Press release: Met Office and DOST PAGASA partners to enhance weather services

The UK Met Office and the Philippine Atmospheric, Geophysical and Astronomical Services Administration (DOST PAGASA) established a three-year collaboration agreement on scientific weather-related research to improve weather and climate services. Last July 21, 2017, PAGASA Administrator, Dr. Vicente Malano, and Met Office Director for Meteorological Science, Dr. Simon Vosper, signed the agreement, which also marks the official launch of the Weather and Climate Science for Service Partnership (WCSSP) Southeast Asia Programme in the Philippines. The UK is investing an indicative amount of £2 million (PHP 130 million) with the Philippines providing an equivalent contribution.

Filipino and British reserachers will work together to understand more about the region's severe weather condititions as comunities in the Philippines have to endure periods of torrential rain, flooding, landslides, high winds and thunderstorms. Improving weather forecasts translates to effective and timely advice protecting Filipinos from the damaging effects of floods, typhoons and other high-impact events.

British Ambassador Asif Ahmad said:

> With our experience in typhoon Yolanda (Haiyan), we've learned that the best way to address the challenges of natural hazards is by working together. This partnership leverages on the expertise and resources of the UK and the Philippines to deliver effective weather services that will protect lives and livelihoods in the Philipines and South East Asia.

WCSSP SEA Philippines is part of the UK – Philippines Newton Agham Programme. DOST Secretary Fortunato T. de la Peña has recognised the programme's contribution since it began in 2014 saying:

> The Newton-Agham Programme is a chance for our local scientists to thrive and progress through scholarships and research collaborations, reinforcing the development of their scientific fields which is crucial in our efforts to generate innovations and to provide creative sustainable solutions to present and future problems that we face. The Newton-Agham partnership allows us to fast track progress with the collaboration of our partners from the UK, helping us contribute to socioeconomic development through science, technology, and innovations.

The event was held at the Amihan Conference Room, PAGASA Central Office, Agham Road, Diliman, Quezon City.

Newton Fund

The Newton Fund builds scientific and innovation partnerships with 18 partner countries to support their economic development and social welfare, and to develop their research and innovation capacity for long-term sustainable growth. It has a total UK Government investment of £735 million up until 2021, with matched resources from the partner countries. The Newton Fund is managed by the UK Department for Business, Energy and Industrial Strategy (BEIS), and delivered through 15 UK Delivery Partners, which include the Research Councils, the UK National Academies, the British Council, Innovate UK and the Met Office.

In the Philippines, the programme is known as the Newton Agham (Science) Programme to reflect the collaboration between the UK and the Philippines in science, research and innovation. UK delivery partners and the UK Government, through its embassy, works with Philippine science and innovation institutions and funders, such as the Department of Science and Technology (DOST), the Commission on Higher Education (CHED), and the Department of Agriculture to co-develop and implement programmes that strengthen science and innovation capacity and create solutions to development challenges in the Philippines and in the region.

The UK delivery partners presently working in the Philippines include the British Council, Royal Academy of Engineering, Medical Research Council (MRC), Biotechnology and Biological Sciences Research Council (BBSRC), Natural Environment Research Council (NERC) Research Councils UK (RCUK), Innovate UK, and the UK Met Office. Priority areas in the Philippines are: health and life sciences, improving environmental resilience, energy security, future cites, agritech, and digital, innovation and creativity.

Weather and Climate Science Services Partnerships Southeast Asia (WCSSP Southeast Asia) WCSSP Southeast Asia is a regional programme currently involving three partner countries: the Philippines and Malaysia. The partnership is led in the Philippines by the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), in Malaysia by the National Disaster Management Agency (NADMA), and in Indonesia by Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG). This project aims to jointly develop and improve underpinning capability in global and regional forecasting systems, and advance the understanding of high-impact weather events in order to provide better advice of high impact weather events and mitigate the socio-economic impact of these events.

WCSSP SE Asia – Philippines: Project Objective

The Met Office will work collaboratively with institutions in the Philippines and the UK to engage in scientific weather related research and to collaborate on the development of improved processes to provide advice related to high impact weather events.

The overarching aims of this project are to:

1. improve the understanding of the impact of large scale atmospheric processes on the weather and climate of SE Asia and the Philippines
2. assess, develop and improve convective scale models (local fine scale models) in order to make better forecasts of high impact weather over SE Asia and in particular for the Philippines
3. improve the processes which translate weather forecast models into advice that can help mitigate against high impact weather in the Philippines at a range of lead-times from hours to months
4. Ensure that the requirements of the users of weather forecasts influence the science carried such that advances of weather forecasts meet the needs of the users

WCSSP SE Asia Philippines: Work Packages There will be 3 work packages for WCSSP SE Asia to deliver the above goals:

1. Global scale science – improve the understanding of the impact of large-scale atmospheric processes on the weather of SE Asia and the representation of this understanding in global models.
2. Regional scale science – improve the understanding of regional to local scale processes in SE Asia and develop better convective-scale weather forecast models for SE Asia.
3. Improving advice and understanding needs – understand user needs, develop applications that support these needs and ensure the science in other work packages directly helps mitigate against high impact weather (HIW) in SE Asia, and in the Philippines particularly.