Space Technology for Socio-Economic Benefits:

The Case for Geospatial Applications

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National Space Agency of Malaysia

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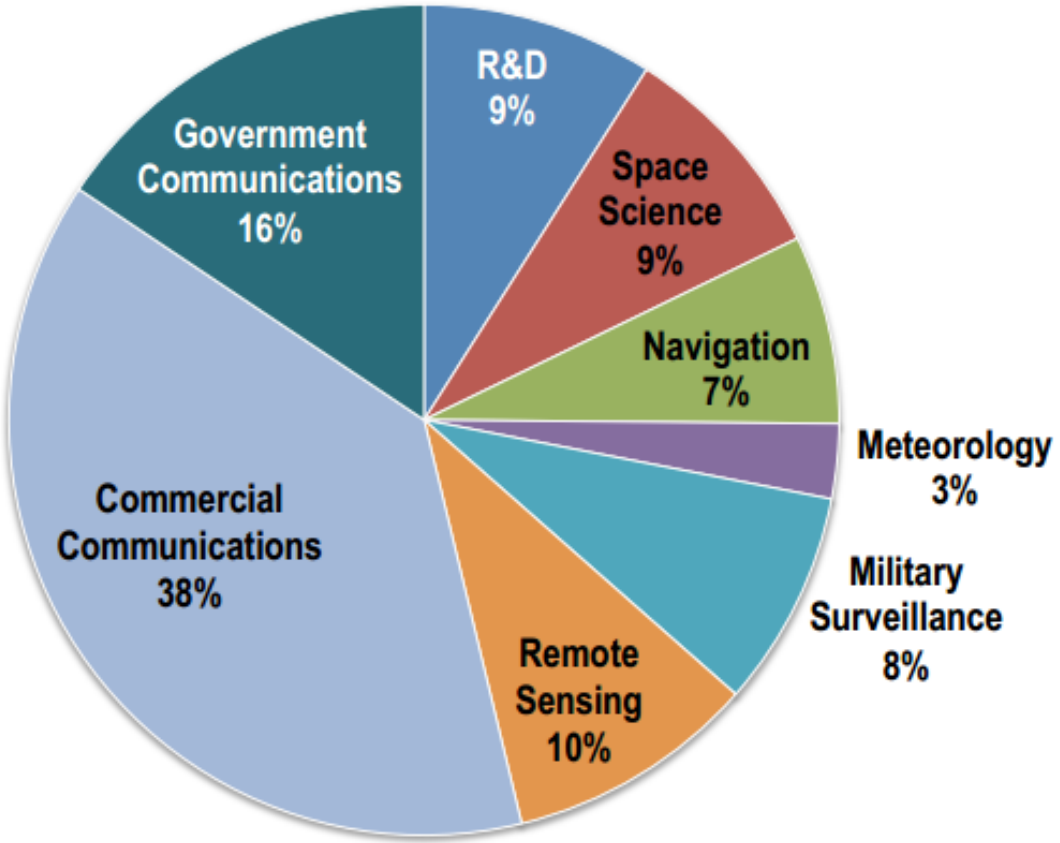
Operational Satellites by Function (as of 2012)



- Over 1,000 operating satellites as of year-end 2012
  - » More than half are communications satellites
  - » More than one third are commercial communications satellites
- More than 50 countries operate at least one satellite (some as part of regional consortia)

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SOCIO-ECONOMIC : how economic activity affects social processes

Space technology

Can be used to monitor crops, provide precise location, linking remote areas, map water courses to determine water storage locations, develop risk maps for areas prone to floods or droughts etc. Data collected through space technology applications thus help policymakers develop better strategies to cope with problems.

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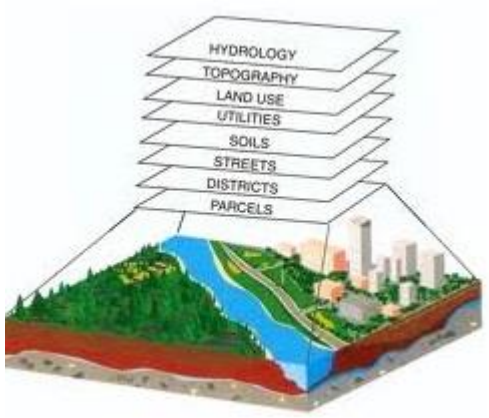
VALUES AND BENEFITS ?

Communication/Broadcasting

Tracking and navigation



Resource/environmental planning and monitoring

Disaster management and Search & Rescue (SAR)

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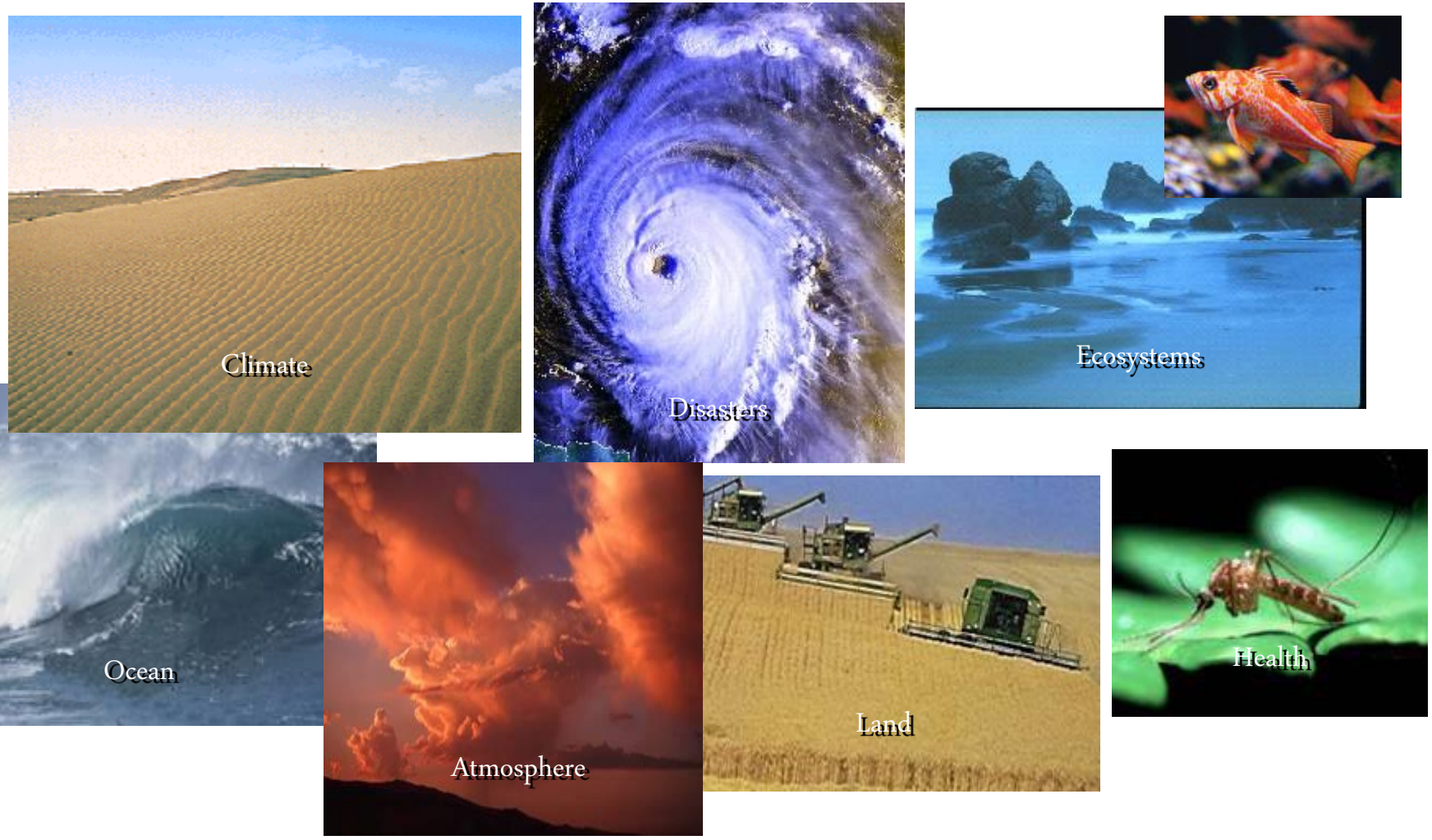
AREAS OF APPLICATIONS



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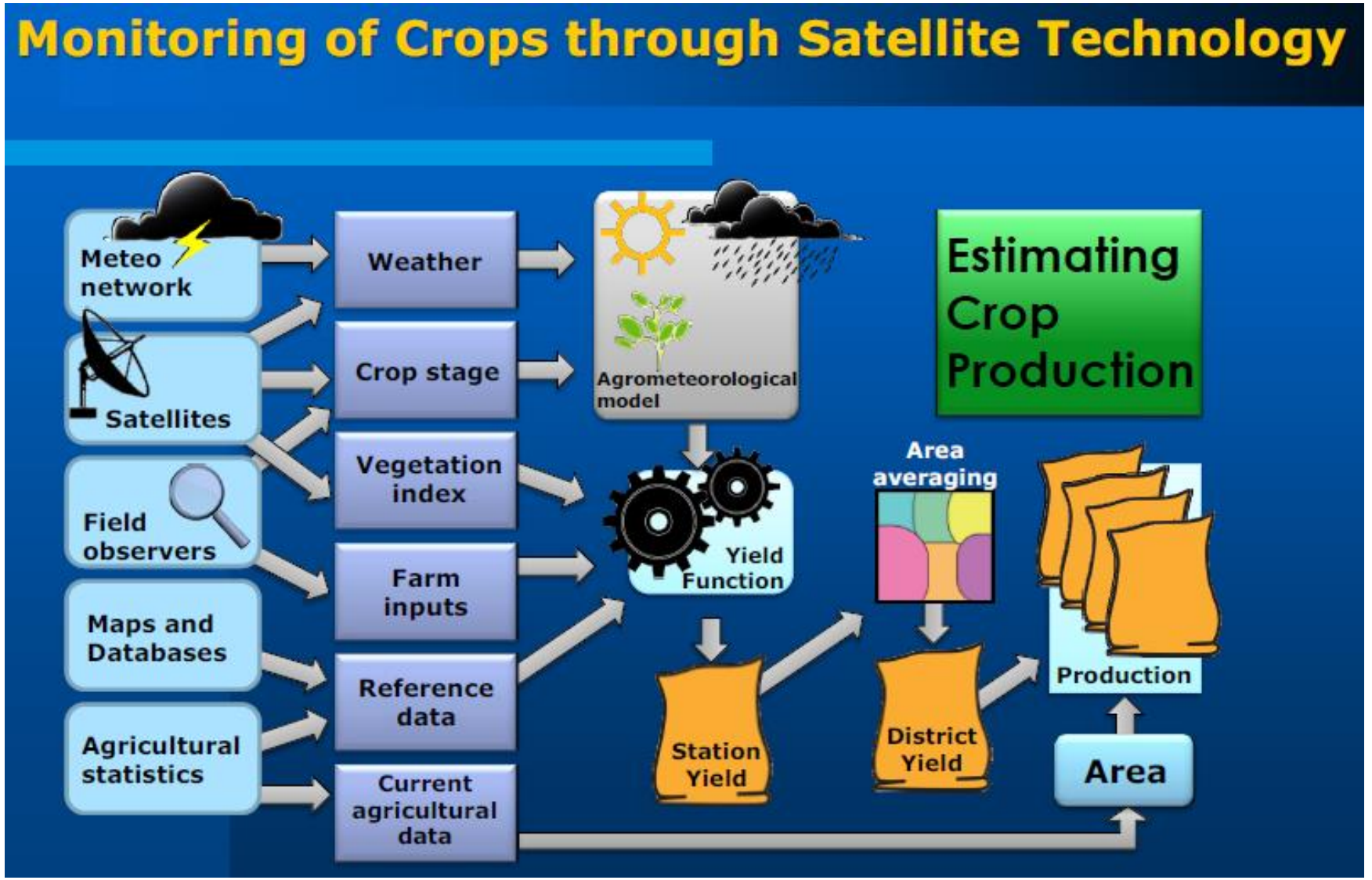
VALUES AND BENEFITS ?

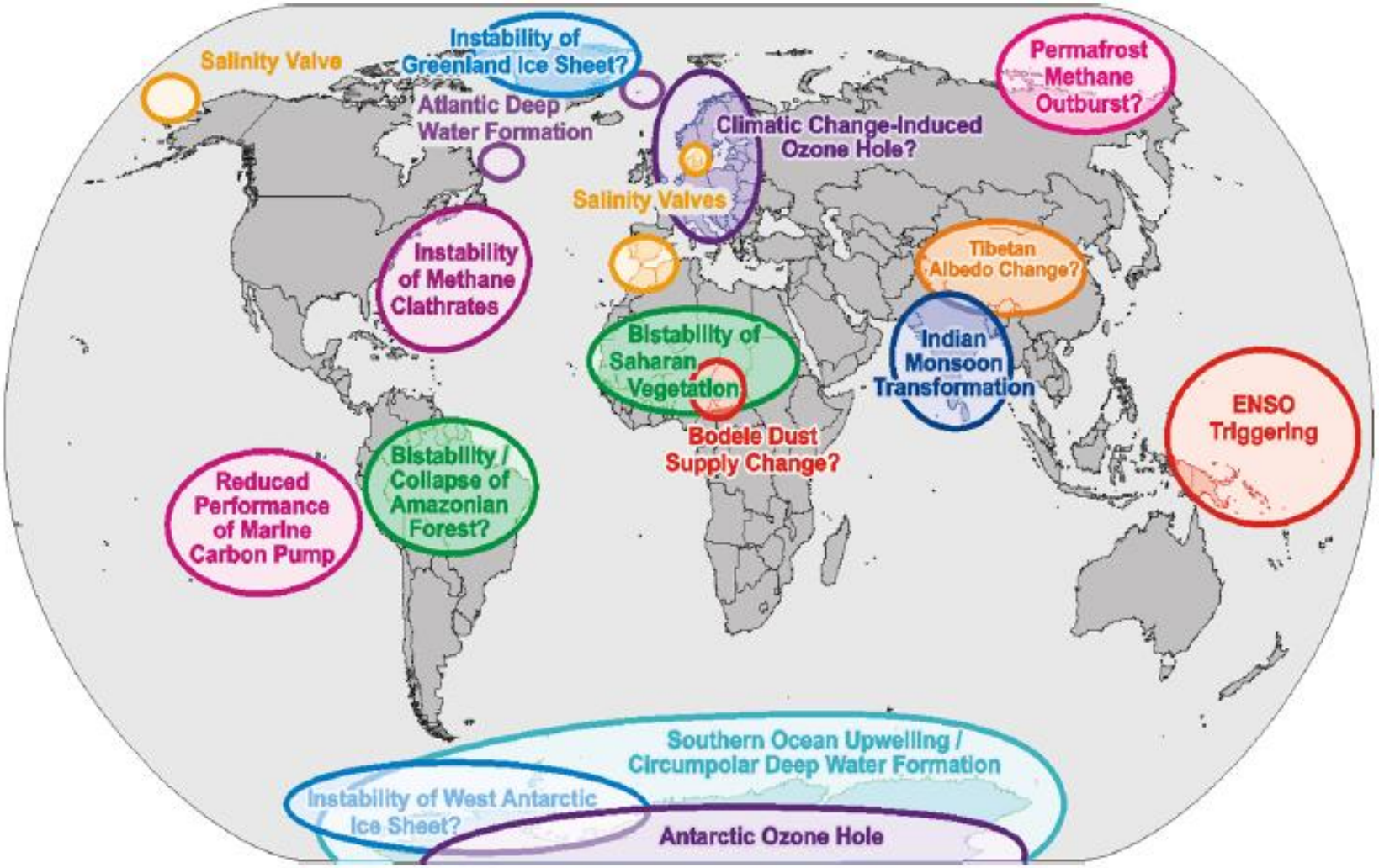
National Level



VALUES AND BENEFITS ?

International Level

Tipping Points on Earth (source: Lenton et al., 2008).



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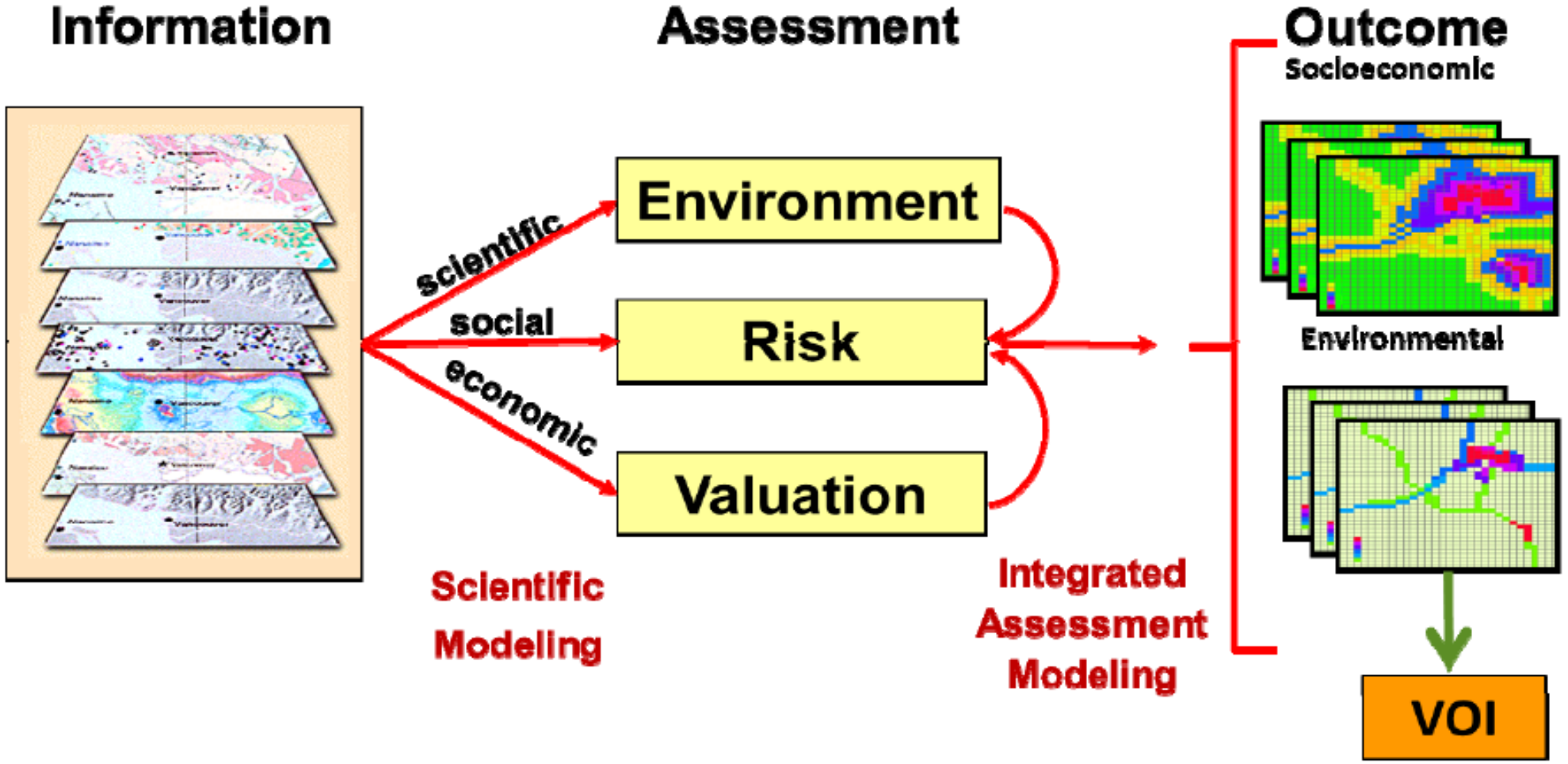
VALUES AND BENEFITS ?

The Geospatial Decision Framework adopted.



ANGKASA SPACE PROGRAM AND ACTIVITIES

- Pursue R&D activities in space science, space technology and allied fields for achieving the objective of self-reliance
- Enhance indigenous capabilities in space technology and promote peaceful applications of space sciences and technology for economic development of the country
- Prepare and propose national long term as well as short term space programs
- Advice the government in all space related matters
- Liaise with national & international bodies and agencies

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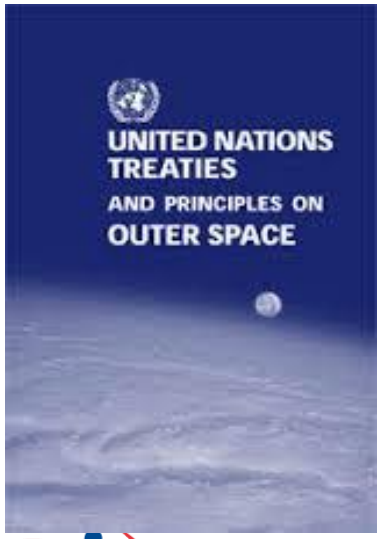
Need for a national space policy



Immersion of the Government in space programs that translate into a public good such as resources and environmental monitoring, communication and broadcasting, disaster management and SAR, and tracking and navigation.

Emphasizing that space activities contribute to the goals of, **and fully respect the principles set out by, the United Nations' "Outer Space Treaty",** in particular the exploration and use of outer space for the benefit and in the interests of all mankind for exclusively peaceful purposes .

Reinforcing public and industry support for the research, development and applications of space technologies, ensuring complementarities of actions and maximizing synergies with other developments;

Organizing the **governance of activities** in particular to shape the evolution of the national space programs.

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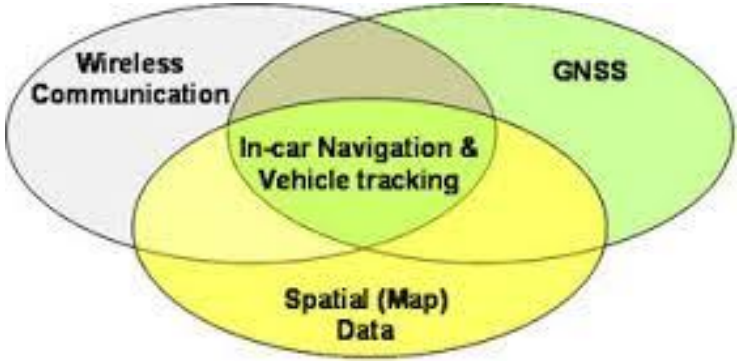
AMBULANS


Wireless Communication
GNSS
In-car Navigation & Vehicle tracking
Spatial (Map) Data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CONGRATULATIONS
TO THE "TRY ZERO G 3" WINNERS FROM MALAYSIA
Winner Name
FABIEN BOUHIER
Proposed Idea
"Growing bubbles in a glass of water"
Winner Name
SABRINA BINTI MOHAMMAD SALIM & ZAKIAH BINTI MOHAMMAD SALIM
Proposed Idea
"Bernoulli's principle"


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Galileo
Compass
JAXA
SPAC
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