

Abstract:

Slum fires impose significant social and economic costs including loss of life, destruction of health, property, dwellings and jobs while the interlinked physical and social vulnerabilities expose the urban poor not to single but multiple risks. Disaster preparedness and mitigation are the main methods of protecting such communities against fire disasters. This study sought to examine fire safety mechanisms and their effect on prevalence of fire disasters in Kenya slums. Nairobi will further absorb another 5 million people in the next two decades who will seek residence in slums and will join the slum population which is already vulnerable and reeling with poverty and continues to lose life, property and livelihood due to fire disasters in slums. The site of the study was LungaLunga slum which is located within the newly created Viwandani Division in Makadara District on the Eastern side of Nairobi province. Apart from the low class, the majority of those who live in LungaLunga slum are the poor who live below the poverty line. Sampling was done for each of the eight villages which were divided into two clusters and from each, three households were selected using simple random sampling and in each, one person chosen by purposive sampling to give a total sample size of forty eight persons. The study revealed that 46.9 percent of participants have experienced ten and more incidents of fire in LungaLunga slum within a year while 36.7 percent have witnessed between one to five showings that the frequency of fire incidents in the slum is high. The cause of most fires in LungaLunga slum is unattended stoves by drunken residents (44.7 percent), electric faults (17 percent), congested houses made of combustible materials (95.9 percent walls and roofs of iron sheets) and presence of kerosene. Majority of the respondents (60.5 percent) did not know of any fire safety mechanism while a cumulative 29.8 percent and 27.7 percent had poor knowledge about fire safety mechanisms. Neighbors were the most active group in fighting fire at 72.9 percent followed distantly by the fire brigade at 16.7 percent. The challenges faced' by residents when coping with fire are poor infrastructure and lack of safety equipment (25.5 percent) and little knowledge over handling of inflammable materials (23.4 percent). Many of the respondents (37.5 percent) felt that community sensitization to fire preventive measures was the best option for sustaining effective fire safety mechanisms while 34.4 percent opted for putting the fire safety measures in practice while another 18.8 percent said that the government needed to ensure effectiveness of the fire brigade. Majority of the participants (28.3 percent) pointed to the need to increase awareness on how to mitigate and deal with fire disasters while 17.4 percent appealed to the government to provide safety facilities. A further 15.2 percent rated equally the need for efficiency and effectiveness of the fire brigade and improving the infrastructure' such as roads as a solution to the challenge of fire disasters. Important recommendations for acting against fire incidents include the government increasing capacity in fire safety mechanisms by reducing prevalence of fire disasters in slums through enhancement of disaster-awareness and disaster management capability by mainstreaming DM. Provision of effective capability for harmonized and standardized rapid response to disasters by coordinated participation of all stakeholders at all levels is also important. Other strategies are rapid and effective response to disasters, promotion of high compliance with safety regulations against potential risks, hazards and disasters and promotion of compliance in construction against fire outbreaks in the slum.