

**Technology Development Board (TDB) has entered into an agreement on 26th March 2019, with M/s Sickle Innovations Private Limited, Ahmedabad for “Grading and sorting machine for fruits and vegetables”.**

### **About the Project and Product**

This proposal is for setting up manufacturing units for image processing-based grading machines for fruits mainly focusing on apple crop. This grader is developed based on requirements from farmers and thus solves a major problem of color sorting for apple growers.

The proposed product is image processing-based grading and sorting machine which can grade various fruits like apples, oranges, Kiwi, vegetables etc. based on their color& size into different category and completely automatic. After harvesting of fruits and vegetables first and most important post-harvest application is grading based on their quality. In India, this process is completely manual and prone to human errors. Unidentified rotten/injured fruits go to cold stores and damage the rest of the healthy ones as well. It is with technical specifications estimated that 40-50% of total fruits produced in India get spoiled. Moreover, graded commodities fetch 20-30% extra for the same produce. Manual grading is very expensive and ineffective. Automatic solutions available in market are imported from European countries and designed for massive capacity (2-10 tonnes per hour). This makes them very expensive and non-affordable for Indian growers. The product is designed for Indian farmers and their needs.



**Dr. Neeraj Sharma, Secretary, TDB exchanging the Loan Agreement with Sh. Nitin Gupta, CEO of M/s Sickle Innovations Private Limited, Ahmedabad .**

**# TDB financially supports M/s Sickle Innovations Private Limited, Ahmedabad for “Grading and sorting machine for fruits and vegetables”.**