

Grading agriculture produce through artificial intelligence to boost farmer income

Introduction:

Standardization and grading are the first steps in the value-chain of an agricultural produce as it travels in a market channel to the consumer. Variations in quality of agricultural produce has led to incommensurate prices for farmers. The assessment of produce quality depends on a responsive system of grading and standardization, which can be quite subjective in absence of a good grading mechanism.

Every consumer wants high quality fruits and vegetables, which are not over-ripe, discoloured, or damaged. The process of quality testing is done manually, with inspectors physically checking a sample from every lot. This makes the testing subjective, allowing errors to creep in.

Intervention:

Bengaluru-based start-up Intello Labs set out to provide advanced image recognition technology that can recognize objects, flora, fauna and tag them in any image. The company uses deep learning algorithms on which a new generation of intelligent applications are built for applications in agriculture.

Intello's AI can generate instantaneous quality metrics based on a photo taken on a basic smart phone. This enables Agricultural Product Grading, which entails automated quality analysis of images of food products, which is an accurate and reliable method for grading fresh products (fruits, grains, vegetables, cotton etc.) characterized by color, size and shape. Its tools help in bringing transparency and standardization to quality assessment, reducing value risk and wastage in the agriculture supply chains. It has developed a ready-to-use solution for fruits, vegetables and spices.

Impact:

The company claims that its image analytics and AI testing can give B2B players savings of between three and five percent. Standardization and digitization of produce can go a long way in making e-Mandis and digital agri markets successful.

Source: Your Story, AI to test and grade fruits and vegetables? These Amazon and Snapdeal ex-staffers are doing just that, 3 April 2019; Economic Times, AgriTech startup Intello labs raises \$2mn seed round from Nexus Venture Partners and Omnivore