



Consolation Awards

Pelletisation for Paddy Cultivation

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Aji Thomas (50) educated upto senior secondary, is a farmer growing banana, vegetables, paddy and rubber. In hilly regions, it is challenging to cultivate paddy. Transportation from other areas takes time and increases costs. He also observed tribal people treating seeds of paddy with various herbs for obtaining rice with high phosphorous and fibre content. Aji developed a table-top rice pelletisation system using which paddy saplings can be grown in pellets, retaining their properties and increasing yield.

A nutritional cocktail is made by mixing and crushing the leaves of various plants in water and fermenting them. Later cow dung and panchagavya mixture are added to it. This increases soil bio-factors and, thereby, the crop quality. The required quantity of seed grains is added to this cocktail and mixed thoroughly to obtain a pellet mixture. The pellet mixture is in a semi-solid state. A multi-chambered (cubic) pallet is washed thoroughly and placed on a flat panel. The prepared mixture is filled in the pallet chambers. After the mixture sets in, the pellets are removed by gently tapping the pallet. The pellets are kept in a natural

environment or a controlled environment to allow them to germinate and further allowed to grow till the desired height and, after that, transplanted in the field.

The pallet tray can be used to make 1100 pellets at a time. Four labourers can produce 70 trays per day, i.e. 77000 pellets. Each cubic chamber contains 1 to 4 paddy seedlings in the mixture. The paddy grown through this process has vigorous growth compared to the traditional method. The average number of tillers per plant is 50-60, with 150% more straw yield and increased panicle length. The average yield per hectare is 5.5-6 MT in 15-20 days lesser duration and with per acre seed requirement of 2.5-5 kg only as against 32-50 kg required in the conventional process.

Aji started this method of pelletisation for paddy cultivation in 2016. He began selling pellets based on the good results; farmers later started adopting this technique. More than 150 paddy farmers are using this technology, and the average area covered under paddy grown through this technique is over 1000 acres.

