

Developing Links in Environmental Health Between Scotland and Malawi

15 years of experience

A.M. Grimason (University of Malawi), T.D. Morse (University of Strathclyde)

A higher education link between the Departments of Environmental Health, University of Strathclyde and the University of Malawi – Polytechnic (one of five constituent colleges which make up the University of Malawi) instigated in 1997 has resulted in an effective and productive network in the field of environmental health between a variety of Scottish and Malawian Institutions.

Both departments have collaborated on a variety of research programmes at both undergraduate and postgraduate level and have undertaken capacity building programmes for higher education development and professional development. To develop this collaboration the link received funding from two Higher Education Links from the British Council (1997 – 2003) and two Department for International Development (DfID) - Development Partnerships in Higher Education (DePHE) (2004 - 2010) links with the Departments of Environmental Health University of Malawi. Throughout the course of these projects academics from both institutions have undertaken reciprocal visits, to either acquire knowledge from experts at University of Strathclyde and/or instigate collaborative research projects. The success of the initial links paved the way for the UoS Malawi Millennium Project (MMP) (<http://www.strath.ac.uk/malawi/>) which raised over £1 million (in cash and in kind) over the duration of the project. One of the successes was the establishment of the Centre for Water, Sanitation, Health and Alternative Technology Development (WASHTED) at the UoM in 2003 (<http://www.poly.ac.mw/washted-poly/>). As a result of a Commonwealth Scholarship Commission (CSC) Institutional Capacity Grant awarded to WASHTED in 2004, the Centre has six academic members of staff from the Departments of Environmental Health (Mr G. Jabu), Mechanical (Mr W. Maruwo) and Civil Engineering (Mr W. Kuotcha), Mathematics and Statistics (Dr. S Masangwi), Physics and Biochemical Sciences (Dr A. Madhlopa), and Languages and Communication Studies (Ms. F. Gomile) undertaking collaborative research with University of Strathclyde staff on a variety of water, sanitation and health projects (http://www.ifeh.org/magazine/ifeh-magazine-2008_v10_n2_Congress_Edition_2008.pdf); some of which have led to the awards of PhD. One such recipient of the scholarships was Dr Salule Masangwi, who completed his PhD at University of Strathclyde and has now taken up position as Director of WASHTED. Staff from University of Strathclyde have also been instrumental in helping the Polytechnic instigate both taught and research postgraduate programmes and continuing professional development courses at the University of Malawi – Polytechnic.

To reciprocate and help develop professional capacity at the Centre & University of Malawi (Polytechnic), the University of Strathclyde MMP granted a further five fee waivers (Mr Z. Banda, Mr G. Jabu, Dr V. Chipofya, Mr A. Kasambara, Mr P. Nkwanda) to University of Malawi academic members of staff to pursue MPhil degrees at the University of Strathclyde in similar areas. WASHTED has now aligned its research and training capabilities with those

of Malawi Ministry of Water Development and Irrigation and the needs of development partners using skills developed by staff in their postgraduate studies (Figures 1 & 2).

The CSC has also supported the Centre through the provision of three professional scholarships coordinated by UoS. Two of the scholarships resulted in the District Environmental Health Officers (DEHO) from Chikhwawa, (Mr Paul Chunga) and Blantyre (Mr Young Samanyika) visiting the Royal Environmental Health Institute of Scotland (REHIS) in 2003 and 2008 respectively. These instigated a professional relationship with the REHIS (www.rehis.org) and led to the re-establishment of the Malawi Environmental Health Officers Association (MEHA) (<http://www.malawieha.org>) after a period of 10 years dormancy. Mr Samanyika subsequently became the President of MEHA and is driving the association forward with continued support from REHIS (http://www.ifeh.org/magazine/ifeh-magazine-2011_v13_n2.pdf).

The third scholarship was awarded to Mr Aaron Mapsere, a Regional Water Engineer from Balaka (2008) who visited Scotland to work with the Drinking Water Quality Regulator for Scotland to develop a risk assessment scheme used for small community water supplies in Scotland to suit Malawian needs in conjunction with WASHTED. These relationships continue to go from strength to strength.

In 2010, WASHTED, with support from academic staff at University of Strathclyde, in conjunction with the MEHA and the Ministry of Health hosted the 2nd All Africa Environmental Health congress, which was attended by over 150 delegates from 15 countries across the world (http://www.ifeh.org/africa/Call_for_abstracts.pdf). Based upon the success of the 2nd All Africa Congress, at the World Environmental Health Congress in Lithuania (2012) MEHA submitted a proposal to host the 14th World Congress (2016) which is currently being considered by the International Federation of Environmental Health (IFEH) full council.

To celebrate World Environmental Health Day 2012 academic staff from Strathclyde helped the 3rd year environmental health students from University of Malawi to produce a short video highlighting the environment and health problems in their country. This was posted on the IFEH website (www.ifeh.org/wehd)

Funding from the Scottish Government International Development Fund (2006 – 2013) has also led to effective networking between the Departments of Environmental Health at University of Malawi and University of Strathclyde by developing the capacity of Polytechnic and Ministry of Health staff through the Scotland Chikhwawa Health Initiative. This project is led by Dr Tracy Morse, University of Strathclyde, who has been based full time in Malawi since 2000. This programme is located in Chikhwawa District in the Southern Region of Malawi, addressing the needs of remote rural communities (<http://www.youtube.com/watch?v=vIaCojnggVE>). SCHI is an intervention project tackling preventative health at community level in terms of disease control, health access, maternal health and water and sanitation. The SCHI has instigated collaborative work with the Ministry of Health, local District Health Office/Assembly, and has ensured the participation

community leaders, voluntary community committees and community members at all stages for effective replication and sustainability. SCHI also links with all other organisations and programmes within target areas to avoid duplication and maximise the effective use of funds. This includes partnering with Scotland based organisations such as FROM Scotland (www.fromscotland.org.uk) and Rotary International (through Motherwell and Wishaw and Inverurie Rotary Clubs) to provide support and infrastructure to vulnerable and needy communities. Donations have also been received from a number of other Scottish sources throughout the duration of the project.

SCHI has also built a basis for further programmes and research in the Chikhwawa area in a number of areas. SCHI health and school pilot sites were used as locations for rural electrification through the Community Rural Electrification and Development programme funded by the SG IDF between the Departments of Electronic and Electrical Engineering at the University of Strathclyde and University of Malawi (2009 – 2012) to add value to the existing project activities. Other research areas have included ecological sanitation, permaculture, parasitology (Scottish Parasite Diagnostic Laboratory) and health access.

All of these programmes have been developed and coordinated with relevant institutions and Ministry's in Malawi and Scotland to ensure sustainable development in the field of environmental health. The Department of Environmental Health at the University of Malawi also hosts the Secretariat of the Africa Academy for Environmental Health (AAEH) (www.ifeh.org/afa). The AAEH is comprised of 25 Universities in 19 African countries throughout the continent. The AAEH was established in 2007 and developed through a DfID DelPHE grant (2009 – 2012), which was led by the University of Strathclyde. The AAEH aims to develop environmental health education and professional standards throughout the continent, and has achieved a number of outcomes including, a generic curricula for degree in environmental health, a quality assurance manual for the generic curricula, electronic networks for academics, cross fertilisation of academic research and teaching, materials for improving academic practice and proposal writing (http://www.ifeh.org/magazine/ifeh-magazine-2011_v13_n2.pdf). This led to a further grant being awarded to the AAEH to address issues of gender parity in higher education institutions in Africa offering environmental health and build capacity in female academics from the Association of Africa Universities (2010 – 2011). This grant included 18 universities from 13 African countries, and led to the establishment of the African Women Environmental Health Network. A further grant to develop an e learning module on environmental health for Masters in Public Health courses throughout Africa was awarded to the AAEH by DfID DelPHE (2011 – 2013), linking the departments of environmental health at University of Muhimbili (Tanzania) and University of Malawi. Both of these grants were prepared/led by academic staff at the University of Strathclyde.

Figure 1: Organisations involved in the environmental health link set up between University of Strathclyde and University of Malawi - Polytechnic

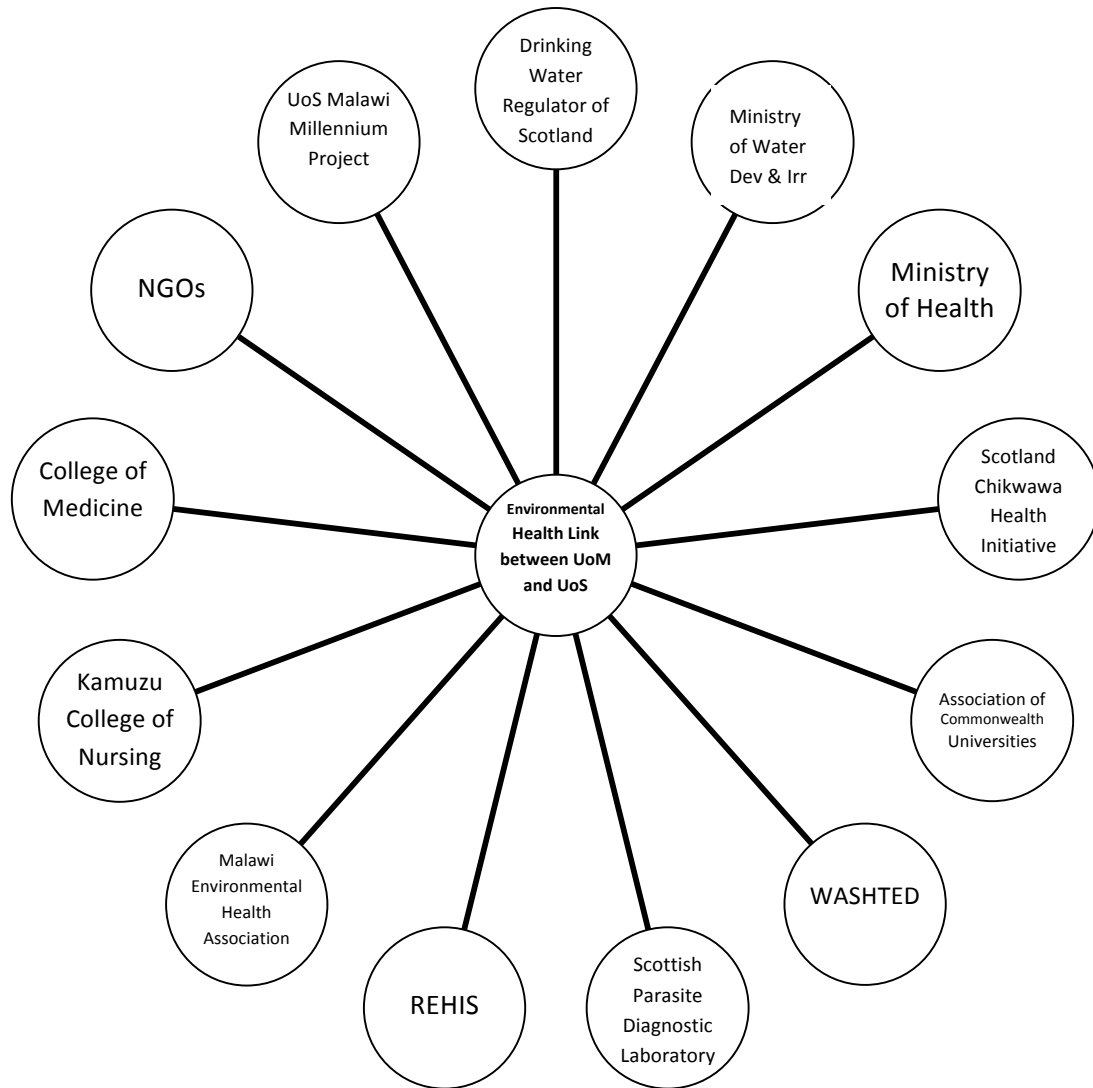
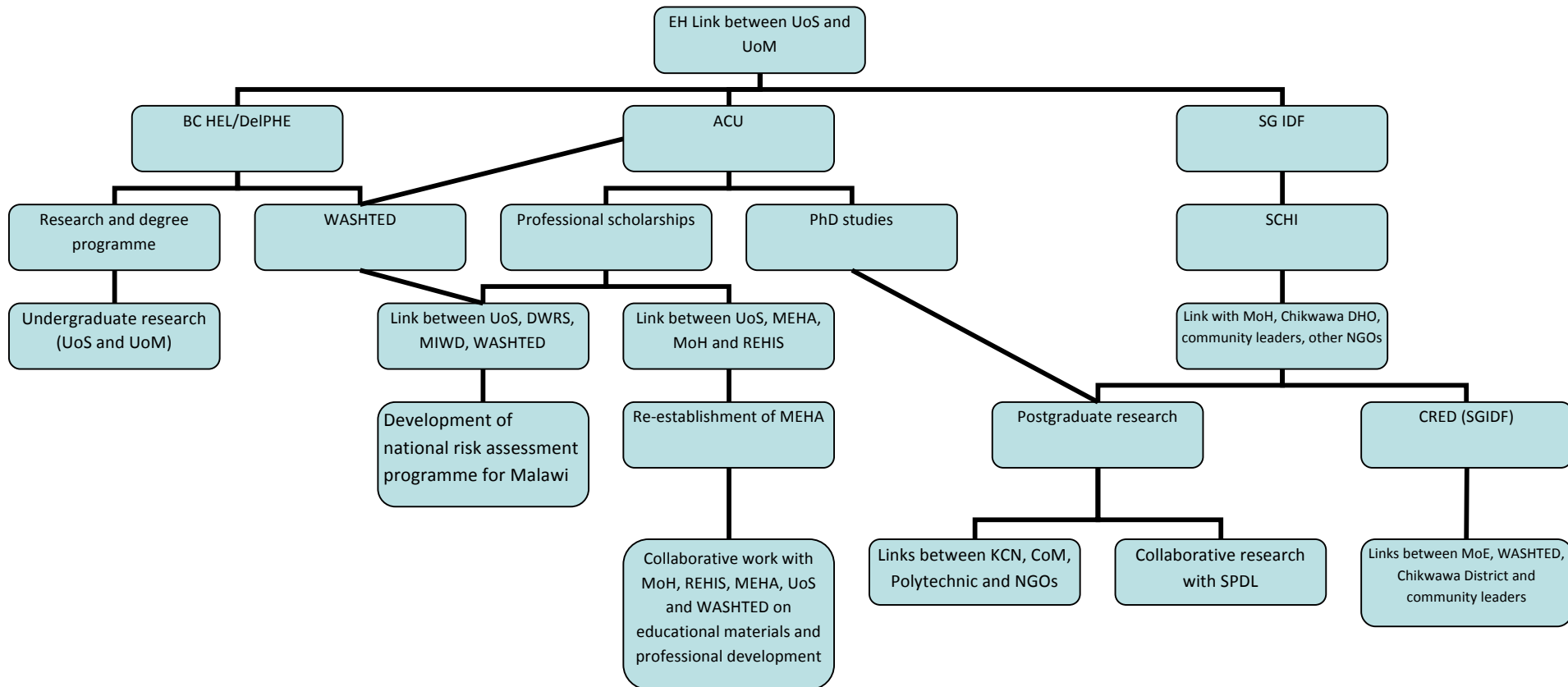


Figure 2: Outcomes of the environmental health link set up between University of Strathclyde and University of Malawi – Polytechnic.



EH = Environmental Health
 UoS = University of Strathclyde
 UoM = University of Malawi
 BCHEL = British Council Higher Education Link
 DelPHE = Development partners in higher education
 WASHTED = Centre for Water, Sanitation, Health and Appropriate Technology Development
 MEHA = Malawi Environmental Health Association
 MoH = Ministry of Health

REHIS = Royal Environmental Health Institute of Scotland
 SG IDF = Scottish Government International Development Fund
 SCHI = Scotland Chikwawa Health Initiative
 DHO = District Health Office
 CRED = Community Rural Electrification Development
 CoM = College of Medicine
 KCN = Kamuzu College of Nursing
 SPDL = Scottish Parasite Diagnostic Laboratory
 MoE = Ministry of Energy
 MIWD = Ministry of Water Development and Irrigation