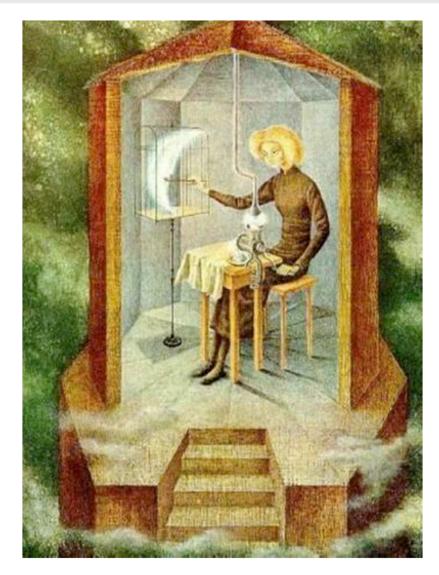
# Space Infrastructure Development For Social Needs

57th UN Committe 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



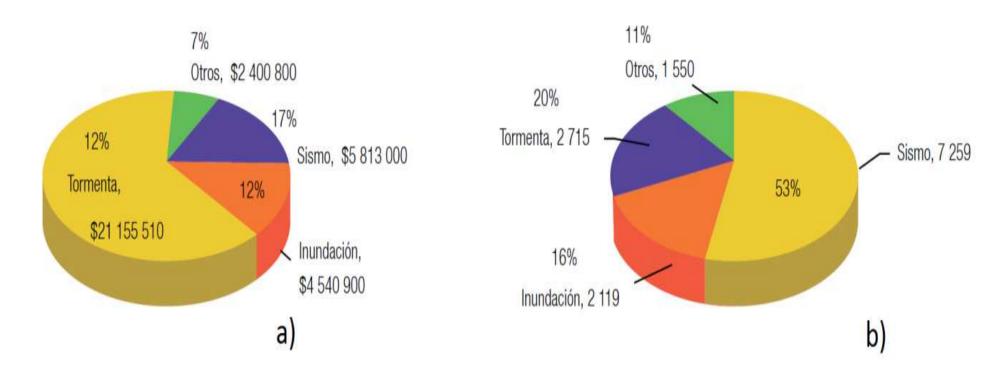
Rufino Tamayo, El Sol de Cuernavaca, 1968







#### **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 wiith 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







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

Sector Comunicaciones y Transportes Ejecutivo Federal SCT Agenda Digital Presidencia Subsecretaría de Conectividad de Genera políticas para el Sector Comunicaciones inmuebles y espacios Todas las públicos como escuelas. dependencias de universidades, centros de la Administración CSIC investigación clínicas. Pública Federal Promueve el acceso a la banda ancha Coordinación de la Sociedad de la hospitales y centros información y el Conocimiento comunitarios AEM SEDENA Prevención de desastres Desarrolla telecomunicaciones satelitales y-seguridad riacional SEMAR Agencia Espacial Mexicana SEGOB satelital TELECOMM Opera los satélites del Gobierno Federal Operación de la red Telecomunicaciones de México CFE troncal Instituto Federal de Telecomunicaciones



# 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)

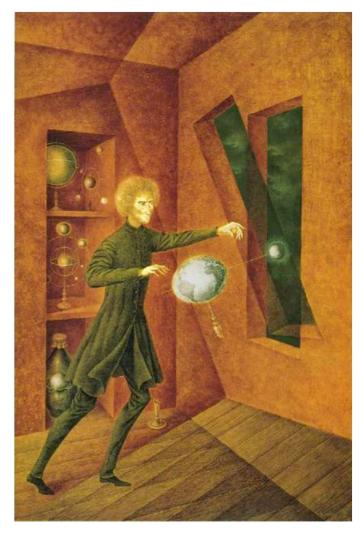
Disaster Management

 Earth Observation (i.e. Early Warning System)



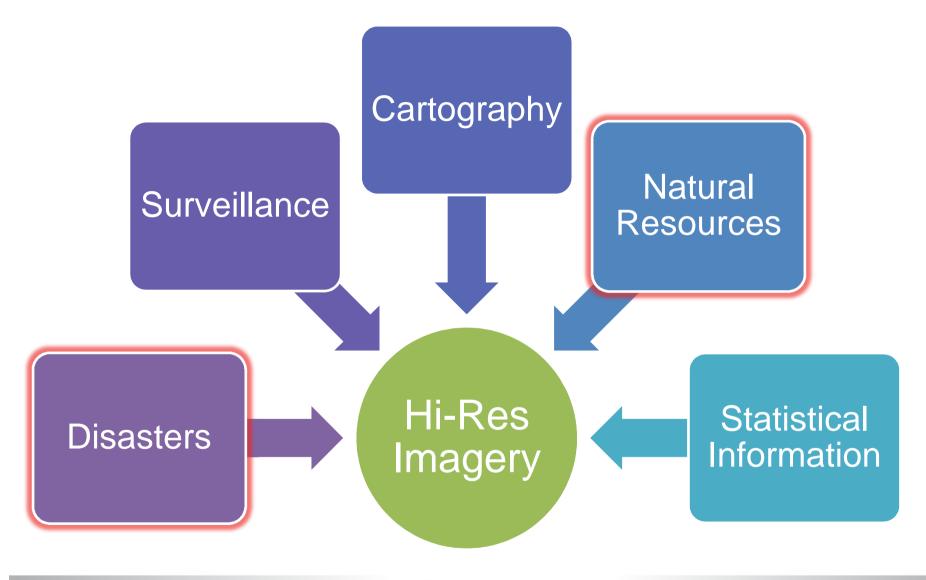


# **Expected Reach:** To Address Social Needs



Remedios Varo, Fenómeno de ingravidez, 1963

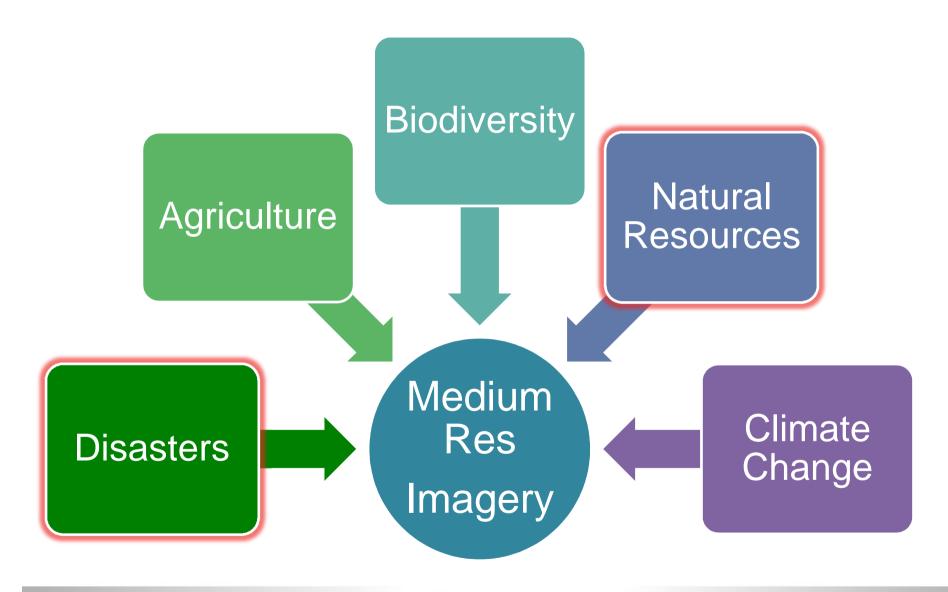














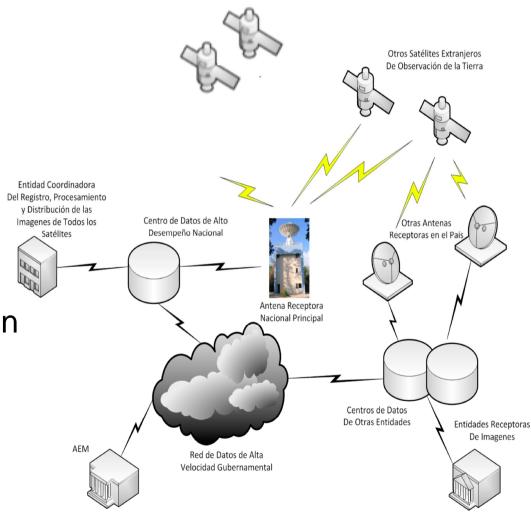




# Space Infraestructure For Earth Observation - Draft-

- 3 years development
- Life expected:

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



### **AEM Policy on Disaster Management**

AEM

 Acquisition and management of satellite imagery in conjunction with the National Institute of Statistics and Geography (INEGI)

Universities, National entities Process, assesment and analysis of imagery

Local entities

Interpretation, final product for end user





#### **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**







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