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SunRice NRG

Lincoln Lee, Kisum Chan, Julia Vannaxay
University College London

Within the next 10 years, we won't have enough food for the world. Despite consuming more than 500 million tons of rice annually. Population growth is set to surpass production growth and food availability will become a serious issue in the coming years. We focus on rice as it is a staple of many cultures and countries.

The funny thing is that we actually have enough rice for the world! We grow nearly a billion tons of rice a year but over 40% of it is wasted roughly 350 million tonnes! Majority of rice is lost during the drying process after harvesting. This is because majority of rice is grown by small farm owners who still use traditional drying methods including sun-drying paddy resulting this loss. Thus, they only earn $50/month which makes rice farmers the epitome of food insecure people in SEA, where rice farmers make up the majority of the poorest.

So our problem is twofold:

1) Wastage of rice that can meet the needs of our growing population;

2) The farmers growing our rice are trapped in the poverty cycle and are ironically the very people that cannot afford food.

Rice farmers in South East Asia are some of the poorest in society and lack access to education and technology. They are also often underpaid for their rice and heavily in debt by the time of harvest. Their debt arises because they need to borrow money to buy seeds, fertilizers, pesticides etc... This leads to desperation to sell rice as soon as the harvest rolls around and due to a lack of funds and access to proper equipment they sun-dry paddy as it is more convenient. They will then sell the rice to get money as soon as possible. They are also unaware that proper drying of rice could lead to a higher quality and quantity of rice and leads to higher profits.

Our solution is to use sustainable drying technologies in order to reduce rice loss while increasing a farmer's income. The technology that we are going to use is the Solar Bubble produced by a company called GrainPro, it harnesses the power of Solar Energy to properly dry the grain and is effectively at reducing rice loss while increasing rice quality.

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Our operating model is to be a mobile rice drying service by travelling from farm to farm during the harvest season with the solar bubble and allowing farmers to dry their rice. However, we won't charge a service fee, instead we will buy the grain the farmer has dried with the Solar Bubble and then bring it to the rice miller and sell it to them. The margin in between will cover our operating cost. We will also be paying farmers slightly higher than market value as well as paying them 50% upfront so that we increase their income and allow them to absolve their debts immediately.

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