

### **KTU Innovative Project Competition**

Engineering is about planning and designing to harness the scientific knowledge gained for practical applications, benefitting the society. Many think that engineering is all about modern gadgets and their applications, but there are many areas in day to day life, where engineering can be applied to solve the problems and to make the life easier.

Kerala technological University has a vision to groom engineering students as practical engineers. With this vision, KTU invited innovative project proposals from BTech students for developing Jack fruit plucking equipment. The equipment shall be designed for cutting jack fruit of max size 60cmx30cm diameter and weight 30kg with safe landing system from a height of 10m.

A team consisting of 5 BTech students of 5<sup>th</sup> semester Mechanical engineering department of Sree Narayana Gurukulam college of Engineering submitted a design for KTU. From a total of 156 proposals received, judging committee shortlisted 28 entries. SNGCE team guided by mentor Asst Prof Alex.S along with Prof K R Rajan was selected for final demonstration on 28<sup>th</sup> july 2017. From the 6nos of final round teams, SNGCE team won the first prize.

The equipment developed by SNGCE team consists of an extendable pole to reach 10m height with a net basket, a hook with a pulley, a magnetic coupling with a wire rope winding drum and a sickle. The hook will be placed on a branch. The basket will encircle jack fruit using the sickle, the jack fruit will be cut. Using wire rope system the jack fruit will be brought down safely.

The device can be improved with some modifications, for which KTU will give a funding of Rs 50,000/-.

The equipment attracted the attention of print media as well as FM radio. Public has shown keen interest on this innovative equipment. This innovative jack fruit harvesting equipment makes jack fruit harvesting easier, solving the long existing problem



