



Figure 1. A meeting in the Yangon office of WCS took place on 12 July 2018 between members of MuEuCAP steering committee and others with a range of non-academic partners, including WCS, Smithsonian Institution, MBNS and Friends of Wildlife.

WP1.4: Non-academic stakeholders needs assessment in environmental protection competencies

Background information on IGO/NGO/CSO non-academic stakeholder needs assessment for HEI in Myanmar

BASED ON THE FOLLOWING MEETING:

12 July 2018 workshop: WCS office, Yangon

1: Work package 1.4 - Results (narrative) (1000 characters)

In addition to workshops in the three participating Myanmar universities on their existing curricula and needs assessment in environmental protection, we also worked with the non-academic stakeholders. We wished to assess their view of the current situation of the HEI sector in Myanmar. We asked these stakeholders about the Masters' students that they employ from the Myanmar university sector. We were particularly interested in assessing their view of students' technical skills and their knowledge base. Also of great interest, was their view on critical skills that the students were missing since we wish to make the training of Master's students relevant to their future employment in NGO/IGO/CSOs. We also asked them (IGO/NGO/CSO) what are the most pressing issues that are currently preventing Myanmar universities teaching students in environmental sciences, and how we can improve this through MuEuCAP.

2: Anticipated outcome

- Compile information on the non-academic stakeholders need assessment in environmental protection competencies (WP.1.4) – *based on informal face-to-face discussions, emails, Skype and telephone conversations, and a structure meeting on 12 July 2018.*

3: Responsible: Project coordinator and project manager. Informal discussions were instigated by the project coordinator. The workshop on 12 July was coordinated by the European trainers and included:

- 4 MuEuCAP European trainers, comprising Dr Swen Renner and Dr Paul Bates from the University of Natural Resources and Life Sciences and Dr Martha Fallola and Dr Macarena Cuellar of the University of Extremadura
- Robert Tizard and U Saw Htun of WCS Myanmar
- Dr Katie La-Jeunesse Connette of the Smithsonian Institution
- Dr Thein Aung of MBNS (Myanmar Bird and Nature Society)
- U Myint Aung of FoW (Friends of Wildlife).

4: Outcomes/outputs reached

- Baseline information on the needs of non-academic stakeholders relating to expected/desired skills of Masters students graduating from Myanmar universities (WP.1.4) (Appendix 1)

5: Remarks – Further Information on needs assessment of non-academic partners

Smithsonian Institution (SCBI Myanmar)

Smithsonian staff interviewed (skype) included Dr Katie La-Jeunesse Connette and Dr. Grant Connette. Smithsonian staff agree that the skills needs for future Myanmar graduates to be employed through projects by the Smithsonian are manifold and include:

- training in conceptual background
- English skills
- technical skills (in most fields)
- how to supervise adequately thesis work (and research projects)
- how to find and cite literature and literature research skills.

They also suggested the need for role models and templates for MSc theses and scientific publications. However, the long-term strategy might be to introduce the concept of critical thinking way before students enter the university and add:

- "critical thinking"

AND

- "conceptual development" of research into training of the teachers as soon as possible.

WWF, FFI, WCS, MBNS, and Friends of Wildlife – based on individual conversations and 12 July meeting

The non-academic stakeholders and CSO/NGOs/IGOs confirm in principal all the issues and lack of specific skills as identified and raised during the needs assessment of the three Myanmar universities namely:



Figure 2. Project coordinator, Dr Swen Renner discussing needs-assessment with Dr Katie La-Jeunesse Connette of the Smithsonian Institution in Yangon.

- Low standard in modern teaching skills and science/research (compared to ASEAN and EU standards)
- Low standard in English/scientific English/teaching capacity in English
- Inflexible structure, high staff turnover (including favourable prospects outside academy)
- Conceptual background and thinking missing (and therefore all the correct steps in science/research/thesis supervision are lacking)

The interview with FFI included mainly the coordinator of the southern region, Nay Myo Shwe (FFI Programme Coordinator for southern region Myanmar), a PhD candidate in the Conservation Ecology Programme at King Mongkut's University of Technology Thonburi (KMUTT Thailand). He highly recommended to include the following skills in teaching because these are of low quality or absent in HEI in Myanmar. The skills should be taught as soon as possible to MUP staff and subsequently to Myanmar graduates:

- Basic concept of Environmental Science and Natural resource
- Proposal and Scientific paper writing
- Research methodologies and design
- Wildlife Ecology and Evolution
- Behavioural ecology
- Pollution management
- Statistics (technical skills and concepts) by using open access software such as R
- GIS (ArcGIS/Q) and basic for Remote Sensing
- Paper reading, Seminar practice
- English (for all).



Figure 3. Robert Tizard, Technical Director of WCS Myanmar joined the discussion.

The interview with WCS was joined by representatives of MBNS, Friends of Wildlife, and Smithsonian staff. All these confirm the findings as with WCS (and previous own needs assessments on the topic by Renner, Bates and others). Additional to the hard and soft skills, WCS pointed out that it might be very valuable to teach also components of project management and project cycle management. This should include the ability of graduates to delegate tasks and to know some basics in simple administration of projects.



Figure 4. Dr Thein Aung of MBNS is a principal contributor to MuEuCAP for needs assessment from NGO/CSO perspective.

Appendix 1: Summary of identified needs/gaps based on a needs-assessment with non-academic partners

Results of the need assessment with potential future employers are in some respect different to the needs articulated by the teaching staff. The following aspects were highlighted: -

- Critical thinking is almost absent (hierarchy, traditional teaching approach)
- Hard skills missing
 - R
 - project set up
 - didactics
 - ecology
 - quantitative ecology
 - EIA
 - RS/GIS
 - any research methodology
 - publications
- Soft skills missing
 - outreach and science communication
 - statistics
 - conference organization.

The following tasks during research are known but cannot be performed in the needed detail to reach the goal of supervising for example a MSc thesis:

- Apply for additional funding
- Research question and literature research
- Testable hypothesis/measurable indicators
- Planning of analysis & statistics
- Design of empirical study
- Preproposal and presentation
- Sampling/fieldwork Statistical analysis
- Writing report/paper
- How to supervise students.