

# Approach of Stellenbosch University in promoting aquaculture education in Africa

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The Faculty of AgriSciences at Stellenbosch University is one of the first dedicated agriculture training institutions in the region, founded in 1916. The Faculty currently hosts a total of 1800 undergraduate and 450 postgraduate students, over nine dedicated programs, including that of Animal Production. Aquaculture is a relatively new sector within animal production in South and Southern Africa.

The first formal training program in Aquaculture was introduced in 1990, as a minor subject within the four year BSc Agric degree in Animal Science. It was expanded onto a major level in 1994. This provided a basis for the subsequent introduction of post graduate courses, including MPhil, MSc and PhD in Aquaculture as from 1996. The lack of training opportunities on subsidiary levels has led to the introduction of a Certificate Program in 1997 as well as regular short courses in order to develop required capacities. The certificate program expanded onto a distance learning platform in 1998 in an effort to improve accessibility throughout the region. The latest addition was a Post Graduate Diploma in Aquaculture Production and Management introduced in 2012 to further enhance accessibility through acknowledgement of prior learning at other institutions.

International networks have subsequently been established with student exchange between Stellenbosch and European universities, including Gent and Leuven (Belgium), Wageningen (Netherlands), Stirling (Scotland) and Auburn (USA). Participation from African countries has grown steadily to approximately 10–12 participants in the certificate program, 2–4 in the undergraduate, 6–8 on the masters and 2–4 on the PhD level. An objective of Stellenbosch University (SU 2013) is to enhance its role and relevance in relation to teaching and learning and capacity building on the African continent (see also African Doctoral Academy).

The curriculum has subsequently developed to incorporate the main components along the value chain, including water ecology, breeding, nutrition, husbandry, health management and post-harvest technology. Production and financial management, together with marketing are incorporated in subsequent modules. A wide range of both freshwater (e.g. trout, tilapia, catfish) and marine species (sea weed, shellfish, molluscs, finfish) are reflected.

The key challenges with regard to aquaculture education and training remains that of accessibility, affordability and student compatibility as well as continental career opportunities for post graduate students in particular. Stellenbosch University is currently embarking on an information communication technology strategy (SU 2014) to enhance future teaching and learning opportunities that could address some of these challenges. Complementary teaching and learning networks throughout Africa and beyond, will also play a key role in meeting the training needs of the continent in relation to aquaculture development.

## References

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