**What is the problem you are trying to solve?**

Agriculture sector of Bangladesh contributes largely to the country’s economy. This sector contributes 19.10% to GDP and employs 50.28% of the labor force. But crop agriculture in Bangladesh is, however, constrained by many challenges every year. Loss of arable land and disease prevalence of vegetable and fruit crops are the two major factors. Potato and Tomato two major crops of Bangladesh suffers from leaf infection of about 37% and 43% (M. T. HOSSAIN, 2010). More than 454 diseases in around 100 cultivated crops have so far been recorded in Bangladesh (Anon., 2006). The diseases cause great loss to the total yield production of Bangladesh. Approximately 30-50% loss is incurred due to the disease (Khan, 1999). About 80 million takas is lost for the diseases (Anon., 2003). Detecting these diseases is hard for farmers without the help of skilled people. Early and accurate detection of these diseases can prevent from a large scale yield loss.

**What is the solution you are providing?**

We have developed an Android App which can detect the disease of certain crop instantly from an image of the leaf. Currently, we have incorporated five major crops of Bangladesh (Potato, Tomato, Apple, Corn, Grape) into our app. The android app is fully voice assisted and has Bangla interface. The app is designed for the underprivileged farmers with the ease of use. Low-resolution camera and low internet speed and data is needed for proper functioning. The computation and prediction are all done in the cloud server. We used Convolutional Neural Network (CNN) to design the models. We are collecting new datasets for other plant diseases in Bangladesh. The farmers can see solutions and steps to follow for the predicted disease. By taking the right measures and steps farmers can reduce the loss of crop significantly.

**What is your business plan?**

The main business plan for this project will be on Affiliate Income. We will be promoting the necessary Insecticides, Fungicides, Herbicides, Seed care products in our app. The sellers and distributors can promote their products through our app.