



Figure 1. Dr Jaime Muriel presenting on 'Methods in BioCEP' as part of the training workshop in the University of Mandalay (9-11 January 2019)

WP2.8: Report on Training to improve skills and competences
with particular reference to 'Methods in BioCEP (field/practical): BioCEP-614'

BASED ON THE FOLLOWING WORKSHOPS:

- 9-11 January 2019: University of Mandalay
- 12 January 2019: Myeik University (small meeting linked to training and course development WP2.3)
- 13-15 January 2019: Myeik University
- 5-7 February 2019: Mawlamyine University

1 Work package 2.8 Results (narrative) (1000 characters)

Three workshops to improve skills and competences in 'Methods in BioCEP' took place. They were attended by staff and students from the universities of Mandalay (9-11 January 2019), Myeik (13-15 January 2019) and Mawlamyine (5-7 February 2019). At each university, the European trainers focused on the method of designing a scientific study. Myanmar participants were trained in how to (1) develop a research question; (2) conduct a literature search; (3) develop a testable hypothesis; (4) identify measurable indicators; (5) plan analysis; (6) select appropriate statistical tests; and (7) design an empirical study. The training was interactive and Myanmar staff and students were encouraged to participate and develop their own ideas. A 'homework' task was set entitled 'Preparing a Project Outline' and instructions were circulated to staff and students. The training will form part of a new course BioCEP-614 (WP2.3) in the new BioCEP curriculum.

2 Anticipated outcome

- Training to improve academic and technical skills and competences, with particular reference to hard scientific skills (WP 2.8.1) relevant to course development in the new

curriculum in BioCEP (W2.3) – these three workshops focused on the theoretical skills of developing and designing a research project - they are part of a series of workshops to develop theoretical and practical skills, which will involve, inter alia, training in field survey techniques and further study in European partner universities.



Figure 2. European staff from BOKU, Austria and Göttingen University, Germany training Myanmar staff of Myeik University in the theory of developing and designing a scientific study at a workshop in Myeik (13-15 January 2019)

3 Responsible

- Project coordinator, project manager, MUP contact persons
- As trainers, the EUP staff provided the majority of the input. As trainees, all MUP staff were involved in each activity.
- Trainers and trainees are listed in the attendance lists and include for:
 - 9-11 January: 41 Myanmar staff and students from the University of Mandalay (Departments of Botany, Geology, and Zoology); one staff member, Dr Thein Aung, of MBNS; 5 European staff, including the Project Coordinator and Project Manager, Dr Swen Renner and Dr Paul Bates, respectively from BOKU; Prof Dr Christoph Kleinn from the University of Göttingen; and Dr Jaime Muriel and Dr Sergio Magallanes from the University of Extremadura
 - 13-15 January: 40 Myanmar staff and students from Myeik University (Departments of Botany, Chemistry, English, Geography, Marine Science, Physics, and Zoology); 6 European staff, including Dr Swen Renner, Dr Marcela Suarez-Rubio and Dr Paul Bates from BOKU; Dr Nils Nölke from the University of Göttingen; and Dr Jaime Muriel and Dr Sergio Magallanes from the University of Extremadura
 - 5-7 February: 21 Myanmar staff and students from Mawlamyine University (Departments of Botany, Marine Science, and Zoology); one staff member each from Mandalay and Myeik universities; three staff members, Dr Thein Aung, Aung Ko Maw and Hnin Pwint Phyu of MBNS; 3 European staff, including Dr

Swen Renner and Dr Marcela Suarez-Rubio from BOKU; Dr Lutz Fehrmann from the University of Göttingen.

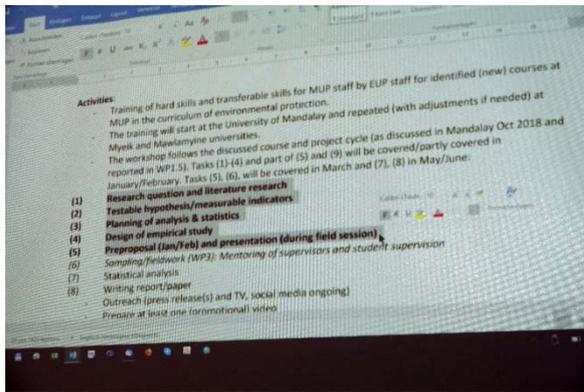


Figure 3. Training in the workshops (as here in the University of Mandalay – 9–11 January 2019) involved presentations from European university staff but also much interactive discussions involving Myanmar university staff and students and NGO/CSO staff.

4 Indicators predicted and indicators reached (number of students and staff)

- MUP staff improved competences and skills in scientific method relevant to the course BioCEP-614 and particularly in theory of developing and designing a scientific study.

5 Outcomes/outputs reached

- Improved academic and technical skills and competences (WP 2.8.1) for 102 Myanmar staff and students at the universities of Mandalay, Mawlamyine and Myeik. Topics learnt include:
 - developing a research question
 - conducting a literature search
 - developing a testable hypothesis
 - identifying measurable indicators
 - planning an analysis
 - selecting appropriate statistical tests
 - designing an empirical study.
- In addition, aspects of the following tasks were also covered during these three workshops, namely:
 - Developing criteria and selection of staff to undergo training and students who will participate in test and realisation stages (WP2.6)
 - Curriculum planning in Biodiversity Conservation and Environmental Protection (WP2.1)
 - MUP staff exchange visits to EUPs specialised training (WP2.9)
 - Outreach and scientific communication (WP7).
- Aspects of the following tasks were covered on 8 January and 12 January, pre- and post- the University of Mandalay workshop, namely:

- Annual financial reports (WP6.4)
- Annual technical and financial report (WP8.2)
- Course development (WP2.3), especially relating to ‘Methods in BioCEP (field/practical): BioCEP-614’
- All additional outcomes will be covered in a series of separate reports.



Figure 4. Training workshop in Myeik University (13-15 January 2019) – as with all three workshops there was a vibrant learning atmosphere with an emphasis on participation, interaction, and a freedom to explore new ideas and concepts.

6 Remarks

- The workshops in Mandalay, Myeik and Mawlamyine outlined above are the first in a series of three training exercises which aim to build capacity in scientific method within Myanmar universities. They focused on training in the theory of developing and designing a scientific study.

- The second set of workshops, which will take place in the universities of Myeik and Mawlamyine in March 2019 and Mandalay in July 2019, will provide training for Myanmar staff and students in technical field skills.
- The third workshop in the series will take place in Myeik University in September 2019 and will focus on data analysis.
- All workshops relate primarily to the new course 'Methods in BioCEP (field/practical): BioCEP-614'.

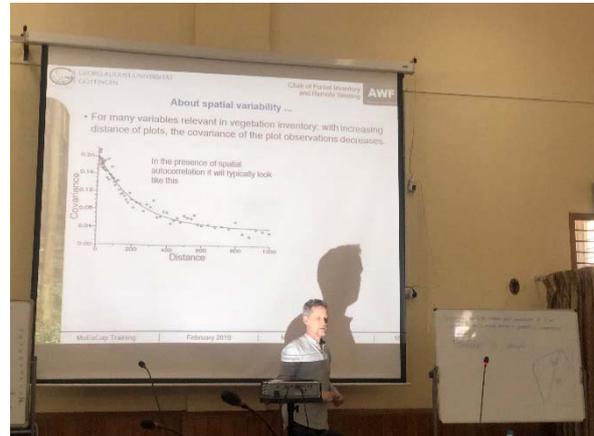
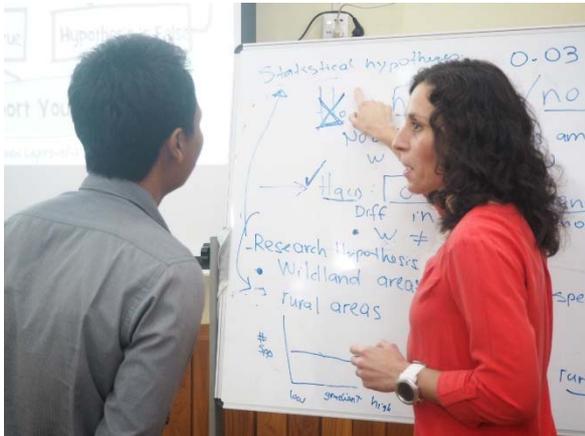


Figure 5. European and Myanmar university staff at the training workshop in Mawlamyine University (5-7 February 2019)