



Azizul (right) sharing the concept of hydroponic farming to the visitors in his greenhouse.



Azizul (second left) among recipients of innovation challenge from Ministry of Science, Technology and Innovation.



Azizul (centre) receiving the RM200,000 social innovation grant from Yayasan Inovasi Malaysia.

UMS graduate shows Kundasang planters the ropes

BP 25.3.2018 5
By Mariah Doksil

MESILOU is a small village with less than 50 households in Kundasang.

Every year, the highlands area is subject to losses of soil nutrients due to the ongoing planting activities - when plants are harvested and removed.

For decades, vegetables have been the major crop of the area, the main income of the local population.

However, there is a need to look for other sources of income as vegetables are more and more dependent on chemicals.

Thanks to the increasing demand from tourists for accommodation, villagers started to build homestays - a side income when their crops are not producing well.

A 28-year-old graduate of Universiti Malaysia Sabah (UMS), Azizul Julirin is one of the homestay operators in the village.

Although the demand for accommodation keeps increasing, but he is not giving up on the planting activities.

"Selling vegetables have been our main source of income. My parents have been growing vegetables since they were young. Even my sisters and myself helped them to sell vegetables at the tamu' to fund our studies.

"I have been always interested to continue my parents' legacy in planting vegetables, that is why I did my Aquaculture degree in UMS to find a sustainable solution on the soil situation in our land.

"During my industrial training at Kansai Bussan Product Co. Plt, Kagawa Ken in Japan, I found an answer to that particular problem," he said, in an exclusive interview with The Borneo Post.

After graduating from UMS in 2010, he worked as an executive in one of government link companies, Sabah Land Development Board (SLDB).

During his free time, he builds a prototype of a greenhouse, growing salad using hydroponic system.

Aquaponics is, a marriage of aquaculture (raising fish) and



Organic red coral lettuce in Kundasang Aquafarm.



Azizul's mother holding the 'pak choi'.

hydroponics (growing plants in water and without soil) together in one integrated system.

The fish waste provides organic food for the growing plants and the plants naturally filter the water in which the fish live.

Since his passion is more to growing vegetable, he decided to resign from SLDB and joined Borneo Marine Research Institute as a Research Assistant, to learn more about fish and water.

At the same time, his personal project on hydroponics continued.

In 2015, Azizul won Sabah Biz Challenge and also one of the semi finalists of Super Malaysia in Cyberjaya.

He did not stop there.

To him, his hydroponic business plan need to be challenged in a higher level.

On the following year, he was chosen as the best participant of Tunas Usahawan Belia Bumiputera

(TUBE) programme and received a grant from the government to market his product.

TUBE programme is a Government initiative to encourage the youth to venture into business.

Looking at the potential opportunities of getting grants from the government, Azizul braved himself to join another competition - Pitch Borneo 2016, and won business assistant grants.

In the same year, another grant was given to develop his project after winning second place in Inclusive Challenge Borneo Zone, organised by Yayasan Inovasi Malaysia.

He used all the grants to make a proper prototype for his hydroponic project.

After about a year of trial and error, Azizul found the perfect formula to make his greenhouse to be commercialised.

He finally made a bold decision to resign in 2017 and built a bigger greenhouse, 40ft x 60ft using all the grants he won.

His greenhouse, Kundasang Aquafarm is the first hydroponic farm in Sabah.

"After three weeks of growing green and red coral lettuce, I made around RM2,000 to RM3,000 a month by selling it to a supplier who distributed it around Kota Kinabalu.

"Today, I added more variety by growing strawberry, tomato, Japanese cucumber and Pak Choi. My supplier not only sells them to various hotels in Kota Kinabalu but also to Brunei," he added.

According to Azizul, it is not easy to penetrate into Brunei market due to their concerns about



The 40ft x 60ft greenhouse of Kundasang Aquafarm.

chemicals used in our vegetables. However, his hydroponic vegetables have been accepted by the Bruneian because it is organic.

Looking at the potential of the sustainable growing system, Azizul's project caught the attention of the government.

Earlier this month, he was given RM200,000 grants to train the community in Kundasang by Yayasan Inovasi Malaysia.

"I am confident that this new growing system will benefit the whole community, and I will build a bigger greenhouse for everyone to learn.

"With the grants from Yayasan Inovasi Malaysia, we will have more supplies to meet the increasing demand," he said.

Last Thursday, Azizul won another innovation challenge by the Ministry of Science, Technology and Innovation (MOSTI) and received RM50,000 grant.

He is planning to use the grant to start building a bigger greenhouse in his parents' land.

"All the hardwork paid off. It has been my goal to make this project successful and inspire the younger generations to develop their own land, create job opportunities so that we don't have to seek for a minimum wage anymore.

"Everything needs to start from us. Push yourself to do what you hope to do so you will never have to regret at not having tried," said the second child of two.

Azizul's mother, Hisiah Sain



Visitors buying fresh vegetables from Kundasang Aquafarm.



Organic green coral lettuce in Kundasang Aquafarm.

said she never thought her only son's project made such a impact - never in her wildest dream to see Azizul winning so many awards from his little greenhouse.

At first, she did not even know how to pronounce "hydroponic".

"When Azizul set up his first hydroponic, I thought it was just a hobby, but apparently he was about to change the fate of planters

in Kundasang.

"I normally helped him when visitors or supplier came to the greenhouse, but most of the time I am looking after our homestays.

"I hope Azizul's project will benefit more families to grow healthier vegetables, and it is good to see the younger generations to continue our legacy, supplying food for the people in Sabah," she said.