

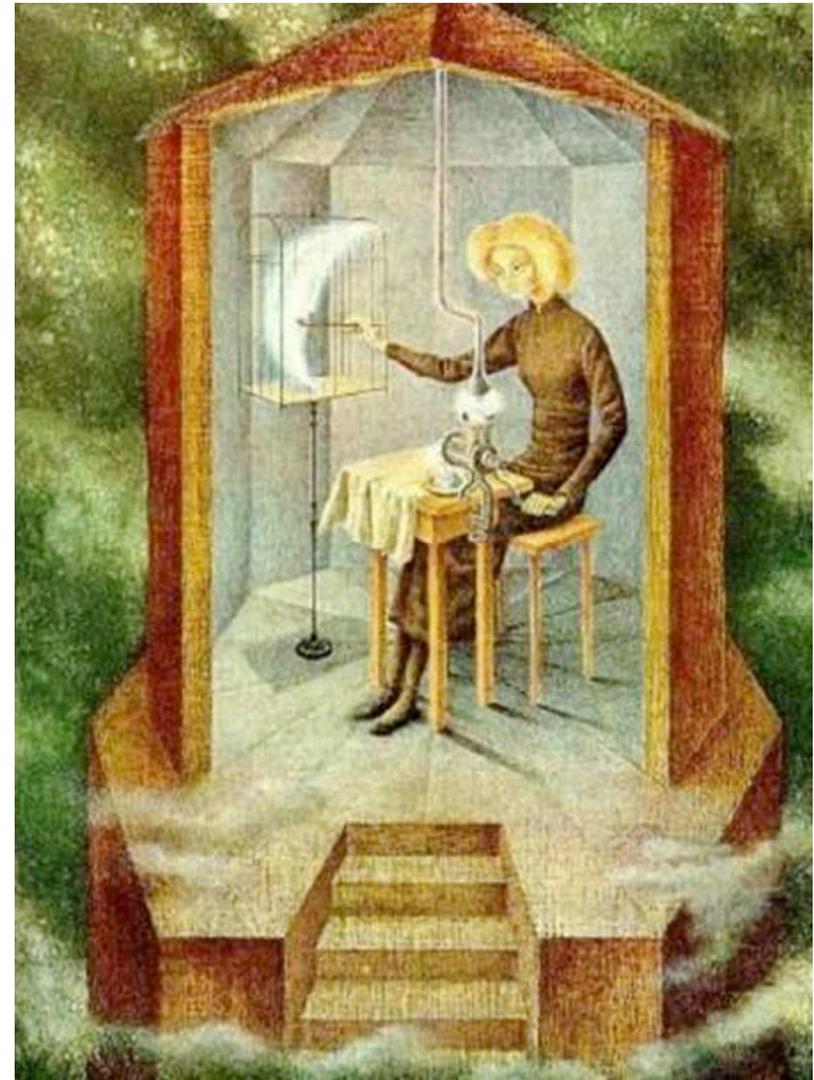
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# Space Infrastructure Development For Social Needs

57th UN Committee on Peaceful  
Uses of Outer Space (COPUOS)

# Outline

- Current Situation:  
Mexico Facing Disasters
- Strategy Development:  
Space Infrastructure Program
- Expected Reach:  
To Address Social Needs



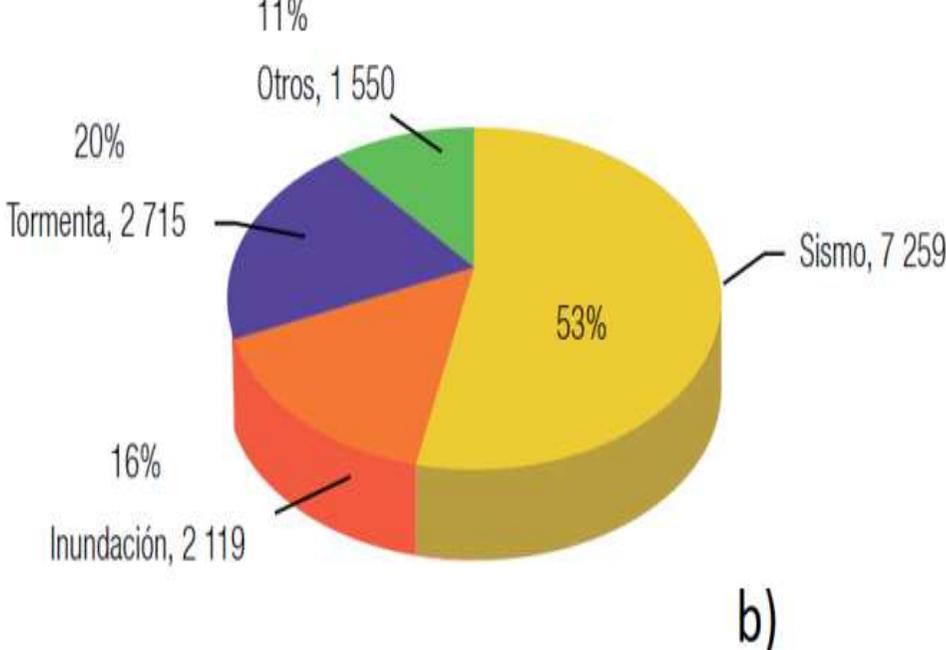
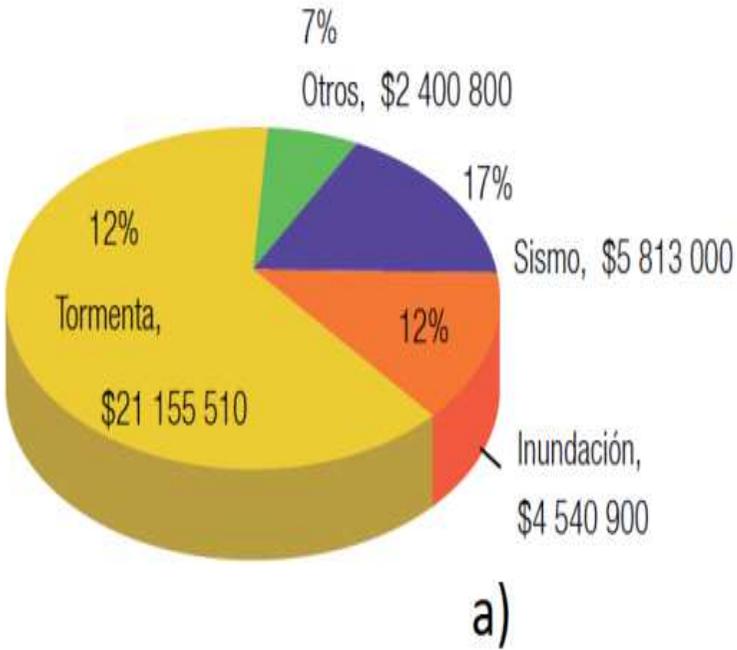
*Remedios Varo, Papilla estelar, 1958*

# Current Situation: Mexico facing Disasters



*Rufino Tamayo, El Sol de Cuernavaca, 1968*

# Economic Loses vs Lost Lives



a) Economic loses in USD billions  
 b) Lost lives (OECD, 2013)

# A Possible Solution: Satellite Imagery But Difficulties Exist

No  
domestic  
satellite  
with total  
national  
coverage

Limited  
availability

User  
license but  
no  
property

National  
security  
dependent  
on foreign  
assets

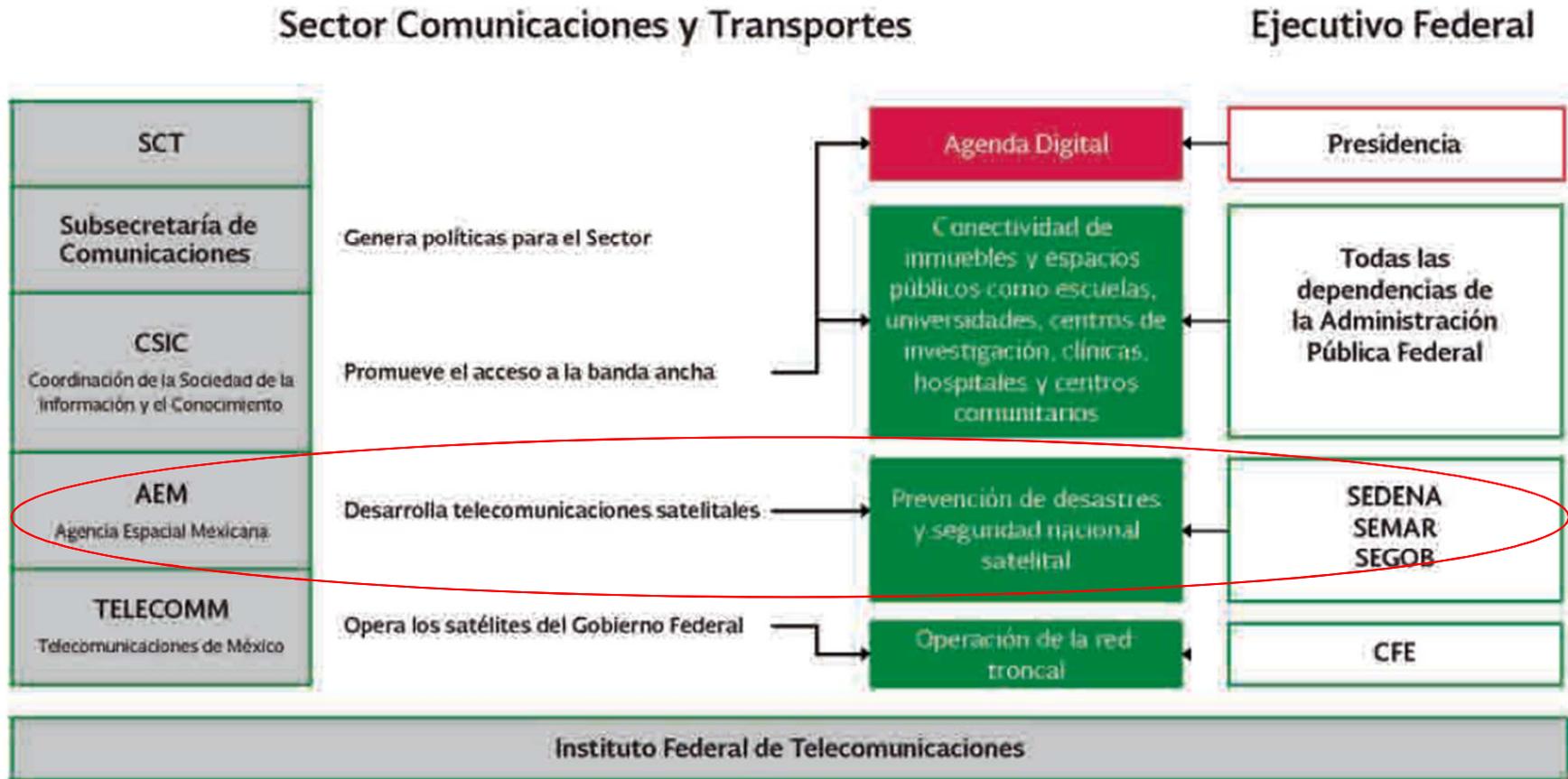
EO  
satellites  
not  
tailored for  
national  
needs

# Strategy Development: Mexican Space Infrastructure Program



Rufino Tamayo, *Sin título*, 1988

# Space Infrastructure in the Sectoral Plan of the Ministry of Communications and Transportation (SCT)



# The AEM Science and Technology Priority Areas

## Science Research and Technology Development

- Scientific and technological development R&D projects (Small satellites manufacture)

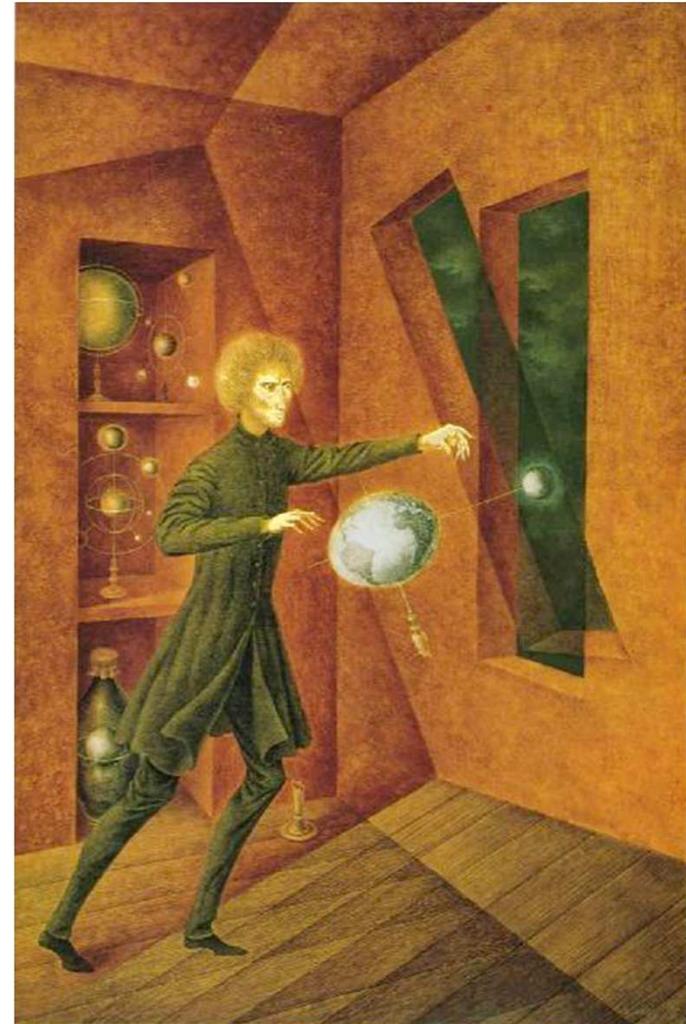
## Telecommunications

- Communication systems (i.e. Connectivity for digital divide)

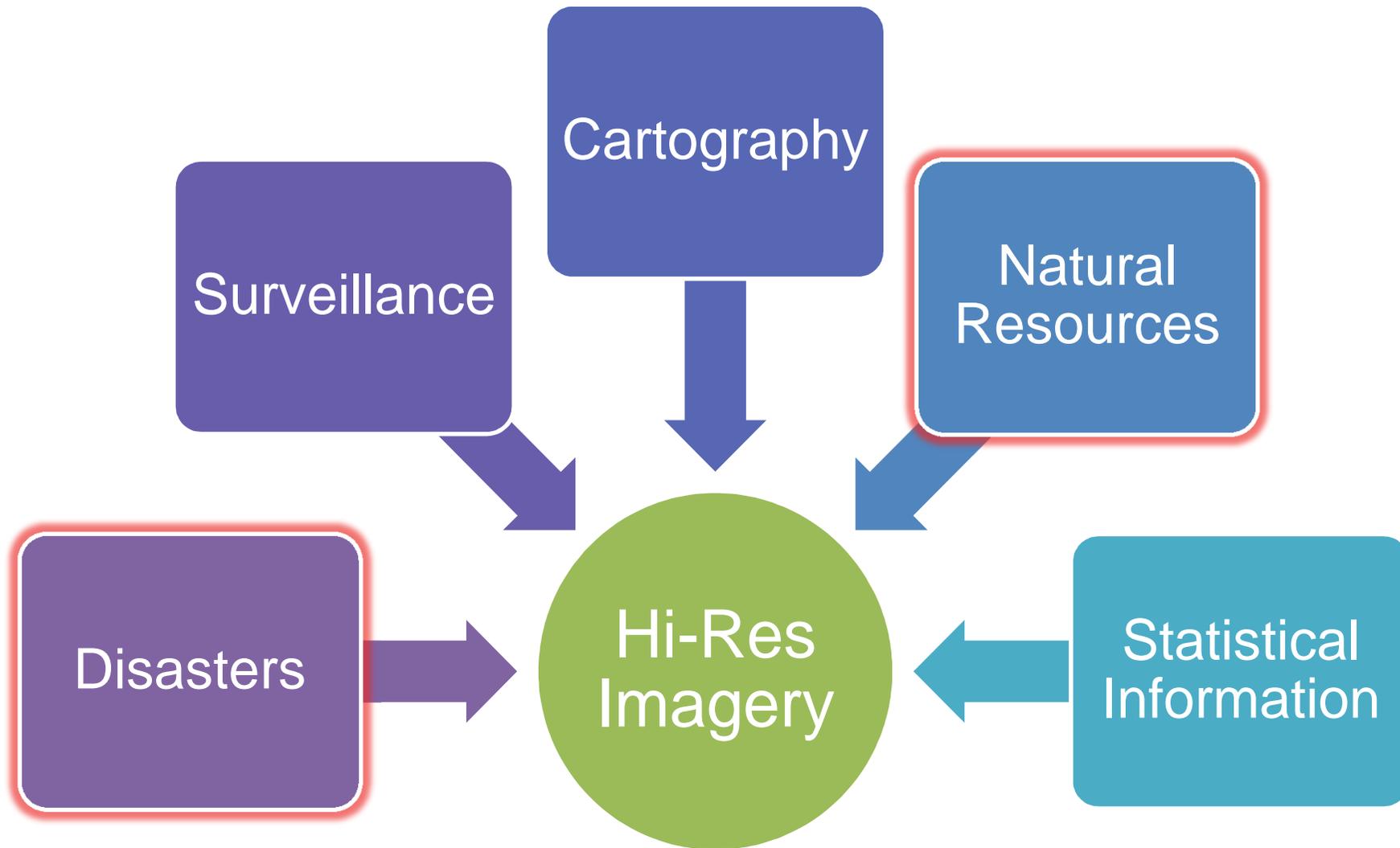
## Disaster Management

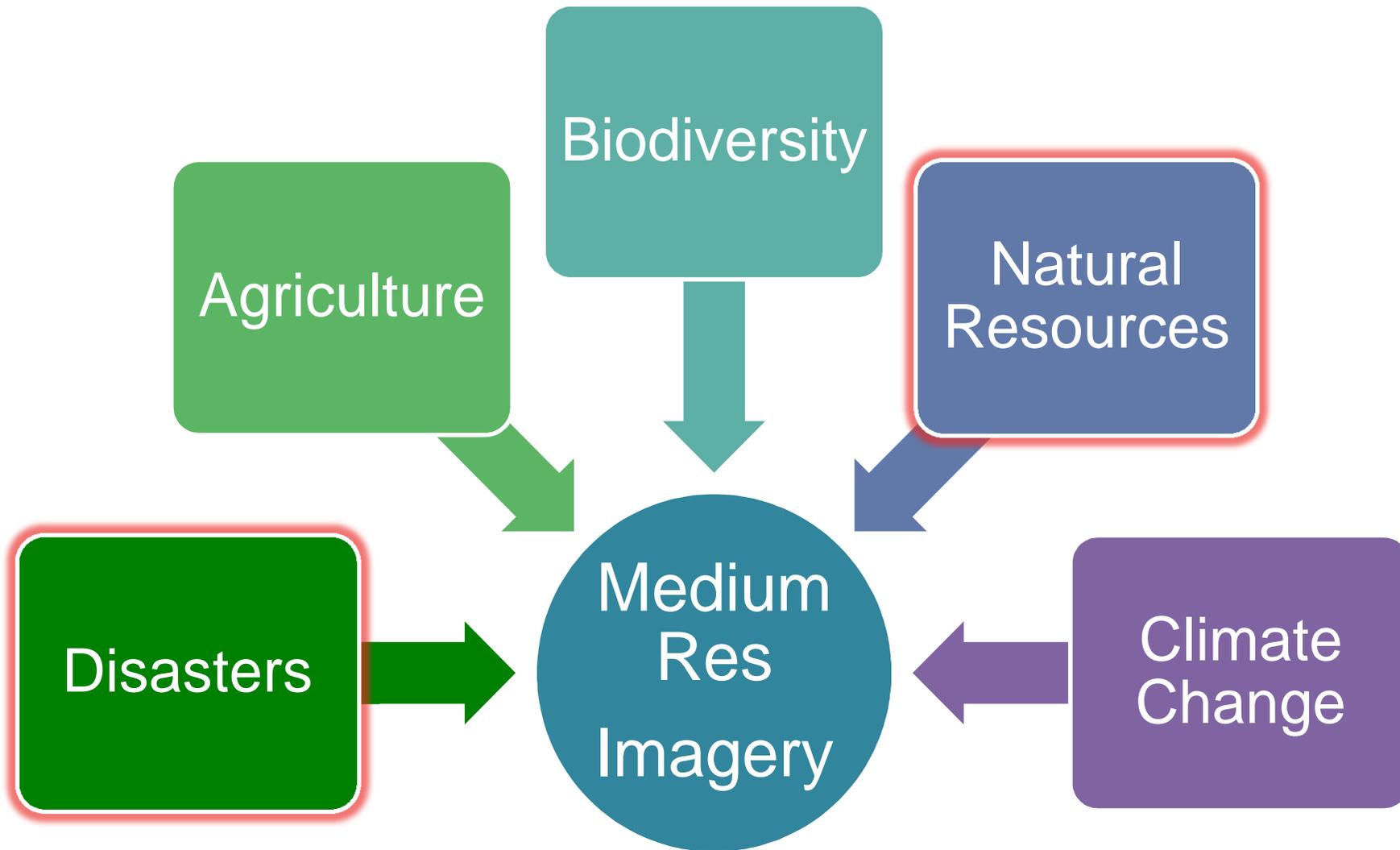
- Earth Observation (i.e. Early Warning System)

# Expected Reach: To Address Social Needs



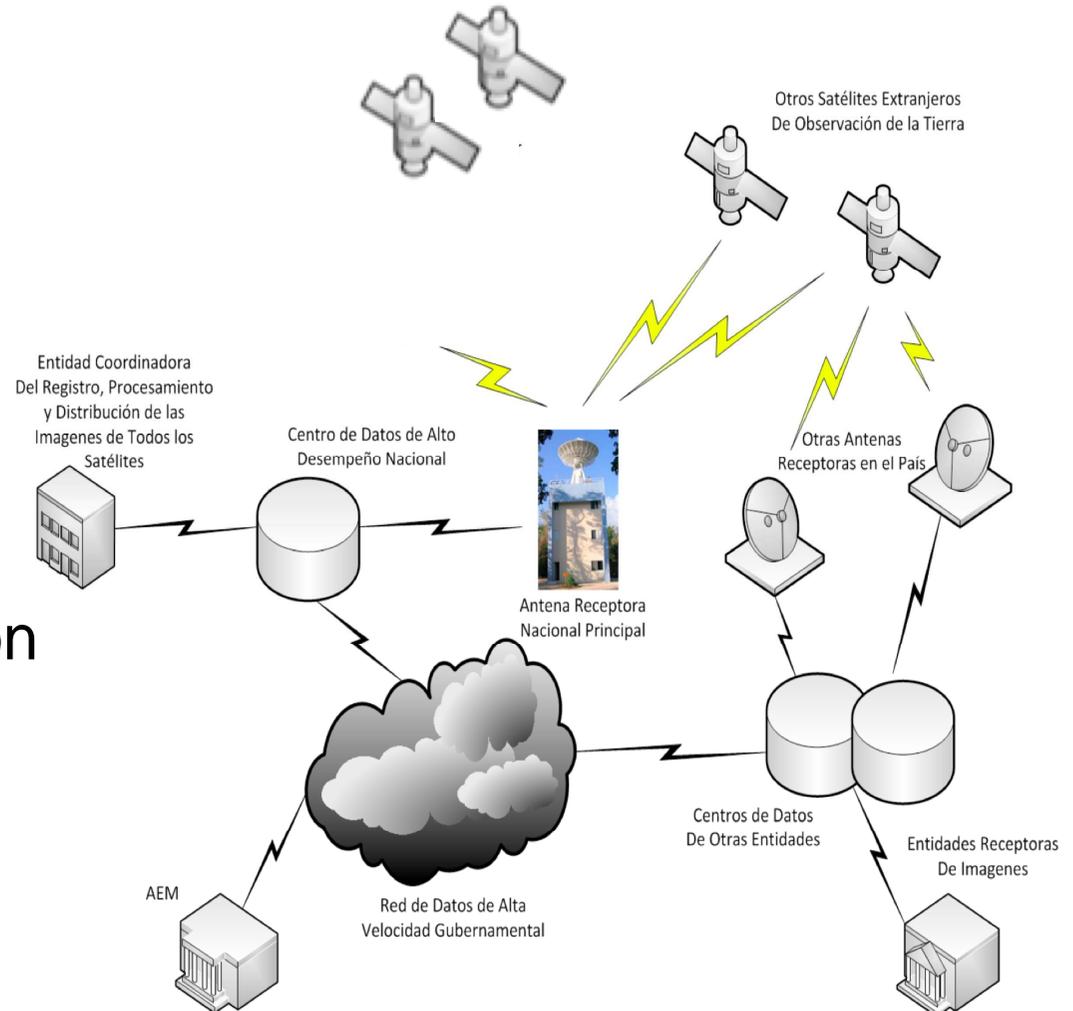
*Remedios Varo, Fenómeno de ingravidez, 1963*



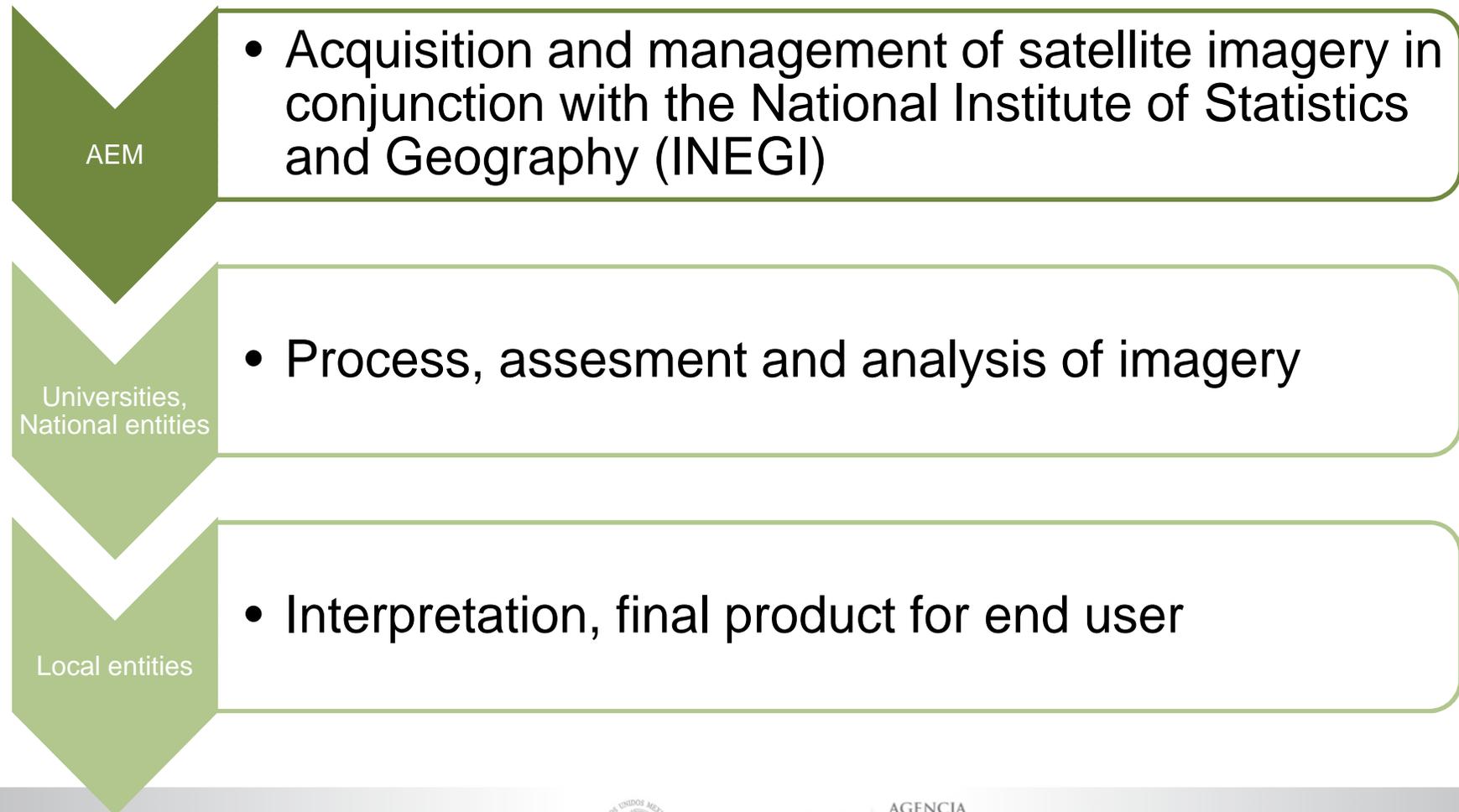


# Space Infraestructure For Earth Observation - Draft-

- 3 years development
- Life expected:  
Satellite.- 7 years +  
terrestrial segment.-15  
years
- LEO RS satellite with  
thermal sensor (250m)  
and multispectral resolution  
less (30m)
- Ground space  
infrastructure



# AEM Policy on Disaster Management



# Current Strategies

- Develop a National Centre for Storage and Processing Geomatics, Astrophysics and Space Data
- Develop a small satellite constellation for disaster management purposes
- Develop qualified human capital for future satellite projects
- Areas of expertise to follow up: stabilization control, remote sensing cameras, satellite propulsion etc.
- Work in international cooperation

# See you in 2016



# GRACIAS



**SCT**

SECRETARÍA DE  
COMUNICACIONES  
Y TRANSPORTES

# AEM

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MEXICANA

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