

**DATE** 26-28 October 2009 (presentations and discussion 26-27 October; field trip 28 October)

**VENUE** International Rice Research Institute, Los Baños, Philippines

**ACCOMMODATIONS** IIRI residence and guest house

**TRANSPORT** IIRI will arrange travel to and from the Ninoy Aquino International Airport.

**PLENARY PRESENTERS** will include Steve Belmain (Bangladesh), Ken Aplin (Mizoram), Nyo Me Htwe (Myanmar), Bounneung Douang Boopha (Laos), Sudarmaji (Indonesia), and Grant Singleton (regional overview).

**SUBMISSION OF PAPERS** We seek other contributions, particularly from civil society groups involved in providing assistance to those affected by the recent rodent outbreaks. Please provide a title and abstract (maximum 300 words; Arial 11pt) and submit to Grant Singleton ([g.singleton@cgiar.com](mailto:g.singleton@cgiar.com)) by 4 September 2009.

**PUBLICATION** The proceedings of the workshop will be published by IIRI.

**WHO SHOULD ATTEND** Ecologists, rodent taxonomists, policy analysts, IPM specialists, food security specialists, sociologists, NGO representatives

**FOR FURTHER INFORMATION PLEASE CONTACT**

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International Conference


# Impacts of rodent outbreaks on food security in Asia

26-28 October 2009

International Rice Research Institute  
Los Baños, Philippines



**IRRI**  
INTERNATIONAL RICE RESEARCH INSTITUTE



**R**odents are major pests in agricultural production. In Asia, rodents cause, on average, annual preharvest losses of 5–10% in rice crops. A loss of 6% is substantial; this is enough rice to feed 225 million people for a year. However, occasional outbreaks of rat populations can lead to severe crop losses, particularly in upland environments where such losses can lead to major food shortages. Since 2005, severe food shortages due to rodent outbreaks have been reported in Mizoram (India), Chin State (Myanmar), the Chittagong Hill Tract region (Bangladesh), and the provinces of Oudomxay, Luangnamtha, Xayabury, and Luang Prabang (Lao PDR). These outbreaks appear to be linked to *rattada* events (bamboo flowering) and have affected highly vulnerable and food-insecure families. In 2009, high losses due to rodents were also reported in the Philippines and Southeast Sulawesi (Indonesia); these were not related to bamboo flowering. There is little documentation of the factors leading to these population outbreaks, their impacts, and the successes and failures of management action. This conference would focus on filling up this information void.

The impact of ecologically based rodent management on both lowland and upland rice environments in Southeast Asia will also be reviewed.

Currently, there are at least eight major rodent pest species in the lowland rice-based ecosystems of Southeast Asia. Over the last decade, there has been good progress in strengthening knowledge of the ecology of many of these species. This has enabled the development of effective ecologically based management practices for chronic rodent problems, and to a lesser extent, for sporadic acute rodent outbreaks. In the uplands, knowledge of which species cause problems and their ecology is limited. Options for intervention will depend on understanding the ecology of the pest species.

The objectives of the conference are:

- To document the evidence and impact of rodent infestations in Asia that cause significant yield losses in rice production;
- To review the impact of ecologically based rodent management in both lowland and upland rice environments in Southeast Asia;
- To develop a framework for research on rodent management in agricultural systems of Asia and on the options to mitigate the effects of future outbreaks; and
- To agree on follow-up activities, including forging partnerships with the public and private sectors (e.g., civil society groups, NGOs).

