



StopRats: Sustainable technologies to overcome pest rodents in Africa through science

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More information from <http://projects.nri.org/stoprats/>



Sustainable Technologies to Overcome Pest Rodents in Africa through Science

The StopRats project combines the strengths of agricultural research and extension institutions to develop technologies to overcome rodent pests. Smallholder farmers in Tanzania, Swaziland, Namibia, Madagascar, South Africa and Sierra Leone will benefit from innovations in sustainable rodent pest management technologies. Evaluating current knowledge, attitudes and practices about the impact and management of rodents will be used to inform and develop (inter)national networks of stakeholders (business, research, policy, extension) related to rodent management. A space will be created for stakeholders to network, building their capacity to effectively communicate on rodent pest issues to the scientific and policy-making arenas.



The multimammate rat, *Mastomys natalensis*, the predominant rodent pest species in sub-Saharan Africa

Challenge

Rodents have a significant impact on people's livelihoods in many ways, causing damage to many different crops, contamination of stored food, damage to buildings and personal possessions and the transmission of 60+ diseases. Commonly recommended approaches for managing rodents using rodenticides are usually inappropriate for small-scale agricultural communities and have the potential to cause damage to human health and the environment.



Rat damage to stored maize: the embryo has been removed from each seed, reducing nutritive content and severely reducing seed germination if used for planting next year's crop

Focus

Innovative research and knowledge extension are required to tackle the rodent problems faced by African communities. As the main beneficiaries, small-scale farming communities will work together with agricultural researchers, NGOs, private sector and government policy makers and extensionists from six African countries to develop ecologically-based rodent management strategies that can significantly reduce the impact of rodents on people's lives. Through information generation on rodent ecology, training, networking and awareness raising, new innovations about rodent management will be developed and disseminated to end users and institutional stakeholder groups such as research institutions, private sector businesses, policy makers, community-based organisations and non-governmental organisations throughout Africa and worldwide.

Rationale

The need for innovations in Africa with respect to rodent management is particularly important not only because of their relatively high impact in the Tropics, but because there is a major disconnect between rodent research activities and priorities in developed and developing countries. In developed countries, research is generally limited because rodent pests are not considered a big market or problem because people's proximity to rodents is relatively low in developed countries. However, human proximity to rodents is high in Africa, and most smallholder farmers have high numbers of rodents in their houses and crop fields. Rodenticides are not a solution for Africa, because they are expensive and easily misused. Innovative research on rodent management is not happening in Africa due to a shortage of private companies and limited private sector rodent management services. This divergence between developed and developing countries with respect to rodents and their management means that Africa's problems with rodents will not be resolved by knowledge transfer from Europe or North America. Africa must take charge of its own agenda and realise that appropriate solutions to its specific problems with rodents must be 'home-grown'. Consequently, it will be necessary to build scientific and technological capacity among African universities, research institutes, civil society and the private sector.

The StopRats Project Partners

- University of Namibia, Namibia
- Association Vahatra, Madagascar
- Concern Worldwide, Sierra Leone
- University of Venda, South Africa
- University of Swaziland, Swaziland
- Sokoine University of Agriculture, Tanzania
- Plant Protection Research Institute, Agricultural Research Council, South Africa
- Natural Resources Institute, University of Greenwich, UK

StopRats started on the 1st Jan 2014 and will end on 31st Dec 2016



Rodent damage to maize just before harvesting

ACP S&T Programme



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