

PREPAREDNESS FOR EFFECTIVE RESPONSE: SIMULATION EXERCISE PROCESS AND PRACTICES

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SIMEX and Micro Learning Hub

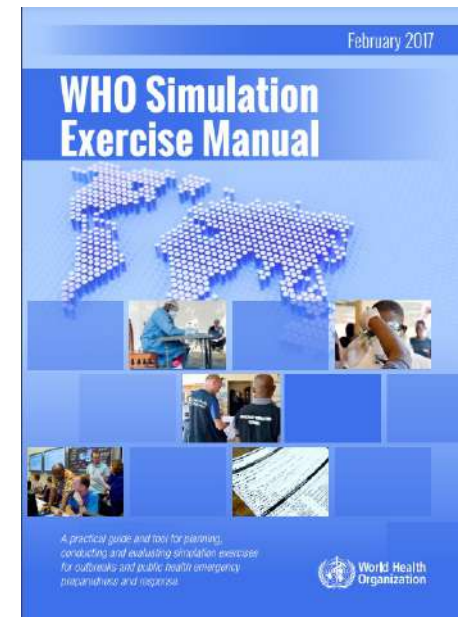
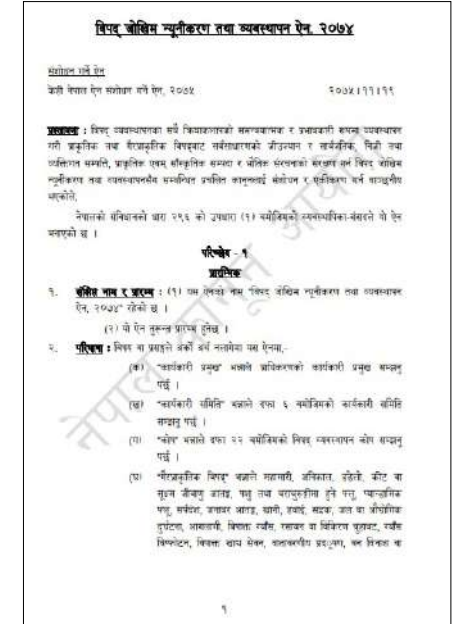
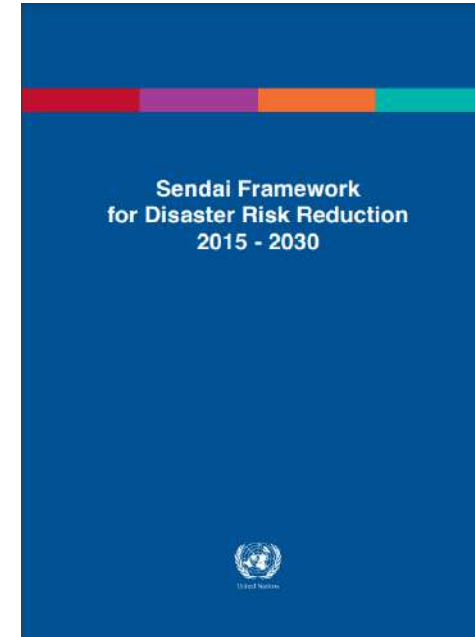
Historical Perspective

- History of simulation goes back to the mid 1800s.
- In 1910 first flight simulator was created to train airplane pilots .
- On 16 July 1945 DM, first DM simulation was carried out by the Manhattan Engineer District (MED) in US to test and assess effects of a nuclear weapon.
- Red Cross started conducting drill simulations in Nepalese context

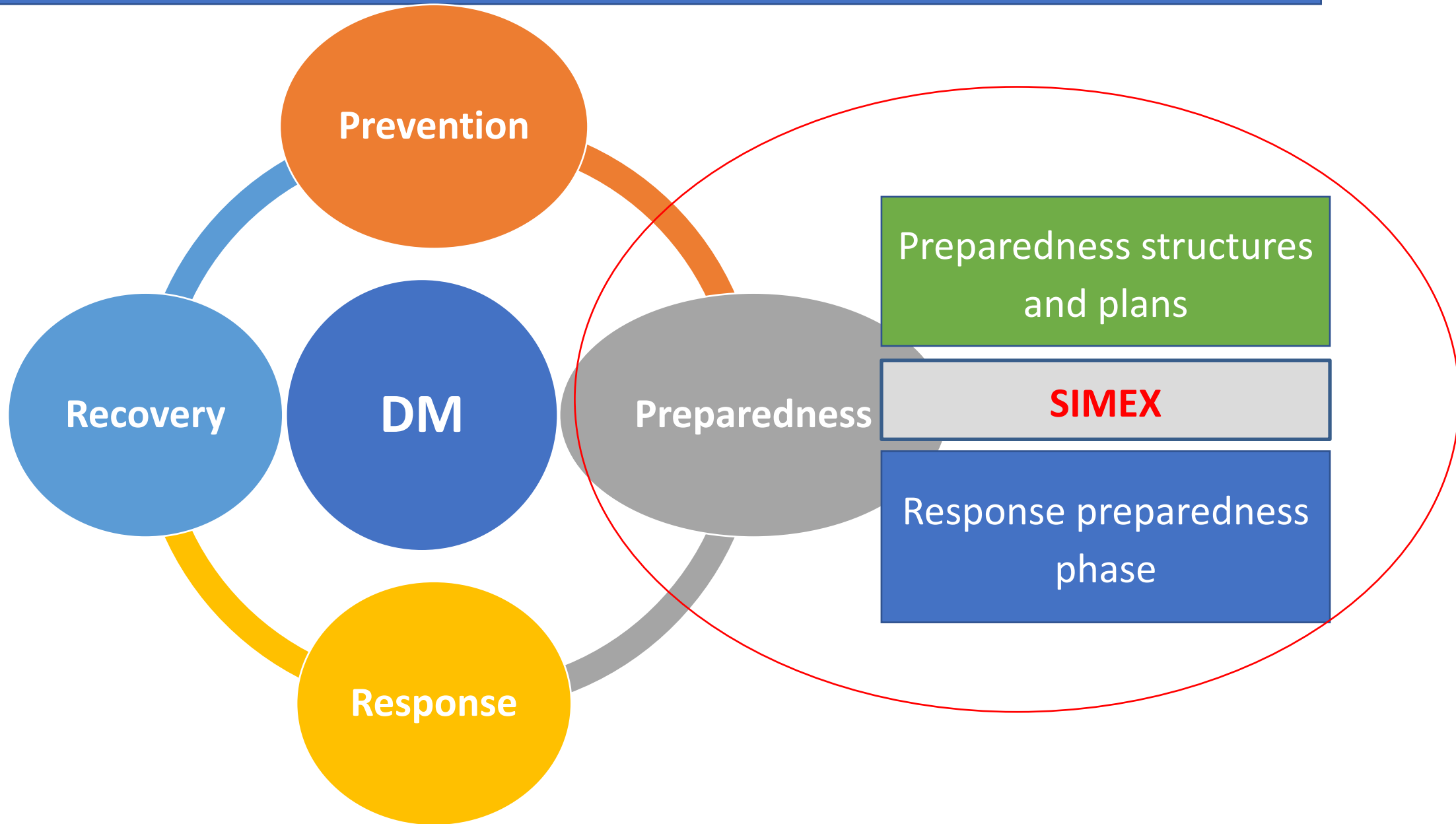


Overview of the Simulation

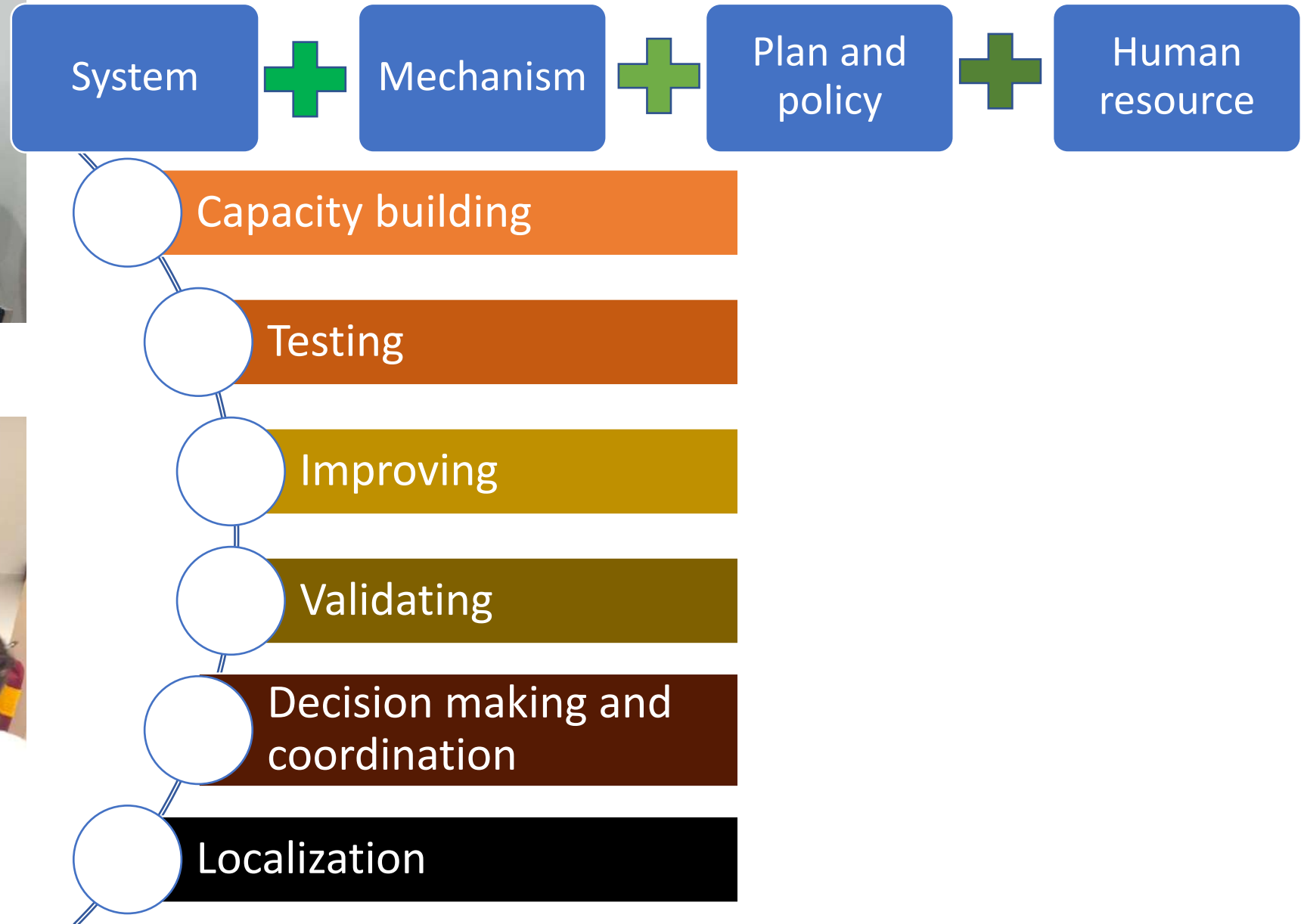
- Disaster Simulation is the part of Disaster Preparedness
- Legal mandate
 - Sendai framework
 - DRRM Act 2017
 - LGO Act 2074
 - National policy for DRR 2018
 - National Strategic Action Plan on Search and Rescue
 - Other DRR&R policies and guidelines
- UNDRR, IFRC, UNOCHA, ECHO, WHO have developed Simulation Guideline



Overview of the Simulation



Significance of Simulation



Types of Simulation

Tabletop



Drill



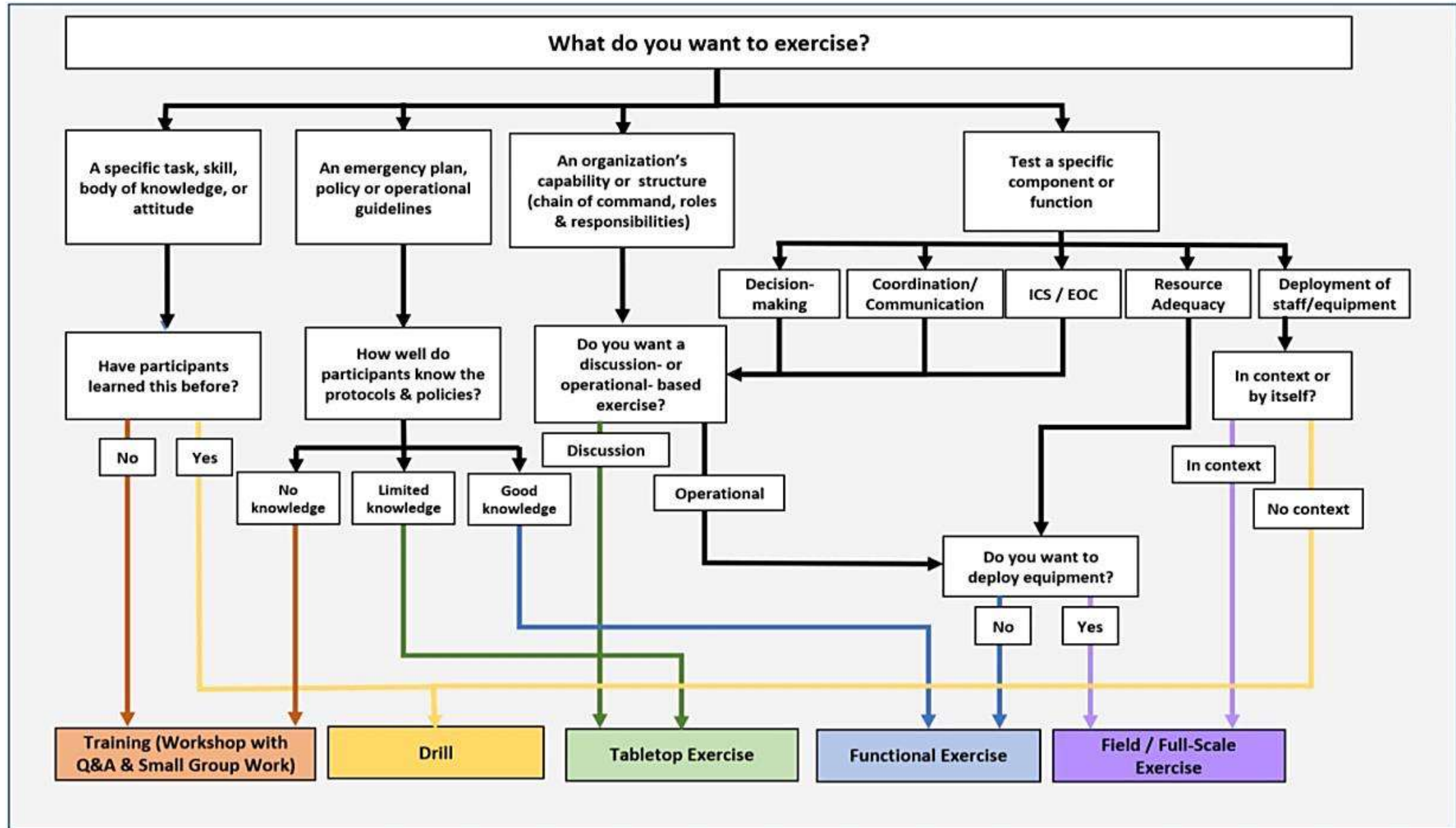
Functional



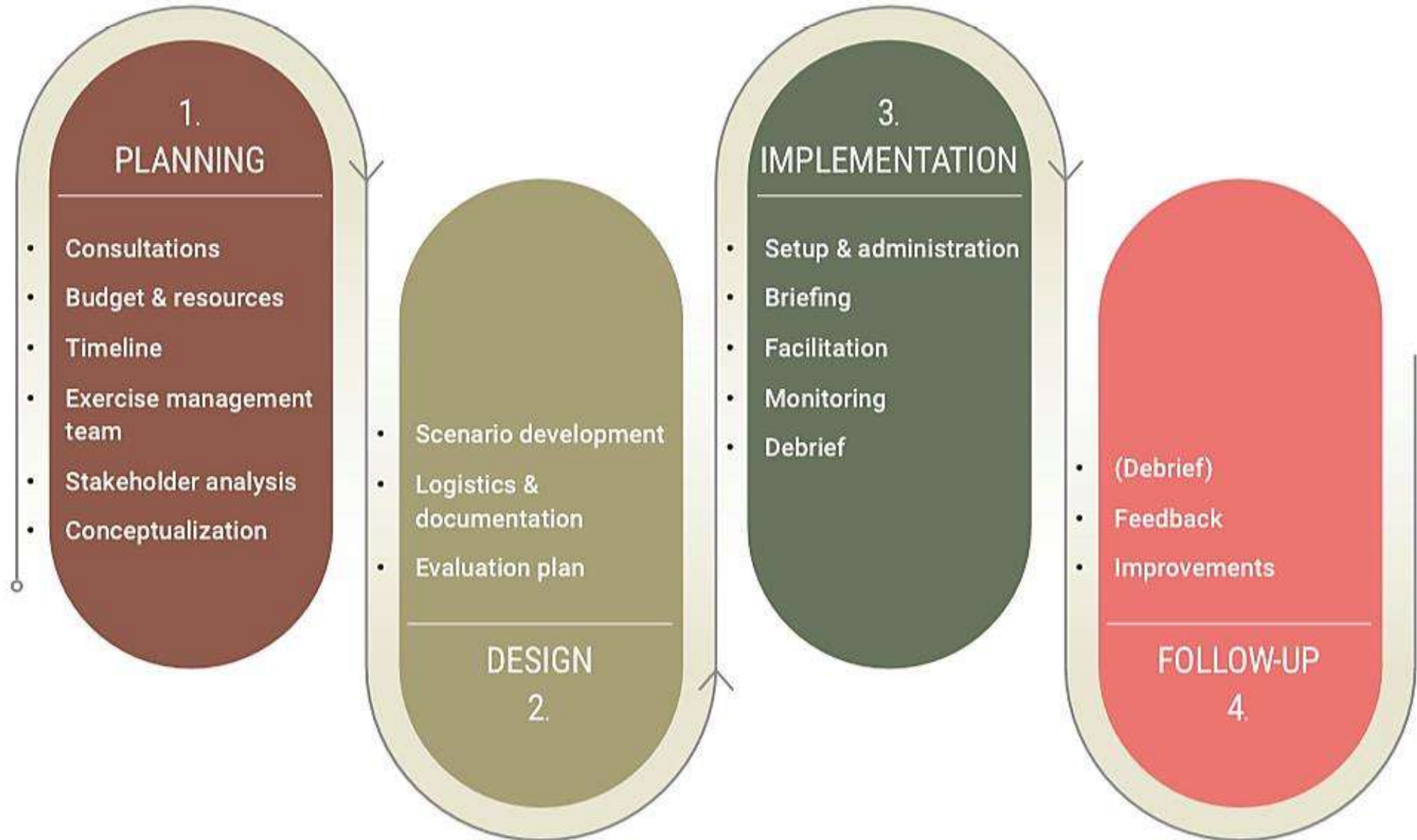
**Field
exercise/Full
Scale Exercise**



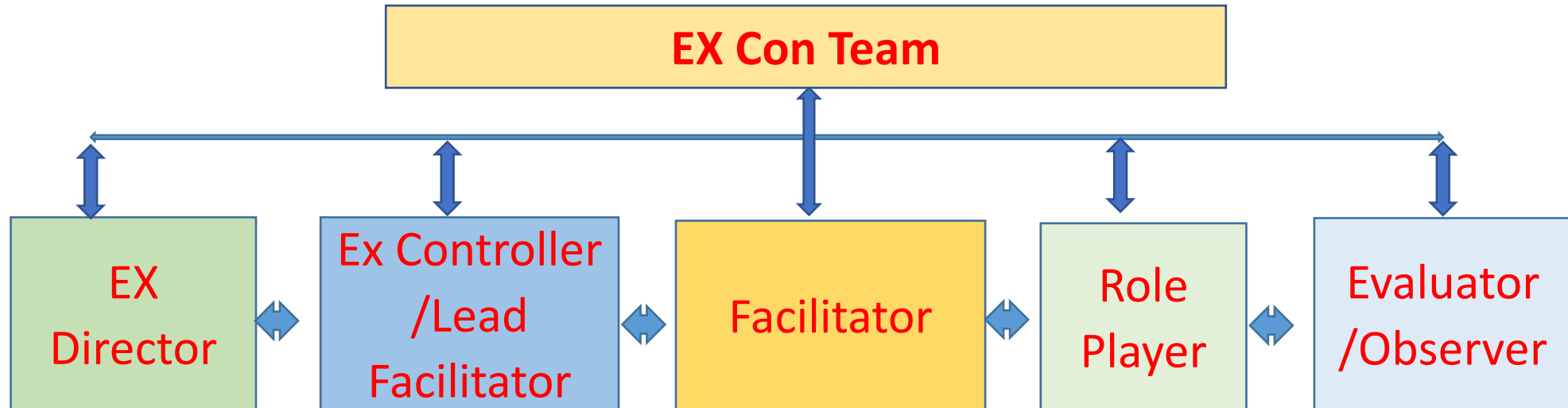
Selection of Simulation



Simulation Process

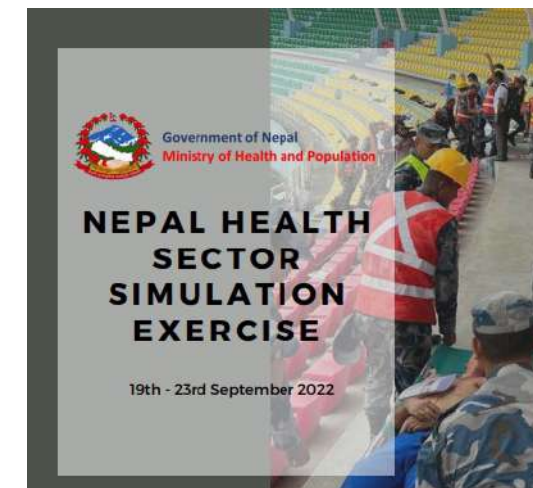


Conduct Team



DRR Simulation Scenario in Nepal

- ❖ INSARAG Simulation Exercise conducted in 2009 (MoHA and UNOCHA)
- ❖ MPAT TE-17 in 2009 and MPAT TE-28 in 2016 (MoD)
- ❖ Student Summit on Earthquake Safety in 2009 (NSET Nepal)
- ❖ DREE : 2011, 2013, 2016, 2018 and 2019 (five exercises) (MoD and PACCOM)
- ❖ DEOC Simulation Exercise in 16 districts by UNDP and Nepal Red Cross Society in 2012
- ❖ **NEOC Tabletop Simulation in 2010 (MoHA and NSET Nepal)**
- ❖ Pacific Angle 2012, 2014 and 2017 (MoD and US Airforce)
- ❖ TIA Mock Drill of Plane Crash in 2017 (TIA)
- ❖ National Level CCCM Simulation for Security Forces 2018 (DoUDBC and IOM)
- ❖ TIA DRP Field Training Exercise in 2018 (TIA supported by NSET Nepal)
- ❖ Nepal Health Sector Simulation Exercise in 2022 (MoHP and WHO)
- ❖ Mass Casualty Simulation in 2023 (APF and US Embassy)
- ❖ TTX conducted by NDRRMA/MOHA from USAID Tayar Nepal 2021-2023
- ❖ UNDP Super led exercise 2022-2023

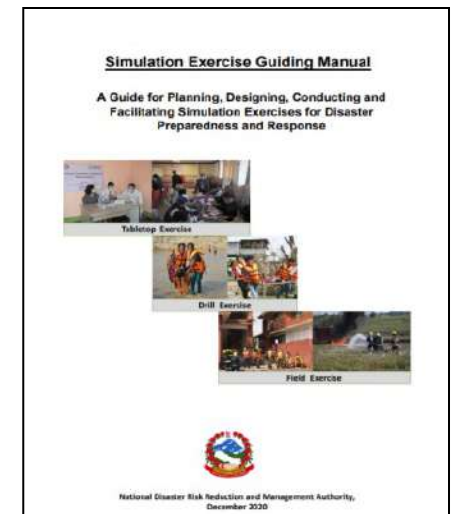


Recent Simulation at Province and Municipality



Current Trends in Simulation

- ❖ Mostly drills are conducted at local level especially in earthquake, fire, medical, and water rescue scenarios.
- ❖ Tabletop exercises are conducted at central, provincial and municipal levels.
- ❖ Functional/field exercises are conducted in medical, aviation sectors and security sectors.
- ❖ Full scale exercise is rarely conducted in the country.
- ❖ **USAID Tayar Nepal:**
 - Developed Simulation Exercise Manual and submitted to NDRRA and MoHA
 - Organized ToT for government, and other key stakeholders
 - Formed SIMCON Team as national resource team
 - Conducted TTX in 6 municipalities engaging federal to local level stakeholders



Observations

- ❖ Stakeholders' still lack awareness thus believes it's wastage of time & money.
- ❖ At local level people are mostly aware of drill.
- ❖ Ensuring participation of concerned officials from respective organizations is difficult.
- ❖ Trend of displaying capacity instead of testing system and procedures.
- ❖ Inter-organizational and inter- government simulations are hardly occurring.
- ❖ Lack government resources, heavily dependent on external assistance.
- ❖ Simulations are more focused on specific regions.
- ❖ Doesn't fall into priority of private and corporate sectors.
- ❖ Municipalities such as Rajapur, Bhimeshwor and Birendranagar formulated policies based on action plan derived from simulation exercises.

From GEDSI Prospective



Way Forward



Endorse Simulation Exercise Manual prepared by NDRRMA and USAID Tayar Nepal



Educate stakeholders about need of simulation



Conduct ToT for producing instructors



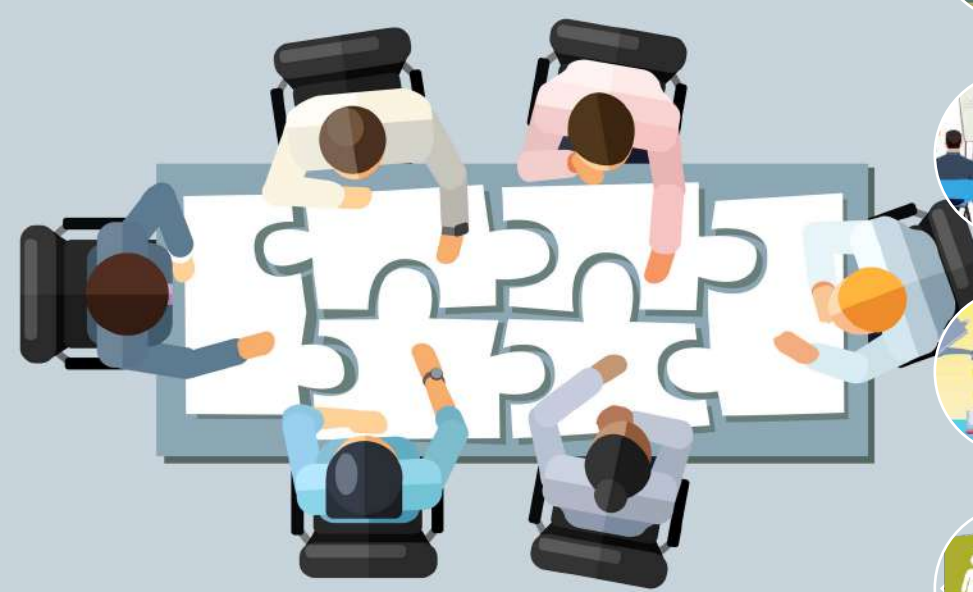
Ensure national investment



Incorporate GEDSI prospective



Encourage (policy intervention?) private & corporate sector to grasp the importance



Conclusion



Thank You



Be Prepared and Stay Alert