



UNAM
UNIVERSITY OF NAMIBIA



**PROPOSED SCHOOL OF MARINE ENGINEERING AND MARITIME
STUDIES AT THE UNIVERSITY OF NAMIBIA (UNAM)**

BACKGROUND

Namibia is a maritime nation, with a rich ocean due to the upwelling Benguela Current system. The South Atlantic Ocean is an important resource for fisheries, tourism, transport and logistics as well as mining. It is recognised worldwide that maritime nations like Namibia need to embrace the blue economy concept as an approach to sustainable development. In fact the importance of oceans for sustainable development was recognised during the June 1992 UNCED Rio Earth Summit as reflected in Agenda 21, and reaffirmed during the adoption of the Johannesburg Plan of Implementation in 2002.



In Namibia, the Fifth National Development Plan (NDP5) document recognises the critical importance of the blue economy in the country's sustainable development and growth, involving industries and resources such as fisheries and aquaculture, water resources, shipping and transport, tourism, marine energy, minerals, genetic resources, pharmaceuticals, blue carbon trading, biotechnology

and general sea products. The Fisheries sector in Namibia is the third largest income earner after mining and tourism, and contributes 15% of the country's exports and employs more than fifteen thousand people (FAO 2015). In addition, thousands more people are indirectly employed in fisheries related activities.

The potential of the blue economy to contribute more to the achievement of Namibia's sustainable development goals is enormous but only if accompanied with massive requisite human resource capacity building through skills development and upgrading. Skills development is the catalyst in driving national development agendas especially in expanding manufacturing and value-addition industries as well as in the efficient and effective provision of services across all sectors of the economy (NDP5). In this regard, tertiary institutions such as the University of Namibia have an important role to play.



In accordance with its motto Education, Service and Development the University of Namibia (UNAM) has designed educational programmes that are aimed at meeting national human resource requirements through quality teaching, research, consultancy and community service. Through its competent and dedicated staff and quality infrastructure, the University has been serving the nation in various ways and contributed significantly to national reconstruction and development since its inception in 1992. UNAM has already been focusing on building capacity in all major economic sectors such as agriculture, fisheries, geosciences, tourism, various engineering disciplines, medicine and nursing, pharmacy, veterinary medicine, animal health, accounting, law, teacher education, etc.

The University of Namibia, has for long acknowledged that science and technology education and research is the engine that would drive economic development and growth through sustainable and responsible utilization of the country's ocean resources wealth. However, building the required human resource capacity in the fisheries and maritime related industries would be the major prerequisite. Although UNAM currently provides education and training in the field of fisheries and aquatic sciences at its Sam Nujoma campus at Henties Bay, there are no academic programmes related to marine engineering and maritime studies at UNAM. Thus in order to address this gap UNAM is to establish an institute or school of Marine Engineering and Maritime studies within the Faculty of Engineering and Information Technology of the University of Namibia.

The proposed institute/school will be based at the coast, preferably at Walvis Bay town in the Erongo region. This institute will play an important role in providing quality higher education and training beyond what is currently being offered by the Namibian Maritime and Fisheries Institute (NAMFI) and will also promote research and development strategies and activities focusing on optimisation of operations and services, while at the same time playing an important role in human resource skills development through in-service training and tailor-made courses to address existing skills gaps in the fishing sector and maritime related industries. The Namibia Ports Authority (NAMPORT) lists maritime career opportunities as follows: Tug Master; Marine Pilots; Marine Engineers; Berthing Masters; Port Control Officers; Marine Lawyers; Ship Cargo Planners; Tally Clerks; Vessel Planners; SHREQ Managers (dealing with health, safety and environmental issues); Civil Engineers, and Mechanical Engineers.



Currently, the training of Engineers is done by UNAM and Namibia University of Science and Technology (NUST) at Bachelor Honours degree level. In addition, UNAM also has Master of Science Engineering degree programmes being offered at its Jose Eduardo dos Santos campus at Ongwediva town. However, there is no institution in Namibia that provides education and training in Marine Engineering and Maritime related study fields at bachelor's or postgraduate degree level.



In recent meetings and discussions held with some key stakeholders which included, among others, the Namibian Ports Authority (NAMPORT), Namibian Maritime and Fisheries Institute (NAMFI), fishing companies such as Seaflower Group and TUNACOR Group Ltd., and the National Training Authority (NTA), it became quite clear that both the fishing sector and maritime related industries face some serious challenges of lack of high level skills (skills gaps), which needed to be addressed, urgently, and echoed that UNAM's initiative to establish the institute/school had come at the right time. The proposed UNAM institute/school of Marine Engineering and Maritime Studies is thus aimed at addressing the skills gaps mentioned above. (Insert relevant photos)

To achieve the above, UNAM will work with its international partners such as the University of Bremen in Germany; the Tokyo University of Marine Science and Technology in Japan, and Ocean University of China, among many other institutions, which have already expressed their willingness to assist UNAM and our country to realise this important dream.



1. VISION: To establish a leading Centre of Excellence in Marine Engineering and Maritime Studies in Namibia.
2. MISSION: The school will provide quality education and training in marine engineering and maritime related fields while also conducting cutting-edge research aimed at providing innovative solutions and approaches which would stimulate and enhance improved productivity and efficiency in the fisheries sector and maritime related industries.
3. STRATEGY: The implementation strategy would be to use five-year development plans, taking into consideration identified priorities as determined by the stakeholders themselves, to implement output-oriented education and training, and research and research related programmes, each of them focusing on selected thrusts/objectives and in line with national imperatives as outlined in Vision 2030, the Harambee Prosperity Plan and NDP5.
4. IMPLEMENTATION PLAN FOR THE INSTITUTE/SCHOOL
The following implementation plan for the establishment of the proposed institute/school would be followed as closely as possible, resources permitting.



	Objectives	Activities/Actions	Milestones	Indicators	Motivation	Tentative Timeframe
1	<ul style="list-style-type: none"> - To provide a conceptual framework for the establishment of an institute/school of Marine Engineering and Maritime Studies - To mobilize partnerships for the project initiative 	Develop a Concept Paper for establishment of the institute/school of Marine Engineering and Maritime Studies	<ul style="list-style-type: none"> - A viable concept paper accepted ; 	<ul style="list-style-type: none"> Number and diversity of stakeholders accepting the concept paper and partnership; 	A strategic conceptualization for the establishment of the institute/school	March/April 2017
2	<ul style="list-style-type: none"> - To share the project concept; - To solicit inputs for project implementation 	Organize individual stakeholder consultation meetings	<ul style="list-style-type: none"> - Inputs and partnerships from stakeholders; - Project initiative acceptance 	<ul style="list-style-type: none"> - Number of stakeholders for the project initiative; - Number of inputs for project plan; - Budgetary items; 	<ul style="list-style-type: none"> - Build a common understanding on the project initiative - Get a buy-in from different stakeholders 	April/May 2017
3	To identify a group of stakeholders to guide the project process and activities	Establish Project Advisory Group/ Steering Committee	- A viable and committed Project Advisory Group/ Steering Committee established	<ul style="list-style-type: none"> - Number and diversity of stakeholders represented in Project Advisory Group/ Steering Committee 	Identify and establish a group of committed stakeholder representatives to guide the initiative implementation	May 2017
4	Finalise the Concept Note and develop a brochure to be used for marketing and other uses	The Steering Committee reviews and finalises the concept document	Acceptable Concept Note in the form of a brochure	Stakeholders endorse the Concept Note and thus support the project	Widespread buy-ins and willingness to support the project established among stakeholders	June 2017
5	<ul style="list-style-type: none"> - To get empirical data on the feasibility/justification on the establishment of the institute/school; - Explore regional and international partnerships 	Conduct a feasibility study on the prospects and challenges of the project initiative; -Survey of similar programmes at regional and global levels	<ul style="list-style-type: none"> A detailed Feasibility Study Report; Viable partnerships 	<ul style="list-style-type: none"> - Number of stakeholders (public and private) accepting the Report - List of prospects and challenges; - Attained leverage for goals of the institute/school 	To establish the prospects and challenges of the envisaged school; Quality enhancement	November 2017-May 2018
6	To provide a detailed outline and process for the establishment of the institute/school	Develop a Business Plan for the Institute/School for discussion during a Stakeholder workshop	<ul style="list-style-type: none"> - A viable Business Plan with inputs from stakeholders; Priority training areas identified - Budgetary outlines 	<ul style="list-style-type: none"> Number of stakeholders (public and private) accepting the Business plan 	Business Plan will provide a detailed outline and process for the project initiative including training priority areas and prospects and challenges	May/June 2018

7	To acquire sufficient funding resources for the establishment of the Institute/School	Mobilize funding resources for training facilities and human resource development and recruitment for the Institute/school	Sufficient funding commitments from various sponsors/donors made available to establish the Institute/school	Amount of funds acquired from different sources	Setting up the Institute/school will require mobilizing funds from different sources	Ongoing
8	To determine priority areas of human resource needs leading to academic and training priority areas as well as research needs	To determine priority areas of human resource needs leading to academic and training priority areas as well as research needs	Human resource development needs and research themes are identified	Academic and training programmes outlines to be used as guidelines for curricula and training materials development	Satisfied stakeholders with outcome of stakeholder workshop	June/July 2018
9	To set up offices and training facilities either at Walvis Bay or Henties Bay	Identify some facilities in Erongo region to host the Institute/school's offices and training venues	Adequate facilities available to kick off the school's activities especially short term training courses/programmes	Number of offices as well as training facilities are available to initiate human resource capacity building activities for the fishing and maritime related industries	The Fishing and Maritime related Industries would be assured of the envisaged quality training for sustainability	July/August 2018
10	To promote knowledge and skills transfer that would contribute to effective and efficient fishing and maritime activities/operations; To create awareness on the obstacles that hamper the development and growth of the fishing and maritime related industries; To build a critical mass of human capital for sustainable development of the fishing and maritime related industries.	Develop capacity building programmes for the fishing and maritime related industries using available competent academics in the faculty of Engineering and IT, and also from the Fishing Industry, NAMFI, Lawmakers, NGOs, etc.	Appropriate capacity building programmes developed and accepted by the fishing industries as well as maritime industries including NAMPORT, and other stakeholders;	Number and diversity of participants from several fishing and maritime related companies attending the capacity building programmes; Number of graduates with improved knowledge and skills arising from the different training programmes	Creation of knowledge and awareness on the importance of efficient and effective fishing/maritime operations for the sustainability of the fishing and maritime related industries; The development and sustainability of the fishing industry requires a critical mass of human capital for research, innovation, teaching and quality products development	Ongoing



11	To organize consultative meetings involving scientists and stakeholders from the fishing and maritime related industries in order to identify key research themes in priority areas of need;	Development of Research Themes and respective Research Teams	Appropriate Research Themes identified and accepted by the fishing and maritime related industries;	Number of active research programmes being undertaken; Multidisciplinary research teams working with respective fishing and maritime related companies to address challenges they face; and diversity of users of the reference materials/data arising from research	Provision of key research information that would enhance the efficiency and effectiveness of fishing and maritime operations and improve the quality of the value added products and the impact on the environment, thus generating more revenue for socio-economic development and growth	Ongoing
12	To develop academic and training programmes based on the guidelines provided during the stakeholder workshop	Development of curricula and training materials	Approved curricula by professional bodies like NGA, NCHE, DMA, IMO, and any other relevant organisations	Academic programmes in place	Fishing and Maritime related Industries and the public are ready and willing to make use of the Institute/School	July/ August 2018
13	To have adequate professional teaching, research and administrative staff	Recruit a critical mass of teaching, research and administrative staff for the institute/school, with additional support from stakeholders	Adequate professional teaching, research and administrative staff are recruited	Number and diversity of professional teaching, research and administrative staff from within the country and from international partner institutions	Ensure that the institute/school has quality teaching, research and administrative staff needed to fulfil the institute's mandate	ongoing

Current Steering Committee Members:

Prof. O D Mwandemele (UNAM), Chair; Mr. Innocencio Verde (FISHCOR); Mr. Patrick Nawaseb (NAMPORT); Ms. Dalia Mwiya (NTA); Mr. Ipeince Mundiulu (MET); Mr. Pinehas Auene (DMA-Mfn. Works &Transp.); Ms. Lorna Mbwale (UNAM Foundation); Dr. Romanus Shivoru (UNAM); Mr. U. Kauata (MFMIR); Ms. Elke Hanstein (Debmairine); Mr. Veston Malango (Chamber of Mines); Mr. T. Nambala (NAMFI); Ms. V. Shipale (Meetings Secretary)