Food & Business applied research fund
Assessment of rodenticide use and rodenticide resistance in Bangladesh in order to reduce post-harvest losses

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Objectives
- Prevent post-harvest losses by rodents
- Provide tools for stakeholders to manage losses
- Increase sustainable agricultural production
- Ensuring equitable access to better nutrition

Impact
This project focuses on the economic impact: post-harvest losses by rodents are estimated on about 15 percent of the total harvest. Huge harvest losses and rodent-borne diseases can be catastrophic to the livelihoods of the poor. The aim of the project is to develop strategies for prevention of post-harvest losses by rodents from farm to fork, ensuring that stakeholders throughout the food chain, policy makers and extension specialists are provided with tools and information to manage post-harvest losses caused by rodents.

Activities
- Obtain reliable data on rodent presence
  - Removal trapping of rodents for taxonomic and breeding biology data
- Monitor post-harvest losses in traditional farming systems
  - Collection of grain samples for faecal contamination & qualitative loss
- Improve effectiveness of countermeasures against rodents
  - Management strategy for rodent pests
  - Monitor rodent abundance and rodent damage in rice warehouses
  - Screen for rodenticide resistance status in key rodent species (rat droppings)
- Increase public knowledge about the impact of rodents
  - Qualitative and quantitative surveys
  - Farmers training
  - Policy briefs for high level policy personnel
  - Exchanges for scientific and practical information

Opportunities and Challenges
- Sustainable delivery of knowledge and technology to reduce post-harvest losses
- Improving both quality and quantity of food available
- More sustainable use of natural resources
- Reduction post-harvest losses
- Reduction in availability of feed recourses will lead to a reduction in rodent population sizes
- Reduction of environmental damage by rodenticides
- Findings of this project are useful throughout Asia.