Getting Rid of the Rat Pack

Crop damage caused by rodent pests is a global problem for large-scale and small-scale producers but these pests also cause problems by damaging food stores, spreading disease and contaminating food and water. Rural farmers and their families may experience rodent pest problems both before and after harvest. Current control strategies based on the use of poisons can increase human health risks – resulting from the use of rodenticides, from rodent-borne diseases and bites, and food and water contamination – and environmental degradation.

Rattus rattus, a cosmopolitan commensal (means living close to or with humans) rodent species found on every continent (except Antartica)

Previous successful research jointly funded by the CPP, CPHP and NGOs in Mozambique (R7372) investigated options for preventing rodent damage to growing crops and developing traps based on the Indian multi-catch trap. Such traps can reduce storage losses by 50–60% and are both safer and cheaper than rodenticides. They can reduce the incidence of rat bites from 10% down to 0% and can reduce rat-borne diseases such as leptospirosis and plague.

A follow-on project (R8190), funded by the CPP links to an EU International Cooperation with Developing Countries (INCO-DEV) project which has a rodent and health focus. In this project linkages required to deliver and promote ecologically based rodent management techniques are being developed through collaboration with private companies, NGOs, research institutes, Government and universities. By assessing all the impacts which rodents have upon rural communities and developing strategies that holistically control rodent pests, the project is achieving sustainable developmental outcomes.

A new project (R8184) funded by DFID, CPP and PETRRA (Poverty Elimination Through Rice Research Assistance) brings together Bangladeshi, Australian and British researchers to address rodent pest problems in Bangladesh. Research and extension organizations will work with communities to develop management strategies that are effective and sustainable with respect to the needs and priorities of small-scale farmers and households. Long-term sustainability of rodent pest management research in Bangladesh will be increased by developing institutional capacity within the relevant organizations.

Multicatch traps are ideal for catching rodents, are easily made locally from wire and small pieces of metal, have a long lifespan and can be adapted for local rodent species

R8190:Technology transfer and promotion of ecologically based and sustainable rodent control strategies in South Africa
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R8184: Ecologically based rodent management for diversified rice-based cropping systems (PETRRA, Bangladesh)
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