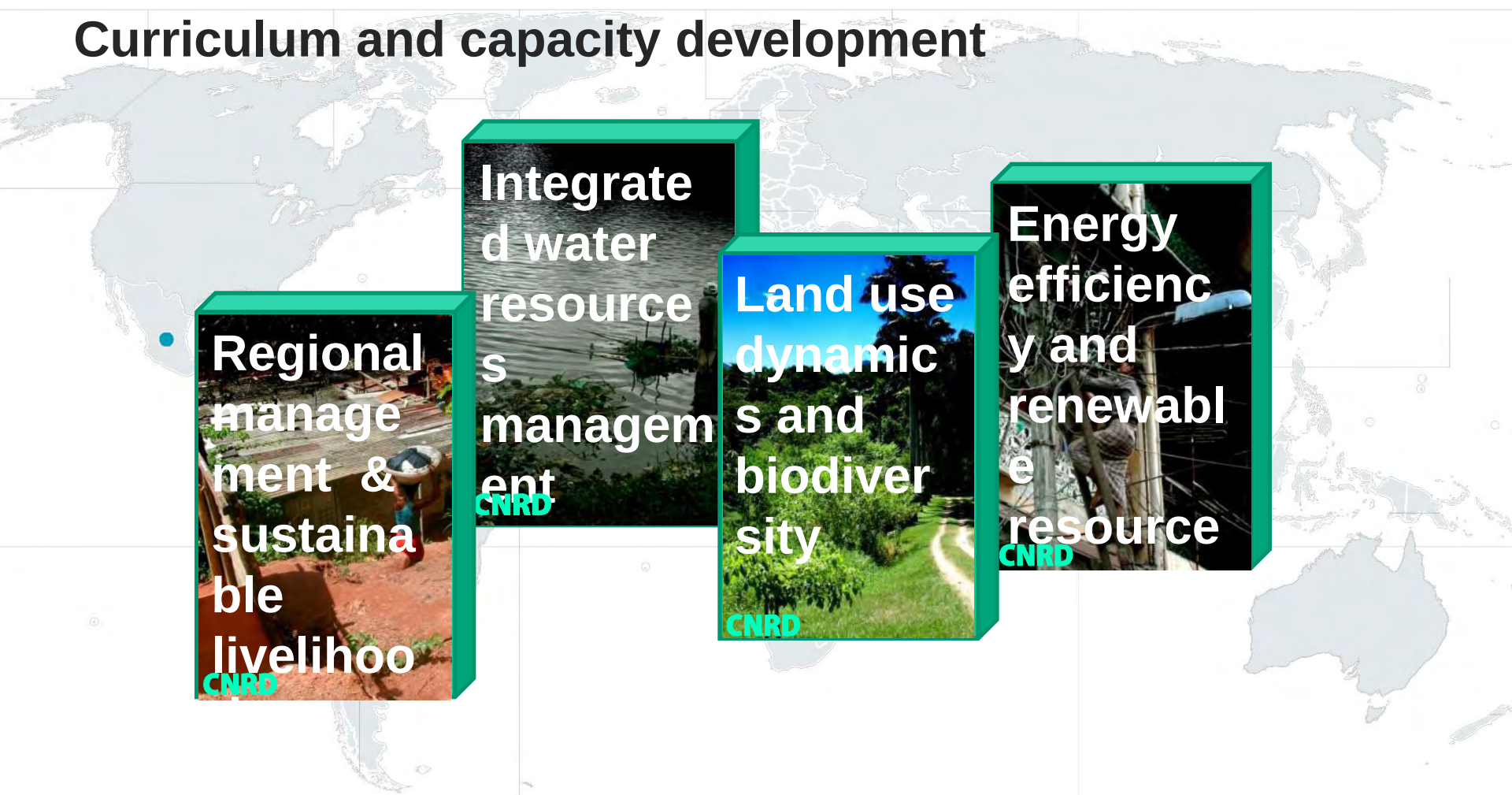


Activities

- Establish CNRD at CUAS – CNRD chair
- Postgraduate courses network and curriculum development
- Fostering strategic research and PhD program
- Establish regional knowledge and training centers
- Communication and outreach
- Virtual Center

Network of postgraduate courses and curriculum development

Curriculum and capacity development



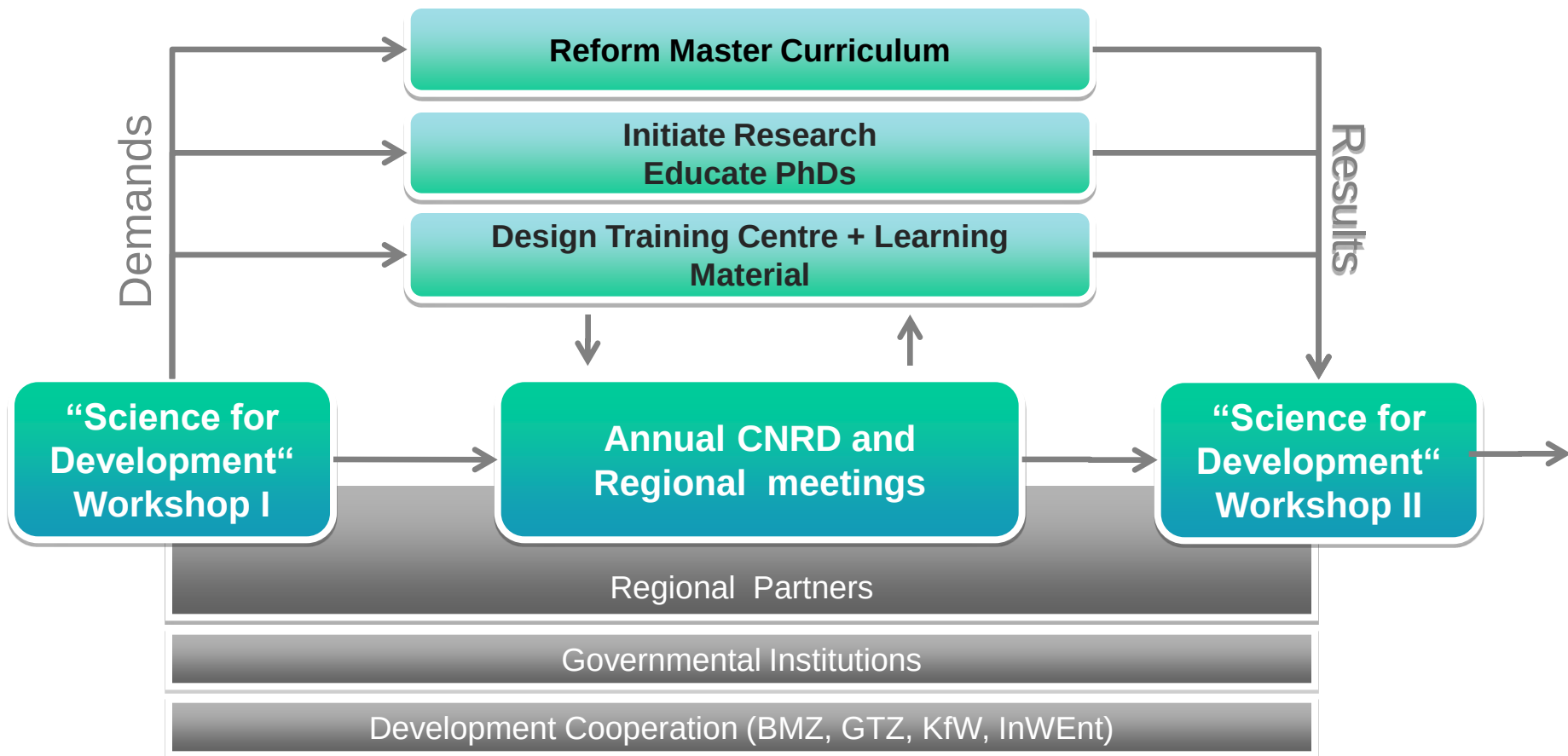
• **Regional
management &
sustainable
livelihoods**
CNRD

**Integrate
d water
resource
s
managem
ent**
CNRD

**Land use
dynamic
s and
biodiver
sity**
CNRD

**Energy
efficiency and
renewabl
e
resource**
CNRD

Communication and outreach



Virtual Center

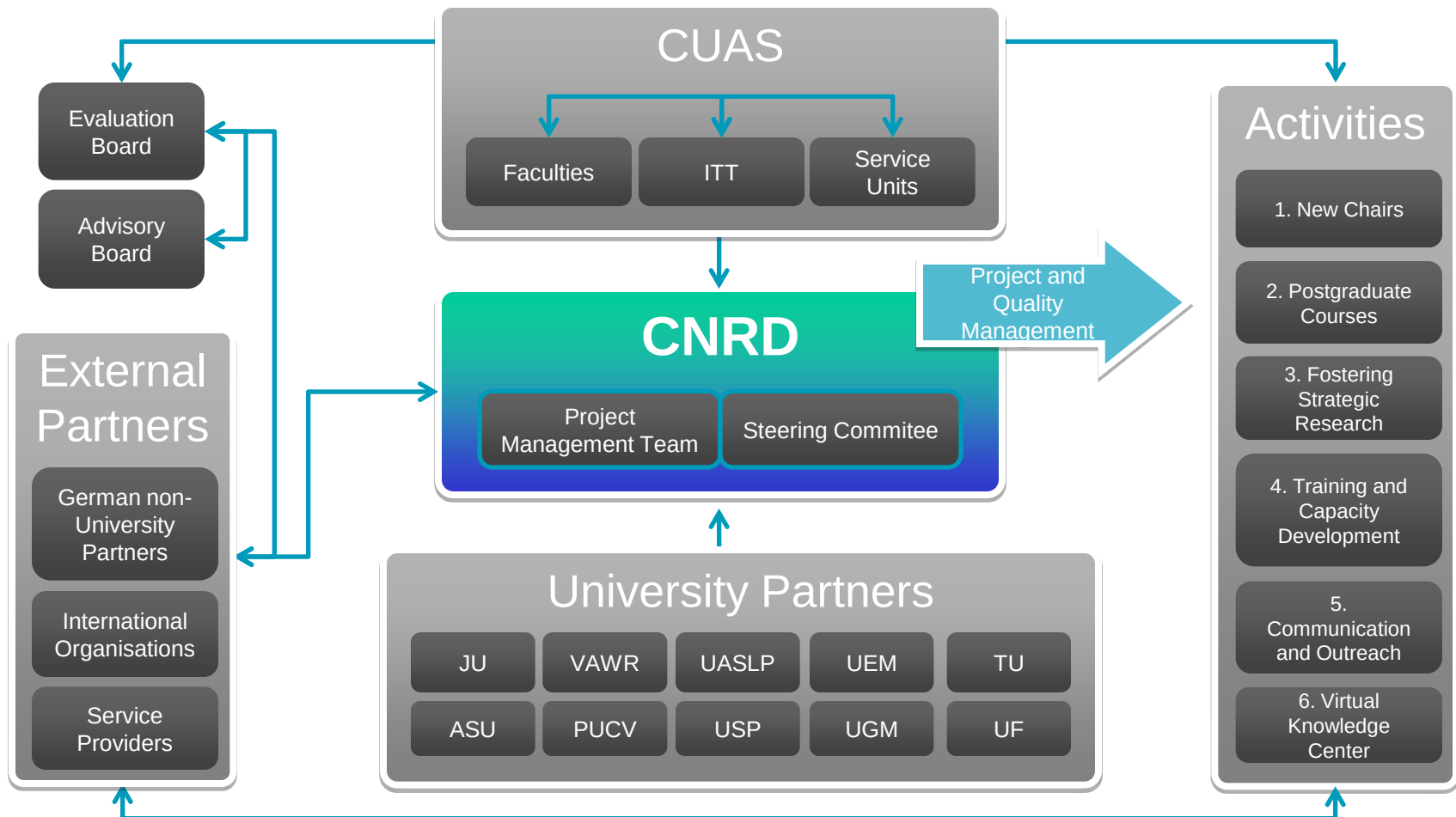
Objectives

- Publications by partners
- E-journal
- Access to learning material for all CNRD partners
- Communication tools / videoconferencing
- Dissemination of results of CNRD

Benefits

- Publications by partners
- storing and sharing the knowledge
- easy to use / simplify the sharing
- students know the web
- students need the web

CNRD organisation chart





CNRD team during first network meeting in
November 2009 at CUAS

Thank you for listening!

www.tt.fh-koeln.de

www.cnrd.info



Federal Ministry
for Economic Cooperation
and Development



DAAD

Deutscher Akademischer Austausch Dienst
German Academic Exchange Service

Study Program

1st Semester

**Natural
Environment**

**Human
Environment**

**Environmental
Economics**

**International
Development**

Management

Scientific Work

2nd Semester

Three Electives

Team Project

**Research
Methods**

3rd Semester

Four Electives

**Special Topics
(Elective)**

**Thesis
Preparation**

4th Semester

**Thesis /
Field Work**

Colloquium

Elective Modules



2nd Semester

Hydrology and Water
Resources Management

Water Resources
Quality

Water Supply and
Demand Management

Water Economics

3rd Semester

Principles of Water Resources Management

Modeling of
Hydrological
Systems

Water Sector
and Institut.
Analysis

Irrigation and
Drainage

Water System
Analysis

Participation
Analysis and
Stakeholder

Urb. drainage,
Sanitation and
Public Health

Watershed Management

Flood and
Drought Risk
Management

Water Resources Planning,
Implementation and Monitoring

Dams,
Channels and
Hydropower

Elective Modules



2nd Semester

Land Use and
Environment

Res. Economics and
Land Use Management

Soil and Water

3rd Semester

Landuse Systems

Global change and food
security

Landuse and water
resources

Sector modeling and
environmental policy

Ecosystem and
Conservation Manag.

Elective Modules



Urban and
Regional
Management

2nd Semester

Urban planning

Regional planning

Integrated Planning I
Efficiency/Environment

3rd Semester

Integrated Planning II
urban infrastructure

Integrated Planning III
Housing/Social Issues

Urban and Regional
Management

Procedures, Methods
and Tools

Elective Modules



Renewable Energy Management

2nd Semester

Energy Resources and
Energy Systems

Electrical and Systems
Engineering

Energy Technology:
Wind Energy Systems/
Photovoltaic Systems/
Solar Thermal Systems/
Biomass / Bioenergy
Systems/
Emerging Technologies

3rd Semester

Integrated Energy
Planning

Energy Economics and
Society

Energy Efficiency:
Energy and Water

Energy Efficiency in
Transport

Energy and the
Environment

Energy Life cycle
Assessment

Network of postgraduate courses and curriculum development

Network of master courses (MSc)

USP

Graduate
Program in
Hydraulics and
Sanitary
Engineering

PUCV

Magister in
Producción
Agrosusten-
table (*Master of
Sustainable
Agroproduction*)

ASU

Urban Planning
and
Environmental
Science and
Building
Technology

CUAS

Technology and
Resources
Management in
the Tropics and
Subtropics

UFF

Master in
Geography

UGM

Planning and
Management of
Coastal Area and
Watershed

UJ/CUAS

Integrated Water
Resources
Management

UASLP

Programa
Multidisciplinario
de Posgrado en
Ciencias
Ambientales

VAWR/CUAS

Technology and
Resources
Management in
the Tropics and
Subtropics

UEM/TU
from 2011