



School Sultan Ibrahim Girls School

City/Country JOHOR BAHRU / Malaysia

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Title of Movie To Create a Hydroponic Kit that will Encourage Self-reliance
／ 水耕栽培キットで自立が繋がる

Topic Modification of hydroponics / 水耕栽培キットの変形

Current Issue of Topic / テーマが抱える課題

Currently 821 million (1 in 9 people) of the world population do not have enough food. On top of that, malnutrition causes 45% of deaths in children under 5. In that context, Asia is the continent with the hungriest people (two thirds of total population). Before this, the solutions to world hunger has always been the same, which are:

- Directly sending resources (food) to specific countries through government or NGOs. (Eg. World Health Organizations)
- Funding by public or private sectors
- Foundations for money by various organizations. (Eg. Food Aid Foundations)

The main cause contributing to world hunger is [Poverty]. That included poor people's lack of resources, and an extremely unequal income distribution. According to World Hunger Statistics provided by Food Aid Foundation, researches shown that if women farmers had the same access to resources like men, the number of hungry people in the world could be reduced to 150 million. That proves that in order to tackle the problem effectively, it is more important to provide the correct tools and make sure everyone gets their welfare. The main topic we chose to work on is: Ensuring Continuous Food Supply. The reason being, we want to stress on the importance of self-sustainability and self-reliance in solving world hunger. We realize that the numbers of people in starvation is not going to decrease if they are to just continuously receive sources of food from third parties. Aside that, they are just going to ask for top up's when they finished their food.

However, the fee needed for preparation of food resources, the manpower, the storage of food and the transportation is costly. So the best way to tackle world hunger is to ensure the people can grow food themselves, and to be able to feed themselves on the spot for a long term. Only when people have the ability to feed themselves in the long term, can the hunger problem be solved forever. If not, the governments and NGOs will be forced to spoon feed them till the end of time. Thus, it's clear that planting your own food is not only important but it is a must to solve world hunger.

世界では多くの人が餓饉に苦しんでいる。これまでの解決策は、政府やNGOを通じた食料援助や官民で行われる資金援助など短期的な解決策ばかりだった。第三者による食糧援助や資金援助は根本的な解決にならず、当事者が自分たちの力でどうにかしようとするのが永続的解決策になると考える。私たちはそのような永続的な解決策を模索したいと考えている。

Solution of Issue / 解決策

The best way to overcome the issue, we have modified the existing hydroponic solution and made a hydroponic kit that can be set up in everyone's backyard and will be sent to people who suffer from hunger. So, they can start their own plantation which can feed the whole family for a long time. As we believe that continuous supply from NGOs and government cannot solve world hunger for a long term, so the only way to make sure people are able to feed themselves for a longer period of time is to let them plant themselves.

We will produce a hydroponic solution. The container will be filled with hydroponic substrate and organic medium we created which is necessary for growth of plants.

This kit also does not use expensive substrates like original hydroponics medium sold in the market. We also made sure that it can be easily handled as well as having a low cost. The vegetables grown on the other hand are able to provide essential amino acids. These amino acids consist of unsaturated fats which contain good cholesterol and no maximum hydrogen unlike the ones obtained from meat. The plants are also fast growing and suitable for most temperatures such as the plants we have planted, water spinach and lettuce.

As we believe that, the success of our project will be able to promote self-sustainability and self-reliance by using eco-friendly and simple materials will be able to decrease the cases of hunger problems in the world.

誰の庭でも簡単にできる、水耕栽培キットを作成する。そのキットは安価で、栽培しやすいように工夫された独自の水耕液で、健康的な食物を育てる。うまくいけば、はじめは小規模の栽培だったものを拡大させることも可能である。この計画は、環境に優しい素材を使って、自分たちの力を頼った、持続可能な解決策になると考える。

Message to Audience / メッセージ

First of all, our project is an organic and ecofriendly long-term solution as we are reusing the food waste which are usually thrown by every family in the kitchen. Through reusing food waste, we are able to reduce the amount of rubbish in the world and also decrease the pollution in our environment. Besides, everyone is able to carry our project in their own house by using the food waste and some organic substances that can be easily obtained. Our project is extremely easy and convenient to carry out at every places. Also, through our solution, we can effectively avoid spoon feeding from the government in some countries that are facing severe hunger problem. Lastly, we would like to thank Nakamura High School for the opportunity to join Food Summit 2019, and also the audience for your time. Thank you!

私たちの提案する解決策は、政府や機関に頼ることなく、誰にでもどこでもできる方法である。食のサミットに参加する機会を与えていただいたことに感謝している。