# Strengthening Urban Resilience & Engagement (SURE) programme Nepal

# Urban Assessment (VCA) Guidelines

May 2017

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## Key definitions and acronyms

**Citizens** - refers to the entirety of the population that resides within the municipal boundaries and is not related to the official status of an individual that reside in the municipal boundaries (as some do not have official Nepali citizenship).

| | |
|---|---|
| BRC | *British Red Cross* |
| CBDRM | *Community Based Disaster Risk Management* |
| CBOs | *Community Based Organisations* |
| CDMC | *Community Disaster Management Committee* |
| CFUGs | *Community Forestry User Groups* |
| DC | *District Chapter* |
| DDC | *District Development Committee* |
| DDRC | *District Disaster Response Committee* |
| DDRT | *District Disaster Response Team* |
| DFID | *Department for International Development* |
| DM | *Disaster Management* |
| DRR | *Disaster Risk Reduction* |
| DRM | *Disaster Risk Management* |
| DUDBC | *Department for Urban Development and Building Construction* |
| EPS | *Earthquake Preparedness for Safer Communities in the Kathmandu valley* |
| EQ | *Earthquake* |
| FGDs | *Focus Group Discussions* |
| IFRC | *International Federation of Red Cross and Red Crescent Societies* |
| J/YRC | *Junior/Youth Red Cross* |
| LDMC | *Local Disaster Management Committee* |
| LDRMP | *Local Disaster Risk Management Planning* |
| MoFALD | *Ministry of Federal Affairs and Local Development* |
| MoHA | *Ministry of Home Affairs* |
| MoUD | *Ministry of Urban Development* |
| NGO | *Non-Governmental Organisation* |
| NPR | *Nepalese Rupee* |
| NRA | *National Reconstruction Authority* |
| NRCS | *Nepal Red Cross Society* |
| NS | *National Society* |
| NSRUC | *National Strategy for Resilient Urban Communities* |
| PRA | *Participatory Rapid Appraisal* |
| PwDs | *Person with Disabilities* |
| SURE | *Strengthening Urban Resilience and Engagement programme* |
| UA | *Urban Assessment* |
| VDC | *Village Development Committee* |
| WCF | *Ward Citizen Forum* |
| 9MCs | Nine Minimum Characteristics of a Disaster Resilient Community |

## Objectives of Guidelines

The purpose of these guidelines is to document the process and rationale the development and implementation of the Urban Assessment (UA); providing guidance on how to carry out urban disaster risk reduction / resilience assessments.

### Strengthening Urban Resilience and Engagement(SURE) programme

The SURE programme will work in seven municipalities across three of Nepal's major urban centres over a 5 year period (2016-2021). The programme is designed to improve the urban disaster resilience of municipal governments, the Nepal Red Cross Society (NRCS) and citizens, including specific vulnerable groups, across the seven targeted municipalities[1]. SURE will use multi-hazard and informal network approaches to better understand and build the overall disaster resilience of municipalities.

## Urban assessment

One of the pivotal outputs of the SURE programme's recently completed inception phase was the Urban Assessment (UA). The assessment of 3,293 participants was conducted in the eight originally targeted municipalities, to understand the capacity, vulnerabilities and context of each area and citizens within them.

### Rationale for the design of the tools

Based on learning from the EPS programme[2], ISET and American Red Cross' neighbourhood focused urban tools and the limited number of other urban CBDRM programmes[3] that have taken place in Nepal, we know that **rural-based spatially-driven vulnerability and capacity assessment (VCA) tools are difficult to use in large urban centres**. These were originally designed to capture the vulnerabilities and capacities of villages or 'communities' that are easily geographically defined, largely homogenous and with members who work and reside in a single settlement. VCAs are usually conducted in a 'town hall' meeting style, with participants attending from each household for 3-5 days of continuous activities.

The complexities of urban living make this a much less viable approach. Time constraints, citizens residing in different areas from where they work, heterogeneous make-up of neighbourhoods, social isolation, and large contingents of migration are just some reasons why use of the rural-based VCA tools has not wielded a depth of understanding of disaster vulnerability and capacity issues. Lessons learnt from the EPS programme also highlighted the challenges in engaging meaningfully with marginalised and hard-to-reach groups.

The breadth of information per municipality has been relatively easier to access with large amounts of secondary information already existing in many of the urban areas SURE is targeting. One of the challenges was how gain an in-depth understanding of citizens and vulnerable groups vulnerabilities

1 Note at the time of the urban assessment (December 2016 – February 2017) the SURE programme was working in 8 municipalities. Since then the Government of Nepal has restructured municipalities and 2 of the municipalities targeted Bajraharahi and Karyabinayak have largely been consumed by Godavari municipality, which the SURE programme will now focus on.
2 The EPS is NRCS / BRC Earthquake Safety Programme that ran from 2012-2014 in the Kathmandu Valley
3 See annex 1 for a detailed review of global urban tools.

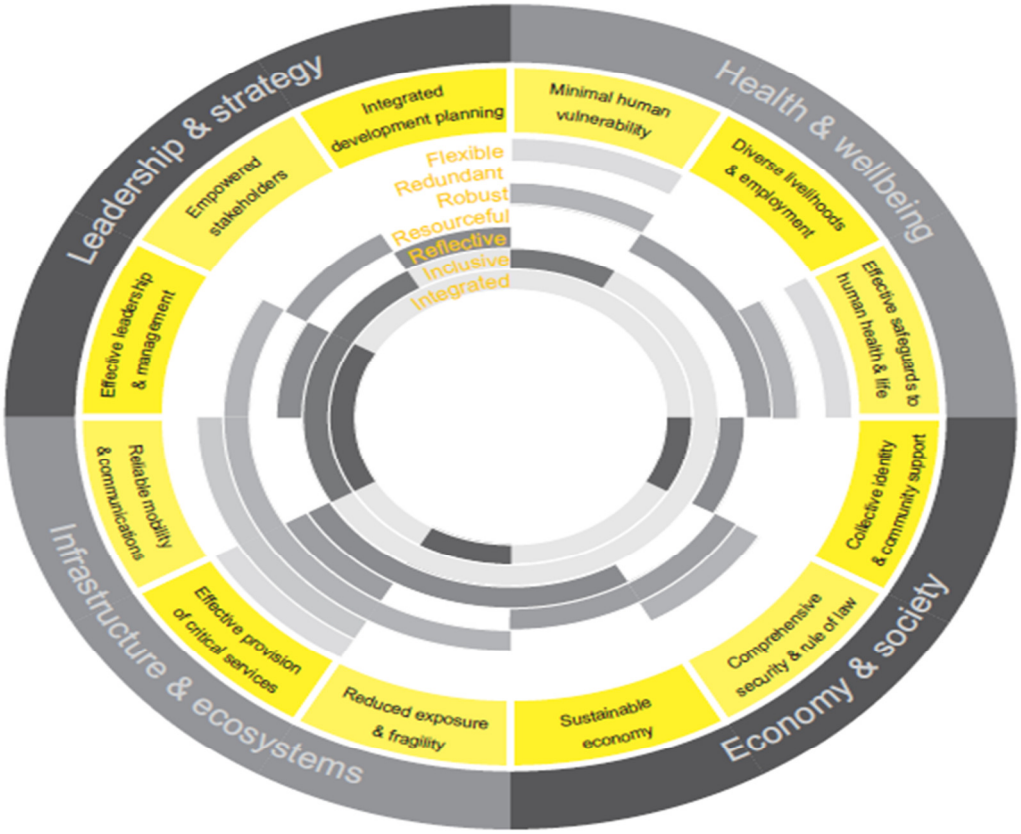
and level of capacity. In order to collect this depth of information a different methodology was necessary.

## Conceptualising 'Urban disaster resilience'

SURE, in developing the UA referred to the following key urban and resilience frameworks:

**ARUP's *City Resilience Framework***[4] articulates 12 indicators that play critical roles when a city is in crisis or faces chronic problems and are outlines in figure 1 below. ARUP defines city resilience as 'the capacity of cities to function, so that the people living and working in cities – particularly the poor and vulnerable – survive and thrive no matter what stresses or shocks they encounter'[5].

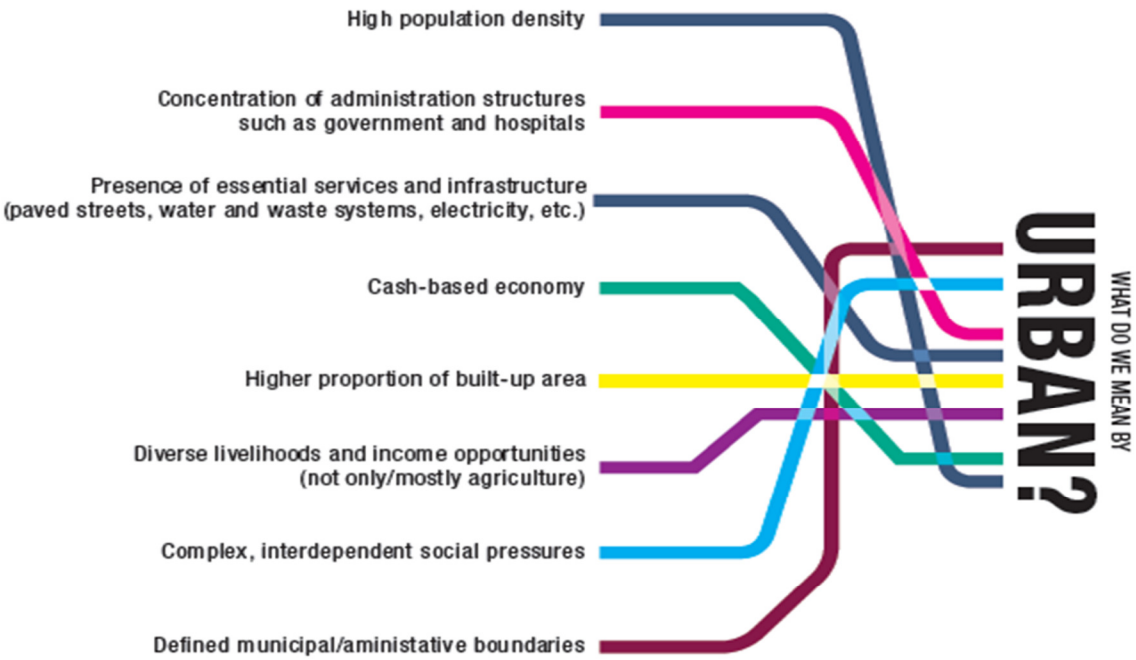
*Figure 1: ARUP's 12 indicators of city resilience framework*




**ALNAP's** recent working paper 'Stepping back: understanding cities and their systems' articulates 8 characteristics that humanitarian organisations need to consider when working in urban contexts (outlines in figure 2). Like ARUP, they also take a systems approach to working in urban contexts.

[4] Rockefeller Foundation (2014) 'City Resilience Framework'
[5] Rockefeller Foundation (2014) 'City Resilience Framework' , p.3.

*Figure 2: ALNAP's 8 characteristics for humanitarians to consider in urban contexts*[6]




**DFID's *Resilience Framework*** (2011); the framework argues that the ability to deal with a disaster '...is based on the levels of exposure, the levels of sensitivity and adaptive capacities'[7]. As such citizens with high levels of economic insecurity, women, those with limited mobility and/or a marginalised social status can be considered to have exacerbated sensitivity to any shocks. Nepal's Economic survey 2015/2016 estimates that the impact of the 2015 earthquake will increase the number of poor people between 2.5% to 3.5% nationally, highlighting the sensitivity of citizens who are economically insecure and unable to weather shocks and stresses[8].

**IFRC's *Characteristics of a safe and resilient community***[9] identifies the following elements of a safe and resilient community: knowledge, healthy, organised, connected, has infrastructure and services, has economic opportunities and can manage its natural assets. These characteristics have been used to triangulate resilience components that need to be considered when focusing on building resilient communities.

**Flagship 4's *9 Minimum Characteristics of a Disaster Resilient Community in Nepal (9MCs): Final Review***[10] was published in December 2016 and highlights that the characteristics should be applied in a flexible manner, adapted to the context in which they are applied. It also recommends that

[6] Campbell, L. (2016) Stepping back: understanding cites and their systems. ALNAP Working Paper. London: ALNAP/ODI
[7] DFID (2011) 'Defining Disaster Resilience: A DFID Approach Paper' (p8)
[8] Ministry of Urban Development (2016) 'Inclusive Cities: Resilient Communities - Nepal National Report'
[9] IFRC (2011) 'Characteristics of a Safe and Resilient Community: Community-Based Disaster Risk Reduction Study'
[10] Nepal Risk Reduction Consortium (2016) 'Flagship 4 Handbook: Nepal's 9 Minimum Characteristics of a Disaster Resilient Community'

programmes need to understand how people organise themselves and work with established groups, noting the raised expectations that citizens have of urban governments as they provide assistance during and post disasters.

## Why focus on networks?

The review of the 9MCs, the EPS programme, experience from the 2015 earthquake response and the inception phase consultations it is clear that **people do not consistently organise themselves using these committees in the event of a disaster**. But instead organise themselves around their own networks, both informal and formal, such as family, temples, markets, service-providers, employment. Given the connectedness and social cohesion are core components of understanding and building resilience the 9MC review recommends developing a better understanding of how people organise themselves, both in 'normal' times and post disaster, and building on already-existing networks to form more relevant local level disaster management committees and response teams.

Information, knowledge and goods often flow across these networks, affecting communities' ability to access resources and processes, and to take action to prepare and respond to disasters[11]. This was also a key finding from the tsunami in 2004[12]. In addition, committees such as the CDMCs and CFUGs often replicate pre-existing power relations and are ineffective in supporting the 'hard to reach' vulnerable groups prioritised by SURE. **The SURE programme will therefore focus on a network-driven analysis of municipalities.**

*'A network is a collection of people and / or thing that are connected to each other by some kind of relationship. Many kinds of entities can be part of a network: people, projects, documents, events, organisations, cities, countries etc. And there are many kinds of relationships that can link such entities; involving transmission or exchange of information, money, goods, influence etc.'*

[1] . Monitoring and Evaluation NEWS

As this is a new approach, we will be tracking it carefully through our M&E process to examine how well it works – indeed, understanding its effectiveness for urban DRR is one of our learning questions for the programme.

This is part of the rationale for why the SURE programme seeks a better understanding of networks through the social and institutional network analysis tool. This tool asks small groups to identify who they interact with on a weekly basis pre and post disaster. A tool that maps mobility of groups is also used to understand better how far people travel, when, where they travel too and how they travel.

The UA study identified formal and informal networks that vulnerable groups interact with on a regular basis. The interaction was measured along three variables: 'Importance', 'Frequency' and 'Distance'. The networks mentioned by the vulnerable groups and a ranking of importance, frequency of interaction and distance of mobility, were recorded pre and post disaster in order to identify changes in the perception and utilities of specific formal-informal networks.

[11] UCL City Leadership Lab (2016) 'Informal Governance Networks for DRR'
[12] BRC (2015) 'After action review: EPS'

Common networks were identified by groups across municipalities and included the informal (relatives, family, temple) and formal networks (schools and workplaces, bank/cooperatives, municipal office/ ward office). **Most of the groups across all municipalities identified family, schools and workplace, as the most important networks both pre and post disaster**. They have high frequency of interaction with these networks, and they typically reside within the district.

Perceived level of importance of bank/ cooperatives and government offices, among groups across all districts scaled up post disaster, indicating that these networks played an important role post disaster. With exception of the elderly (who rated this highly), most of the groups identified temples as a least important network, even though it resided within the ward area.

## Defining 'community' in the urban context

In delivering a programme focusing on "communities" it is important to be clear on what is meant by that term. The concept of community is used loosely and inconsistently in the sector as a whole, creating complications in implementation and limitations in impact which are often tolerated as 'inevitable'[13]. Moreover, Nepal's traditional defining features of community (more applicable to rural settings) rarely transfer to its urban contexts.

Learning from EPS and rural CBDRM interventions both in Nepal and regionally highlights that the geographical classification of communities is deeply problematic[14]. In an urban context this only becomes more complicated due to increased heterogeneity of areas, lack of social cohesion and difficulties in engaging with "community" members.

The 9MC review which was published during the inception phase observes that geographical boundaries are arbitrary, and encourages organisations and government to understand more about how citizens organise themselves in practice and how they communicate vertically and horizontally across formal and informal networks.

In their study in eastern Nepal, Jones, Aryal & Collins (2013) note that using a geographical definition of community often leads to '…insufficient attention paid to the asymmetries of power and heterogeneity of interests in internally differentiated groups'[15]. In targeting "hard to reach" citizens and citizens in general in urban areas, the SURE programme will use the *six types of urban community* defined by Hamdi (2004) and Kupp (2016) – figure 3. These definitions will guide the SURE urban citizen engagement framework and the broader urban engagement and accountability strategy.

Although this approach brings its own set of complications and logistical challenges, it is essential to move away from the status quo if the programme is to achieve its aims. There are two main benefits to trialling this approach:

- It tests a new model of working in urban communities and within the realities of how people network with one another, which does not rely on artificial geographic groupings;

[13] Cannon T. (2015). 'The fallacy of community: how realistic is grassroots work? Discords of gender, class, caste, ethnicity'.
[14] BRCS (2015) 'EPS After Action Review'
[15] Jones et al., 2013, 'Local-level governance of risk and resilience in Nepal' (p. 446)

- While geographical communities risk excluding our priority hard to reach and "hidden" community members and where traditional power dynamics strongly influence results, the programme will instead target groups based on the networks which they themselves identify with.

Figure 3 – six types of urban community[16]

## Interlinkages with climate change

The Red Cross / Red Crescent climate smart DRR indicators have been applied to the Urban Assessment and highlight issues such as weather related hazards and the perception from the community of whether these will increase in severity over the coming 10 years. The minimum standards will also be applied through the awareness raising and risk reduction and mitigation activities with citizens, vulnerable groups and municipal government.

Weather and climate change related hazards make up 50% of the hazards that SURE will target: drought, cold wave, fire, flood, epidemic, landslide and pollution.

### Livelihoods and economic security

In line with the initial parameters of the SURE proposal the economic security/livelihoods and conflict analysis tools were not included in the UA, but a question about livelihoods was included in the semi-structured interview as this emerged as an area warranting more focus than originally planned. Due to the urgency in undertaking the UA, it was agreed that the political economic analysis should happen at a later date.

## Linking with Government of Nepal

### Nepal's LDRMP and the Urban Assessment

The Local Disaster Risk Management Plan (LDRMP) guidelines were endorsed in 2011, providing guidance to local level government structures how to assess and plan for disaster risk management at the local level, including an agreed VCA process. The LDRMP is currently under revision, with the

[16] Hamdi, 2004, 'Small Change: About the Art of Practice and the limits of Planning in Cities' (published by Earthscan) and Kupp, 2016, cited in ALNAP, 2016, 'Stepping back: understand cities and their systems' (Campbell)

intention to include climate change adaptation components. It is important that this forum also considers the experience of working in urban setting including this urban focused assessment.

To ensure that the urban assessment doesn't replicate existing processes, such as the LDRMP, a comparison of the spatially-driven LDMRP VCA against the network-focused SURE UA tools illustrates the same basic levels of information collected by both tools. However it is the methodology of collecting this information (and therefore their reach into the citizens and vulnerable groups are prioritised) that is different and makes the UA suitable to the urban context.

See annex 2 for a detailed analysis of the respective tools.

### National Strategy for Resilient Urban Community

In November of 2016 the National Strategy for Resilient Urban Community (NSRUC) was launched, which focuses on disaster resilience in urban areas, and building resilience at the municipal level. A total of 108 indicators were developed and tested, designed to assess a municipality's level of resilience. NRCS will use these as a part of their baseline assessment for municipal governments it works with.

In light of this work, the UA was designed to contribute to the work suggested municipal governments carry out in the draft NSRUC including:

- Multi-hazard risk analysis
- Contribution of GIS-based multi-hazard information
- Identification of vulnerable communities, groups and households in urban areas
- Building knowledge of citizens and vulnerable groups about the multi-hazards in their municipalities.

In addition, the UA guidelines was developed with reference to the following documents:

- IFRC Minimum Standard for Climate Smart Disaster Risk Reduction
- Natural Calamity (Relief) Act 2039 (1982)
- Local Self-Governance Act 2055 (1999)
- National Strategy for Disaster Risk Management (NSDRM) 2009
- 2005 Hyogo Framework for Action
- 2015 Sendai Framework
- Sustainable Development Goals
- Local Adaptation Plans of Action (LAPA)
- National Strategy for Resilient Urban Community (NSRUC) 2016
- Flagship 4's Final Review of the 9 minimum characteristics of a disaster resilient community in Nepal
- School Development Plan (MoE)
- Nepal National Report – Inclusive Cities: Resilient Communities (MoUD)
- ARUP City Resilience frameworks
- ALNAP 13 urban characteristics
- IFRC characteristics of a resilient community
- NRCS / BRC EPS lessons learnt
- NRCS / BRCS EPS After Action Review

## Urban Assessment Tools

Below is the list of tools that were developed, piloted, revised and implemented in 8 municipalities in Nepal. A detailed explanation of each tool is available in annex 3. Tool 1: Secondary Data Collection

- Tool 1: Secondary data collection
- Tool 2: Historical Hazard Profile
- Tool 3: Hazard Risk Matrix
- Tool 4:Semi-Structured Interviews
- Tool 5: Social and Institutional Network Analysis
- Tool 6: 24 Hour Clock ( Mobility Mapping)
- Tool 7: Basic Hazard Mapping
- Tool 8: Planning for Urban Resilience

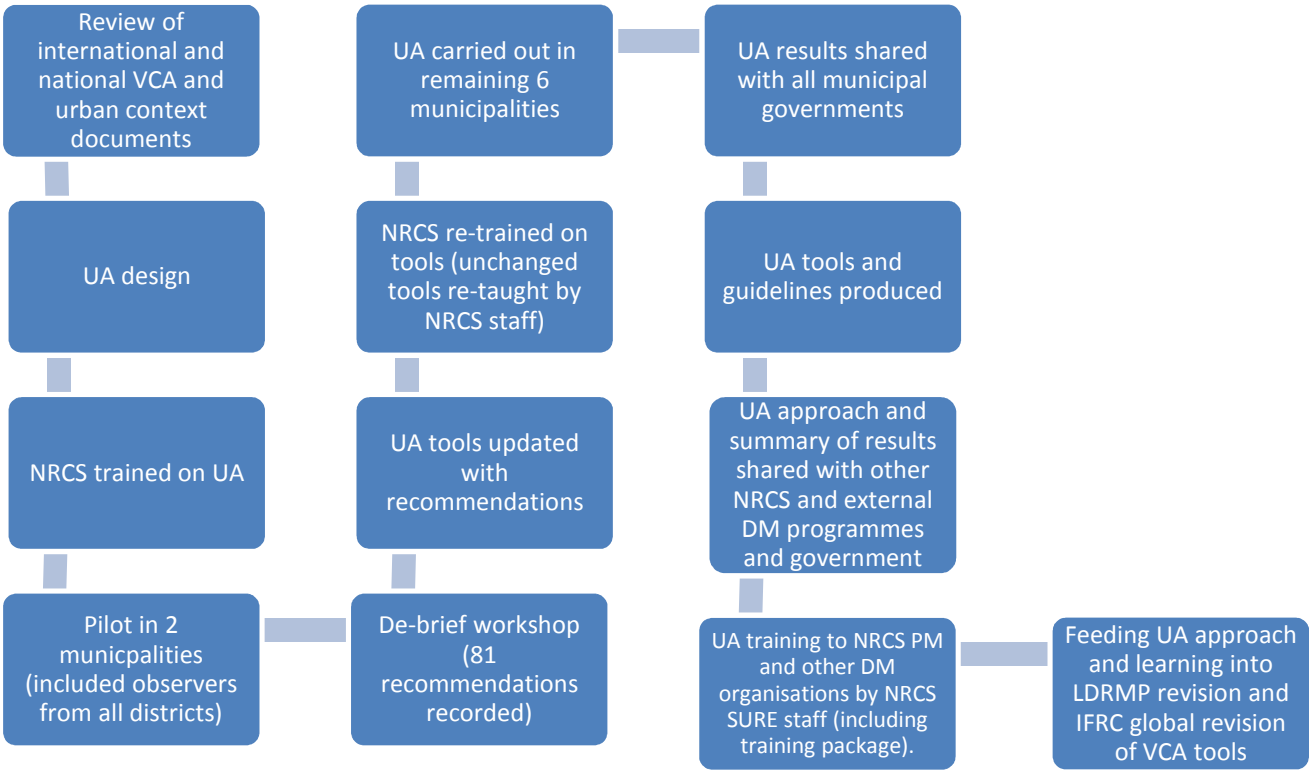
### *Piloting of UA*

Once provisionally designed, the tools were further reviewed in line with the LDRMP guidelines and against the past experience of the NRCS in VCAs, as well as the experience of two District Chapters responsible for piloting the UA tools in Karyinbainyak and Dhanghadi municipalities. The pilot provided an opportunity to involve multiple levels of NRCS from senior governance members to filed-based volunteers, as well as municipal government partners, to actively engage, contribute to, the tools and methodologies being employed by the programme. As a result, the tools were updated with stakeholder insights that helped ensure they were as fit for purpose as possible before being rolled out in the other 6 remaining municipalities.

### Process of developing and implementing the tools

The UA process occurred over a 6 week period, with the exception of the UA training to the NRCS other non-SURE programme management staff. A summary of the tool and the process is highlighted in figure 4.

Figure 4: Process of creating urban assessment




# How to carry out an Urban Assessment

## Participants in the Urban Assessment

The UA involved a range of stakeholders belonging to different social sectors and institutions. The UA participants included;

- 10-16 vulnerable groups per municipality (described in detail below);
- municipality and government officials;
- security forces,
- political parties and
- media

### Human resources:

The UA was carried out jointly by the municipality and the local Nepal Red Cross District Chapter. Alongside the municipality and Red Cross facilitators, linkages with the ward citizen forums or L/CDMCs, where they exist, can be useful facilitators and strengthen existing links and provide a helpful introduction and perspective on the urban area being assessed. Volunteers will be key for performing focus groups, holding interviews and mapping the urban areas and require a 1.5-2 day training on new methodology and tools.

### *Disaggregated data (gender and age)*

The UA disaggregates data by both men and women. The UA had considerable participation of both men and women. In most of the analyses including network analysis and mobility mapping, there was higher female participation in comparison to men. In Kathmandu and Pokhara, people belonging

to third gender (LGBTI community) were also included in the course of the study, identified as vulnerable groups.

## Methodology of identifying vulnerable groups

One of the most challenging aspects of the UA was identifying and 'reaching' vulnerable groups. The following outlines the process in which SURE identified 10-16 vulnerable groups per municipality to include in the UA.

### *Selection of vulnerable groups*

Recommendations from the review of EPS and DFID DRM programmes in Nepal highlight the need for more explicit social inclusion strategies in future urban CBDRM programming. Building on the SURE proposal and inception phase, the programme has developed its urban citizen engagement framework in an attempt to reach and better engage 'hard to reach' groups in the urban area. This approach separates citizens into two categories: general urban citizens and, within this, specific vulnerable groups who will be the focus of SURE. Working with specific vulnerable groups, schools and general citizens (using the 6 types of 'communities') the programme seeks to achieve **depth by reaching the most vulnerable and breadth by supporting citizens to raise their voices** to the local and municipal government levels.

An initial list of groups vulnerable to the impact of disasters was collated for each municipality through contacting the following organisations:

- Social Welfare Council
- District Coordination Committee
- District Administration Office
- PwD National Association
- Association of small shop keepers
- Single women's association
- National Landless Association
- Other NGO in the Municipality
- Municipality office
- NRCS guidelines for vulnerable groups ( in CBDRR guidance)
- Dalit and Janajati National Association

### *Verification of lists of vulnerable groups*

Once the initial list was compiled of groups vulnerable to disasters, they were verified with the following organisations, who added any groups that were felt missing:

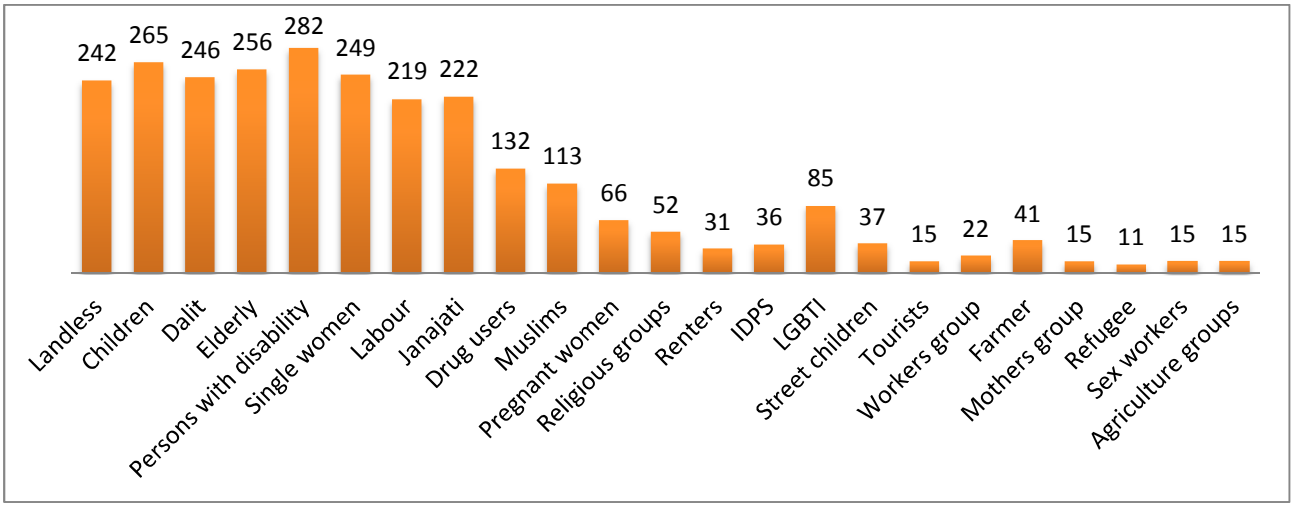
- Municipal government
- NRCS District Chapter
- stakeholder identified in the secondary data review and
- NGOs working in the area that were registered with the social welfare council.

### *Vulnerable groups that participated in the Urban Assessment*

In the UA process 10-16 vulnerable groups were identified in each municipality through consultation, and each was assessed as part of the UA. Although the total types of vulnerable groups that took part in the urban assessment was 21 (see figure 6 for overview). Groups common to all

municipalities included Dalit; school children; single female headed households; labour workers; landless people; Persons with Disability (PwDs); and, Janajati.

Figure 5: Number of people from vulnerable groups that participated in the Urban Assessment




Vulnerable groups specific to each municipality were also included in the assessment such as renters, street children, tourists and Internally Displaced Persons (IDPs) in Kathmandu.

### *Engaging with identified vulnerable groups*

Once lists were collected, two sampling methodologies were used to engage with these citizens:

1. Meeting with ward representatives for each of the vulnerable groups in one meeting, eg. all the ward representatives for Dalits met and carried out focal group discussions (FGDs) and other tools.
    - To verify that these representative voices aligned with the citizens they were actually representing, random confirmation FGDs were undertaken as a second step with citizens.
2. In addition, 'snowball' sampling[17] was used to access vulnerable people and avoid the same representatives attending multiple meetings for various groups.

Through the urban assessment these 10-16 different vulnerable groups to disasters were assessed in each municipality. NRCS district chapters were then asked to rank and select four of these groups to work with as part of the SURE programme, against the following criteria:

- their level of vulnerability to disasters
- the groups' willingness and interest to build their disaster resilience
- the NRCS' skills and experience in working with the groups.

[17] Snowball sampling is where research participants recruit other participants for a test or study. It is used where potential participants are hard to find. It's called snowball sampling because (in theory) once you have the ball rolling, it picks up more "snow" along the way and becomes larger and larger. Snowball sampling consists of two steps:

1. Identify potential subjects in the population. Often, only one or two subjects can be found initially.
2. Ask those subjects to recruit other people (and then ask *those* people to recruit. Participants should be made aware that they do not have to provide any other names.

## Information the Urban Assessment will generate

- A better understanding of the municipal hazard and vulnerability profile, by consolidating secondary information. This will continue to evolve with Open Street Mapping and as additional assessments are added.
- An understanding of urban citizens and vulnerable groups perceived ranking of hazards, level of vulnerability and capacity of resilience, along with their formal and informal networks, and a profile of their movement in the urban area assessed.
- The ability to determine actions which municipal government and citizens can change, influence, or where acceptance (mitigation) is necessary. This information feeds into planning processes and also advocacy strategies.
- A greater picture of the functionality of governance mechanisms and political economy of disaster risk management in the municipality.

## Urban Assessment Process

The UA process, outlined clearly in figure 6 and below involves the following 4 steps of data collection, analysis and validation.

### Step 1: secondary data review & sharing

To achieve breadth in the assessment findings tool1: secondary data collection and tool 2: historical disaster profile is used. Information is collected and is verified through ward citizen forums, local government officials, or L/CDMCs where they exist.

It's important to not only collect previously assessments specific to disaster management, but the municipality as a whole (including climate change, infrastructure development, economic viability etc.). This forms part of the political economy analysis or context of the municipality.

### Step 2: data collection

Target groups for example municipal officials undertake tool 3: hazard risk matrix and tool 4: semi structured interview together, as one group. The group is then split into 3 and each of these groups undertakes one of the following tools: tool 5: social and institution network analysis, tool 6: 24 hour clock or tool 7: basic hazard mapping. Where possible, groups should be disaggregated by gender, age and any other commonality (eg. livelihood).

All information needs to be captured in the data collection spread sheet (see annex 4). Semi structured interview summaries can be entered into the spread sheet for each question and it is recommended a scanned copy of the original notes be kept on file for records.

### Step 3: analysis and reporting

Data collection spread sheets are analysed using SPSS software (due to the volume of the data collected), with both reports and presentations produced for further sharing and validation with target groups who information was collected from.

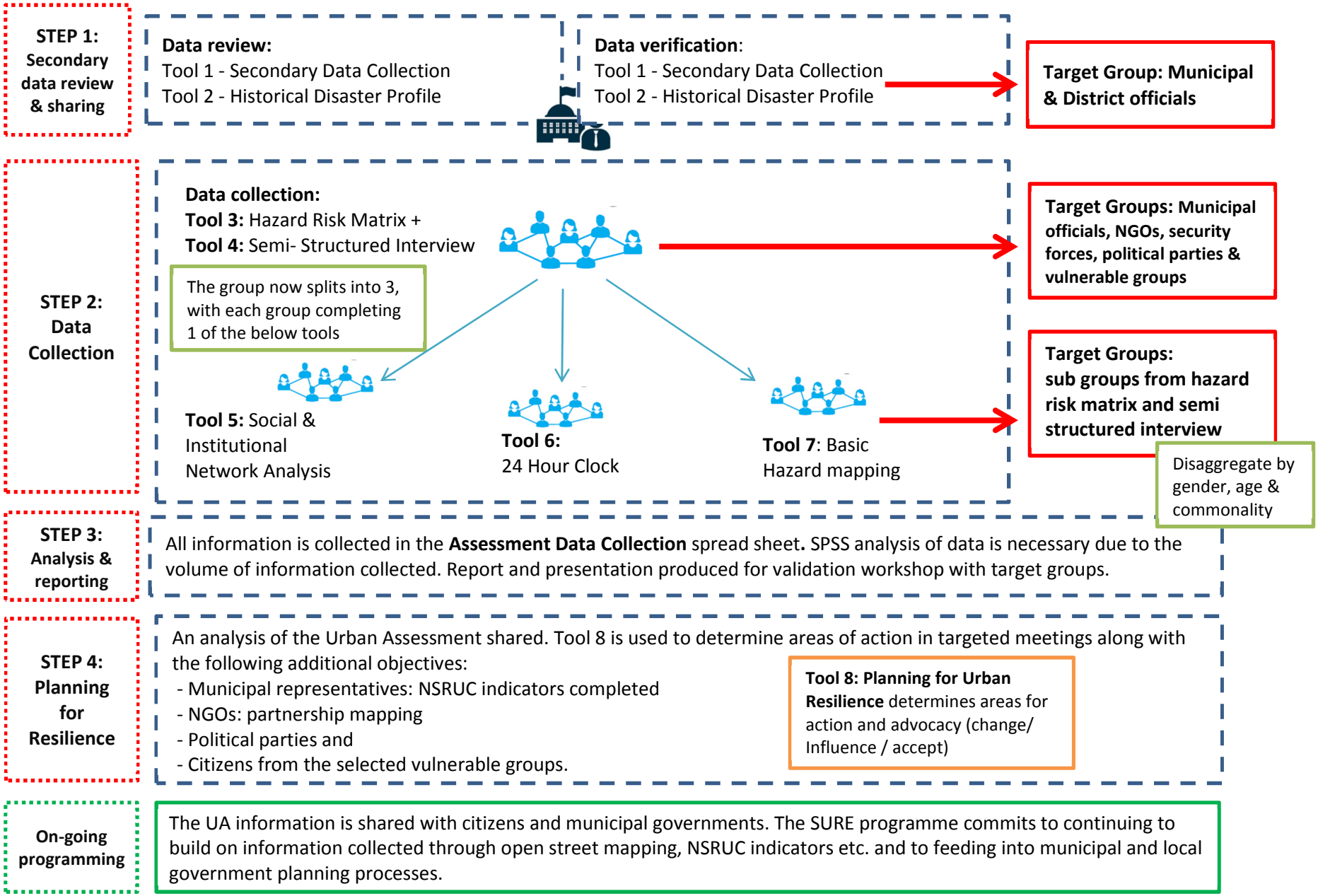
Strong information management and oversight is necessary as a significant amount of information is collected through the process.

### Step 4: planning for resilience

An analysis of the Urban Assessment shared. Tool 8 is used to determine areas of action in targeted meetings along with the following additional objectives:

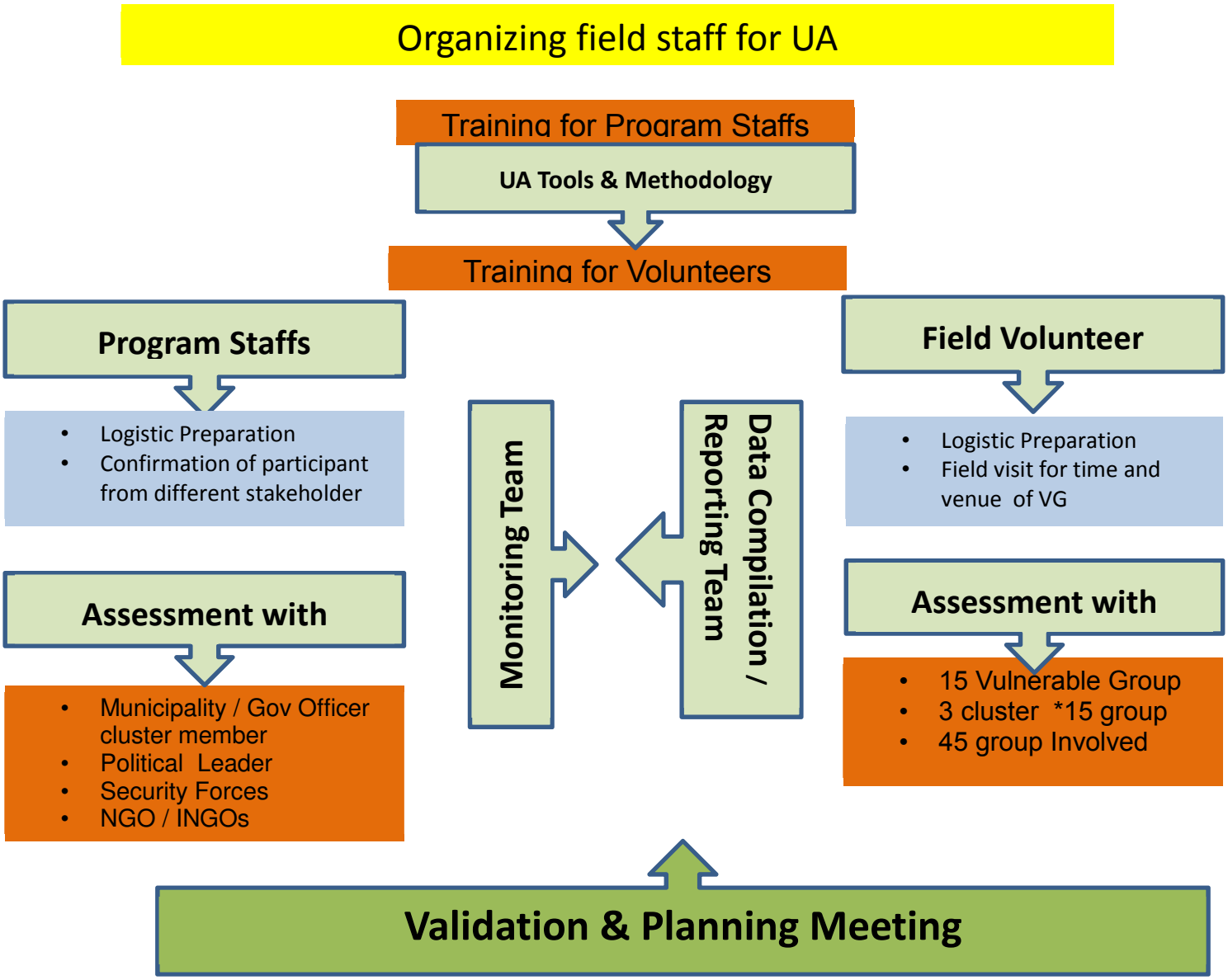
- Municipal representatives: NSRUC indicators completed
- NGOs: partnership mapping
- Political parties and
- Citizens from the selected vulnerable groups.

*Figure 6: Urban assessment process*



## Tips for organising Urban Assessment

The below diagram outlines how the NRCS team organised the Urban assessment in each municipality.




## Effort involved in carrying out UA

- The UA took an average of 6.5 days per municipality, which covered training volunteers, collecting and entering data (note data was analysed separately by a consultant (approximately 18 days needed for data analysis and narrative).
- A total of 3,293 people participated in the UA across the 8 municipalities (an average of 409 per municipality)
- 199 focus groups discussions (FGDs) and key informant interviews were conducted
- 159 government participants were involved

Although the total population of these 8 municipalities is 1,822,730, SURE's urban citizen engagement framework of targeting specific networks and not ward boundaries has resulted in a detailed snapshot of 10-16 target groups in each municipality and a breadth of information across the area.

## When to conduct an Urban Assessment?

The UA process is designed to be iterative, and can be repeated every 1-2 years depending on the needs of the municipal government. At a minimum a review of new secondary data should occur annually to keep pace with the rapidly evolving context of the urban environment. In recognition of the multiple DRR actors in various municipalities and the on-going revision of the LDRMP guidelines, the information generated by the UA is designed to be inputted into the LDRMP.

A report of the UA for each municipality has been shared with the municipal government inn both hard and soft copy.

## Annex 1 – Global Review of Urban VCA tools

| No | Tools | Type of tool | Description | American Red Cross Vietnam | Bangladesh Red Crescent Urban V2R | Nepal Red Cross EPS | Municipal L-SAT/ Toolkit | Use |
|---|---|---|---|---|---|---|---|---|
| **Information collection tools** | | | | | | | | |
| 1 | **Transect walk** | **PRA (participatory rapid appraisal)** | To gain clear understanding of the slum and its physical structure, land use, problems, prospects etc | | X | | | 25% |
| 2 | **Focus Group Discussions** | **data collection method** | To gain information about the locality, people, their livelihoods, local risk environment (hazards) and local/traditional preparedness and coping strategy. | X | X | X | X | 100% |
| 3 | **Seasonal Calendar** | **PRA** | To gain knowledge about slum based livelihood options and its seasonality dimensions. | | X | X | | 50% |
| 4 | **Citizen profile** | **secondary data** | Demographic profiling including religion, sex, age, ethnicity, income groups) | | | | X | |
| 5 | **Mapping (risks and resources)** | **PRA/ spatial analysis** | To identify and analyse common hazards and resources in the locality and their magnitude, likelihood and the resource availability | X | X | X | X | 100% |
| **Information analysis tools** | | | | | | | | |
| 6 | **Institutional and social networks analysis** | **social network analysis** | To understand the perceptions that slum dwellers have the roles to play and significance of various organizations within the slum | | X | X | X | 75% |
| 7 | **24-hour clock** | **PRA (gender/ mobility safety)** | To analyse slum dwellers' mobility/ tasks at different places during day and night time (gender and connectedness/ movement analysis when done by gender | | X | | | 25% |

| No | Tools | Type of tool | Description | American Red Cross Vietnam | Bangladesh Red Crescent Urban V2R | Nepal Red Cross EPS | Municipal L-SAT/ Toolkit | Use |
|---|---|---|---|---|---|---|---|---|
| 8 | **Household economic analysis (mini)** | **economic systems/ Livelihoods** | To identify the major livelihoods in the locality and their importance in the context of existing hazards. | X | X | | | 50% |
| 9 | **Review of secondary data** | **Data collection** | Information from existing reports and data on natural hazards and disasters that have happened previously in the ward and any other relevant information. | X | X | X | X | 100% |
| 10 | **Historical Timeline** | **PRA** | Information from the local community about previous natural hazards and disasters in the last 5-10 years including their damaging effects, frequency, and local experiences in DRM. | X | | X | X | 75% |
| 11 | **Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis** | **Synthesis** | Information from the local community on the existing personal, household, community and institutions' strengths, weaknesses, opportunities and threats in preparing for, responding to and recovering from natural hazards and possible disasters. | X | | | X | 50% |
| 12 | **Synthesis** | **Synthesis** | Combine all information collected into one table to identify clearly past and potential natural hazards, disaster risks, capacities, vulnerabilities and changes in frequency of natural hazards over time. | X | | | X | 50% |
| 13 | **Ranking** | **Synthesis** | Identify the priorities of the local community from the information collected. | X | | | | 25% |

| No | Tools | Type of tool | Description | American Red Cross Vietnam | Bangladesh Red Crescent Urban V2R | Nepal Red Cross EPS | Municipal L-SAT/ Toolkit | Use |
|---|---|---|---|---|---|---|---|---|
| 14 | **Cause Analysis** | | Identify the root causes of the community's prioritised disaster risks. | X | X | X | X | 100% |
| 15 | **PESTL (political/ economical/ social/ technological/ legal) analysis** | **political economy/ power** | | | | | X | 25% |
| 16 | **Control/ indirect control/ externally controlled analysis (CIA- IFRC)** | **synthesis** | | | X | | X | 50% |
| 17 | **Policy review** | | | | | | X | 25% |

## Annex 2 - Analysis of original LDRMP VCA and SURE UA

| LDRMP VCA | Urban Assessment (SURE program) | Any difference? | Analysis | Source |
|---|---|---|---|---|
| 1. Hazard mapping and ranking | Tool 3: Hazard risk matrix | Similar tool | Both tools rank hazards. SURE tool is simplified using colours and frequency and severity to make it more appropriate for community use | IFRC tool, and basic DM analysis tool |
| 2. Hazard calendar | Not used | Not suitable for urban context | Not used as urban hazards have less seasonality, although time of year can be noted in semi-structured interviews | N/A |
| 3. Historical timeline | Tool 2: historical timeline | Similar tool | Collects the same data, SURE tools use secondary information from multiple sources including desinvestar. Municipalities update for missing period (2013-2016) | Adapted IFRC tool for urban context from urban VCA update |
| 4. Hazard analysis | Tool 8: Validation and planning tool | The same | Similar level of analysis and validation workshop held with municipality. | Taken from LDRMP |
| 5. Community wellbeing ranking | Not used | Not used | Information is collected via the extensive secondary data available in most municipal areas. A separate tool is not necessary. | N/A |
| 6. Problem tree analysis | Tool 8: Validation and planning tool | Similar | Similar - both look at cause of hazard, SURE tool also looks at how to address through change=action, influence=advocacy, accept=not changeable possible mitigation | IFRC tool used in VCA, similar to LDRMP tool 6 |
| 7. Transect walk | Tool 7: Mapping | Similar | Due to the size of the municipality, this is not possible. As a first step the participants interviewed | IFRC DRAFT digitalizing the |

| LDRMP VCA | Urban Assessment (SURE program) | Any difference? | Analysis | Source |
|---|---|---|---|---|
| | | | identified hazard risk areas on printed maps. In the first year of the SURE programme these will be verified and added to using open street mapping. | VCA tool, adapted to align with LDRMP |
| 8. Stakeholder analysis | Tool 5: institutional and network analysis | Similar | Both tools look at important institutions. SURE tool specifically targets networks in order to include both formal and informal networks. Informal networks are recognized as left out in most assessment but are essential in disasters. SURE tool also looks at how networks change after disaster. | IFRC VCA+ gender analysis tools, slightly adapted to align with LDRMP |
| 9. Mobility Map | Tool 6: 24 hour clock | Similar | LDRMP looks at reasons why citizens contact organisations, SURE tool looks at overall movements and contacts during the day. This helps with to set times for community engagement activities, as well as shows informal networks, modes of transportation and level of connectivity of areas outside their neighbourhood. Also shows how much time people spend at home vs. in the community | PRA tool used by IFRC gender training, used in VCA tool kit in BDRCS, and ZRC. Adapted for Nepal |
| 10. Target group discussion | Tool 4: semi-structure interviews | Similar | Similar: both cover discussions with vulnerable groups. SURE semi-structured interviews are more in-depth discussions from municipal government to vulnerable groups. | IFRC VCA tool. Adapted for Nepal |
| 11. Direct observation | Tool 7: Mapping | Not included in UA | Due to the extensive geographical ground that would need to be covered this will form a 1st year | IFRC DRAFT digitalizing the VCA tool |

| LDRMP VCA | Urban Assessment (SURE program) | Any difference? | Analysis | Source |
|---|---|---|---|---|
| | | | activity in Open Street Mapping | (including urban areas) |
| 12. Documentation of local skills, knowledge and technology | Tool 4: semi-structured interviews | Similar | LDRMP looks at the preparedness measures and coping mechanisms. These questions are asked in the Tool 3 semi structured interviews | IFRC VCA tool |
| Identification and planning Matrix | Tool 8: Validation and planning tool | Similar | SURE tool combines data from the cause (LDRMP problem tree) and planning matrix to easily look at areas of activities, advocacy or possible mitigation | IFRC VCA tool |
| N/A- not done likely because areas covered are smaller and less reports exists covering small area | Tool 1:Secondary data review | New | Not part of LDRMP, in urban areas significant data exists and should be reviewed in order to not duplicate, and best align with policies other and other stakeholders | IFRC VCA tool adapted |

## Annex 3 – SURE Urban Assessment Tools