

What can natural disasters teach the world?

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Cyclone Yolanda forms off the coasts of the Philippines in 2013. Credit: Murdoch University

Historians from Murdoch University have joined a global study that will shed light on how to better deal with the prediction and aftermath of environmental disasters in the Indian Ocean region, including tsunamis, volcanic eruptions and earthquakes.

Professor James Warren and Dr. Joseph Christensen, from Murdoch's



Asia Research Centre, are part of an international team awarded a \$2.5m partnership grant by the Canadian Social Sciences and Humanities Research Council (SSHRC).

The seven-year project will examine what is known as the Indian Ocean World – the world's most populous and unstable macro-region, stretching from East Africa to the South China Sea – focusing on the social, economic and political impacts of natural disasters.

The Indian Ocean World is home to Australia's most important strategic and economic partners. It houses most of the world's population and is central to global trade.

Six of the greatest environmental crises dating back to the mid-sixth century will be examined as part of the project, which is anchored at the Indian Ocean World Centre, McGill University, in Canada.

The project, 'Appraising risk, past and present: Interrogating historical data to enhance understanding of environmental crises in the Indian Ocean World', will also assist with the development of effective responses to environmental risks in the 21st Century.

Historians, social and environmental scientists from universities and research centres in Canada, Europe and Australia, as well as anthropologists, linguists and geographers, will analyse centuries of data as part of the project.

Professor Warren said the Indian Ocean region was experiencing some of the greatest environmental problems the world had seen, and looking at the past enables us to formulate future solutions.

His extensive research over four decades has demonstrated that cyclonic storms – or typhoons – had a fascinating pattern in the Indian Ocean



World, repeating every 50 to 100 years. However, since 1983, the El Nino phenomenon had seen super-storms become more frequent and more intense.

"Population growth, rising sea levels, typhoons and changing monsoon patterns are all issues confronting this part of the world," Professor Warren said.

"These types of large-scale environmental events affect the displacement of millions of people, resulting in poverty, disease, famine and war. Environmental refugees are becoming more common place, and with the acceleration of global warming, the impact of these crises will be even more detrimental."

Dr. Christensen said Murdoch's long-standing relationship with McGill University had improved its presence in a strategic research area.

"These partnerships help us to keep Murdoch at the forefront of interdisciplinary research into the past, present and future of humanenvironment interaction in the Indo-Pacific region," he said.

"There is enormous potential for us to learn from the past. We can ask new questions of old data sets and build on the ground-breaking work that historians like Jim (Professor Warren) have been committed to for decades."

Historical data will be examined closely in a bid to uncover patterns of natural hazards, and better understand how societies have adapted to disaster and risk across time.

Professor Warren will lead a research team focussed on Southeast Asia and the Indo-Pacific, which includes Professor Greg Bankoff, a Murdoch alumni and former Sir Walter Murdoch distinguished



collaborator.

Three Ph.D. researchers will also be recruited by the Asia Research Centre, while current Ph.D. students such as Max Findley (pictured), who has a background in history and environmental chemistry, will be integral to the research.

"Collaborations across disciplines are fundamentally important here," Dr. Christensen said. "We have been building towards this for a number of years."

Provided by Murdoch University

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