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Kathmandu, Nepal 14–16 November

REGIONAL CONFERENCE 2024

Climate Responsive Land Governance and Disaster Resilience: Safeguarding Land Rights



# Developing Criteria for Identifying Humanitarian Open Spaces for Disaster Preparedness in Rural Nepal

## Authors

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Source: Naxa

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## Outline for presentation

- Introduction
- Objective
- Methodology
- Findings
- Conclusions
- Recommendations



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Displaced families gather in an open field.

Source: Naxa

Earthquake in Kathmandu, Nepal, April 26, 2015.



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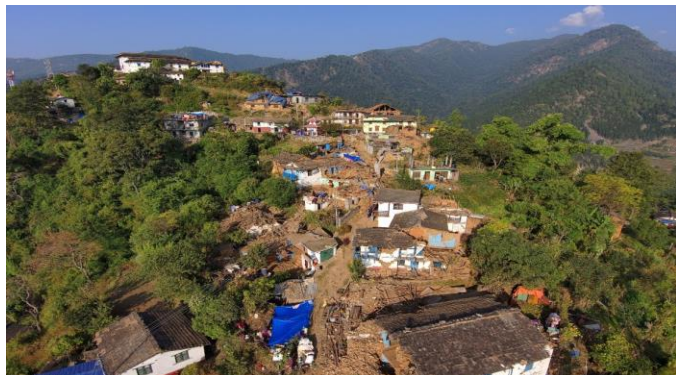
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## 1. Introduction

- ❑ Open areas include parks, gardens, playgrounds, forests etc.(Saxena, 2016; Shukla & Chhabra, 2023; Woolley, 2003)
- ❑ Humanitarian open spaces are identified and mapped with the aim of strengthening emergency preparedness and to provide the initial response planning framework for the local governments and partner agencies.





## Study and Initiatives taken by various organization for open spaces preservation

| Year        | Organizations   | Contributions  |
|-------------|---|--|
| 2013        | International Organization for Migration (IOM)  | Detailed study identifying 83 open spaces in Kathmandu Valley.                             |
| 2020        | United Nations Development Programme  | Mapped available open spaces in Kathmandu, Lalitpur, Kirtipur, and Bhaktapur Municipality. |
| 2023 - 2024 | Under the SIKAI project, supported by USAID's Bureau for Humanitarian Assistance, IOM | Mapped additional open spaces in Karnali and Sudurpaschim provinces.                       |



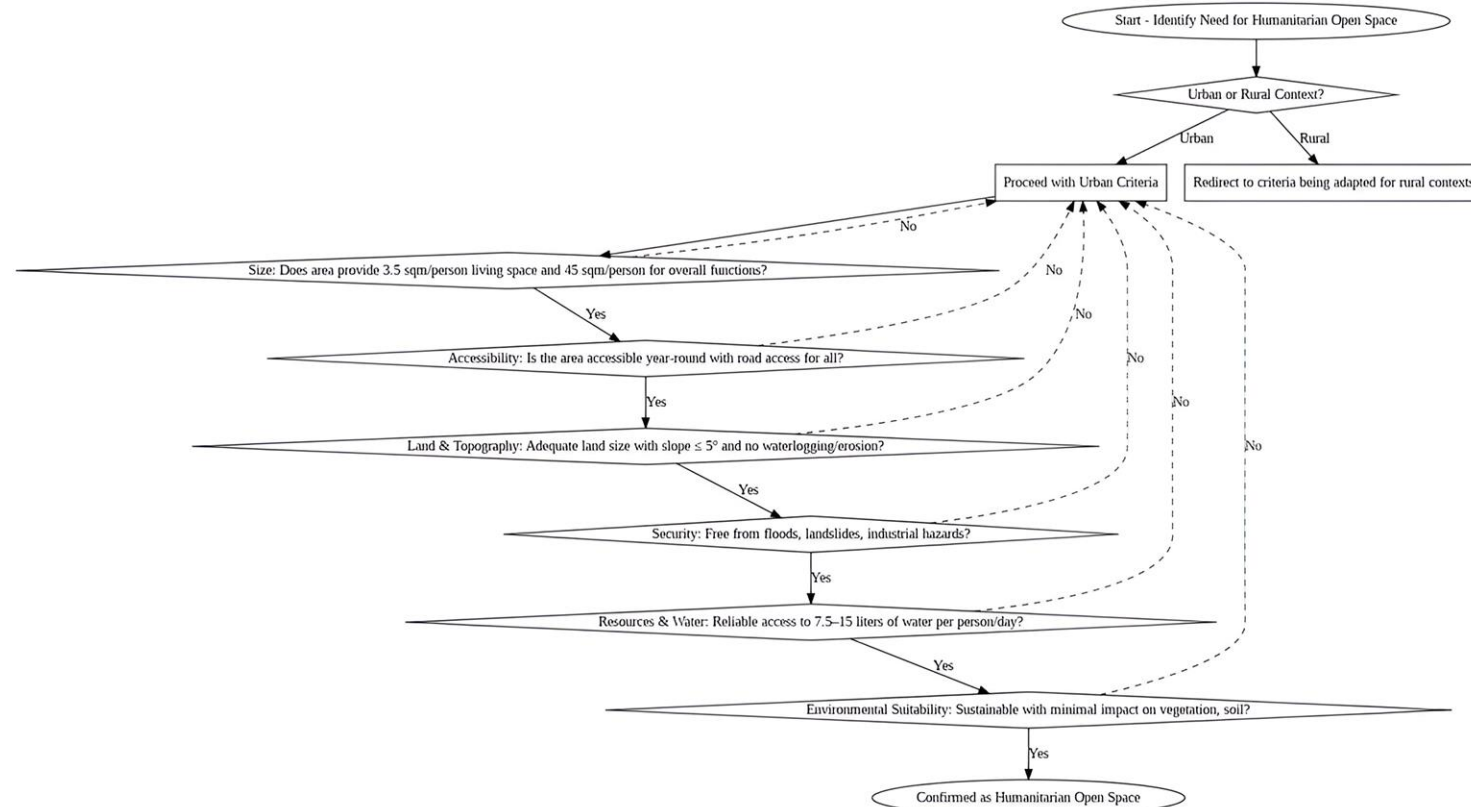
## Gaps Analysis of Open Spaces

1. Existing research primary focuses on open space identification in developed countries.
2. Limited research in developing countries is mainly focused on urban, not rural areas.
3. Criteria for rural humanitarian open spaces remain unexplored in disaster-prone regions like Nepal.





## Criteria for Identification of Humanitarian Open Spaces in Urban Context







## 2. Objective

To develop criteria for identifying humanitarian open spaces for disaster preparedness in rural Nepal.



*Image Source: PNGWing*





### 3. Methodology





## 4. Findings

### Criteria for the Identification of Humanitarian Open Spaces in Rural Nepal

| S.N | Criteria       | Testing List                              |
|-----|----------------|---|
| 1.  | Land Ownership | Government and public owned open land     |
| 2.  | Size of Land   | Large Open Spaces > 1500 sq. m            |
|     |                | Medium Sized Open Spaces 1000-1500 sq. m. |
|     |                | Small Open Spaces 500-1000 sq. m          |





## Criteria for the Identification of Humanitarian Open Spaces in Rural Nepal

| S.N | Criteria                                  | Testing List                                  |
|-----|---|---|
| 3.  | Topography, Soil and Land Characteristics | The steepness of the land is up to 30 degrees |
|     |   | Alluvial and very rocky soil                  |
| 4.  | Access to infrastructure and Facilities   | Access to the road network                    |
|     |   | Any health or market facility nearby          |





## Criteria for the Identification of Humanitarian Open Spaces in Rural Nepal

| S.N | Criteria                            | Testing List  |
|-----|-------------------------------------|---|
| 5.  | Water and Sanitation Infrastructure | Water and sanitation infrastructure                                       |
|     |                                     | Internet facility   |
|     |                                     | Access to electricity and Sewerage facility                               |
| 6.  | Environmental aspect                | Adjacent to or near central areas of National Parks and Wildlife Reserves |
|     |                                     | Exposure to air, water, noise, and land pollution                         |
|     |                                     | A garbage dump nearby   |





## Criteria for the Identification of Humanitarian Open Spaces in Rural Nepal

| S.N | Criteria             | Testing List                                     |
|-----|----------------------|--|
| 7.  | Disaster risk aspect | Risk of flooding                                 |
|     |                      | Risk of Landslide                                |
|     |                      | Risk of fire and wildfire                        |
|     |                      | Risk of Soil Erosion                             |
| 8.  | State of security    | Police station or Nepali army security nearby    |
|     |                      | A large industrial area nearby or exposure to it |
|     |                      | Around high tension power transmission lines     |





## Criteria for the Identification of Humanitarian Open Spaces in Rural Nepal

| S.N | Criteria                            | Testing List  |
|-----|-------------------------------------|---|
| 9.  | Religious and cultural significance | A socio-culturally acceptable location for the immediate community                  |
| 10. | Place specific and others           | The land can be adjusted by cutting filling to the current condition and topography |
|     |                                     | Able to design and construct temporary structures required for emergency assistance |





## 5. Limitations

- ❑ Existing literature may not reflect current realities deviating the accurate information while KII interviews are missing due to time limitations.
- ❑ Comparison with national standards to identify humanitarian open spaces. (developed under MoFAGA).
- ❑ Changes in land use, population, and environment, impacting the long-term suitability of identified open spaces.







## 6. Conclusions

- ❑ This framework provides guidelines for identifying humanitarian open spaces for disaster preparedness in rural Nepal.
- ❑ Local governments and relevant stakeholders can improve disaster preparedness in rural Nepal.





## 7. Recommendations

- Regular monitoring is required to preserve these open spaces from land invasion.
- This is based on a literature review but ground & baseline surveys could enhance this criteria.
- Local governments should take ownership of these open spaces which could be used for early disaster preparedness.



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# Thank You !!!!!



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