In sub-Saharan Africa, both hunger and poverty have been the major problems faced by the people and governments. The consequences of these problems are natural disorder, high human mortality, and environmental degradation, among others. Government policies in the region are aimed at ending hunger and creating wealth among the masses through increased food production, promotion of entrepreneurship and commercialization of agriculture and creating an enabling environment. However, even if development capital is made available, the key element is availability of qualified human resource that can undertake activities that will provide solutions to many of the problems faced by the region. These can only be achieved by empowering the people through education and training and therefore, capacity building in all sectors of the economy in the region is paramount.

Graduate Profile
The PhD programme aims at producing professionals who;

i) Have a deeper understanding of the theoretical framework underlying economic policy decision making in social sciences, agricultural, resources and rural development areas,

ii) Can critically analyze, derive and implement policy prescriptions for public and private sectors, as well as, for international and non-governmental organizations.

iii) Will handle major thematic areas e.g., agricultural marketing and international trade; food and agricultural policy analysis and rural development; and, environmental and natural resource economics and management.

Programme duration
This is a Three-year Programme.

Programme Objectives
The objectives of the Programme are

1) To equip students with a deeper understanding of the theoretical framework underlying economic policy decision making in social sciences, agricultural, resources and rural development areas, and

2) To equip students with analytical skills in deriving policy prescriptions for public and private sectors, as well as, for international and non-governmental organizations.
Curriculum structure and content
The following are the bridging, core and elective courses:

The Core courses are -
• AEC 611 - Advanced Microeconomic Theory and Practices I
• AEC 621 - Advanced Microeconomic Theory and Practices II
• AEC 622 - Advanced Macroeconomic Theory and Practices
• AEC 612 - Advanced Econometric Theory and Practices
• AEC 613 - Advanced Research Methods & Practices
• AEC 623 - Advanced Resource Economics & Management
• AEC 614 - Life Skills and Personal Development

Courses are clustered under six fields of specialization –
1. Resource & Environmental Economics
   • AEC 625 - Environmental Valuation & Policy
   • AEC 631 - Quantitative Methods in Environmental Economics
   • AEC 632 - Global Dimensions, Poverty & Environment
2. Agricultural Production Economics
   • AEC 633 - Applied Mathematical Programming
   • AEC 634 - Dynamic Production and Supply
3. Agricultural Marketing
   • AEC 635 - Advanced Market & Price Analysis
   • AEC 636 - Advanced Agricultural Marketing & Decision Models
4. Agricultural Policy
   • AEC 637 - Agricultural Development & Policy
   • AEC 638 - Quantitative Analysis of Agricultural Policy
5. Trade and Development
   • AEC 639 - International Trade, Commerce and Policy
   • AEC 640 - Science, Technology and Development Policy
6. Institutional, Behavioral and Health Economics
   • AEC 641 - New Institutional Economics for Smallholder farmers
   • AEC 624 - Personal Development and Social Responsibilites
   • AEC 642 - Health and Policy Economics

The Total Credit Hours including PhD Thesis should not be less than 60 credit hours for a student to
graduate with PhD degree in Agricultural and Resource Economics. It is important to note that the minimum requirement for graduation is to pass all core courses, the compulsory course plus two in fields of specialization.

**Mode of delivery**
This comprises of:

1) Course work – All courses have strong theory and practical components to achieve the objectives of graduating skills that are able to apply their learning to the real world.
2) The Candidates field work which leads in the development of the thesis.

**Method (s) of assessment**

**Coursework**
The Assessment of Students Course work is based on all courses taught in any one semester and it is done at the end of each semester. At the end of the course/ module, each lecturer administers a questionnaire for evaluation. The questionnaire are designed by the University of Malawi through the Registrar’s Office to capture issues of course/module content, delivery and relevance of such courses for the region.

**Thesis**
The research Project is examined by written thesis and oral presentation. Student’s thesis is examined by two internal (within the university) examiners and one external examiner followed by oral presentation/examination at the Faculty the student is registered. The candidates who fail their research thesis work are allowed for two re-submissions and then discontinued after a fail in the second re-submission

**Implementation progress and achievements**
The Agricultural and Resource Economics Degree Programme was launched concurrently with Aquaculture and Fisheries Sciences in 2009. Subsequent cohorts of students reported in 2010.

**Staff exchange / visiting lecturers to the programme**

<table>
<thead>
<tr>
<th>Cohort</th>
<th>National staff</th>
<th>Regional</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1(2010)</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

**Student numbers**
Table 1 gives a summary of student’s statistics, including the numbers that applied for the program during the first intake.
Table 1: Student numbers since 2009

<table>
<thead>
<tr>
<th>Year of Intake</th>
<th>Student Numbers (% females in brackets)</th>
<th>Status of Students</th>
<th>Countries of origin of the students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 (2009)</td>
<td>8 (10%)</td>
<td>3 students have graduated and the rest are finalizing the thesis write up</td>
<td>Kenya, Malawi, Tanzania, Uganda</td>
</tr>
<tr>
<td>Cohort 2 (2011)</td>
<td>3 (0%)</td>
<td>2 students have submitted their thesis for external examination</td>
<td>Malawi</td>
</tr>
<tr>
<td>Cohort 3 (2012)</td>
<td>3 (0%)</td>
<td>The students are writing thesis</td>
<td>Malawi</td>
</tr>
<tr>
<td>Cohort 4 (2013)</td>
<td>7 (48%)</td>
<td>The students completed coursework and are now writing thesis</td>
<td>Ethiopia, Malawi</td>
</tr>
<tr>
<td>Cohort 5 (2014)</td>
<td>7 (28%)</td>
<td>The students have just completed coursework and will</td>
<td>Ethiopia, Malawi</td>
</tr>
<tr>
<td>Cohort 6 (2015)</td>
<td>1</td>
<td>Students have just started the coursework</td>
<td>Swaziland</td>
</tr>
</tbody>
</table>

Skill enhancement Courses
As part of quality assurance and building competencies beyond the technical skills, students in the programme undergo the following short skill enhancement training courses (5-7 days): Proposal writing, Journal Publishing, Scientific data management, Personal Mastery and Soft Skills

Where the graduates are going
The programme has contributed to building the capacity of the staff from member universities as well as national research institutions. As the PhD students graduate, some have resumed duties at their workplaces while others have secured new jobs:

1) Horace Phiri – Lecturer, Lilongwe University of Agriculture and Natural Resources, Malawi
2) Mildred Barungi – Makerere University – Department of Policy and Research, Uganda
3) Hellen Kongai – Kyambogo University, Uganda
4) Vincent Ekiyar - Ministry of Local Government, Amuria, Uganda
5) Bonface Kakhobwe – Researcher - UNICEF
6) France Tilapasila Gondwe – Training Officer, ICRISAT, Malawi
7) Mirau Mbise – Lecturer - Mkwawa University, Tanzania
8) Irene Nambuya Musebe – Ministry of Agriculture, Kenya

Programme Outputs

*Publications and manuscripts:*

- 4 theses and 4 others are in their final stages
- 8 Papers published in peer reviewed journals
- 18 papers in conference proceedings