THEMENHINDU

A lightweight, efficient groundnut pod removing machine

August 27, 2014



The machine is priced at Rs. 20,000 a piece and reduces drudgery. Photo: Special Arrangement

Among the many fast growing cash crops, groundnut is always sought after by small farmers. The crop can be grown even during dry seasons and can be harvested in 120 -150 days depending on the region and variety and sold easily either as pods or whole.

But the major hardship in growing this crop is harvesting. It is a laborious and time consuming process. The fields need to be made wet the previous day with scant irrigation, so that the soil becomes loose and the plants along with the pods can be pulled out easily from the soil.

Once plucked, the pods need to be stripped from the shell. Stripping the pods is a traditional practice done either by removing the pods manually or hitting the bunches with the help of rods.

Difficult methods

Both these methods are quite difficult and damage the hands and fingers. There is no guarantee that all pods can be removed from the shell. Manually about 20-30 women are required for stripping an acre of groundnut pods.

Mr. Mohanasundaram, a small groundnut farmer from Nasiyanur village, Erode district has developed a portable groundnut pod stripper. The machine is powered with a help of a 0.25 HP electrical motor.

"The cylindrical type machine is closed on all the sides except for three openings, one on the top and the other two at the bottom. The uprooted plant with the pods is fed through the opening at the top where a spiked cylinder is fitted and through the opening at the bottom the broken pods are collected. The fine dust and other particles are thrown out through the third outlet. It is designed in such a way that two men can simultaneously work on it and is gender friendly," says Dr.P. Alagesan, Programme Coordinator, Mysore Resettlement and Development Agency (Myrada), KVK, Erode district.

Spiked cylinder

Stripping is done by holding the pod portion of a bunch manually over the spiked cylinder. The vines along with the groundnuts are held over the spiked cylinder and the pods get removed. The vines are not fed into the machine. After pod removal the bunch is dried and used as fodder for animals.

It saves 60 per cent of labour and pod separation time, which ultimately reduces the cost of cultivation. Though there are several models of groundnut pod stripper available in various research institutes, this particular machine is compact (weighs 35kg), and can be transported easily. Winnowing operations can also be done with the support of a special attachment called blower to blow away dust and other fine particles. Using this machine a farmer can harvest an acre area of groundnut in two or three days by engaging his family labourers alone.

Testing

"On-farm testing was conducted by our Kendra, in order to study the performance and the suitability of this pod stripper over the existing models. Stripping efficiency of the machine was tested in various farmers' field and found that 99 per cent of the harvested pods were clean and no broken pods were observed at the time of stripping," says Dr. S. Saravanakumar, Agronomist at the institute.

The machine reduces the cost of stripping operation from Rs. 2,400 - Rs. 3,000 per acre.

With the support of Myrada, the farmer demonstrated the performance of the stripper to several scientists from at the Tamil Nadu Agricultural University and State Department officials.

In recognition of his innovation the farmer was honoured at the annual Scientific Advisory Committee meeting by the institute.

Price

Priced at Rs. 20,000 a piece the machine has caught the fancy of practically all groundnut growing farmers in the region and other places of the state.

Till date the farmer has been able to market more than 250 machines to individual farmers and to several self help groups and farmers' associations.

For more details contact

Dr. S. Alagesan

The Programme Coordinator, MYRADA Krishi Vlgyan Kendra, 272,

Perumal Nagar, Pudhuvalliyampalayam, Kalingiyam post,

Gobichettipalayam Taluk, Erode district – 638 453, TamilNadu, email:

myradakvk@gmail.com, website: www.myradakvk.org and

Mr. Mohanasundaram, Perundurai Main road, Backside to the Mariamman

Temple, Nasiyanur, Erode, mobile: 9488020646.