

NEEDS

Needed disciplines

- specialists in
 - the economy of natural resources,
 - environmental economy,
 - marine policy,
 - environmental policy making and
 - the law of the seaare among the least available and at the same time of lowest level.

Twinning needs

Preferred options for twining:

- **Twining between projects active in similar types of ecosystems and**
- **Twining with more advanced projects in the Science to Governance approach.**

Preferred activities.

- **Joint “hands on” workshops (1 to 5 days) to share, exchange and discuss new methods and techniques and**
- **Joint “hands on” workshops (1 to 5 days) to work and discuss data and associated scientific and technical issues**

Needed Topics

A long-list of selected (ranking) topics was obtained by inquiring on the following areas:

- ecosystem management and governance
- integrated ecosystem assessment
- quantitative skills
- fisheries
- Technical skills
- Cross-cutting subjects

Needed Toolkits

Topics for designing toolkits were assessed for:

- Governance
- Social Aspects of environmental policy
- Environmental economic analysis
- Large Marine Ecosystem framework toolkit
- LME/GEF Project toolkit

African caucus

- Need to prioritise needs
- AfriCOG will develop regional CD programme and will identify delivery mechanism and will secure funding
- Toolkits of global LMEs should be guided by the regional bodies – bottom-up
- Twinning/sharing lessons & best practices should continue
- Regions should use MOOCs (massive open online course) as tool to deliver accredited courses
- Will need additional funding

Arctic

- 8 countries
- Expert group will continue experiences gained
- Discussion on scale: lme vs pan-arctic
- Many EBM activities carried out by countries
- Need for cd: integrated ecosystem assessment: cutting-edge science: what happens in ecosystems and how to interpret which are human created; how to manage?
- We see ICES as important partner

Asia

- Recommendations on toolkit
 - Integrated ecosystem assessments: consider in broader context; ecosystem health card
 - Collaboration with ICES is welcomed as service provider
 - Human dimension of ecosystem approach (SocMon endorsing)
 - Endorsing TEES methodology

Asia (2)

- Twinning, training and long-term courses
 - Endorse twinning for skills transfer, process and project management
 - Need dedicated funds for monitoring CD impact
 - Need short-term training but also master course
 - Need local, regional and in developed country or mix
 - Tap universities strategically for interdisciplinary research and science needs
 - Need to develop knowledge on EAF and EBM and to communicate effectively

Latin America & Caribbean

- Training is 1 component of CD: needs assessment, then build curriculum, need to embed in institutions and local processes
- Sustainability: training should be aimed at local partners with permanent role
- Similar list to the global list but (he had short list)
- Twinning needs list

summary

- Sustainability

ICES training

- 2014: 6 courses planned
 - Stock assessment, design catch sampling programmes, social sciences methods, msp, Geostatistics
- 20-25 pax; week
- Bring your own data

OceanTeacher

- Request for central web site announcing courses

IOI

- Regional training programmes latin america, africa, europe, asia (ocean governance)
- Dalhousie: 600 alumni from >100 countries
- LME: ocean governance part could be covered partly by IOI regional courses
- Places for 2 more regional courses still under discussion
- Frequency of courses could be increased to 2/year

AfriCOG

Overall...

- Twinning and training are widely welcomed but need to prioritize -> **action?**
- Needs have to be defined locally: needs driven and self-driven – defining needs how? -> **action**
- Concerns about long-term impact and sustainability of project-based training: human CD needs to be strategic priority in national and institutional policies -> **action?**
- How to monitor CD impact long-term? Cannot be project based. Can partner organizations help?
-> **action**
- ICES, IODE, IOI, AfriCOG listed relevant CD activities: need to map these with needs and also with each other -> **action**
- **LINK WITH SCI: RVs (nansen, IIOE2,...)**
- **Certification of training? Local Univs?**