Developing conservation science graduate education in Rwanda:

Training & learning approaches

Beth A. Kaplin, PhD
Center for Tropical Ecology & Conservation, Department of Environmental Studies, Antioch University New England

and

Technical Advisor, The Conservation Biology Education Project, National University of Rwanda
The case of Rwanda

Biology Department, Faculty of Science
National University of Rwanda
Innovative Models for Training

• Need to understand from the context and the constraints involved
• Focus on HOW training program is being developed
• Less on content of MSc program
• Model for training the trainers
Rwanda and conservation biology education – the context

- Biodiversity hotspot – Albertine Rift
  - high endemism
  - high human population
- Conservation issues
  - tourism, endangered species
- Lack of capacity to conduct research and manage biodiversity
Rwanda and conservation biology education – the context

- No university programs in conservation biology
- Existing biology undergraduate curriculum lacking natural history content
- No trained conservation biologists at university
- Few MSc programs
- Post-genocide society
Training need identified

• New government policies focused on environment and conservation
• Government focused on tourism (e.g., mountain gorillas)
• Lack of capacity in country to staff govt institutions, NGOs, and programs
The Conservation Biology Education Project

- MacArthur Foundation funding
- 2006-2008
- Biology Department, Faculty of Science, National University of Rwanda
- 3 objectives
MSc Conservation Science, Wildlife Management & Sustainable Development

- Interdisciplinary
- Electives
- Professional Training
- Regional Emphasis
Constraints

• Low morale – isolation, salaries, heavy bureaucracy
• University not located in capital city, considered to be in the ‘bush’
• University ‘out of the loop’
• Budget issues – low support for field trips
• Resources limited – library, internet capacity, electricity, computer access
• Lack of capacity to teach conservation science
• Brain drain
What does a program need to be successful - Training Approaches

• Stakeholders
• Formal and informal training
• Academic culture - incentives
• Bridging theory & practice – professional skills, role of research in conservation (ORTPN mandates, conservation research & poverty reduction, MDGs)
• Networking
Stakeholders

- Biology Department staff
- Faculty of Science
- Other faculties and departments involved in conservation and environment
- National University of Rwanda Administration (Finance, Program Directors, Directors of Research, Vice Rectors, other key people)
Stakeholders

• Other universities in the country with Biology departments
• Government – Ministries (Education, Environment)
• Non-governmental Organizations (DFGFI, WCS)
• Universities and research institutions in the region
• Universities and research institutions internationally
What do stakeholders give us

- Warm bodies
- Information - reduces isolation
- Elevate status of university
- Funding – Great Ape Trust, GEF
- Opportunities – workshops, trainings, resources, student internships (WREM)
- Jobs for graduates
- Helps us link theory and practice
Lots of meetings!

Connects university lecturers to local, regional and international organizations; opens up opportunities for collaborations & funding; helps keep curriculum links to needs of the country.
Training Approaches

• Stakeholders
• Formal and informal training
• Academic culture - incentives
• Bridging theory & practice– professional skills, role of research in conservation (ORTPN mandates, conservation research & poverty reduction, MDGs)
• Networking
Informal training

- Teaching workshops (NCEP)
- Field trips
- Group research proposals
- Working retreats
- ‘Publishing days’ for students
- Attendance at workshops and meetings in capital city
- On campus lecture series
- Co-teaching*
Training Approaches

• Stakeholders
• Formal and informal training
• Academic culture - incentives
• Bridging theory & practice— professional skills, role of research in conservation (ORTPN mandates, conservation research & poverty reduction, MDGs)
• Networking
Academic culture & incentives

• Lecture series
• Creating opportunities to meet and discuss
• Connecting to activities of govt and NGOs
• Exchanges
• Contests

*Benefits students & instructors*
Training Approaches

- Stakeholders
- Formal and informal training
- Academic culture - incentives
- Bridging theory & practice – professional skills, role of research in conservation (govt mandates, linking to poverty reduction, MDGs)
- Networking
Bridging theory & practice

- Inviting govt & non-govt staff to campus
- Govt & non-govt staff team-teaching
- Obtaining research priorities from govt and non-govt institutions
- Using radio
Training Approaches

• Stakeholders
• Formal and informal training
• Academic culture - incentives
• Bridging theory & practice– professional skills, role of research in conservation (govt mandates, linking to poverty reduction, MDGs)
• Networking
Regional Network of Conservation Educators in the Albertine Rift

- 5 day workshop, 5 countries
- Identified needs in region for training and teaching conservation science
- Identified strengths in the region
- Funding
A model for building graduate education programs

- Networking with stakeholders to develop capacity – identify strengths in the region
- Innovative ways to get research going - necessary component of graduate programs
- Developing positive incentives: through networking, opportunities, contests
- Linking academia with stakeholders to meet country/regional needs, make curriculum relevant.
evaluation
Thank you!