Thanks to farmer-to-farmer extension and village seed production groups the new technologies have already made a big difference to the lives of more than 10,000 poor farmers, in particular women, in more than 120 villages in India.

Two leguminous forages, African Dhaincha (Sesbania rostrata) for the Boro rice season and Khesari (Lathyrus sativus) for the Aman rice season, fit easily into existing seasonal cropping and labour patterns. Scientists produced these technologies by working with groundnut growers - often poor tribal farmers - in the Deccan Plateau in India, the largest groundnut growing area in the world. Two diseases that affect groundnut, late leaf spot and rust, meant that farmers lost more than 70% of the pods, as well as the leaves and stems that they feed to animals or sell as fodder.

To cut these losses, scientists brought in an improved groundnut that does well in the Deccan, where there’s low and erratic rainfall and drought in three out of five years. The improved groundnut variety, coupled with integrated disease management, raised farmers’ net returns by about 25%. Plus, a continuous supply of healthy fodder made a positive impact on the livelihoods of small dairy farmers.
for hands-on training in integrated disease management in the villages.

**Integrated Disease Management means safe food for humans and healthy fodder for animals**

*Integrated disease management is a technology that is ecologically sound and user friendly because harmful chemicals are used very sparingly and carefully.*

In groundnut cultivation, fungicide is only used twice, once to treat the seed before planting and the second time 65-70 days after sowing. This means that the crops are protected from late leaf spot and rust but that any traces of fungicide disperse well before groundnuts are stored or the crop residues are fed to cattle.

Control of late leaf spot and rust has been so successful that both men and women farmers are realising that integrated disease management can be really useful in preventing crop losses. They are now beginning to ask for advice and suggestions for managing other problems, such as collar rot, in similar ways.

**Making a big difference to women**

*Since women are usually responsible for dairying they know very well that poor quality fodder harms the health of their animals and lowers milk production.* They know that feeding milking cows diseased groundnut haulms makes them sick - the animals get diarrhoea and refuse to eat, which in turn reduces their milk yield. This affects women’s regular source of income from milk sales. For them, less groundnut disease means healthier groundnut haulms - in other words more nutritious fodder - and higher yields of milk, up to half a litre per day per animal.

**Making a difference to groundnut production**

*More than 10,000 farmers are growing groundnuts with integrated disease management technology on nearly 20,000 hectares in Andhra Pradesh and Karnataka. But this is still only a tiny fraction - just 2.5 % - of the total groundnut area. And, at the current rate only 10% of the total groundnut area is likely to be using the new cultivar and integrated disease management by 2011.*

Although the improvements are spreading, the bottlenecks are the availability of seed of the new cultivar and the unmet need for further technical information go to the RIU online database at www.researchintouse.com/database and type in CPP15 or email riuinfo@nrint.co.uk