

# A Case Study of Disaster Risk Reduction in Schools for the Blind in Thailand

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## ABSTRACT

In Thailand, 9% of people with disabilities are visually impaired (VI). VI children are vulnerable when disasters occur. This study investigates risk situations and disaster risk reduction (DRR) methods in VI schools to identify present and potential ways that students can be provided skills. An interview was administered in two schools to schoolteachers and administrators. Content analysis was used to analyze qualitative data based on core keywords. DRR for daily risk exposure and fires is the priority. Concerns over VI students are based on the difficulty in orientation. Support is considered crucial for student safety. Supervisory means to limit risk among the VI is uncertain in times of disaster. Students are capable of learning about DRR and, combined with assistive techniques, can limit their risk. DRR policies in VI schools are primarily reactive. Uncomplicated risk awareness information and training could foster an appropriate approach to bringing self-efficacy to deal with risk.

## KEYWORDS

Disaster Risk Reduction, Schools for the Blind, Self-Efficacy, Students With Visual Impairment, Thailand

## BACKGROUND

Persons with disabilities are often overlooked throughout disaster management, although considered vulnerable. They are more likely to have limited access to services, information, and community networks. In terms of disasters, the implications are life-threatening. Because disaster warning signs are frequently delivered through a visual base, people with visual impairment (VI) often cannot receive important information. Wheelchair users frequently have difficulty accessing evacuation routes. Similarly, people with an intellectual disability or psychosocial disorders are frequently isolated because they cannot receive proper communication and emotional support.

Disasters unequally affect people with disabilities. The estimated mortality rate from the Great East Japan Earthquake in 2011 in the general population was 1.03%, compared to 2.06% for those with disabilities. Besides, a survey showed that people with disabilities accounted for 24.6% of total “disaster-related deaths,” while only 7% of deaths were in the total population (Kyodo News, 2020). A study was conducted after the 2015 earthquakes in Nepal. People with disabilities experience various challenges and difficulties, including daily accessibility issues, physical vulnerability, psychological

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issues, a lack of health services, problems with government disability payments, and access to information. Findings showed that structural disparities and patterns of social exclusion have a wide variety of implications for patterns of recovery and resilience (Lord, 2016).

In a global society built on the ability to see, VI is a significant disadvantage to access to information. People with VI face significant challenges in daily life as they cannot freely move around, read, or write. This situation becomes incalculable during disaster events. There are many layers of barriers for those with VI to face during a disaster. For example, people need to know where to find and how to get to emergency shelters. At the shelter, people must understand where and when food is provided and how to access and use toilets. People with VI must obtain the required information precisely (Japan Disability Forum, 2015).

In Thailand, there are disasters, such as floods, storms, landslides, earthquakes, and tsunamis. The 2004 Indian Ocean Tsunami was a significant disaster, and the 2011 Great Flood caused the most damage to lives and economies. Active faults also caused the magnitude 6.3 earthquake in Chiang Rai in 2014 (Department of Disaster Prevention and Mitigation [DDPM], 2015). Thailand has 2,127,332 people with disabilities, accounting for 3.18% of the population. Those with VI account for almost 9% (Punbutre, 2021). At the present, there is no study focusing on VI persons in Thailand that investigate their situation in disasters.

## LITERATURE REVIEW

### Visual Impairment and Blindness

VI occurs when an eye condition affects the visual system and one or more vision functions. Globally, at least 2.2 billion people have near or distant vision impairment (Steinmetz et al., 2021).

#### *People With Visual Impairment in Thailand*

According to a report from the Ministry of Social Development and Human Security, the number of people with visual impairment of those who hold disability ID cards is 186,701 as of July 2022 (Office of the Basic Education Commission, 2017). However, National Statistic Office reported data from a disability survey that includes non-disability registration, non-ID holder, and non-Thai nationality with two-eyed blindness or low vision representing 447,864 total, with 6,080 represented VI children aged 2–17 years old (Social Statistical Division, 2020).

#### *Schools for Blind Students in Thailand*

Education Provision for Persons with Disabilities Act, 2008, persons with disabilities have the right to education as follows (Royal Thai Government Gazette, 2008):

1. To obtain an education free of charge from birth or with disability throughout their life, including receiving technology facilities, media, services, and other educational assistance.
2. To choose educational services, educational institutes, educational systems, and programs, considering the person's abilities, interests, aptitudes, and special needs.
3. To obtain an education that meets standards and quality assurance, including the course, learning process, and educational test suitable to the unique needs of people with disabilities and person.

There are two governmental schools for blind students under the Ministry of Education, one in the northern region, another in the southern region, and 11 private schools. VI students can obtain education from joint schools where the school for blind students sends their students to study with sighted students, special education centers in each province, and schools for disabilities. Such a school's curriculum is set following the learning standards of the Ministry of Education.

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