



National Award - Third

Portable Coconut Breaking and Water Collecting Device

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Scout: PDS Kerala

Biju Narayanan (51) works as an electrician and a mechanic. He has been a curious tinkerer since his childhood. Noticing the various coconut-breaking methods used by people around him, he came up with his manual cum power-operated portable coconut-breaking machine.

Generally, dry coconuts are broken into two equal parts for further processing, like the making of copra wati, virgin coconut oil and coconut powder. Conventionally, manual tools/ implements are used to break coconuts, which is unsafe, drudgery-prone, tedious and time-consuming.

Biju's machine is a portable device where a

dry coconut is split into two pieces using the impact of a free-falling blade accentuated by the movement of a cam. After breaking open the coconut, the water passes through a filter and into a collector. This machine can be manually operated as well by an electric motor. Taking only a few seconds to break/ split a single coconut, the machine can break open about 250-300 coconuts per hour in manual version while 800-900 coconuts per hour in power operated version.

