In 2011 the John D. Rockefeller Scholars Program of Winrock International held a competition for applied research concepts to assess the impacts of climate change on smallholder agriculture in Indonesia.

The winning research team is led by Dr. Armi Susandi of the Institute of Technology in Bandung (ITB), and includes Irsal Las, Ministry of Agriculture; Elza Surmaini, Indonesian Agency for Agricultural Research and Development (IAARD); and Dr. Erizal Jamal, Indonesian Center for Agriculture Socioeconomic Policy Studies (ICASEPS). The team will explore how improved models for rainfall prediction can assist rice farmers to plan their planting times and reduce crop failure.

In February 2012, Dr. Susandi traveled to Stanford University and UC Davis to present his research and exchange ideas with experts in climate modeling and agricultural economics. In July, UC Davis Professor Dr. Robert Hijmans traveled to Indonesia to visit field sites and consult with the team on methodologies to validate their model and to assess the value of rainfall information to users.

In September 2012, the team completed a series of focus group sessions with smallholder rice farmers and government extension officers in West Java, to understand if and how climate data could be accessed and utilized by small farmers.

The team will prepare a series of policy briefs to inform decision-makers about program and policy strategies that will enable smallholder adaptation. The research has generated significant attention from the Ministry of Agriculture in Indonesia, who hope the outcomes will support smallholder farmers.