

AS PART OF THE CLASS ASSIGNMENT OF ENE3608 2020
IDEA DEVELOPED AND INSPIRED BY DR. POOVARASI BALAN
PRODUCED BY 4TH YEAR CHEMICAL ENGINEERING STUDENTS

THE UPRISING AGAINST THANOS-19 VIRUS

and the subsequent battle for environment

CREATIVE DESIGN BY: YEOW JING JONG

STORY BY:
AW YUAN ZHE
NUR ATIKA NIKMA DAHLAN
MOK JIA HAO

JEREMY KHOO YEN PIN
KOAY WEI XIN
TAM SI CONG



MONASH
University
MALAYSIA



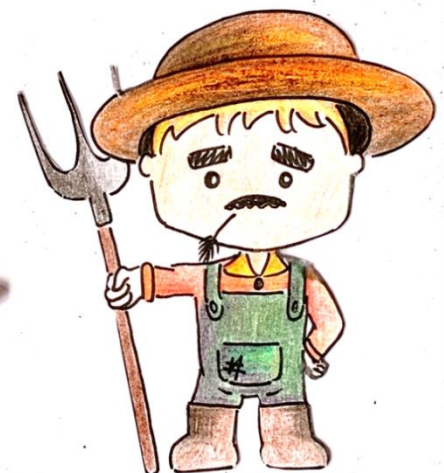
Starring:



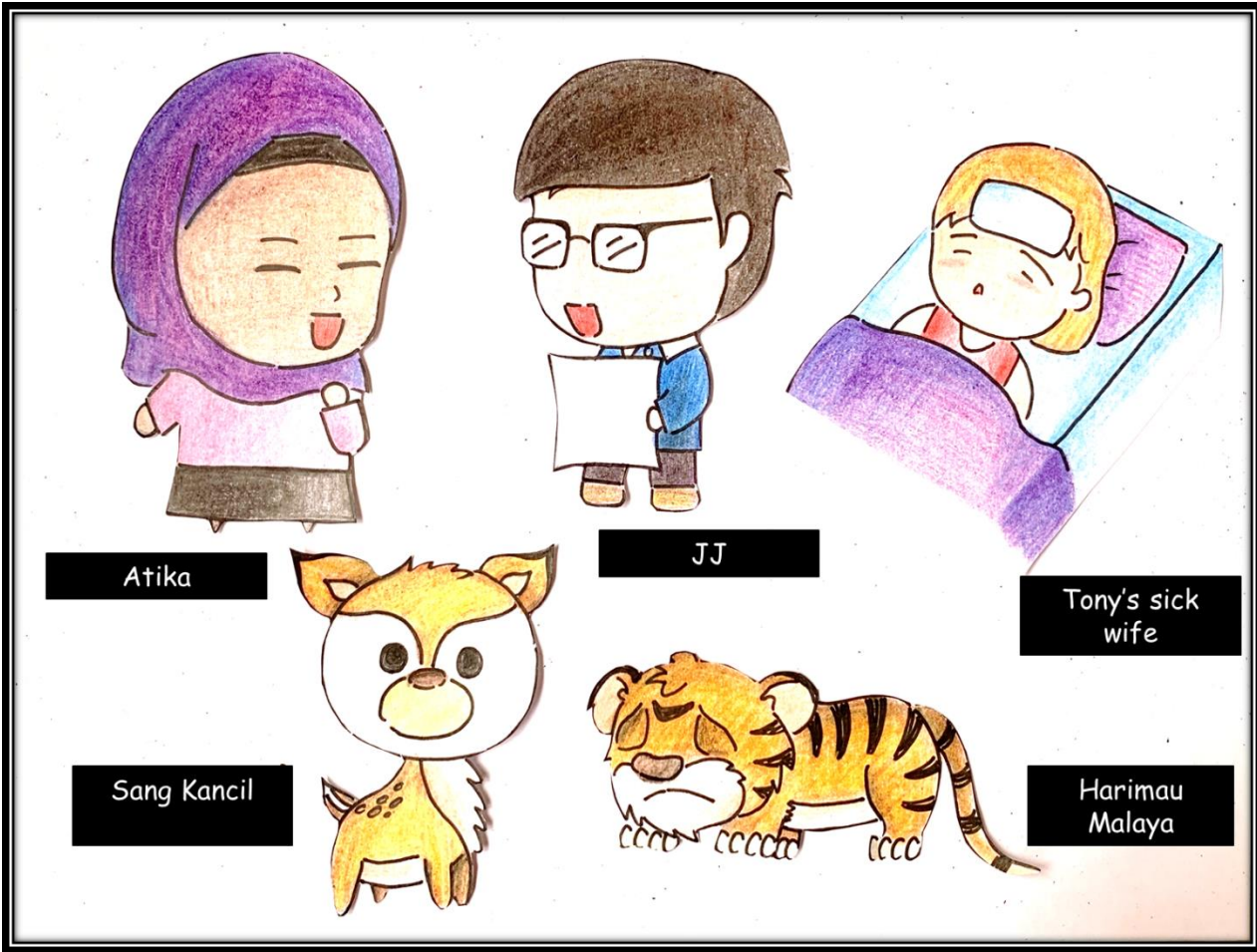
Thanos-19
the virus



Scott
the Engineer



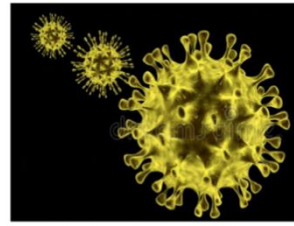
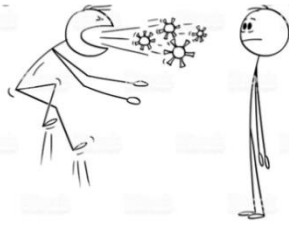
Tony
the Farmer



Earth 2020
 A threat has come to all of humanity!!
 Thanos-19 the virus had invaded Earth.

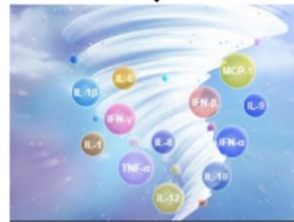


In real life, Thanos-19 has another name, it is called Covid-19.



It is a virus that originates from animals. This virus can be transmitted from one infected person to another easily by entering through our nose or mouth.

Inside our body, the virus can start to multiply and form an army to attack our immune system.



We will have problem breathing so we will need medical help. However, the process is very fast that we might not be quick enough to seek medical assistant. This is why many people die because of the virus.

Our immune system will try to protect us by forming a "cytokine storm" to kill the virus. Unfortunately, the storm starts to kill us too by injuring our lung.



People think that they can defeat Thanos-19, the virus by wearing masks...little did they know.. they are doing it the wrong way..

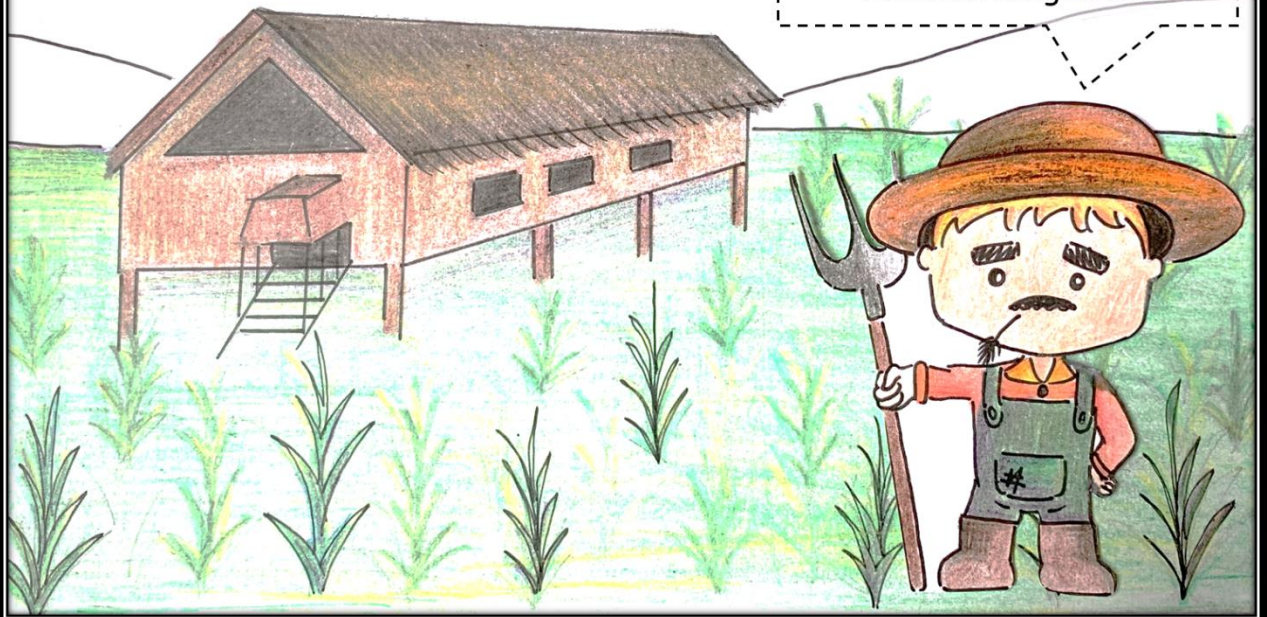


Malaysian heroes emerge and advise the citizens to stay at home to silently fight Thanos-19.



After hearing advices from the heroes, Tony has no choice but to put down his tools and stay at home.

No one can come to collect my crops, what should I do with all these? :(*sigh*.. Time to go back to my Sarawak Longhouse.



One day, his sick wife asks for corn porridge.

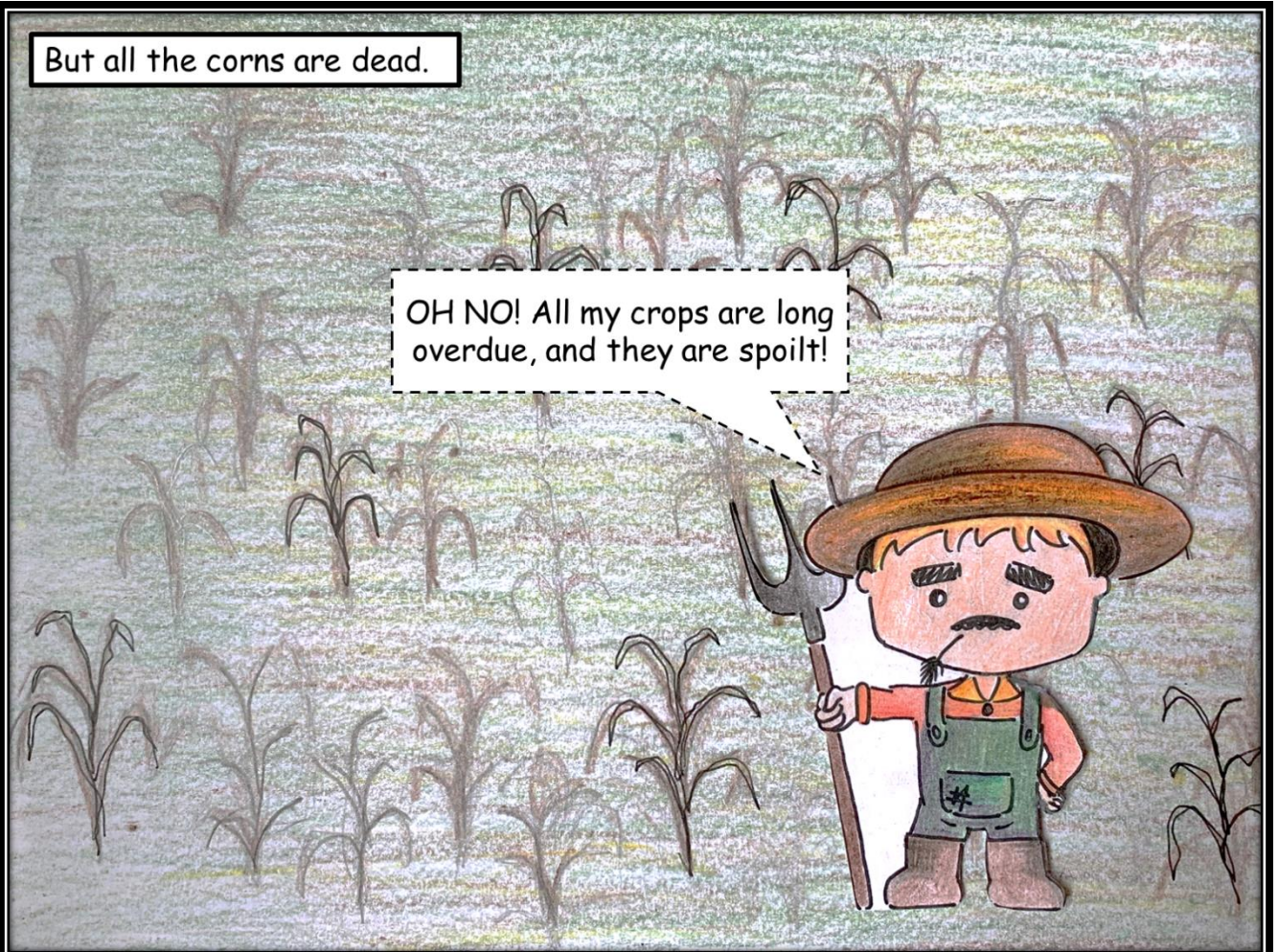
Of course, honey. I'll get some leftovers from our farm.

Tony, can you make me some corn porridge?

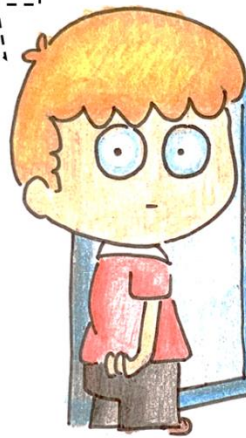
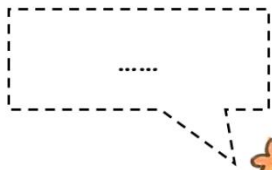


But all the corns are dead.

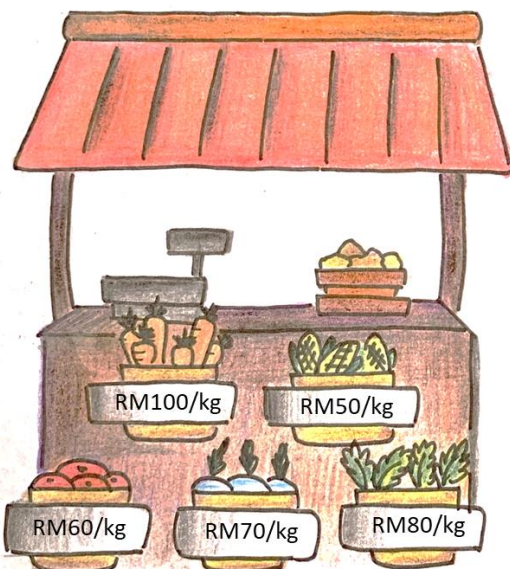
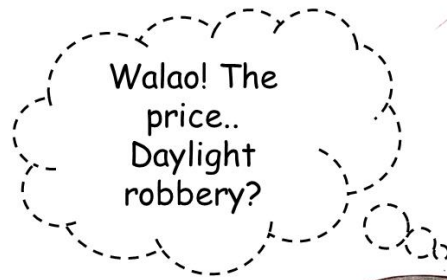
OH NO! All my crops are long overdue, and they are spoilt!



People are jobless and starving at home due to economic crisis.



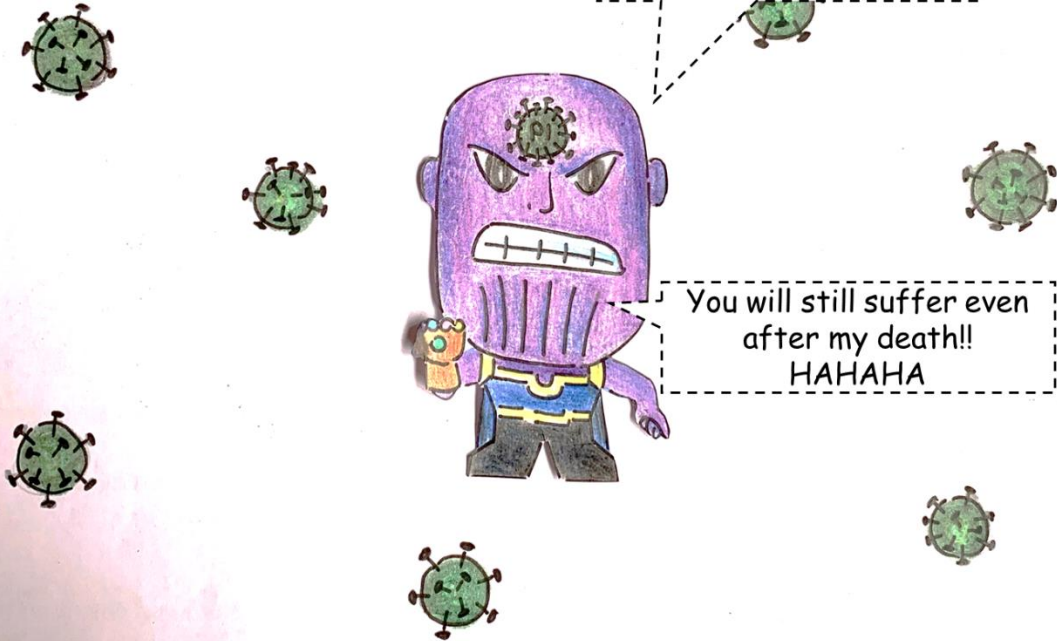
During Thanos-19 pandemic, all the food prices have increased due to the Movement Restriction Order by the authority which results in reduced food crops entering the market.



After 6 months, the efforts by the Malaysian heroes finally paid off! Or so they thought...

WE'LL BE BACK,
HUMANS!!!

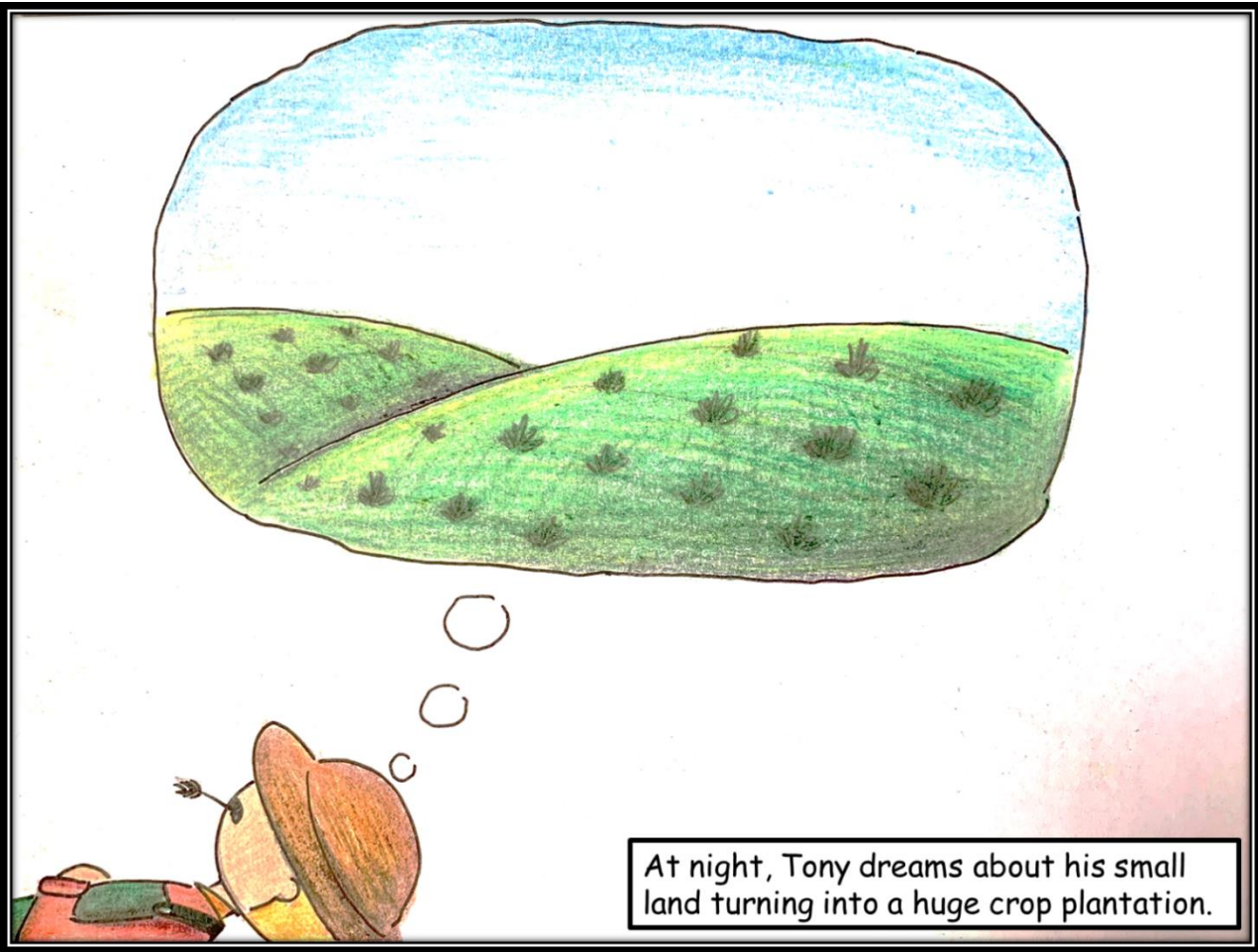
You will still suffer even
after my death!!
HAHAHA



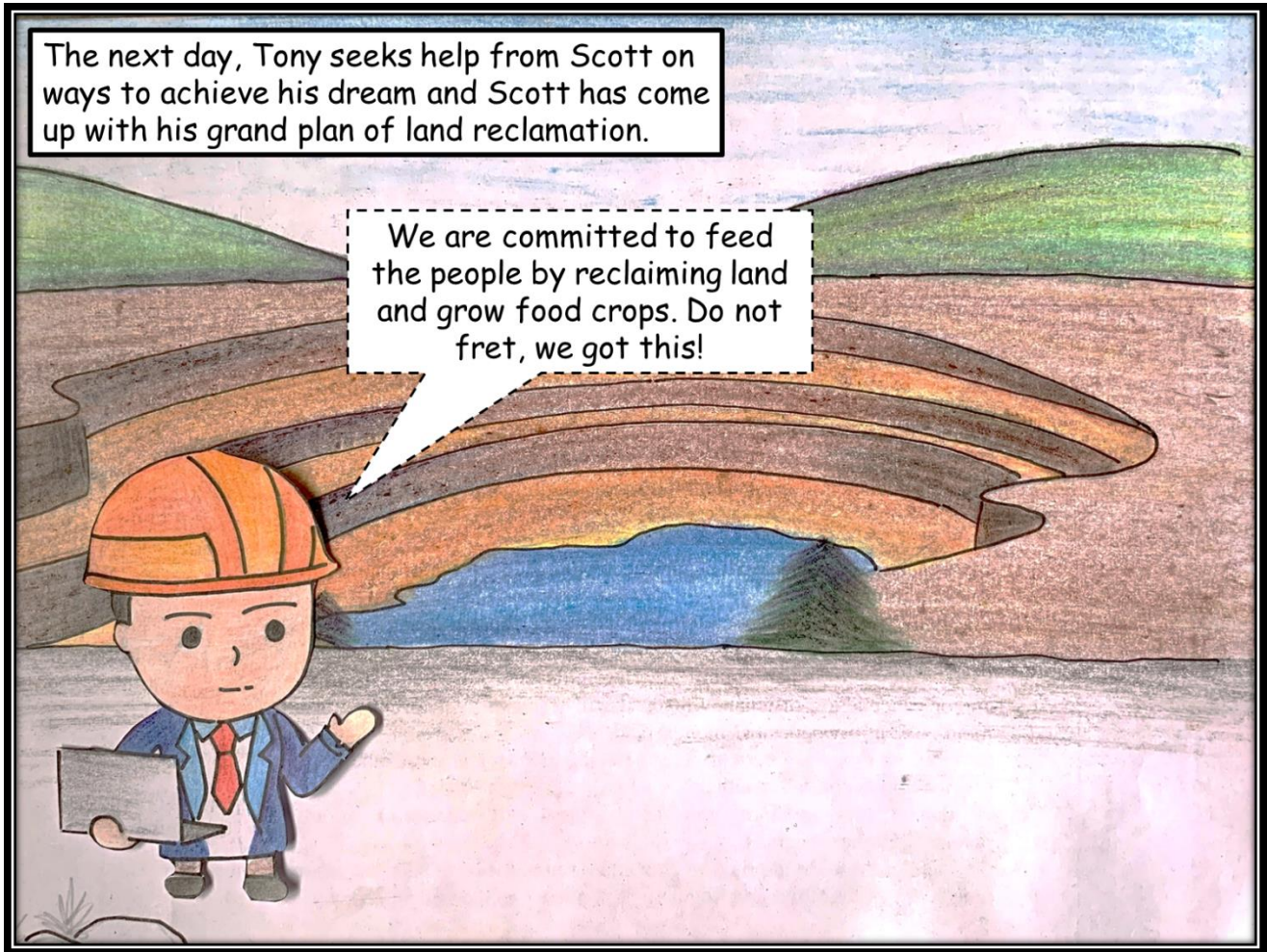
People are finally out of home after the crisis but they realized that there are limited food in the market.

There's no more cabbage...





At night, Tony dreams about his small land turning into a huge crop plantation.



The next day, Tony seeks help from Scott on ways to achieve his dream and Scott has come up with his grand plan of land reclamation.

We are committed to feed the people by reclaiming land and grow food crops. Do not fret, we got this!

First, Scott needs to clear and flatten the land before starting to grow the crops.



What is he doing?

Oh, he is performing a process called land reclamation! I'll tell u more about it

First, let's clear out the forest so that we can plant our crops.

The land is rocky too, let's flatten it out.



Due to the finite land on Earth, land or coastal reclamation allows us to create more land for various purposes!

Reclamation can be performed on land or coastal, depending on the availability.



Land reclamation includes places like abandoned mines, lakes, unused land and more! Water in lakes or pond can be pumped out and soil is used to fill up the area! Flattening process is then performed to ensure the land is suitable for different purposes!

Coastal reclamation is the process of creating new land by raising the elevation of a water bed. The soil is constantly used to fill up the deep ocean until it reaches ground level! Like the floor we step on everyday! Importantly, the newly created land can be used to do different industrial activities!



Soon, his dream finally comes true.

YESS!! I own this wonderland now!

We have infinite food now
HAHAHA!



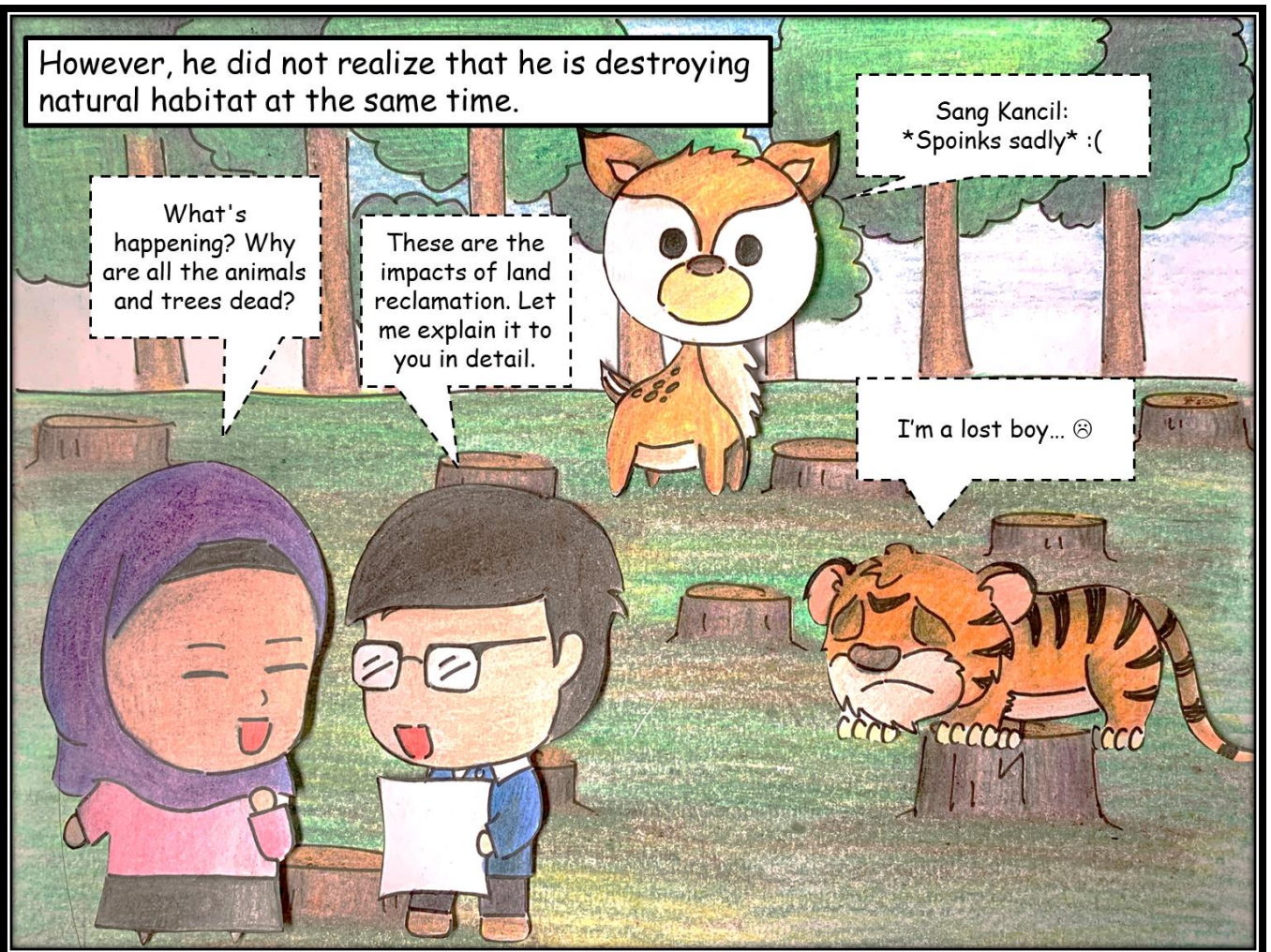
However, he did not realize that he is destroying natural habitat at the same time.

What's happening? Why are all the animals and trees dead?

These are the impacts of land reclamation. Let me explain it to you in detail.

Sang Kancil:
Spinks sadly :(

I'm a lost boy... ☹



There are several impacts that land reclamation has had on the environment:

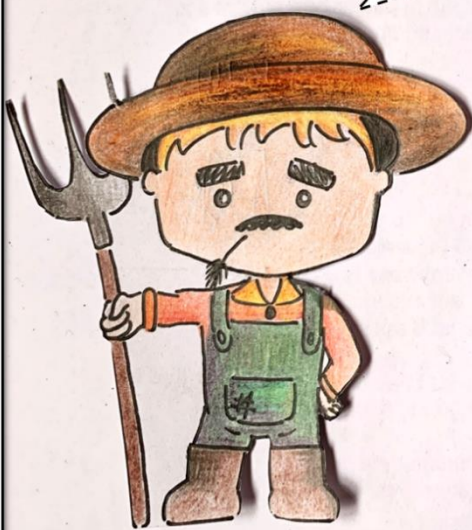
- Disruption of food chain
- Decrease in quality of water
- Soil erosion
- Loss of natural habitats for flora and fauna

When these ecosystems are destroyed, there is no retrieving them back. As a result, it showed obvious effects towards the physical-chemical and biological environment in the area. Therefore, we should try to protect it as much as possible, instead of just focusing on the advantages.



It seemed like Tony is faced with problems one after another. He felt sorry for all the troubles he caused to the poor wildlife.

I'm so sorry...



Oh no, I'm so dead..



Once again, Tony sought help from Scott to revert the damages that they have done to the wildlife.

Hey Scott, can't you see Sang Kancil and his friends are losing their home. This is not right, you have to help me save them!

Who is DoE and what is the assessment that Scott is talking about?

I think I understand. Let me explain to you!

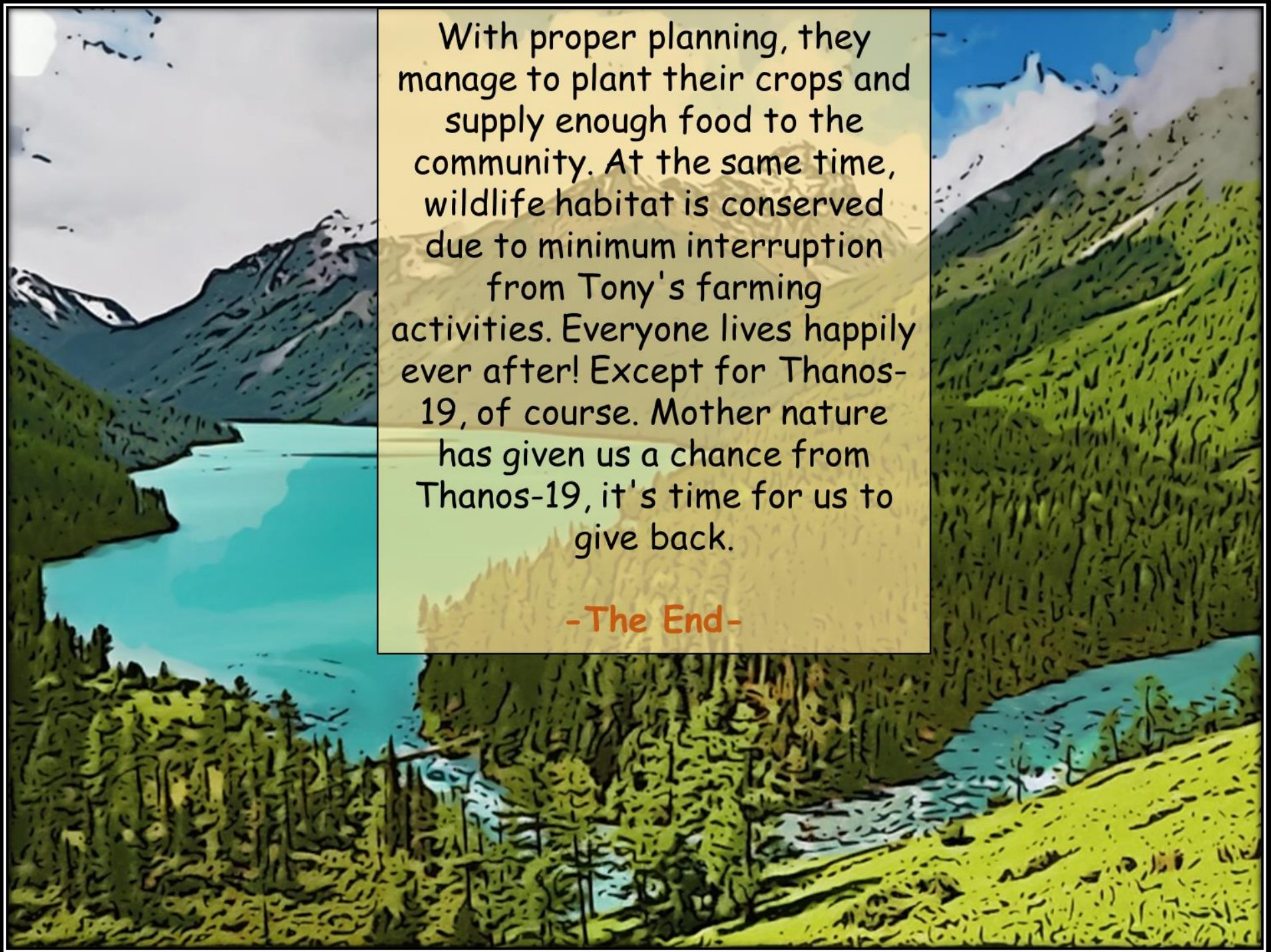
You're right! We need to have a detailed assessment and planning before we start our future land reclamation. The DoE should be able to help us with this.

Department of Environment (DoE) serves to protect the environment from harmful activities. In fact, they are responsible to carry out the resolutions decided by international environment conventions!

Since what Scott is planning to do is a prescribed activity, he was supposed to get an approval from DOE before carrying out his plans! The approval is only possible through an Environmental Impact Assessment (EIA) report.

Through EIA, Scott is able to identify the impacts of his plans to the environment! That way, he can formulate strategies to ensure his plans goes on with minimal damages to the environment!

Bingo!

The background of the slide is a stylized illustration of a mountain landscape. On the left, a large mountain peak with patches of snow overlooks a calm, light blue lake. The foreground is dominated by a dense forest of green trees. On the right, a steep, green mountain slope descends towards a small stream that flows into the lake. The sky is a pale, hazy blue. The entire scene is framed by a thick black border.

With proper planning, they manage to plant their crops and supply enough food to the community. At the same time, wildlife habitat is conserved due to minimum interruption from Tony's farming activities. Everyone lives happily ever after! Except for Thanos-19, of course. Mother nature has given us a chance from Thanos-19, it's time for us to give back.

-The End-

Synopsis

It was the year 2020 when a highly infectious disease emerged. The cause was identified to be Thanos-19, the virus. More and more citizens across the world were infected and the number of death in all countries were creeping out the governments. People were anxious as there was no cure for the disease. To prevent further spreading of the virus, the Malaysian government imposed the Movement Restriction Order (MCO) instructing its citizen to stay indoor and only go out of their home to secure necessary essentials. Tony the farmer started to feel distressed as he could not send out his food crops to the market due to the MCO. Meanwhile in the city, people were starting to experience price hike on the limited amount of vegetables. Fortunately, Thanos-19 was defeated after 6 long months. Citizens were then free to go out yet another crisis hit them. They figured that there were less food supplies than it used to be. Tony wanted to use this opportunity to expand his farm capacity to support food demand but he had no more space to farm. His engineer friend, Scott, suggested land reclamation to him. Tony was astonished by the idea and start reclaiming land almost immediately with Scott's help. Little did he know that Scott was an unexperienced person in this field who just wanted to profit from the project, as he himself was struggling financially. The new farm was a success but Tony started to find animal carcasses on the site. His instinct told him that his activity was the cause, since his site used to be a forest, home for the dead animals. He confronted Scott again and together, they decided to consult the DoE. Thankfully, the root of the problem was identified and the duo came out with proper plans to correct their actions for a sustainable operation.