

UNAM in new EU Funded Aquavita Project



Over 70 scientists and industry professionals from 16 countries gathered in Tromsø, Norway recently to launch the EU funded Aquavita project. Over the next four years, they will work to increase aquaculture production of low-trophic species in and around the Atlantic Ocean in sustainable ways. Aquavita is a new research and innovation project funded by the EU's Horizon 2020

programme. The project consortium consists of 36 partners, from 16 different countries, spread across four continents. In addition to Europe, partners are situated in countries bordering the Atlantic Ocean, including Brazil, South Africa, Namibia, as well as in North America.

Eleven case studies will be conducted across the Atlantic, with emphasis on developing new products from low-

trophic species e.g. macroalgae and sea urchins, optimising production in existing industries (e.g. shellfish and finfish) and moving towards zero waste and a circular economy in aquaculture.

UNAM, through the Department of Fisheries and Aquatic Science and Sam Nujoma Marine and Coastal Resources Centre (SANUMARC), will carry out tasks related to nutritional

value, market potential and consumer acceptance of new products from this project. "UNAM will also be involved in capacity building work package and there will be opportunities for student exchange and post graduate training" says Dr. Johannes Iltembu, a UNAM project participant.

The project is coordinated by Nofima- the Norwegian Institute of Food, Fisheries and Aquaculture Research.

"It's an exciting challenge to bring together industry and research partners from across the length and breadth of the Atlantic Ocean to address relevant societal challenges," says project coordinator Dr. Philip James. This project has received funding (EUR 8 000 000.00) from the European Union's Horizon 2020 Research and Innovation Programme.

Written by: Dr. J. Iltembu

GIS students tackle bush encroachment

Fourteen final year BSc Geoinformation Science students and their supervisors from the UNAM Geography department are currently conducting research on bush encroachment. Bush encroachment is one of the biggest threats facing the agricultural sector in Namibia.

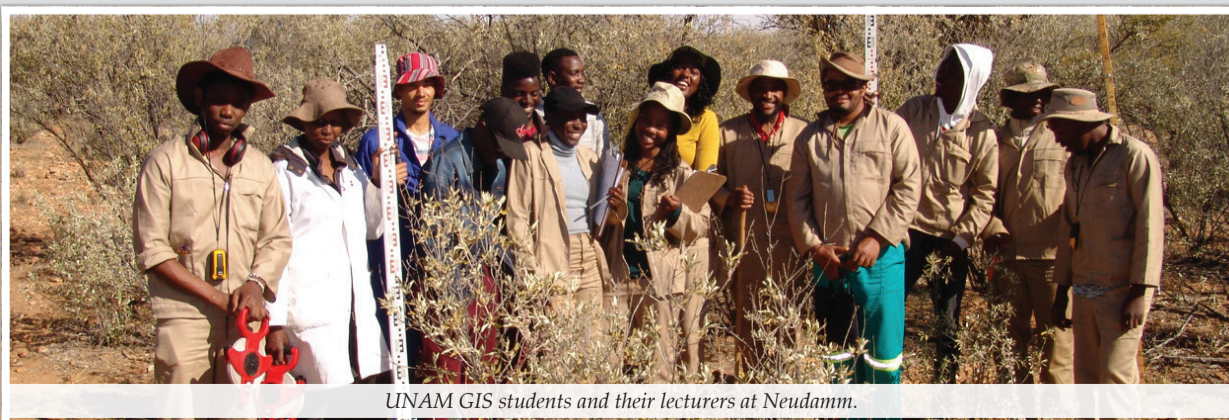
Current data on the extent and quantity of bush encroaching species in Namibia is largely based on estimates, which are not always reliable, hence the need for a more accurate and cost effective methodology.

There is great potential in the utilisation of encroacher bushes, for

example, the production of charcoal, animal fodder and biomass power plants, but accurate data on bush encroachment is needed to facilitate sustainable utilisation of the bushes. Therefore, there is a need for accurate woody vegetation inventory as it makes way for informed decision-making and practices that could mitigate the effects of bush encroachment. The students are conducting a field survey of the woody bush species at farm level (Neudamm farm), with the intention of upscaling the methodology to the national level. The team aims at utilizing Remote Sensing, GIS and ecological techniques to quantify and map the extent of bush encroachment at high spatial resolution, by relating field

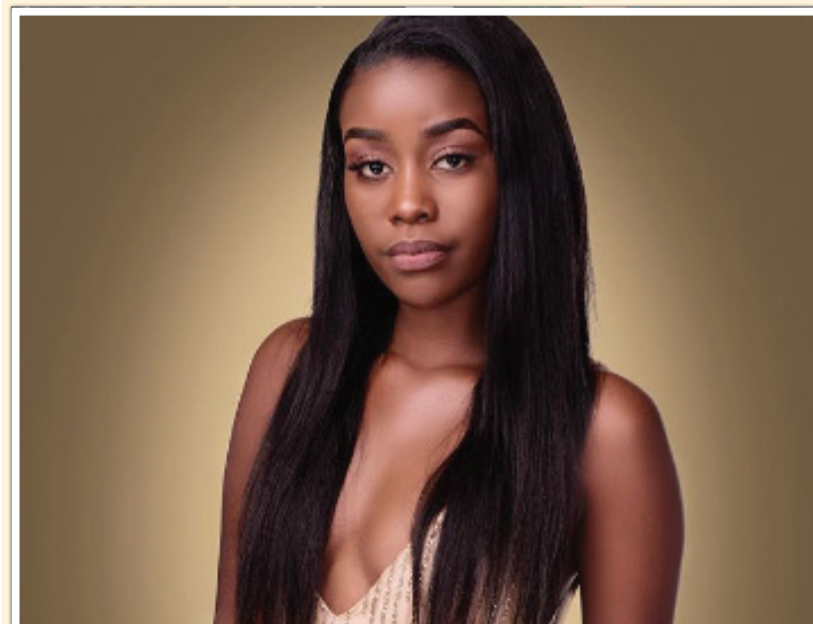
measurements to satellite imagery using machine learning algorithms. As part of vegetation inventory, students are also using Low-Cost Hemispherical Cameras to capture the properties of the woody vegetation.

The student's vegetation inventory is concentrated on biomass, Leaf Area Index (LAI), tree height, canopy cover and bush equivalents. The research aims at assessing the estimates of woody bush cover obtained from Remote Sensing techniques, which will facilitate the sustainable and effective management of the woody vegetation within Namibia, as it tends to be problematic for farmers and the agriculture sector.



UNAM GIS students and their lecturers at Neudamm.

We expected nothing less!



Congratulations to UNAM's 6th year Medical Student, Julita-Kitwe Mbangula for scooping the first Princess award in the Miss Namibia 2019 beauty contest.

