Science Publishes NTU Co-authored Policy Paper on Sustainable Aquaculture

*Global Food Supply: Certify Sustainable Aquaculture?* – a policy forum paper co-authored by Asst Prof Md Saidul Islam, Division of Sociology, has been published in the 6 September issue of *Science*, one of the world’s leading journals.

The academic journal of the American Association for the Advancement of Science, *Science* is one of the world’s most influential publications. Its articles are routinely cited, garnering it an impact factor of 31.027 in 2012. First published in 1880, it is one of only two scientific journals to cover the full range of scientific disciplines, publishing important original research, research reviews, science-related news, and opinions on science policy.

Explaining the paper’s content and background, Asst Prof Saidul said that “Whereas early human societies were dependent on food sources within their tribal territories, nowadays most people in richer countries consume food from all over the globe.”

“Because of the globalization of the agro-food system, many local agriculture systems in developing countries are increasingly linked to global commodity chains, generating complex intersections and tensions between the local and the global. This needs systematic analysis,” he added.

According to Asst Prof Saidul, global aquaculture is one of the fastest growing food systems in the world (currently a US$125 billion global industry, employing about 24 million people). However, the intense stress exerted on the aquaculture systems of third world nations has resulted in a wide range of environmental and social problems including water pollution, deforestation of mangrove forests, displacements of local residents, increased salinity, and the loss of biodiversity and ecology.

“These pressing factors along with the goal of sustainable aquaculture motivated us to embark on this study,” said Asst Prof Saidul, who has spent most of his academic career researching the area. His Ph.D research and two subsequent major researches were all on aquaculture.

Written in collaboration with some of the world’s leading experts on the globalization of food and aquaculture – Simon R Bush, Benjamin Belton, Derek Hall, Peter Vandergeest, Francis J. Murray, Stefano Ponte, Peter Oosterveer, Arthur P.J. Mol, Maki Hatanaka, Froukje Krujissen, David C. Little, and Rini Kusumawati – the idea for the paper stemmed from a project that Asst Prof Saidul participated in a few years ago.
“I was a principal researcher in a global project titled Privatizing Environmental Governance: A Global Study of the Effects and Effectiveness of Environmental Certification for Farmed Shrimp and Salmon [2007-2012; funded by the Social Science and Humanities Research Council of Canada]. Peter Vandergeest was the principal investigator while Derek Hall was the Co-PI. This project actually led to us embarking on the current collaboration and on an eventual publication in Science,” said Asst Prof Saidul.

Initial ideas emerged when most of the authors including Asst Prof Saidul attended the World Aquaculture Society Meeting held in Vera Cruz, Mexico, from 26 to 29 September 2009.

They met again at the 9th Asian Fisheries and Aquaculture Forum organized by the Asian Fisheries Society and held at Shanghai Ocean University, China, from 21 to 25 April 2011. The draft of the paper was finally completed when the authors including Asst Prof Saidul participated in an intensive workshop held in late October last year at Wageningen University in the Netherlands.

With so many strong minds and opinions brought to bear on a contentious issue, wrangling a cohesive solution from the workshop was itself a monumental task.

“The process was very lengthy, complex, and challenging,” said Asst Prof Saidul. “Getting to know all collaborators, bringing them onto one table, crystalizing diverse and often competing ideas into one central core, collecting and analyzing different sets of data on aquaculture, providing adequate supplementary materials to Science for every claim we made, these were among the many problems we encountered.”

With global awareness now focused on aquaculture as a result of their paper, Asst Prof Saidul is keen to put this newfound attention to good use.

“The publication in Science will hopefully provide a ground-breaking foundation for all stakeholders involved in the industry to rethink current practices and move towards a more sustainable aquaculture. Our next target is to publish a larger paper in Global Environmental Change journal, and to work with industries for a truly sustainable global aquaculture.”

Asst Prof Saidul is currently working with academic publisher Palgrave Macmillan on his third book Labor, Gender and the Environment: Towards a Social Justice in the Globalisation of Production. Investigating how neoliberal flexible accumulation generates unique conditions, contradictions, and confrontations in labor, gender and environmental relations, the book looks at how the establishment of broader global social justice can mitigate tensions and improve conditions in the food/aquaculture industries.