

MUNTINLUPA SCIENCE HIGH SCHOOL

Anianihan

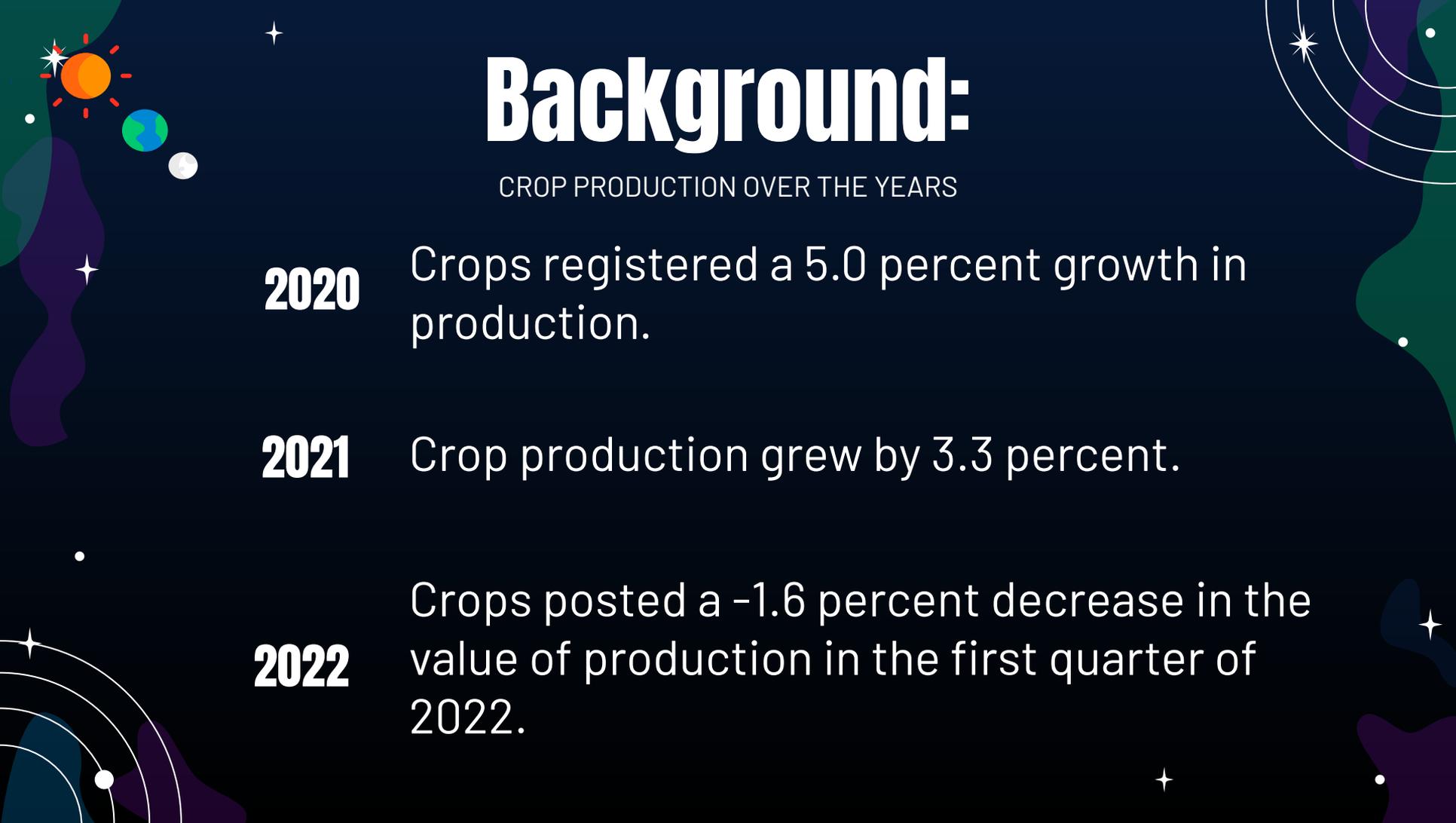
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Introduction:

What is the Anianihan?

- Earth Observation Satellite
- It serves to be a tool that will be able to help farmers increase crop yields.
- A space mission that can be conducted with help from the Department of Agriculture



Background:

CROP PRODUCTION OVER THE YEARS

2020

Crops registered a 5.0 percent growth in production.

2021

Crop production grew by 3.3 percent.

2022

Crops posted a -1.6 percent decrease in the value of production in the first quarter of 2022.

OBJECTIVES

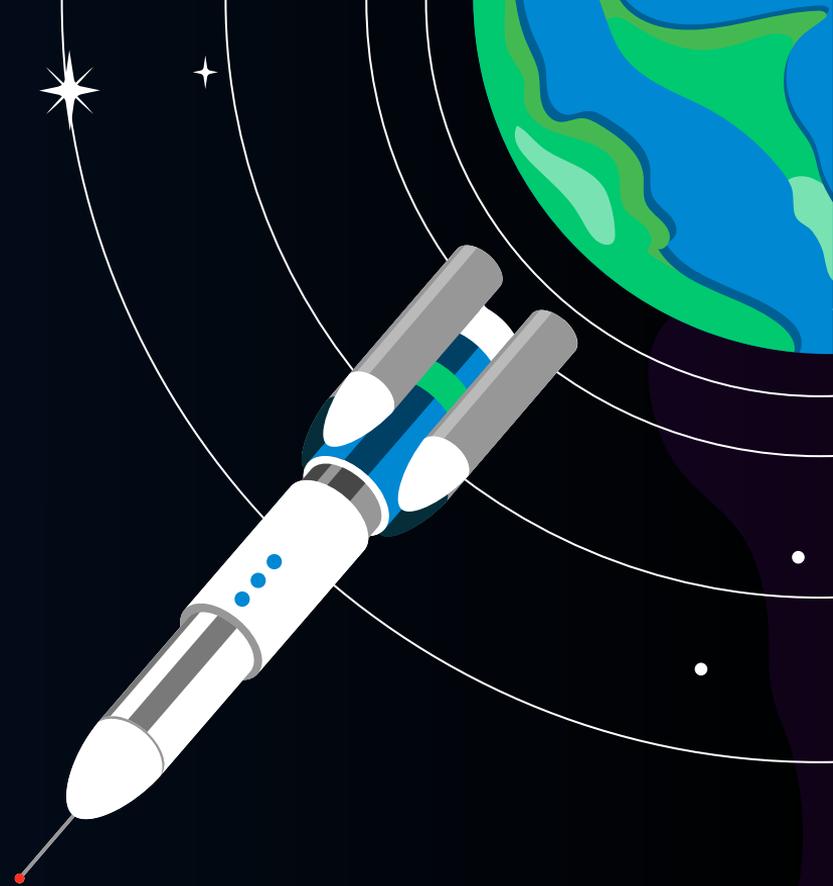
To monitor crop growth
and condition in the
Philippines

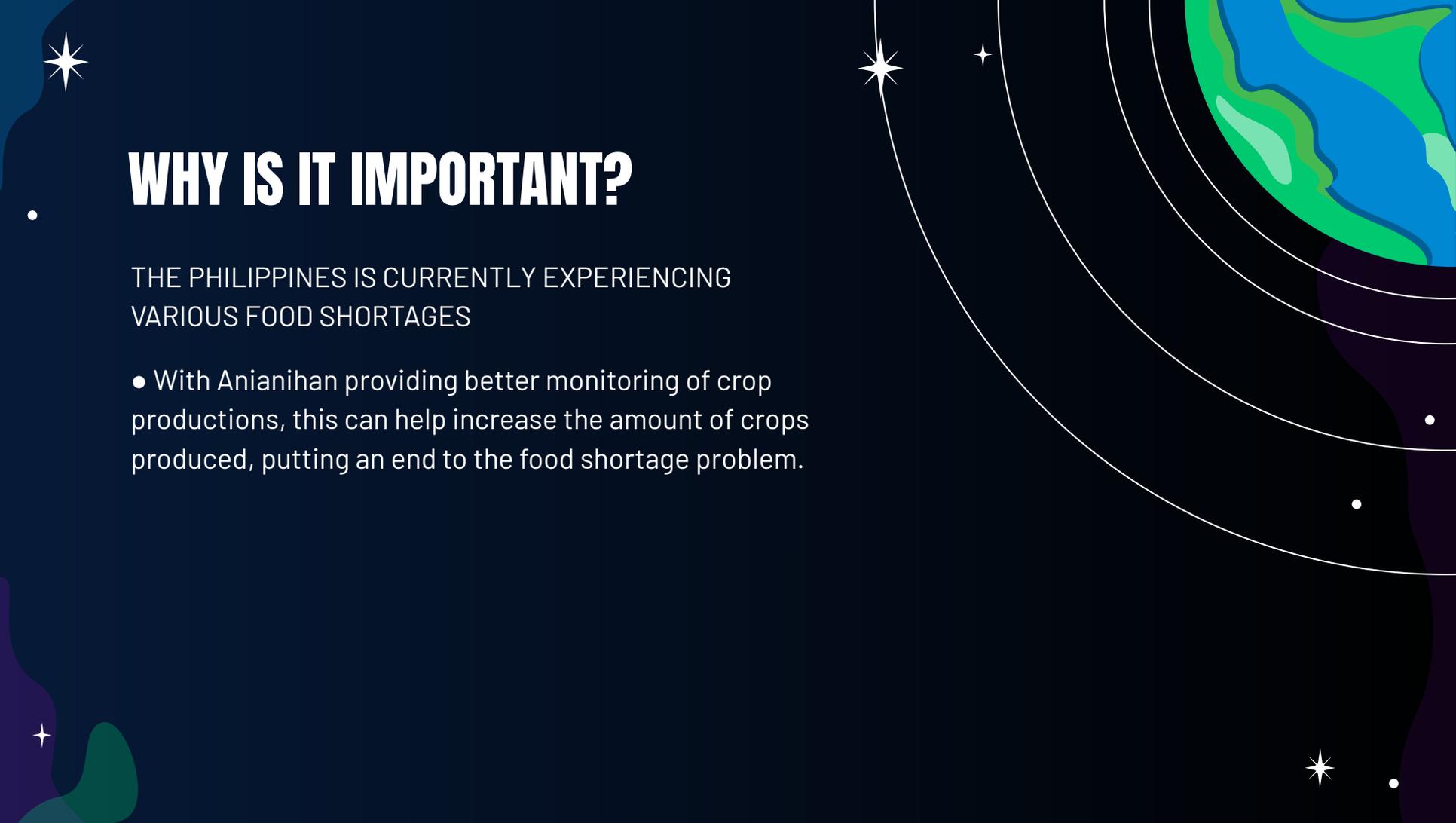
To monitor soil conditions
in the Philippines

To monitor climate and
weather

WHY IS IT IMPORTANT?

- THE PHILIPPINES HAS HAD AN ONGOING PROBLEM WITHIN THE AGRICULTURE SECTOR AND IN THE INEFFICIENT FARMING
 - Due to the problems faced by the agriculture sector of the Philippines, Anianihan can provide data needed, such as the conditions of crop, soil, and weather, in order to improve the quality of agricultural products in the country. Though area increases were observed in MY 2020/21, a larger impact to the estimated record output was driven by favorable seasonal weather, boosting yield potential to an estimated record high.





WHY IS IT IMPORTANT?

THE PHILIPPINES IS CURRENTLY EXPERIENCING
VARIOUS FOOD SHORTAGES

- With Anianihan providing better monitoring of crop productions, this can help increase the amount of crops produced, putting an end to the food shortage problem.

FACTORS WE NEED TO PAY ATTENTION TO

TEMPERATURE

**GEOPHYSICAL
FACTORS**

SOIL MOISTURE

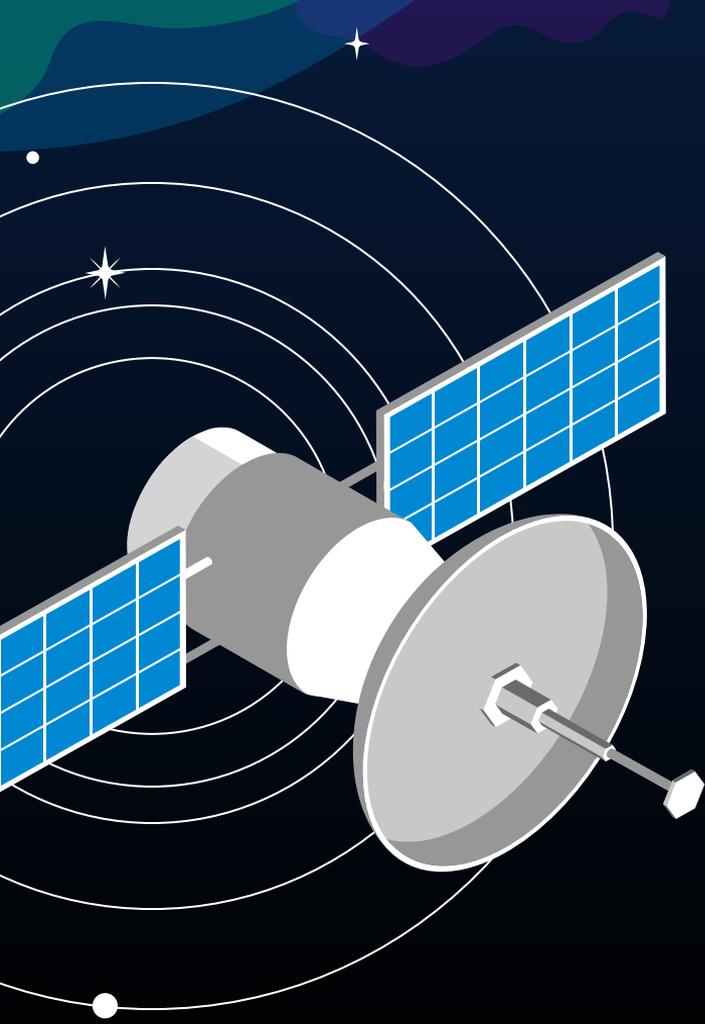
WEATHER CONDITIONS

WHAT ARE THE KEY FEATURES OF THIS MISSION?



Anianihan will have the following instrument (payload)

- **Imaging Payload** - for capturing timely photos of the crop and soil condition for monitoring
- **Thermal Infrared Sensor** - measures land surface temperature



WHAT ARE THE KEY FEATURES OF THIS MISSION?

Integration with the use of data on the existing satellites used by P.A.G.A.S.A. and other South East Asian satellite data

It will observe for a year and this data will be collected to compare to different years

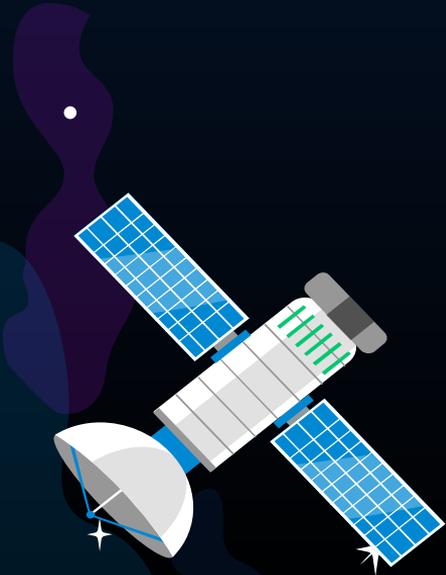
EXAMPLE:

Palay

USDA's Philippines rice market year begins with quarter three, which is planted in April through June and is harvested in July through September.

Corn

Corn may be planted anytime of the year provided there is adequate soil moisture and is best to plant from May to June during the wet season and from October to November during the dry season. - department of agriculture



The background is a dark blue space-themed illustration. It features several white stars of varying sizes, some with four-pointed starburst patterns. There are also white concentric circles representing orbital paths or celestial bodies. The background is decorated with abstract, organic shapes in shades of dark blue, teal, and purple, suggesting nebulae or galaxies. The overall aesthetic is clean and modern.

**Thank you
for listening!**

REFERENCES

- <https://psa.gov.ph/system/files/Full%20Report%2C%20Value%20of%20Production%20in%20Philippine%20Agriculture%20and%20Fisheries%2C%20First%20Quarter%202022.pdf>
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- https://ati.da.gov.ph/ati-car/sites/default/files/9_Basic_Steps_Towards_A_Bountiful_Corn_Harvest.pdf