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GETTING BEYOND THE SURFACE OF BLUE GROWTH POTENTIAL

Describing the benefits of blue growth within Europe, Maria Damanaki, former European Commissioner for Marine Affairs and Fisheries details the importance of acting now to build on existing progress...

The “blue economy” is already creating new jobs in Europe. But we have only just scratched the surface of its potential. We have been thinking about how to build on existing progress and how we can benefit from new research insights to ensure that this maritime economy can continue to generate jobs across Europe.

As the European and global economies continue to navigate themselves out of dangerous waters, the world has to face up to twin challenges. How do we provide the economic opportunities to lift people out of poverty bearing in mind that there will be at least another billion of us on the planet in the next decade or so? And how do we address environmental risks that, if left unmitigated, could lead to a catastrophe in which we do not have the resources to provide the energy or food we need to live?

Both questions need to be tackled without delay if we are to ward off disaster for the next generation. So unsurprisingly the European Union’s focus is on supporting those areas which can address both the need for economic growth and the need to preserve our planet.

This is why we are turning to the blue economy. Our recently adopted EU strategy on Blue Growth is where these twin challenges meet – it is all about prioritising the use of ocean resources sustainably as a driver for growth and jobs in Europe.

Every year half the planet’s sunlight falls on seas and oceans and half the organic matter is created there. The wind, the tides and waves offer energy that does not contribute to global warming. Every year a higher proportion of new wind farms are already built offshore whilst fish and shellfish, increasingly from fish farms, are the fastest growing source of animal protein worldwide.

This year’s European Maritime Day Conference, held in Bremen, Germany in May, was a big part of that thinking. Over 2 days ministers, industry experts, policy makers, and many others debated and swapped ideas as to how the different sectors in the maritime economy can work together catalyse the investment and

innovation needed for sustained growth. Participants concluded that:

- There is a vast potential for jobs and sustainable growth in the maritime economy. To exploit it we need to invest more in knowledge and innovation and focus on placing sustainability at the heart of Blue Growth.
- The issues related to seas and oceans can only be addressed at international level – more global governance is of paramount importance. The EU’s Maritime Spatial Planning and Maritime Security Strategy are good examples of what can be achieved.

The timing of the European Maritime Day Conference was ideal, as it took place only 2 weeks after we unveiled our EU action plan to drive innovation in the maritime economy. If we are to exploit our waters in a sustainable way, a number of challenges need to be overcome.

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For instance our knowledge about the sea is still limited and maritime research in different countries is not linked up. Unsurprisingly access to finance is also a recurring theme heard when out and about talking to researchers and entrepreneurs alike. We are doing what we can to cut red tape and incentivise investment across all industries.

But we have also identified 3 issues that are particular to the blue economy – poor marine knowledge, fragmented marine research and shortage of skills. We will address those by reducing bottlenecks in accessing marine data, creating a multi-resolution seabed map of European waters and by making sure that we have the



people with the right skills in place to fill the new jobs we hope to create.

We don't just need to develop innovative products but also ensure that we continue to develop the skills and technology needed for the longer term. That's why we are extending programmes like Erasmus to include fostering cooperation in education and training and why, through our dedicated research and innovation fund, we will equip Europe's best scientists and innovators with the tools they need to do their work.

The costs of cutting-edge research is greater than ever before, and even with our investment are often too large for individual organisations so we will encourage and incentivise co-operation and results sharing.

Our seas and oceans, just like all other natural resources, are not infinitely substitutable and global environmental and economic challenges are on an

unprecedented scale. The way we respond to them will require greater levels of ingenuity and innovation than ever before. I am glad for having picked the brains of Europe's brightest minds in Bremen's European Maritime Day and seen the maritime sector to share ideas on how sustainable growth from the seas can bring Europe's economy back to safer waters and ensure that we leave a legacy of opportunity to tomorrow's Europeans.

Maria Damanaki

former European Commissioner for Maritime Affairs and Fisheries
European Commission

www.ec.europa.eu/commission_2010-2014/damanaki/index_en.htm



...for the EU to implement its Blue growth policy, it must look beyond its own borders. Capacity building through the United Nations University Fisheries Training Programme provides leverage for sector development.

Capacity enhancement for fisheries and aquaculture:

International educational collaboration for sustainable growth in fisheries

International trade in fish and fish products has grown rapidly over the past few decades and now far exceeds the trade of any other food commodity. The importance of fisheries and increasing global trade means that for the EU to implement its Blue growth policy, it must look beyond its own borders. Capacity building through the United Nations University Fisheries Training Programme provides leverage for sector development.

- About 75% of landings from capture fisheries and over 90% of farmed fish come from developing countries¹,
- Net export of fish from developing countries is estimated at about USD 35 billion per year²
- FAO estimates that about 90% of exploited fish stocks are either over fished or fully fished

FISHERIES DEVELOPMENT AND NORTH/SOUTH COLLABORATION

Established in 1998, the United Nations University Fisheries Training Programme in Iceland is a long running research and training programme which aims to enhance institutional and individual capacity in developing countries to support the sustainable use of living aquatic resources. Through a wide range of activities taking place all over the world, the UNU-FTP serves as a competency center for cutting edge fisheries science, management, and sustainable aquaculture.

Presently, the UNU-FTP is primarily funded through the Icelandic ODA budget, but has the potential to grow provided outside funding can be secured.

WHY ICELAND?

Iceland has a long history of international development cooperation in the area of fisheries. At present, the strategic plan of the Icelandic Ministry for Foreign Affairs highlights fisheries as one key area of focus for development activities.

Given the importance of fishing to the national culture and economy, a strong science-based system of fisheries management focused around sustainability and value creation has developed in Iceland. Drawing on expertise in

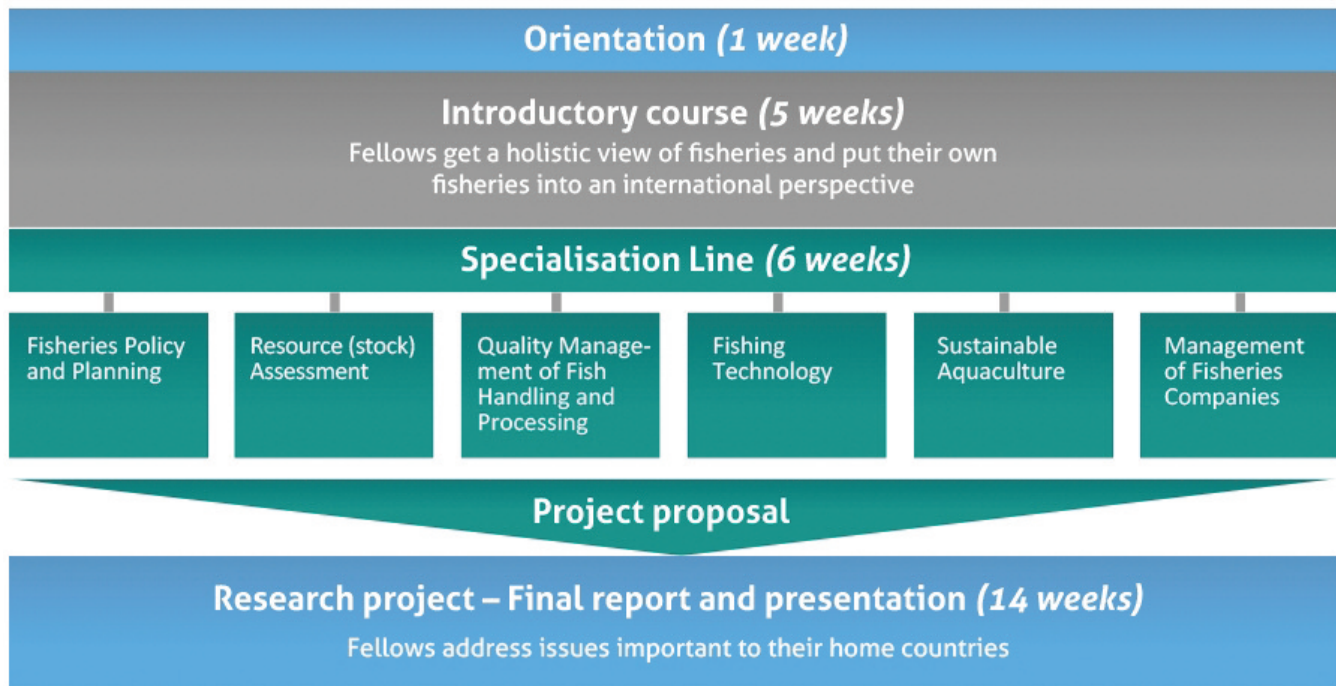
Iceland, the UNU-FTP collaborates with fisheries professionals in partner countries to develop highly relevant and applicable research and training opportunities.

BUILDING GLOBALLY RECOGNISED COMPETENCE IN FISHERIES EDUCATION

The UNU-FTP prides itself on developing world class education programmes related to fisheries development. As an interdisciplinary programme, the UNU-FTP draws expertise from academia, the fishing industry and government to provide fellows with a holistic and meaningful perspective on fisheries in their home countries. This close connection between sectors related to fisheries is a core strength of the UNU-FTP.

In the 16 years since its establishment, the UNU-FTP staff, fellows and partner organisations have gained a broad view of the status and development of fisheries, particularly in developing countries. Three aspects are critical for the development of the sector:

- Practice-led promotion of food security and safety through improved handling and processing practices. Fisheries differs from other food producing sectors in that it is largely supply driven. Catches are often seasonal and the composite of the catch may vary between seasons and between years. At the same time fish is highly perishable, so proper handling and preservation practices are of utmost importance to maintain quality and value. Post-harvest losses in terms of nutritional and economic value are high. Poor handling can cause otherwise healthy food packed with essential vitamins, micro-nutrients, protein and polyunsaturated fatty acids necessary for human growth and development to become dangerous for those who consume it.
- Knowledge-based management of living aquatic resources must be based on accurate information and sound economic principles. Although information on stocks in many developing countries could be improved, available data together with sound understanding of fish biology are usually good enough to evaluate the status of stocks and give advice on management. This advice should consider the socio-economic situation and



policies developed which can help policy makers use fisheries as a tool on the path towards sustainable development.

- Development of informed practice for sustainable aquaculture, which is the fastest growing food sector in the world. More than 90% of all aquaculture is in developing countries, primarily in Asia, but there is a great potential for aquaculture development in Africa and growth is already rapid in many African countries. Sustained growth is built on sound practices founded on understanding of such varied areas as genetics, economics, feed preparation and business.

UNU-FTP CORE VALUES:

- The UNU-FTP applies principles of sustainability in all aspects of its educational and research activities
- Issues of gender equality are addressed in all activities undertaken by the UNU-FTP
- The UNU-FTP nurtures cooperation with institutions that play an important role in the implementation of fisheries policies in partner countries
- The UNU-FTP relies on cooperation between individuals; not only to jointly increase their knowledge of fisheries, but also to influence the development of fisheries through leadership and professional practice

ACTION FOR IMPACT: THE UNU-FTP CORE ACTIVITIES SIX-MONTH COURSE IN ICELAND:

Each year, around 20 fisheries professionals selected through interviews and in consultations with our partners

come to Iceland to participate in the six-month training course. These professionals, so-called UNU-FTP fellows, are typically mid-career professionals from the governmental sector and academic institutions. To date, nearly 300 men and women from close to 50 countries have received fellowships for six months of training in Iceland.

The course involves fellows in many field visits, an extended visit to northern Iceland, close cooperation with supervisors, the development of personal goals and consultations with visiting lecturers.

Through this intensive six month training, UNU-FTP fellows are empowered to actively contribute to the activities in their own organisations. The training is highly focused on professional growth of individuals and their competency to address pressing challenges they face at home. The course is divided into three parts; a common introduction, an area of specialisation and an individual research project.

The five week introduction provides fellows with a view of world fisheries and aquaculture and they are encouraged to place fisheries development in their own countries into a regional and global context. This period establishes a foundation for fellows to develop a vision of the potential of the fisheries in their home countries, and to contextualise their work both later on in the six month course and their role as fisheries professionals at home.

The six week long specialist course is designed to deepen the expertise of fellows in their chosen area of specialisation. This opportunity allows fellows to explore



The UNU-FTP builds individual and institutional capacity and fosters an ever-growing community of fisheries experts

in detail one area of fisheries which relates to their work, and provides a firm context for the individual research they undertake later in the six month training. Fellows may specialise in one of the following areas:

- Marine and Inland-Waters Resources, Assessment and Monitoring
- Quality Management of Fish Handling and Processing (offered every year)
- Management of Fisheries Companies and Marketing
- Fisheries Policy and Planning
- Fishing Technology
- Sustainable Aquaculture

The final research projects undertaken by fellows address important issues in their own countries and are often based on data from their work (see figure opposite).

OPENING THE DOOR FOR CAPACITY BUILDING IN DEVELOPMENT PROJECTS

The six month programme can be a useful component of development projects as a formal capacity building component. Development projects often include scholarships for professional staff of partnering institutions/organisations, but degree studies tend to take many years and the formal university training is not always flexible enough to provide specific training needed in specific instances. The UNU-FTP prides itself on working closely with its partners to meet their needs.

The six month training in Iceland caters well to people with varying backgrounds. Through assignments and the individual research project, fellows practice methodologies and analyse available data or a problem central to their work at home. In addition to the 18-20 fellowships offered by the UNU-FTP each year, the programme can add an additional 6-8 fellows annually through external funds.

MOBILISING ACTION: SHORT COURSE DEVELOPMENT AND DELIVERY

In 2004, the UNU-FTP expanded its work and began to focus on providing financial and technical expertise for short training courses on the ground in partner countries, often related to the work of former fellows.

The UNU-FTP has since developed and delivered close to 40 such courses, training nearly 1000 participants. Short courses are typically designed and run in cooperation with specialists from Iceland and from the target country or region and often engage former UNU-FTP fellows. Case studies used to explain and discuss topics and issues are used from the target area and active engagement of participants is required.

The UNU-FTP seeks to cooperate with local training institutes and universities which can then develop the materials further and include them in their regular teaching. The UNU-FTP also cooperates with regional and international organisations, such as the Caribbean Regional Fisheries Mechanism and the Network of Aquaculture Centres in Asia-Pacific (NACA) on development and delivery of short courses and training. These courses are often co-financed by other organisations or development projects.



The UNU-FTP engages academia, industry, and research organisations to offer applied training for tangible solutions

EUROPE TO THE WORLD: CREATING A GLOBAL COMMUNITY OF SCHOLARS

A pillar of the accomplishments of the UNU-FTP is the internationally active community fisheries professionals comprised of former fellows. The UNU-FTP facilitates the continued engagement of former fellows through supporting them to attend conferences and workshops and develop short training courses in their home countries. This is done through direct involvement in conferences and workshops in partner countries and through cooperation with organisations such as International Federation of Fisheries Economics and Trade, and the World Seafood Congress.

KNOWLEDGE BUILDING THROUGH PARTNERSHIPS: CONNECTING WITH INDUSTRY, ACADEMIA AND RESEARCH INSTITUTES

The UNU-FTP partners with universities, research institutions, and the industry to develop the best available educational experience for our fellows. Over the years, a pool of expertise has developed in Iceland related to development through fisheries, and the UNU-FTP sees the benefit of that expertise in all its activities.

University of Iceland: The University of Iceland is responsible for implementation of the Fisheries Policy and Planning line of specialisation. For more, visit <http://english.hi.is/>

University of Akureyri: The University of Akureyri is responsible for the specialist training in Management of Fisheries Companies and Marketing. For more, visit <http://english.unak.is/>

Hólar University College: Holar is responsible for administration of the Sustainable Aquaculture line of specialisation. For more, visit <http://www.holar.is/en/english>

Matís: Matís is responsible for administration of the Quality Management of Fish Handling and Processing line of specialisation. For more, visit www.matis.is/english

Marine Research Institute: The Marine Research Institute is responsible for administration of the Marine and Inland Waters Resources, Monitoring and Assessment, and Fishing Technology lines of specialisation. For more, visit http://www.hafro.is/index_eng.php

1 <http://www.springerlink.com/openurl.asp?genre=article&id=doi:10.1007/s10531-012-0360-9>

2 <http://www.fao.org/3/a-i3720e.pdf>



Drawing on expertise in Iceland, the UNU-FTP collaborates with fisheries professionals in partner countries to develop highly relevant and applicable research and training opportunities.



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