

# PUBLIC-PRIVATE PARTNERSHIP IN FIRE MANAGEMENT

CHANGUNARAYAN MUNICIPALITY, BHAKTAPUR, NEPAL



Lightning is the leading cause of natural wildfires in Nepal. Wildfires occur in forests, bushes, or farmlands. People intentionally or accidentally start forest fires; discarded cigarette buds are a notable cause.<sup>ii</sup> In the pre-monsoon of 2021; 5,626 forest fire incidents occurred in Nepal. More than 3,000 fire incidents occurred just in April of the same year. The pollution from the forest fires lowered the air quality of Kathmandu Valley and many other places to hazardous levels.<sup>iii</sup>

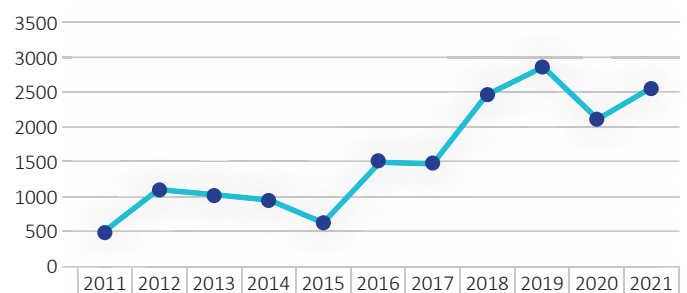
Electrical faults, lightning strikes, and mishandling or mishap with cooking and heating appliances, candles, and flammable liquids are major sources of fires in the built environment. In Nepal, these fires cause more damages and losses than forest fires.

## Fire disasters >

Changunarayan is one of the four municipalities of Bhaktapur District, covering an area of 62.98 km<sup>2</sup> and consisting of nine wards. The municipality's total population in 2018 was 54,551 living in 11,878 households (Changunarayan municipality survey, 2074).

The urban growth rate of the municipality was 0.37% from 2012-2018, and it is projected to be 0.35 in 2018-2028 and 0.32 in 2028-2038.<sup>1</sup> In the last five years, 48 fire incidences affected 45 families and injured five people in the municipality. Eleven private houses were fully damaged, ten were partially damaged, and 13 sheds were displaced. There was a total loss of about NPR 13 million.

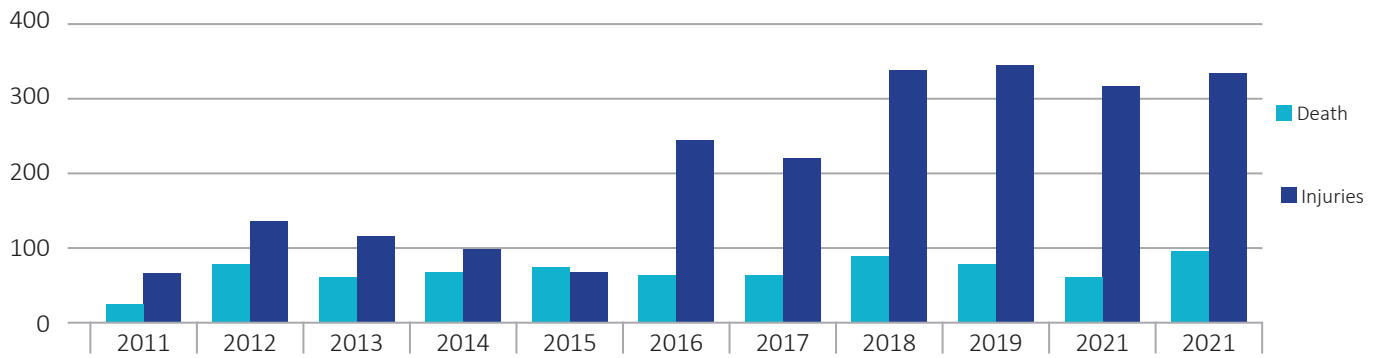
## Fire incidents >



## Background >

Globally, nearly 200,000 human deaths occur each year due to fire hazards.<sup>i</sup> It is also one of the major disasters responsible for the loss of lives and properties in Nepal. The cases of fire-related disasters recorded in Nepal (Government's DRR Portal) show an increasing trend. There were 500 to 1,000 incidents in the first half of the last decade, which rose to over 2000 from 2018 onwards. Fire incidences are increasing with urbanization, and fire injuries in Nepal have surged since 2016, reaching an average of nearly 300 people every year. In the last ten years, seven hundred forty-five people have lost their lives, losing more than 21 billion Nepali rupees in fire hazards.

## Deaths and injuries from fire ➤



Institute for Social and Environmental Transition (ISET)–Nepal, with the support of the Dan Church Aid (DCA) Nepal, implemented the Nexus project in Changuarayan Municipality to enhance urban resilience, early warning, landslide resilience, and urban risk communication. Fire resilience was one of the project's components.

The project carried out the following activities in fire management:

- The project assessed the state of fire hazards and the capacity of the municipality to manage them in its area.
- The project developed a Standard Operating Procedure (SOP) for fire preparedness and management in the municipality that highlights the role of the private sector in fire management.
- It explored Public-Private Partnerships (PPP) for fire preparedness in the municipality and liaised with the private organizations to discuss how the profit-making sector can contribute to fire management.
- The project conducted fire simulation/drills in all the municipality wards to sensitize ward officials, community police, and local communities.
- The project mapped potential water resources within the municipality to refill water for fire brigades during the fire response.
- Carried out a discussion forum for PPP modality with local stakeholders

## PPP model for fire preparedness ➤

Governments adopt Public-Private Partnership (PPP) when its budget is limited and/or the public burden of providing municipal services becomes hefty. The sanitation, water supply, solid waste, and hydropower sectors have implemented PPP models in Nepal. Khimti, Chilime, Bhotekoshi, and the Upper Tamakoshi projects are the PPP projects in the hydropower sector. The partnership model for fire disaster preparedness and management is yet to be employed in the country.

The Constitution of Nepal 2015 has delegated the authority of Disaster Risk Reduction/Management (DRR/M) to the local level government. DRR national strategic plan of action 2018-2030 states that the local

government is responsible for developing institutional, policy, and program-related capacity at the local level to ensure the priority of Disaster Risk Reduction and Management in its working areas. The local governments are the focal point for initiating PPP models. They can allocate budgets on DRR/M based on the local scene to execute programs. According to the DRRM Act 2074, every local government should form a Local Disaster Management Committee (LDMCs) whose roles extend from planning and monitoring to disaster preparedness and response. The committees could take the authority to liaise with private sectors for potential PPPs.

Trade-offs are an essential component of PPP. For a successful partnership, the private sector should benefit from their involvement. Studies show that the private sector's participation can improve emergency response and long-term recovery in disaster management.<sup>2</sup> They participate for financial gain, brand recognition, moral/religious obligation, and social responsibility obligations; these need to be explored before asking private sectors for partnership.

A PPP plan helps ensure prevention, preparedness, mitigation, response, and recovery by outlining procedures and partners' responsibilities. This plan incorporates partners' risks,



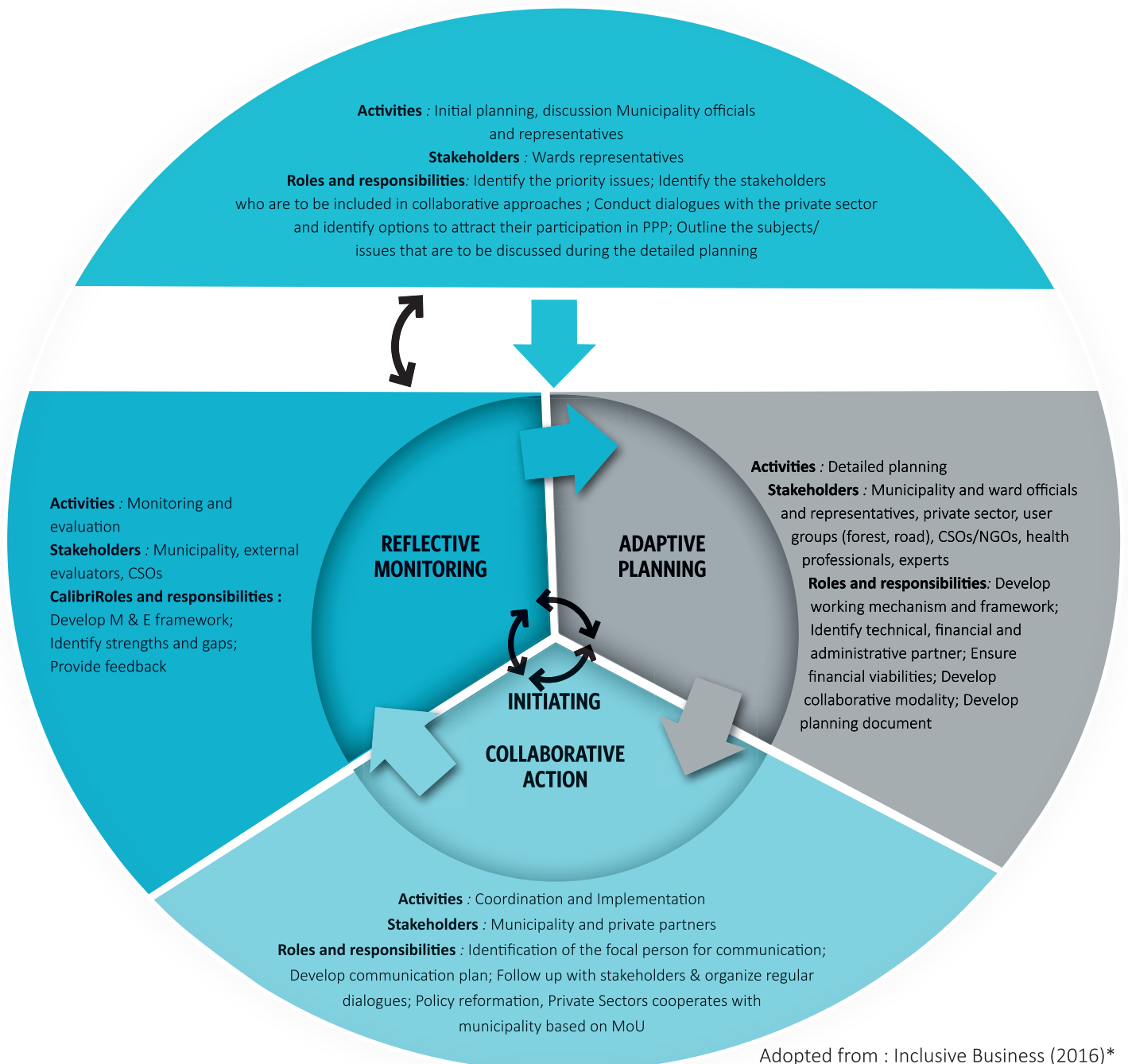


vulnerabilities, and capabilities. However, the plan does not replace the state and local response plans. Instead, they supplement each other. Some public and private sectors, who can provide critical input to the planning process of PPP, follows:

- Public sector: Government decision-makers; municipal officials including LDMC; police and fire chiefs; and elected officials;
- Private sector: Executives and administrators; private sector safety and/or security directors; insurance company representatives; private sector human resource directors; and related contractors such as private security firms.



## PPP framework for fire management in Changunarayan Municipality ►



Adopted from : Inclusive Business (2016)\*

\* <https://www.inclusivebusiness.net/ib-voices/editors-choice-may-2016-multi-stakeholder-partnerships-guide>

## Discussion >

There is a lack of a regulatory framework to bring private sectors into disaster management in Nepal. Some legal documents provide guidance, but there is a need for clarity to bring about and properly define their roles. For instance, the Forest Fire Management Strategy 2010 considers the participatory approach one of the pillars of forest fire management. It envisions community, government, and non-government organizations as the expected partners in the participatory approach but has not addressed the private sector's involvement.<sup>3</sup>

From the project's learnings at Changunarayan municipality, it has been realized that identifying rationales for private sector engagement in fire management is challenging. In any disaster, it will not be easy to find financial incentives. Their recognition by the municipality could be one option, but private companies/firms may not always be motivated simply by recognition.

The Bhaktapur Chamber of Commerce and Industries (BCCI) has shown interest in collaborating with Changunarayan Municipality to identify potential partners from BCCI umbrella or any interested private companies. For this, BCCI seeks a complete work plan from the municipality.

Evidence-based fire information is a foundation for PPP planning. It helps identify needs and calculate risks for

## Recommendation >

- The most significant part of promoting PPP is appropriate policy, regulatory and institutional reform. The gaps need to be identified, thoroughly analyzed, and effectively amended to create a conducive investment, contribution, and collaborative environment.
- Before disaster events, a concrete PPP plan becomes vital to ensure smooth operation. This plan should form a customized PPP model based on the local situation. Not-for-profit organizations or CSOs should facilitate this process and capacitate municipalities to conduct detailed assessments of local fire disasters.
- Series of dialogues between multi-stakeholders, including private sectors, will help crystallize issues and challenges regarding investments and private sectors' roles and responsibilities. Such dialogues will allow stakeholders to understand each other and improve relationships. A municipality or not-for-profit organization and BCCI could facilitate such dialogues and support multi-parties in reaching a consensus or convergence.
- The municipality needs to support and endorse the private sector's innovative ideas and promote their businesses for their motivation. Multi-stakeholders/ private sector expect recognition and positive feedback for their initiatives.
- Private sectors are unwilling to invest in an uncertain and risky environment such as fire management but seek profit. Thus, stakeholders need to discuss, identify and analyze risks and strategize on managing and minimizing them. Moreover, a less risky or calculated



investments. There is a need for robust assessment of fire-related disasters in the municipality and the country to generate such evidence. The DRR portal under the Ministry of Home Affairs (MoHA) maintains the data of fire incidents. Nepal Police assesses and provides disaster data to MoHA. Information such as location, date, deaths, injuries, missing people, affected family, and the estimated loss is available in the portal. However, the portal does not mention the essential fire sources in order to prepare and prevent fire hazards. Electrical and LPG fires are the leading causes in urban areas; however, this information is supported only by anecdotal evidence. The systematic records of fire burn patients at health institutions are yet to be maintained.

risk-taking environment will help attract private sectors. A comprehensive assessment process developed for fire disasters would help.

- A municipality should liaise with concerned ministries on how the amount set aside by the private sectors through Corporate Social Responsibility (CSR) could be drawn in managing fire disasters. It should also explore motivating measures such as exemption or reduction of the tax amount and transparent bidding procedures.

## References >

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