

**MOTIVATION, ORGANIZATIONAL
SUPPORT, PREPAREDNESS AND
CHALLENGES AMONG CIVIL DEFENCE
VOLUNTEERS IN PATHANAMTHITTA
DISTRICT**

MSW DISASTER MANAGEMENT

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**Motivation, Organizational Support, Preparedness and
Challenges among Civil Defence Volunteers in
Pathanamthitta District**

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Abstract

This study, titled ‘Motivation, Organizational Support, Preparedness and Challenges among Civil Defence Volunteers in Pathanamthitta District,’ investigates factors influencing participation, preparedness, and experiences of Civil Defence Volunteers engaged in disaster management within a district frequently exposed to floods, landslides, river overflows, and other hazards. Employing a quantitative survey design, data were collected from 60 active Civil Defence Volunteers selected through purposive sampling using a structured questionnaire that captured socio-demographic characteristics, motivation (assessed via the Volunteer Functions Inventory), perceived organizational support, training experiences, confidence levels, and challenges. Findings indicate that values-based motivation—anchored in humanitarian concern, moral responsibility, and community service—was the strongest predictor of volunteer participation. Respondents reported moderate to high perceived organizational support and had received training in key operational areas including First Aid/CPR, Search and Rescue, Fire Fighting, and Flood Rescue. Notable gaps were identified in psychosocial support training, relief camp management, transportation support, financial assistance, formal recognition, and volunteer identity support. The study concludes that reinforcing regular training, logistical provisions, recognition mechanisms, welfare measures, and psychosocial preparedness would strengthen volunteer effectiveness and contribute to enhanced community-level disaster resilience in Pathanamthitta District.

Keywords: Civil Defence Volunteers, Motivation, Organizational Support, Disaster Preparedness, Volunteerism

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CHAPTER I: INTRODUCTION

1.1 Introduction

Disaster management increasingly depends on trained community-level actors who can connect formal institutions with local realities. The Sendai Framework for Disaster Risk Reduction emphasizes that reducing disaster risk requires “all-of-society engagement and partnership,” with shared responsibility among governments, local bodies, communities, and other stakeholders (UNDRR, n.d.). In India, this approach is reflected in the Disaster Management Act, 2005, which defines disaster management as a continuous and integrated process involving prevention, mitigation, capacity building, preparedness, prompt response, relief, rehabilitation, and reconstruction (Government of India, 2005).

Civil Defence Volunteers occupy an important position within this framework. The Civil Defence Act, 1968, as amended in 2009, formally expanded the role of Civil Defence Corps to include disaster management before, during, and after natural and man-made disasters. Civil Defence in India is primarily voluntary in nature, and its objectives include saving lives, minimizing property loss, maintaining essential services, and strengthening public morale during emergencies. The National Disaster Management Authority’s handbook on Civil Defence and sister organizations highlights that community participation as first responders must become more comprehensive, swift, effective, and well planned through systematic training and capacity building (NDMA, 2012).

Volunteerism is not merely an act of unpaid service; it is also a social resource for resilience. United Nations Volunteers notes that volunteer action in disasters extends across prevention, preparedness, mitigation, response, and recovery, and that community networks are among the most effective resources for reducing vulnerability (UNV, 2011). Research on volunteerism shows that people enter and continue voluntary service for multiple reasons, including values, altruism, community concern, skill development, social relationships, self-esteem, and career-related motives (Snyder & Omoto, 2008). Recent meta-analytic evidence also shows that volunteer motives predict satisfaction, commitment, intention to continue, and frequency of service, with “values” emerging as the strongest predictor (Zhou & Kodama Muscente, 2022).

In this context, the present study, “Motivation, Organizational Support, Preparedness and Challenges among Civil Defence Volunteers in Pathanamthitta District,” focuses on the human side of disaster preparedness. It seeks to understand why individuals volunteer, how institutional support shapes their engagement, how prepared they are for disaster-related duties, and what challenges they experience.

1.2 Background of the study

Pathanamthitta is a disaster-relevant district in Kerala because of its river systems, hilly terrain, forested areas, pilgrimage routes, and recurring exposure to floods and landslides. The official district profile notes that Pathanamthitta has one district panchayat, eight block panchayats, 53 grama panchayats, four municipalities, six taluks, and 70 villages. Studies on the district describe it as vulnerable to flooding caused by the overflow of the Pamba, Achankovil, Manimala, and their tributaries, with places such as Kallooppara and Aranmula identified as flood-prone areas (Samuel, 2022).

The landslide profile of Pathanamthitta further increases the need for trained local response systems. The ICLRR 2022 proceedings report that Pathanamthitta has a total area of 2,637 sq. km, with forests accounting for about 52% of the district; flash floods were reported in areas such as Aruvappulam, Vadasserikkara, Adoor, Enadimangalam, and Chunkappara during 2021–2022; and Thannithode, Chittar, Seethathode, and Ranni-Perunad are highly vulnerable to landslides. The same source reports that landslide hazard zonation identified 63,464 hectares as high-hazard zone and 582 hectares as very high-hazard zone, mainly in Konni and Ranni taluks (Institute of Land and Disaster Management, 2022). KSDMA’s official hazard map portal also provides district-level flood hazard probability maps and GSI 2022 landslide susceptibility maps for Pathanamthitta, confirming the district’s relevance for flood and landslide risk reduction planning. (Kerala State Disaster Management Authority, n.d.)

The conceptual background of this study rests on four interrelated dimensions. First, motivation explains why volunteers join and continue service. Functional theories of volunteering suggest that similar acts of volunteering may satisfy different motives, such as values, understanding, social connection, career, protection, and enhancement (Clary et al., as discussed in Zhou & Kodama Muscente, 2022). Second, organizational support affects whether volunteers feel recognized,

trained, supervised, and integrated. Stukas et al. (2016) argue that volunteer environments that support autonomy, meaningful tasks, and motivation-matching benefits can improve satisfaction and intentions to continue volunteering. Third, preparedness reflects training, practical skills, communication, coordination, and readiness to respond before, during, and after disasters. NDMA emphasizes Civil Defence training, capacity building, mock drills, search and rescue, first aid, and community-based disaster preparedness (NDMA, 2012). Fourth, challenges include role ambiguity, lack of recognition, emotional stress, safety risks, inadequate equipment, coordination issues, and sustaining participation over time. Research on community first responders shows that volunteers may be motivated by altruism and community commitment, but they may also experience emotional strain, role ambiguity, lack of public recognition, and the need for stronger support systems (Phung et al., 2018).

1.3 Statement of the Problem

Pathanamthitta district faces recurring flood and landslide risks, and these hazards require rapid, localized, and coordinated response. Formal agencies such as the District Disaster Management Authority, Fire and Rescue Services, Police, Revenue Department, Health Department, and local self-government institutions play central roles; however, the first minutes and hours of an emergency often depend on people who are already present in the affected locality. Disaster literature shows that ordinary citizens and volunteers are frequently first on the scene and may remain active even after official services have withdrawn (Whittaker et al., 2015). Therefore, Civil Defence Volunteers can become a crucial bridge between official disaster management structures and vulnerable communities.

Despite this importance, there is limited localized empirical understanding of Civil Defence Volunteers in Pathanamthitta district. Existing policies emphasize training, capacity building, and community-based disaster risk reduction, but they do not fully explain how volunteers themselves experience their role. It is not enough to know that Civil Defence Volunteers are trained or deployed; it is necessary to understand what motivates them, whether they receive adequate organizational support, how prepared they feel for real emergencies, and what challenges affect their effectiveness and retention.

Thus, the central problem addressed by this study is: there is a need to systematically examine the motivation, organizational support, preparedness, and challenges of Civil Defence Volunteers in Pathanamthitta district so that their role in disaster management can be better understood, strengthened, and sustained. The study is especially relevant in a district where flood-prone riverine areas, landslide-prone hill regions, and high-risk pilgrimage contexts require strong preparedness.

1.4 Significance of the study

This study is significant because it contributes to disaster management practice, volunteer management, community resilience, and social science research. At the practical level, the findings can help district-level authorities understand whether Civil Defence Volunteers are adequately trained, supported, equipped, and psychologically prepared for their roles. This is important because effective disaster risk planning and response require trained Civil Defence Volunteers and community participation, especially since such volunteers may serve as first responders with the best opportunity to save lives and provide immediate assistance before, during, and after disasters (NIDM & DDMA West, 2022).

For Civil Defence and Fire & Rescue Services, the study can provide evidence on how to improve recruitment, motivation, training, deployment, recognition, and retention. Volunteer research shows that organizations can reduce preventable attrition by understanding volunteers' motivations, preferences, satisfaction, effectiveness, and continuing involvement (Snyder & Omoto, 2008). This is particularly useful for Civil Defence systems that depend on sustained voluntary participation rather than short-term enthusiasm.

For Pathanamthitta district, the study has direct relevance to local disaster risk reduction. Flood-prone panchayats, landslide-prone hill areas, and pilgrimage-related emergency contexts require volunteers who understand local terrain, local communities, evacuation routes, communication patterns, and vulnerable groups. Strengthening Civil Defence Volunteers can enhance early warning dissemination, evacuation support, first aid, crowd management, search and rescue assistance, relief coordination, and community awareness.

The study is also significant for community resilience. UNV argues that disaster management begins and ends with communities, and that resilience includes the ability to prevent, prepare for, cope with, and recover from disasters (UNV, 2011). By studying Civil Defence Volunteers, this research highlights how community members can shift from being viewed only as victims or beneficiaries to being active partners in disaster preparedness and response.

Academically, the study fills a contextual gap by applying volunteer motivation and disaster preparedness literature to Civil Defence Volunteers in a Kerala district setting. Much of the existing research on volunteerism has been conducted in Western or generalized disaster contexts, while district-level studies on Civil Defence Volunteers in Kerala remain limited. The findings can therefore support future research in social work, disaster management, public administration, community development, and volunteer studies.

CHAPTER II: LITERATURE REVIEW

2.1 Introduction

This chapter reviews the existing literature related to motivation, organizational support, preparedness, and challenges among Civil Defence Volunteers, with specific relevance to disaster-prone settings such as Pathanamthitta District. Civil Defence Volunteers occupy an important position in community-based disaster management because they act as a bridge between formal disaster management institutions and local communities. Their role becomes especially significant in districts exposed to recurring floods, landslides, and other natural hazards, where timely local response can reduce loss of life, property damage, and community distress.

The literature on volunteerism shows that volunteering is not merely an act of unpaid service, but a complex form of social participation influenced by personal values, altruism, community attachment, skill development, recognition, and organizational experience. In disaster management, volunteers contribute not only during emergency response but also in preparedness activities, awareness generation, evacuation support, relief coordination, and recovery. Therefore, understanding what motivates Civil Defence Volunteers and what sustains their involvement is essential for strengthening disaster risk reduction at the grassroots level.

At the same time, motivation alone is not sufficient to ensure effective volunteer participation. Studies on disaster volunteerism and Civil Defence indicate that organizational support plays a crucial role in shaping volunteer commitment and performance. Training, role clarity, leadership, communication, safety equipment, emotional support, supervision, and recognition all influence whether volunteers feel capable and valued. Preparedness is also central, as volunteers must possess the knowledge, skills, confidence, and practical readiness needed to function in high-pressure disaster situations.

The literature further highlights several challenges faced by volunteers, including inadequate training, lack of resources, unclear duties, weak coordination, emotional stress, low recognition, and difficulties in balancing family, work, and voluntary responsibilities. These challenges may affect their morale, preparedness, and continued participation. In the context of Pathanamthitta, where flood and landslide risks are recurrent, examining these issues becomes highly relevant for improving the effectiveness of Civil Defence Volunteers and strengthening community resilience.

This review is organized thematically to provide a clear understanding of the major concepts and research findings relevant to the present study. The first section discusses volunteerism in disaster management, followed by literature on Civil Defence Volunteers and community-based disaster management. Subsequent sections examine motivation, organizational support, preparedness, disaster vulnerability in Pathanamthitta, challenges faced by volunteers, and the relationship between volunteerism and community resilience. The review concludes by identifying the research gap and establishing the need for the present study.

Volunteerism in Disaster Management

Volunteerism has been widely understood as a freely chosen form of helping behaviour performed without expectation of financial reward and often carried out through organized agencies or community structures. Snyder and Omoto (2008) describe volunteerism as sustained social action that benefits individuals, communities, causes, and society. In disaster management, this meaning becomes more practical because volunteers often function as the first layer of response before formal agencies arrive, especially in rural, flood-prone, and geographically difficult regions.

Disaster volunteerism is especially significant because disasters create sudden needs that exceed the capacity of government departments and professional emergency services. Whittaker, McLennan, and Handmer (2015) argue that ordinary citizens are usually among the first to act during emergencies and may continue supporting affected communities after formal services withdraw. Similarly, the United Nations Volunteers report emphasizes that volunteerism strengthens trust, solidarity, reciprocity, and participation in communities affected by disasters (United Nations Volunteers [UNV], 2011). Therefore, volunteers are not only supplementary helpers but also important social actors in disaster preparedness, response, relief, and recovery.

Civil Defence Volunteers occupy a formal and community-linked position within this broader field of disaster volunteerism. In the Indian context, the National Disaster Management Authority's handbook emphasizes that community participation as first responders must be more comprehensive, effective, swift, and well planned through proper training (National Disaster Management Authority [NDMA], 2012). . This is highly relevant to Pathanamthitta District, where floods, landslides, river overflows, and local vulnerabilities demand trained community-based personnel who can assist government agencies during emergencies.

Civil Defence Volunteers and Community Based Disaster Management

Civil Defence has gradually moved beyond its earlier war-related role and has become linked with disaster risk reduction, community preparedness, emergency response, and public awareness. The Disaster Management Act, 2005 created institutional structures at national, state, and district levels and gave legal importance to disaster planning, coordination, mitigation, and response (Government of India, 2005). Within this framework, Civil Defence Volunteers can support District Disaster Management Authorities, local bodies, fire and rescue services, police, health departments, and community organizations.

The NDMA handbook notes that Civil Defence should function as a community-based effort run by socially motivated and trained volunteers, working in synergy with government and community institutions (NDMA, 2012). It also recommends close coordination with Panchayati Raj Institutions, municipalities, youth organizations, NCC, NSS, NYKS, Scouts and Guides, and other voluntary organizations to build trained human resources for disaster response. This reflects the community-based disaster management approach, which recognizes that communities are not passive victims but active participants in identifying risks, preparing for hazards, and responding to emergencies.

Community-based disaster management literature strongly supports this position. Hossain (2013) observes that disaster losses can be minimized through proper planning, management, and collective participation. Huq (2016) similarly argues that community participation is one of the most effective elements for achieving sustainability in disaster risk reduction. Azad, Uddin, Zaman, and Ashraf (2020) describe the shift from reactive, top-down disaster management to proactive, community-focused disaster risk reduction. For Civil Defence Volunteers in Pathanamthitta, this literature suggests that their role should be examined not merely as emergency manpower but as part of a larger system of local resilience, awareness generation, preparedness, and coordination.

Training, Competency Development, Mock Drills, and Experiential Learning

Preparedness is strongly shaped by training quality. Training gives volunteers the knowledge, skills, confidence, and discipline needed to act safely during emergencies. The Sendai Framework

identifies preparedness, response readiness, and capacity building as central elements of disaster risk reduction (UNDRR, 2015). In the Indian context, the NDMA Civil Defence handbook stresses continuous training, retraining, refresher courses, and orientation for volunteer-based organisations (NDMA, 2012). This is directly relevant to Civil Defence Volunteers because emergency response skills can decline if they are not practiced. A volunteer trained once in first aid, rope rescue, or communication may not remain competent unless refresher training and practical exercises are repeated.

Training should be competency-based rather than only lecture-based. Competency-based training focuses on what volunteers must be able to do in the field. For example, a volunteer should not merely know the definition of cardiopulmonary resuscitation; they should be able to perform chest compressions correctly on a mannequin. Similarly, flood rescue training should include safe approach, use of personal flotation devices, rope handling, victim reassurance, and coordination with trained rescue personnel. Search and rescue training should include scene safety, basic search patterns, lifting techniques, communication, and personal limitations. Such practical competencies help transform willingness into operational readiness.

Mock drills and simulation exercises are useful because they expose volunteers to realistic conditions without the full risk of an actual disaster. Tabletop exercises help volunteers understand roles, sequence of actions, and communication flow. Field drills help them practice movement, crowd management, evacuation, first aid, and coordination with agencies. The IFRC and other humanitarian organisations emphasise that exercises and drills are valuable for testing plans, identifying gaps, and improving teamwork before an emergency occurs (IFRC, 2011). In Pathanamthitta, mock drills can be designed around locally relevant hazards such as river flooding, landslide evacuation, building fire, road accident, relief camp opening, and pilgrimage crowd pressure.

Training should also include debriefing. Debriefing after drills or real operations allows volunteers to discuss what worked, what failed, what was confusing, and what support was needed. Without debriefing, mistakes may be repeated and emotional stress may remain unaddressed. Jaime et al. (2023) highlight the relationship between task knowledge and volunteer satisfaction, suggesting that training should make volunteers feel capable and not merely certified. Training evaluation can include attendance, skill demonstration, confidence ratings, scenario performance, and feedback

from trainers. Such evaluation can help Civil Defence authorities identify volunteers who need additional support and those who can become peer trainers.

A strong training system also recognises different levels of competence. Not every volunteer can or should perform every task. Some volunteers may be suitable for first aid, some for communication, some for camp management, some for crowd guidance, and some for rescue support under professional supervision. A tiered training model can classify volunteers as basic, intermediate, and advanced according to skills, physical capacity, and experience. This prevents unsafe deployment and improves efficiency. It is especially important in flood and landslide contexts, where well-intentioned but unprepared action may endanger both victims and volunteers. Therefore, Civil Defence training should combine motivation, technical skill, safety awareness, and role-specific deployment.

Psychosocial Preparedness, Critical Incident Stress, and Volunteer Well-being

Disaster response is emotionally demanding. Civil Defence Volunteers may see injured people, dead bodies, destroyed houses, crying families, displaced children, exhausted older persons, and distressed survivors. Such exposure can create psychological strain, especially for volunteers who are not professionally trained in mental health. The Inter-Agency Standing Committee guidelines explain that mental health and psychosocial support should be integrated across emergency response sectors, not treated as an optional specialist activity (IASC, 2007). For Civil Defence Volunteers, psychosocial preparedness includes two dimensions: the ability to provide basic emotional support to affected people and the ability to protect their own mental well-being during and after response activities.

Psychological First Aid is a practical approach that can be taught to non-specialist responders. The WHO, War Trauma Foundation, and World Vision International (2011) describe Psychological First Aid as humane, supportive, and practical assistance to people who are suffering after crisis events. It does not require volunteers to provide counselling or therapy. Instead, it teaches them to listen respectfully, help people feel safe, connect them to services, identify urgent needs, and avoid causing further harm. This is relevant to Civil Defence because volunteers may be among the first persons to interact with survivors during evacuation, rescue, relief camp registration, or crowd management.

Psychosocial preparedness also protects volunteers from harmful practices. Without training, a volunteer may unintentionally pressure survivors to talk about painful experiences, give false reassurance, share unverified information, or ignore privacy. Psychological First Aid helps volunteers understand boundaries. It also teaches them to identify people who need referral, such as those who are disoriented, injured, separated from family, at risk of self-harm, or unable to care for themselves. In relief camps, volunteers may meet pregnant women, older persons, children, persons with disabilities, and people who have lost homes or documents. Psychosocial awareness makes their support more sensitive and dignified.

Volunteer well-being must receive equal attention. IFRC guidance on volunteering in emergencies stresses the need to include psychosocial support for volunteers in response management plans (IFRC, 2011). Volunteers may experience fatigue, fear, guilt, helplessness, or intrusive memories after difficult operations. Some may avoid discussing distress because they believe responders should be strong. However, unaddressed stress can affect sleep, family life, concentration, motivation, and future participation. Civil Defence systems should therefore include rest periods, peer support, post-operation debriefing, referral pathways, and awareness about normal stress reactions.

Critical incident stress management is particularly relevant when volunteers experience high-intensity events such as drowning, landslide deaths, mass casualty incidents, or crowd crush risk. Support should begin before deployment through safety briefings and realistic expectations. During response, team leaders should monitor fatigue and emotional overload. After response, volunteers should have opportunities to share operational concerns and receive support without stigma. This is important in Pathanamthitta because floods, water accidents, landslides, and pilgrimage-related emergencies can involve emotionally intense scenes. Psychosocial preparedness therefore connects directly with volunteer confidence, organisational support, challenge reduction, and long-term retention.

Risk Communication, Early Warning Dissemination, and Community Awareness

Risk communication is a central part of disaster preparedness because timely and understandable information helps people take protective action. The Sendai Framework emphasises the need for people-centred, multi-hazard early warning systems, disaster risk information, and public

awareness (UNDRR, 2015). Civil Defence Volunteers can play an important role in translating warnings into local action. In many communities, official alerts may be received through district administration, weather bulletins, police, local self-government institutions, or media, but people may still need local explanation. Volunteers who know the area can help communicate what the warning means for specific households, roads, riverbanks, hillsides, schools, markets, and places of worship.

Effective risk communication is not only about sending messages. It requires trust, clarity, consistency, and cultural understanding. If people do not trust the source, or if messages are too technical, they may delay evacuation. Civil Defence Volunteers can improve communication because they are locally visible and may already have relationships with residents. However, they must be trained to avoid spreading rumours or unverified information. They should know how to communicate official warnings accurately, explain protective actions, and direct people to authorised help. This is especially important during floods and landslide warnings when time is limited and misinformation can increase panic.

Early warning dissemination should also consider vulnerable groups. Older persons, persons with disabilities, children, migrant workers, isolated households, and people living near rivers or slopes may require additional support to understand and act on warnings. In Pathanamthitta, some locations may face communication difficulties due to terrain, heavy rain, power interruption, or mobile network failure. Volunteers can support door-to-door warning, public address announcements, local WhatsApp group verification, shelter guidance, and coordination with ward members. Such work shows that preparedness is not limited to rescue after impact; it begins with helping people act before harm occurs.

Community awareness programmes are another area where Civil Defence Volunteers can contribute. Volunteers can participate in school safety programmes, first aid demonstrations, monsoon preparedness campaigns, household emergency planning, fire safety awareness, and safe pilgrimage messaging. Awareness activities can also sustain volunteer motivation during non-disaster periods because they provide meaningful engagement. If volunteers are active only during emergencies, their skills and identity may weaken. Regular community education allows them to remain connected with the public and reinforces the role of Civil Defence as a preparedness-oriented institution.

Local Knowledge, Social Capital, and Trust in Community-Based Response

Community-based disaster management depends not only on formal plans but also on local knowledge and social relationships. Civil Defence Volunteers often know the local geography, shortcuts, river behaviour, flood marks, vulnerable houses, elderly residents, boat owners, youth groups, schools, temples, churches, mosques, and community leaders. Such knowledge can improve response speed and appropriateness. Aldrich and Meyer (2015) argue that social capital and social networks are crucial for disaster survival and recovery. Social capital includes the relationships, trust, norms, and networks that help people cooperate. Civil Defence Volunteers can act as carriers of social capital because they link households, local institutions, and formal agencies.

Norris et al. (2008) describe community resilience as a process that links adaptive capacities to positive adaptation after adversity. These adaptive capacities include social capital, information and communication, community competence, and economic development. Civil Defence Volunteers contribute to several of these capacities. They circulate information, support coordination, connect people with services, and strengthen community competence through awareness and practical help. In a district like Pathanamthitta, where hazards are recurrent, resilience requires repeated local learning. Volunteers who have participated in past floods or landslide responses may remember what routes failed, which shelters were suitable, and which groups needed extra help.

Local knowledge is particularly valuable because official maps and plans may not capture all micro-level realities. A flood map may identify a broad hazard zone, but residents and volunteers may know which lane floods first, where the current is strongest, which house has bedridden persons, and which bridge becomes unsafe. Similarly, in landslide-prone areas, volunteers may know local signs such as cracks, blocked drains, unusual water seepage, or past slope failures. This knowledge should be documented through participatory risk mapping, ward-level preparedness meetings, and volunteer reports. When formal scientific information and local knowledge are combined, disaster preparedness becomes more grounded.

Trust is also important during evacuation. People may hesitate to leave homes because of fear of theft, livestock concerns, previous false alarms, attachment to property, or uncertainty about relief camps. Civil Defence Volunteers from the same community may be able to persuade residents

more effectively than unfamiliar officials. However, trust must be built before disasters. Volunteers who are visible during awareness programmes, training demonstrations, and local preparedness activities are more likely to be accepted during emergencies. Therefore, Civil Defence should be understood not only as a response force but also as a trust-building community institution.

Inclusion, Gender, Vulnerability, and Protection in Civil Defence Volunteering

Disasters affect people differently depending on age, gender, disability, health, income, social location, and access to support. Inclusive disaster management recognises that preparedness and response must address these differences. The Sphere Handbook emphasises dignity, protection, accountability, and attention to vulnerable groups in humanitarian response (Sphere Association, 2018). For Civil Defence Volunteers, inclusion means understanding that evacuation, relief camp support, first aid, communication, and crowd management cannot be one-size-fits-all. A bedridden older person, a pregnant woman, a child separated from family, a person using a wheelchair, and a migrant worker who does not understand Malayalam may require different forms of assistance.

Gender is an important issue in volunteer participation as well as disaster response. If Civil Defence teams are predominantly male, certain tasks may become difficult, especially in relief camps, women's spaces, child protection situations, and communication with women survivors. Increasing female participation can improve community reach, dignity, and protection-sensitive response. However, female volunteers may face barriers such as family restrictions, safety concerns, lack of separate facilities, social norms, or unsuitable training schedules. Therefore, volunteer management should not merely call for more women volunteers; it should create enabling conditions such as safe training spaces, respectful leadership, appropriate uniforms, transport safety, and equal recognition.

Protection sensitivity is essential because volunteers may work with people in highly vulnerable situations. Relief camps may involve privacy concerns, gender-based violence risks, child safeguarding issues, missing family members, and conflict over resources. Volunteers should be trained to maintain confidentiality, avoid discrimination, respect privacy, and report protection concerns through proper channels. They should not photograph survivors without consent, disclose

personal details, or make promises they cannot fulfil. Such ethical conduct strengthens public trust and reduces harm. It also protects volunteers from accusations and misunderstandings.

Inclusion also relates to the internal organisation of Civil Defence. Volunteers themselves may come from different economic backgrounds, age groups, occupations, and abilities. Some may not be able to travel long distances without transport support. Some may need compensation for food or lost wages during long deployments. Some may have language skills useful for communicating with migrants or pilgrims. Inclusive volunteer management recognises these differences and deploys volunteers according to strengths, limitations, and safety. In Pathanamthitta, where disaster response may involve local residents, interstate pilgrims, older persons, tribal communities, and people in remote locations, inclusion is not an optional topic but a core preparedness requirement.

Technology, Social Media, and Digital Support in Disaster Volunteering

Technology has become an important part of disaster preparedness and response. Mobile phones, messaging applications, digital maps, social media, emergency databases, and online weather alerts can help volunteers receive information, coordinate teams, report needs, and guide communities. However, technology is useful only when volunteers know how to use it responsibly. During disasters, information can spread quickly, but so can rumours and panic. Civil Defence Volunteers should therefore be trained in digital discipline: verifying information before forwarding, using official sources, protecting personal data, and reporting field information through authorised channels.

Digital tools can support early warning and situational awareness. Volunteers may receive alerts from official disaster management channels, weather updates, or local emergency groups. They can help share location-specific information, such as blocked roads, rising water levels, relief needs, or vulnerable households requiring evacuation. At the same time, unstructured social media messages can overwhelm authorities. To avoid confusion, Civil Defence teams can use standard reporting formats, area-wise WhatsApp groups, contact trees, GPS locations, and designated communication leaders. Technology should strengthen coordination rather than replace command structure.

Digital volunteering also raises questions of inclusion. Not all volunteers or community members may have smartphones, internet access, digital literacy, or language comfort. Heavy rain, power

failure, and network disruption can reduce technology access. Therefore, Civil Defence preparedness should combine digital and non-digital communication. Public address systems, door-to-door warnings, local leaders, notice boards, community radio, and face-to-face communication remain important. In remote or hilly parts of Pathanamthitta, multiple communication methods may be needed. Volunteers should be prepared to operate even when digital systems fail.

Technology can also support training and record-keeping. Online modules, videos, quizzes, attendance records, certificates, skill databases, and deployment histories can help maintain volunteer readiness. A district-level volunteer database could identify who is trained in first aid, flood rescue, psychosocial support, communication, camp management, or crowd control. Such information would make deployment faster and safer. However, data systems should protect privacy and should not become a substitute for practical training. The most effective approach is a blended model where digital tools support, but do not replace, field drills, community relationships, and direct supervision.

Flood, Landslide, and Water-Rescue Contexts in Kerala

Kerala's recent disaster experience shows the importance of trained community-level responders. The state has faced major floods, landslides, and extreme rainfall events in recent years, and many districts continue to require local preparedness. Pathanamthitta's river systems, hilly terrain, and settlement patterns create specific operational challenges for Civil Defence Volunteers. Flood response may require warning dissemination, evacuation, boat coordination, shifting of older persons, first aid, relief camp support, and road safety. Landslide response may require rapid reporting of slope movement, evacuation support, crowd control near unsafe areas, and coordination with specialised rescue teams. These tasks require both local knowledge and formal training.

Flood response is not limited to rescue from water. Volunteers may support pre-monsoon awareness, identification of vulnerable households, preparation of emergency kits, safe route mapping, shelter readiness, and communication between local bodies and residents. During floods, they may help move people to safer locations, guide vehicles away from submerged roads, support boat landing points, and assist in relief camps. After floods, they may support cleaning campaigns,

distribution, documentation, and public health awareness. This shows that Civil Defence flood preparedness should cover the entire disaster cycle, not only dramatic rescue moments.

Landslide contexts require a different form of preparedness. Volunteers should understand basic landslide warning signs, safe evacuation behaviour, the danger of crowd gathering near unstable slopes, and the importance of reporting through official channels. They should also understand their own limits. Landslide rescue often requires trained professional teams because secondary slides, unstable debris, and heavy equipment risks can endanger untrained responders. Civil Defence Volunteers can still play a vital role by supporting evacuation, traffic control, first aid, information management, and community reassurance under the guidance of authorities.

Water-rescue training is particularly relevant in riverine areas, but it must be safety-oriented. Not all volunteers need to become swimmers or rescue divers; however, all should know flood safety basics, such as avoiding fast-moving water, using ropes safely, wearing life jackets, preventing crowding at riverbanks, and identifying when to call trained rescue personnel. Those selected for advanced water rescue should receive repeated practical training, fitness assessment, and supervised drills. In Pathanamthitta, where rivers and tributaries influence disaster risk, flood and water safety skills are directly connected to volunteer confidence, safety, and community trust.

Pilgrimage, Crowd Management, and Civil Defence Roles in Pathanamthitta

Pathanamthitta has an additional disaster management relevance because of pilgrimage-related movement, especially during high-crowd seasons. Large gatherings can create risks such as crowd pressure, traffic congestion, heat exhaustion, medical emergencies, missing persons, fire hazards, communication problems, and difficulties in evacuation. Civil Defence Volunteers can support formal agencies by assisting with crowd guidance, first aid support, information dissemination, queue discipline, route awareness, and help to vulnerable pilgrims. Crowd contexts differ from flood or landslide situations because risk may arise from density, movement, emotion, fatigue, and misinformation rather than from a single physical hazard.

Crowd management requires calm communication and role discipline. Volunteers should know entry and exit routes, emergency access lanes, medical points, police instructions, public address systems, and crowd flow principles. They should avoid giving conflicting directions or creating panic. Training should include how to identify crowd stress signs, how to assist children and older persons, how to communicate with people from different linguistic backgrounds, and how to

respond to rumours. In pilgrimage settings, cultural sensitivity is also important because volunteers must balance safety instructions with respect for religious practices.

Preparedness for crowd contexts also involves coordination with multiple departments. Police, Fire and Rescue Services, health services, transport authorities, temple or shrine administration, local bodies, and district officials may all be involved. Civil Defence Volunteers should have clear reporting channels and task areas. Their role should be supportive, disciplined, and visible. Identity cards and uniforms are especially important in crowd settings because people need to know who can be trusted for directions. Without visible identity, volunteers may find it difficult to guide the public or coordinate with officials.

The inclusion of pilgrimage and crowd management in the literature review strengthens the local relevance of the present study. Pathanamthitta's disaster management context is not limited to natural hazards; it also includes human concentration, mobility, and public safety challenges. Civil Defence Volunteers who are trained only in conventional rescue may not feel fully prepared for crowd-related duties. Therefore, volunteer preparedness should include crowd psychology, communication, first aid, missing person support, emergency route protection, and coordination with formal agencies.

Decentralized Disaster Governance and Local Self-Government Linkages

Disaster management in India operates through national, state, district, and local institutional structures. The Disaster Management Act, 2005 gives legal importance to planning, coordination, mitigation, preparedness, response, relief, rehabilitation, and reconstruction. At the district level, disaster management requires the cooperation of district administration, line departments, local self-government institutions, emergency services, and community organisations. Civil Defence Volunteers function within this wider governance system. Their effectiveness depends on how well they are connected to local plans, ward-level information, and department-level coordination.

Kerala's disaster management approach gives importance to local self-government planning and community participation. The Kerala State Disaster Management Authority provides disaster management plan resources, including district and local self-government disaster management plans (KSDMA, n.d.). This is relevant because Civil Defence Volunteers can contribute to local planning if they are included in risk mapping, awareness activities, evacuation planning, shelter identification, and mock drills. Local self-government institutions know ward-level vulnerabilities,

while Civil Defence Volunteers can provide trained human support. The combination can make disaster preparedness more practical and locally grounded.

Decentralized governance also helps identify vulnerable groups and local resources. Panchayats and municipalities may know which households need assistance, where relief camps can be opened, what vehicles are available, which roads get blocked, and who can support communication. Civil Defence Volunteers can help verify this information and use it during emergencies. However, coordination must be established before a disaster. If volunteers are not introduced to local body members, health workers, school authorities, and community leaders before emergencies, collaboration may be weaker during response.

The local governance perspective also supports accountability. Volunteers should not operate independently without direction, because disaster response involves safety, legal responsibility, and protection concerns. At the same time, authorities should not ignore volunteer knowledge. A balanced model would include Civil Defence Volunteers in local preparedness meetings, define their duties in local disaster management plans, maintain contact lists, and conduct joint drills. In Pathanamthitta, such integration can improve preparedness for floods, landslides, fires, road accidents, pilgrimage crowd risks, and relief camp management.

Aapda Mitra, Civil Defence, and Community Volunteer Models in India

India has increasingly recognised the importance of trained community volunteers in disaster response. The Aapda Mitra scheme is an important example because it focuses on training community volunteers to respond to disasters such as floods, landslides, cyclones, and earthquakes. The National Disaster Management Authority states that the upscaled Aapda Mitra scheme covers 350 districts and aims to train 100,000 community volunteers for disaster response (NDMA, n.d.). This model supports the idea that community-based trained volunteers can reduce the gap between official agencies and affected communities during the early phase of emergencies.

The Aapda Mitra approach is relevant to Civil Defence Volunteers because both depend on structured training, local availability, and community service. Training areas such as first aid, search and rescue, water rescue, communication, and emergency support are common across volunteer models. However, Civil Defence has a distinct institutional identity linked with Fire and Rescue Services and the legal framework of Civil Defence. In Kerala, Civil Defence has been constituted under the Fire and Rescue Services structure, and the Director General of Fire and

Rescue Services is connected with Civil Defence and Home Guards administration (Kerala Fire and Rescue Services, n.d.). This formal placement gives Civil Defence Volunteers an important operational identity.

Comparing these models can help strengthen the literature review. Aapda Mitra shows the value of training large numbers of community volunteers, while Civil Defence shows the value of a more formal volunteer structure connected with emergency services. Both models indicate that volunteers need training, equipment, identity, deployment systems, and welfare support. They also show that volunteerism cannot be left entirely informal in high-risk contexts. Trained volunteers can support professional responders, but they need clear boundaries and supervision.

For Pathanamthitta, the comparison suggests that Civil Defence Volunteers should be understood as part of India's broader movement toward community-based disaster response. Their motivation, organisational support, preparedness, and challenges are not isolated local issues. They reflect national questions about how to train, retain, equip, recognise, and protect disaster volunteers. This makes the present study relevant beyond one district, while still retaining its local focus. The findings can therefore contribute to discussions on district-level volunteer management, community resilience, and institutional support for volunteers.

Ethics, Accountability, and Professional Conduct in Disaster Volunteering

Civil Defence Volunteers work in situations where affected people may be frightened, injured, displaced, grieving, or dependent on assistance. Ethical conduct is therefore essential. The Sphere Handbook emphasises humanitarian principles, dignity, accountability, and the right of affected people to receive assistance in a respectful manner (Sphere Association, 2018). Volunteers should understand that disaster-affected people are not passive victims; they are rights-bearing individuals and community members. Assistance should be provided without discrimination based on religion, caste, gender, age, disability, political identity, income, or social status.

Accountability also means giving accurate information and avoiding false promises. During disasters, affected people may ask volunteers about compensation, relief materials, rescue timing, missing persons, or return home. Volunteers should communicate only verified information and refer people to authorised officials when needed. Giving uncertain information as fact can create confusion and distress. Similarly, volunteers should respect confidentiality. Personal details, photographs, videos, medical information, and family situations should not be shared casually or

posted on social media. Digital ethics is now an important part of disaster volunteering because mobile phones make it easy to record and circulate sensitive content.

Professional conduct includes discipline, teamwork, and respect for command structure. Volunteers should report for duty properly, follow safety instructions, avoid political or personal misuse of their role, and treat fellow responders respectfully. They should not obstruct professional rescue teams or enter restricted areas without permission. At the same time, ethical volunteer management requires that authorities treat volunteers respectfully and do not expose them to unnecessary risk. Accountability is mutual: volunteers must act responsibly, and organisations must support and protect volunteers.

Ethics also includes cultural sensitivity. Pathanamthitta contains diverse religious, cultural, linguistic, and social contexts, including pilgrimage-related situations. Volunteers may interact with local residents, pilgrims, migrant workers, tribal communities, older persons, women, children, and persons with disabilities. Respectful communication and sensitivity to cultural practices can reduce conflict and improve cooperation. Therefore, ethics should be included in Civil Defence training alongside technical skills. A volunteer who is skilled but insensitive may damage trust, while a volunteer who is both competent and respectful can strengthen the legitimacy of Civil Defence in the community.

Motivation among Volunteers

Motivation is one of the central themes in volunteerism research because it influences recruitment, commitment, performance, satisfaction, and retention. Volunteers may join for altruistic reasons, personal growth, social recognition, learning opportunities, career development, community attachment, religious or moral duty, or previous disaster experience.

The functional approach to volunteer motivation is especially useful for studying Civil Defence Volunteers. Clary et al.'s Volunteer Functions Inventory identifies six major motives: values, understanding, enhancement, social, protective, and career. Stukas, Snyder, and Clary (2016) explain that volunteers may be motivated by the desire to express values, understand the world and their own abilities, enhance self-esteem, fulfil social expectations, reduce negative feelings, or gain career-related benefits. Asghar's (2015) study also found that these six VFI dimensions

significantly predicted volunteer motivation, showing the usefulness of this framework for studying organized volunteering.

In disaster contexts, altruism and values-based motivation are particularly visible. Ganoë, Roslida, and Sihotang (2023) found that disaster volunteers were mainly motivated by altruism, a sense of duty, and personal experiences with disasters. Phung et al. (2018), in their study of community first responders, found that volunteers joined mainly to help others and give something back to the community. These findings are relevant to Pathanamthitta, where repeated flood and landslide experiences may create strong local motivations among Civil Defence Volunteers, especially when volunteers have personally witnessed community suffering.

However, motivation is not purely altruistic. Haski-Leventhal (2009) argues that altruism and volunteerism are closely connected but not identical; volunteering may include both other-oriented and self-oriented motives. Zhou and Kodama Muscente's (2022) meta-analysis of VFI studies found that all six motives predicted volunteer outcomes, while values emerged as the strongest predictor of satisfaction, commitment, and behaviour. Therefore, a study of Civil Defence Volunteers should not assume a single motive. It should examine how humanitarian concern, social belonging, recognition, skill development, career aspirations, and community identity combine to shape continued participation.

Organizational Support and Volunteer Retention

Organizational support refers to the training, supervision, communication, equipment, recognition, emotional care, safety measures, leadership, and administrative support provided to volunteers. It is a major factor in whether volunteers remain active and feel confident in their role. A volunteer may enter Civil Defence with strong motivation, but motivation can decline if there is poor training, unclear responsibilities, inadequate equipment, weak leadership, lack of recognition, or poor coordination.

The NIDM and DDMA training report also emphasizes that trained Civil Defence personnel can enhance district-level capacity during extreme situations. It argues that Civil Defence should be developed as a large trained volunteer-based community organization and that community support can reduce pressure on emergency service providers. The report further identifies weak

community-level disaster management factors such as low morale, absence of recognition, lack of regular capacity development, lack of awareness, and inadequate infrastructure (National Institute of Disaster Management [NIDM] & Delhi Disaster Management Authority [DDMA West], 2022). These issues directly connect organizational support with volunteer morale, preparedness, and performance.

Studies on community first responders support this point. Phung et al. (2018) found that responders valued scenario-based training and wanted clearer role definition, improved communication skills, support from ambulance services, public recognition, and emotional support. Jaime et al. (2023) found that volunteers' knowledge of specific tasks was one of the most consistent predictors of satisfaction and perceived performance during disaster volunteering. Thus, organizational support should not be limited to occasional training; it must include continuous capacity building, practical drills, psychological support, safety, leadership, and meaningful recognition.

Preparedness and Capacity Building

Preparedness refers to the knowledge, skills, attitude, resources, and readiness needed before a disaster occurs. For Civil Defence Volunteers, preparedness includes understanding local hazards, early warning, evacuation, first aid, search and rescue, relief distribution, crowd management, shelter support, communication, coordination with officials, and psychological support.

The NDMA handbook places major emphasis on training and capacity building. It states that India needs a critical mass of well-trained professionals and master trainers to respond effectively before, during, and after disasters. It also notes that a volunteer-based organization can sustain motivation through creative, innovative, action-oriented, continuous training, retraining, refresher courses, and orientation (NDMA, 2012). The handbook's training objectives include improving competency and skill levels of Civil Defence trainers and volunteers, developing action plans for mitigation and risk reduction, and building Civil Defence personnel as master trainers.

Preparedness is also linked to community education and social capital. Mathbor (2007) argues that communities that are culturally, socially, and psychologically trained are better prepared and more effective in disaster response. Social capital—bonding within communities, bridging across communities, and linking with public institutions—strengthens preparedness and recovery.

Cretney (2016) found that pre-disaster community networks and grassroots participation helped communities respond more effectively after the Christchurch earthquake. These findings suggest that Civil Defence Volunteers in Pathanamthitta may be more effective when they are embedded in strong local networks and are trusted by residents.

The Cuba case study by UN-Habitat also illustrates the value of preparedness culture. Cuba's disaster system is described as combining early warning, strong civil defence, well-organized evacuation, local leadership, community mobilization, solidarity, and disaster awareness (UN-Habitat, 2008/2009). This shows that preparedness is not only a technical matter but also a social and cultural process. For Pathanamthitta, preparedness should therefore be examined through both formal training and informal community readiness.

Disaster Vulnerability and Pathanamthitta Context

Pathanamthitta District has a strong disaster relevance because it is exposed to floods, landslides, river overflow, and climate-related hazards. Samuel (2022) identifies Pathanamthitta as one of Kerala's flood-prone districts, affected by the overflow of the Pamba, Achankovil, and Manimala rivers and their tributaries. The study specifically notes that areas such as Aranmula and Kalluoppara are flood-prone and experience social and economic impacts from flooding.

Jibin and John (2023) describe Pathanamthitta as part of the Manimala–Pamba–Achankovil river basin, experiencing continuous flood and landslide events, particularly during 2018 and 2019. Their study on risk-informed development emphasizes that disaster risk is shaped by hazard, exposure, vulnerability, and capacity, and that preparedness, mitigation, and preventive measures can reduce vulnerability. This is highly relevant for studying Civil Defence Volunteers because their preparedness is directly linked to reducing local-level risk.

The International Conference on Landslide Risk Reduction proceedings also situate Kerala within a recurring pattern of floods and landslides. The proceedings state that Kerala has been affected by landslides and floods following torrential rainfall year after year and that climate change has manifested through repeated floods and landslides in recent years. The proceedings further note that Ranni is among the most landslide-prone taluks in Kerala and that landslide vulnerability is shaped by rainfall, land use, settlement expansion, development activities, and ecological changes.

Since Ranni is in Pathanamthitta District, this strengthens the local relevance of the present research (Institute of Land and Disaster Management, 2022).

Therefore, Pathanamthitta offers an important field for studying Civil Defence Volunteers because the district combines recurring hazards, community vulnerability, river-based flooding, hilly terrain, and the need for locally trained response personnel. The literature suggests that Civil Defence Volunteers in such a district should be studied not only in terms of their willingness to serve but also in terms of their practical preparedness, institutional support, and challenges in real disaster contexts.

Challenges Faced by Disaster and Civil Defence Volunteers

The literature identifies several challenges faced by volunteers in disaster management. These challenges may be personal, organizational, operational, social, psychological, or structural. Personal challenges include fear, physical strain, emotional stress, family responsibilities, lack of time, and health limitations. Organizational challenges include inadequate training, poor equipment, unclear roles, weak communication, lack of recognition, irregular activities, and limited supervision. Operational challenges include difficult terrain, transport issues, lack of coordination, risky rescue situations, and delayed information.

The NIDM-DDMA report identifies low morale, absence of recognition, lack of regular capacity development, lack of awareness, and inadequate infrastructure as factors behind weak community-level disaster management. These factors are directly relevant to Civil Defence Volunteers because they influence whether volunteers feel prepared, valued, and supported.

Whittaker et al. (2015) note that informal volunteers are sometimes viewed as liabilities or nuisances by formal emergency systems, even though they provide valuable surge capacity. Nahkur et al. (2022) found that disaster management systems often remain cautious about integrating informal volunteers and that collaboration is more effective when procedures for engagement exist. Although Civil Defence Volunteers are formal volunteers, similar challenges may arise when roles are unclear or when coordination between departments is weak.

Psychological stress is another important challenge. Civil Defence Volunteers may witness death, injury, property loss, displacement, and distress. The Civil Defence volunteer policy document recognizes that volunteers may be exposed to distressing scenes and therefore need Critical Incident Stress Management awareness training (Civil Defence Branch, Department of Defence, 2018). Phung et al. (2018) also found that community first responders experienced emotional strain, especially when they were first on scene, and relied on informal support. This indicates that psychological preparedness and emotional support should be included in any study of Civil Defence Volunteers.

Volunteerism and Community Resilience

Community resilience refers to the capacity of a community to anticipate, prepare for, respond to, recover from, and adapt after disasters. Volunteers contribute to resilience by strengthening local knowledge, social networks, trust, response capacity, and community participation. Disaster volunteers often know the geography, vulnerable households, local roads, religious institutions, schools, shelters, and community leaders. This local knowledge can improve response speed and appropriateness.

Ganoe et al. (2023) found that volunteer involvement in disaster management contributes to community resilience, economic recovery, psychological well-being, and community empowerment. Cretney (2016) shows that community-led organizations can create avenues for citizen participation and social learning after disasters. Mathbor (2007) emphasizes that social capital is crucial for sustainable disaster relief and management. Together, these studies show that Civil Defence Volunteers can contribute not only to emergency response but also to long-term community resilience.

For Pathanamthitta, where disasters are recurring rather than rare, Civil Defence Volunteers may help build a culture of preparedness. Their local presence can support awareness campaigns, evacuation drills, early warning dissemination, first aid training, relief coordination, and vulnerable group support. However, this contribution depends on motivation, organizational support, and preparedness. If volunteers are poorly trained, unsupported, or demotivated, their potential contribution to resilience may remain limited.

2.2 Research Gap Analysis

The reviewed literature shows that motivation, organizational support, preparedness, and challenges are closely connected. Motivation brings volunteers into Civil Defence, but organizational support sustains their participation. Training and preparedness transform willingness into practical capacity. Challenges such as weak recognition, poor infrastructure, unclear roles, emotional stress, and insufficient training can reduce both motivation and effectiveness.

International and national studies provide strong evidence on volunteer motivation, community participation, disaster preparedness, and volunteer management. However, there is limited district-level empirical research focusing specifically on Civil Defence Volunteers in Kerala, especially in Pathanamthitta District. Existing studies discuss floods, landslides, community-based disaster management, volunteerism, and civil defence separately, but few integrate these themes into one study focusing on the lived experiences, motivation, preparedness, organizational support, and challenges of Civil Defence Volunteers.

This research therefore addresses an important gap. Pathanamthitta's vulnerability to floods and landslides makes Civil Defence Volunteers highly relevant to district disaster management. Studying their motivation, organizational support, preparedness, and challenges can help identify ways to improve volunteer retention, training quality, role clarity, community-level readiness, and disaster response capacity.

CHAPTER III: METHODOLOGY

3.1 Introduction

Research methodology refers to the systematic and scientific process used to identify, collect, analyze, and interpret data to answer research questions or solve a research problem. According to Kothari (2004), research methodology is a way of systematically solving a research problem and involves studying the various steps adopted by a researcher, along with the logic behind them. Similarly, Creswell and Creswell (2018) explain that research design provides the framework for collecting, analyzing, and interpreting data in a study.

This chapter presents the methodology used in this research. It contains the title, research questions, definitions of key concepts, research design, population, sampling technique, data collection methods, research instruments and data analysis procedures. The methodology is important because it provides a clear plan for how the study is conducted and ensures that the findings are valid, reliable, and relevant to the research objectives. Therefore, this section serves as a guide for understanding the procedures followed in carrying out the study and justifies the methods selected to achieve the aims of the research. Ethical considerations, assumptions, limitations, and the study's scope will also be discussed in this chapter.

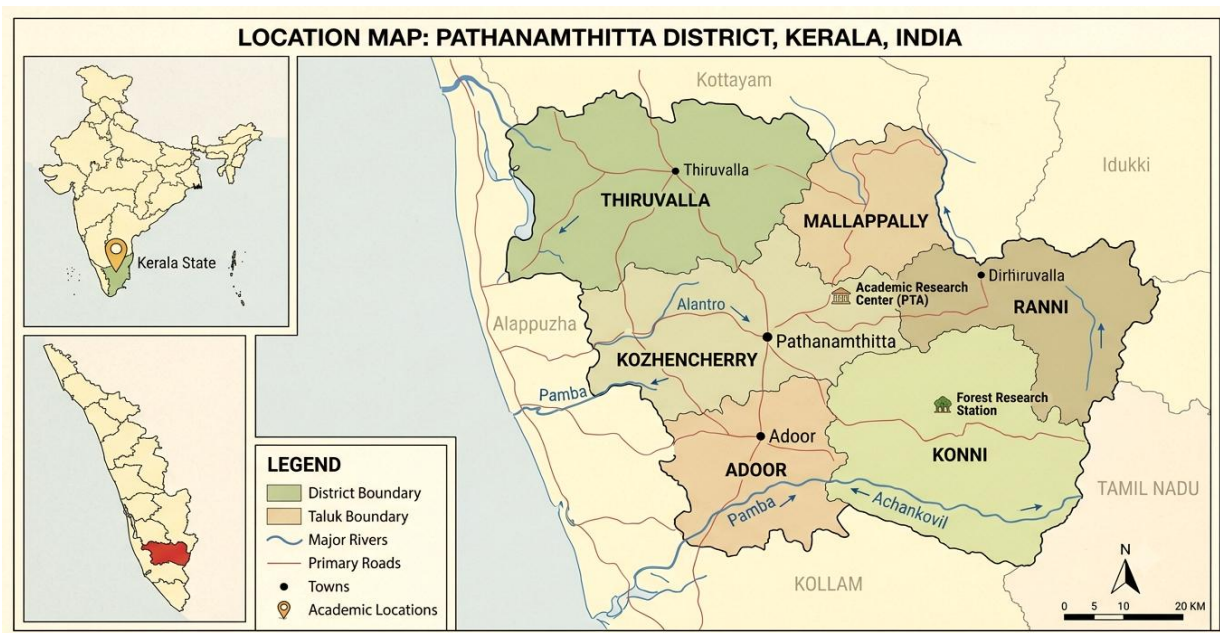


Figure 1: Location map of the study area

3.2 Title of the Study

Motivation, Organizational Support, Preparedness and Challenges among Civil Defence Volunteers in Pathanamthitta District

3.3 Research Objectives

Main Objective:

To assess the motivations, perceived organizational support, training experiences and challenges, and confidence levels of formal disaster volunteers in Pathanamthitta District.

Specific Objective:

- To identify the motivational factors influencing participation in disaster volunteering among formal disaster volunteers using the Volunteer Functions Inventory (VFI).
- To assess the level of perceived organizational support among formal disaster volunteers in Pathanamthitta.
- To identify the types and extent of disaster management training received by formal disaster volunteers.
- To identify the challenges encountered by formal disaster volunteers during disaster preparedness and response activities.

3.4 Definition of concepts

Civil Defence Volunteers

Conceptual Definition:

Civil Defence Volunteers are individuals who voluntarily associate with the Civil Defence system to assist in protecting people, property, and communities during emergency situations. In India, Civil Defence is legally grounded in the Civil Defence Act, 1968, which provides for civil defence measures and the organization of Civil Defence Corps (Government of India, 1968). Civil Defence volunteers are also trained at local or town levels to support emergency-related functions (Directorate General Fire Services, Civil Defence & Home Guards, n.d.).

Operational Definition:

In this study, Civil Defence Volunteers refer to registered or active Civil Defence Volunteers in Pathanamthitta District who are included as respondents. They are studied with reference to their motivation, perceived organizational support, preparedness, and challenges in performing Civil Defence-related duties.

Motivation

Conceptual Definition:

Motivation refers to the internal and external reasons, needs, values, and personal goals that encourage Civil Defence Volunteers to join, continue, and actively participate in Civil Defence activities. In the present study, motivation is understood through the functional approach to volunteering, which explains that individuals volunteer because volunteering serves different psychological and social functions (Clary et al., 1998).

Operational Definition:

Motivation is operationally defined as the score obtained by the respondents on the **Volunteer Functions Inventory (VFI)** developed by Clary et al. (1998). The VFI measures six functions of volunteer motivation:

1. **Values** – motivation based on humanitarian concern and helping others.
2. **Understanding** – motivation to gain knowledge, skills, and practical experience.
3. **Social** – motivation related to social relationships, group belonging, and approval from others.
4. **Career** – motivation to gain career-related experience or future opportunities.
5. **Protective** – motivation to reduce guilt, personal problems, or negative feelings.
6. **Enhancement** – motivation to improve self-esteem, confidence, and personal growth.

The total motivation score and/or subscale scores will be calculated by summing or averaging the responses. A higher score indicates a higher level of volunteer motivation among Civil Defence Volunteers.

Organizational Support / Perceived Organizational Support

Conceptual Definition:

Perceived Organizational Support refers to the extent to which volunteers believe that the organization values their contribution and cares about their well-being. This concept is based on organizational support theory, which states that members of an organization develop general beliefs about the organization's concern for their contribution, welfare, and needs (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002).

Operational Definition:

In the present study, Perceived Organizational Support is operationally defined as the score obtained by respondents on a structured scale measuring their perception of support received from the Civil Defence organization or concerned authorities. The scale will be measured using a 7-point Likert scale.

The scale may include areas such as training support, supervision, communication, availability of equipment and resources, recognition, encouragement, safety support, administrative support, and welfare-related support. The responses will be summed or averaged to obtain the perceived organizational support score. A higher score indicates a higher level of perceived organizational support.

Preparedness

Conceptual Definition:

Preparedness refers to the knowledge, skills, readiness, resources, planning, coordination, and confidence required to respond effectively to emergencies and disasters. According to the United Nations Office for Disaster Risk Reduction, preparedness includes activities such as contingency planning, stockpiling equipment and supplies, coordination arrangements, evacuation, public information, training, and field exercises (UNDRR, n.d.).

Operational Definition:

Preparedness is operationally defined as the score obtained by respondents on a structured preparedness scale measured using a 7-point Likert scale. The scale will assess the volunteers' self-perceived readiness in areas such as disaster response knowledge, first aid skills, search and rescue skills, evacuation procedures, emergency communication, use of equipment, awareness of

standard operating procedures, participation in training or mock drills, and confidence in handling emergency situations. The preparedness score will be calculated by summing or averaging the responses. A higher score indicates a higher level of preparedness among Civil Defence Volunteers.

Challenges

Conceptual Definition:

Challenges refer to the difficulties, barriers, limitations, and problems experienced by Civil Defence Volunteers that may affect their participation, performance, preparedness, satisfaction, or continued involvement in Civil Defence activities. In disaster and emergency management, volunteers may face challenges related to coordination, role clarity, training, resources, communication, safety, and integration with formal response systems (Whittaker et al., 2015).

Operational Definition:

Challenges are operationally defined as the score obtained by respondents on a structured challenges scale measured using a 7-point Likert scale. The scale will assess perceived difficulties such as inadequate training, lack of equipment, insufficient communication, limited organizational support, lack of recognition, financial constraints, time constraints, family or work-related responsibilities, transport difficulties, safety risks, psychological stress, unclear role expectations, and coordination problems.

The challenge score will be calculated by summing or averaging the responses. A higher score indicates a greater level of perceived challenges faced by Civil Defence Volunteers.

3.5 Pilot Study

Before starting the main research on the Motivation, Organizational Support, Preparedness and Challenges among Civil Defence Volunteers in Pathanamthitta District, a small pilot study was done. The aim was to test whether the research tools like the questionnaire and sampling method were suitable and easy to use. This helped identify any issues in the data collection process. For the pilot study, the Pathanamthitta Fire Station was visited and through them, 60 active civil defence volunteers across Pathanamthitta were chosen using purposive sampling.

The pilot study gave important information about some issues that were dealt with by the volunteers. Some of them said they had not given regular refreshment training, the budget for training is limited, no identification for civil defence volunteers. Based on their feedback, some questions in the survey were improved to make them clearer and more relevant. Overall, the pilot study proved that the research topic is important and that the research design is suitable for the full study.

3.6 Research Design

A research design is the overall plan or structure that guides a study from the formulation of the research problem to the collection, analysis, and interpretation of data. It acts as a blueprint that helps the researcher decide what type of data is needed, how it will be collected, from whom it will be collected, and how it will be analysed. According to Creswell, research design helps researchers choose among qualitative, quantitative, and mixed methods approaches depending on the nature of the research problem (Creswell, 2014).

A good research design ensures that the study is systematic, logical, and reliable. It connects the research questions or objectives with suitable methods, tools, sampling techniques, and procedures. For example, a quantitative research design may use surveys or experiments to measure variables, while a qualitative design may use interviews or observations to explore meanings and experiences. Mixed methods research combines both approaches to provide a broader understanding of the problem (Creswell, 2014).

Research design is important because it reduces bias, improves validity, and helps the researcher obtain accurate findings. It also guides ethical decision-making and ensures that the research process is organised and appropriate for the topic being studied. Saunders, Lewis, and Thornhill explain that research design involves choices about research strategy, time horizon, data collection, and analysis methods (Saunders et al., 2023). Therefore, research design is a crucial part of any academic investigation because it determines the quality and credibility of the research findings.

In this study, a quantitative research design has been employed to find the Motivation, Organizational Support, Preparedness and Challenges among Civil Defence Volunteers in Pathanamthitta District. Quantitative research is particularly useful when the aim is to collect

measurable data and analyze it statistically to identify patterns, relationships, and trends. This approach ensures objectivity, reliability, and the possibility of generalizing the findings to a larger population.

To gather data from the target population, the survey method has been selected as the primary data collection tool. Surveys are widely used in social science research for their efficiency in collecting information from a large number of respondents within a relatively short period. The use of structured questionnaires ensures consistency in responses and facilitates the statistical analysis required to understand the Motivation, Organizational Support, Preparedness and Challenges among Civil Defence Volunteers. Through this design, the study aims to generate evidence-based insights that can support policy development and improve the civil defence and its volunteers.

3.7 Sampling Strategy

Sampling is the process of selecting a smaller group of people, cases, or units from a larger population for the purpose of research. According to Bryman (2016), sampling is important because researchers are usually unable to study every member of a population. Therefore, they select a sample that can provide useful information about the wider group being studied.

For this study, a purposive sampling method was used to select participants who are in the civil defence in Pathanamthitta District. Purposive sampling is a non-probability sampling technique where participants are chosen based on specific characteristics that are relevant to the research objectives. In this case, the criteria for selection included individuals who are currently active in the civil defence within the district.

The total sample size consisted of 60 participants, selected from various taluks across Pathanamthitta. The purposive sampling strategy was especially suitable for this study as it allowed the researcher to focus on respondents who could provide rich, relevant, and insightful information about the civil defence in Pathanamthitta.

3.8 Criteria for Selection of Participants

Inclusion Criteria

- Volunteers who are currently active in the civil defence.
- Volunteers who have a minimum experience of 6 months.

Exclusion Criteria

- Volunteers who just joined the civil defence.
- Volunteers without any experience.

3.9 Data Collection

Sources of Data

Sources of data are the origins or places from which information is obtained for research, analysis, or decision-making. In this study, both primary and secondary data sources were utilized.

Primary Data

Primary data was collected directly from the civil defence volunteers using a structured questionnaire. The questionnaire included questions about their socio demographic details, proximity of disaster-prone areas and years of experience. Then the questions that measure their Motivation, Organizational Support, Preparedness and Challenges. These responses were taken from the civil defence volunteers across Pathanamthitta. The primary data gave real life insights into the experiences of the volunteers.

Secondary Data

Secondary data was collected from journals, research articles, government reports, newspaper articles, and documents related to disaster management, volunteerism and civil defence. These sources provided useful background information and helped support the findings from the primary data. By using both primary and secondary data, the study became more reliable and informative.

3.10 Method of Data Collection

In this study, the data was collected using a survey with a structured questionnaire. The main focus was to collect clear and useful information directly from people volunteering in the civil defence of Pathanamthitta District. The questionnaire had multiple-choice, yes/no, and scale-based questions. It focused on important topics like age, gender, education, employment status, years of service, marital status, area of residence, distance from the nearest Fire and Rescue Station, training

received, motivation for joining Civil Defence, organizational support, confidence in disaster response, and challenges faced during voluntary service.

The survey was given to Civil Defence volunteers working in different parts of Pathanamthitta district. In some cases, the researcher visited the volunteers directly to give and collect the forms. In other cases, the survey was shared through online methods like messaging apps, especially when direct visits were not possible. Participants were given enough time to complete the forms.

3.11 Tools for Data Collection

The main tool used to collect information in this study was a questionnaire. This questionnaire was made to ask important questions to Civil Defence volunteers in Pathanamthitta District. It included multiple-choice, yes/no, and scale-based questions about their age, gender, education, employment status, years of service, marital status, training received, motivation for joining Civil Defence, confidence in disaster response activities, organizational support, and challenges faced during voluntary service.

The questionnaire was written in a simple and easy-to-understand way so that all participants could answer it without confusion. It was shared in two ways: as a printed copy for those the researcher met in person, and as an online form through WhatsApp or other messaging apps for those who were far away or could not be reached directly. This helped the researcher collect information from Civil Defence volunteers from different areas of Pathanamthitta District.

Using this questionnaire helped the researcher collect correct and organized data that could be studied and used to understand the motivation, organizational support, training, preparedness, and problems faced by Civil Defence volunteers.

3.12 Data Analysis

After collecting the filled questionnaires, all the answers were checked and arranged properly. The data was then entered into Microsoft Excel and SPSS to make it easier to study and understand. Excel was used to organize the answers, count responses, and prepare simple tables and charts. SPSS was used to find frequencies, percentages, and other basic statistical results for each question.

This helped the researcher understand the main findings related to Civil Defence volunteers, such as their motivation for joining, training received, confidence in disaster response activities, organizational support, and challenges faced during voluntary service. Using Excel and SPSS made the process of analysing the data easy, clear, and useful for understanding the experiences and problems faced by Civil Defence volunteers in Pathanamthitta District

3.13 Ethical Considerations

This study followed proper ethical guidelines during every stage of the research. The participation of respondents was completely voluntary, and their consent was taken before collecting the data. The aim of the study, how the information would be used, and the rights of the participants were clearly explained to them.

The privacy and confidentiality of all respondents were protected, and no personal details were revealed. The information collected was used only for academic purposes and was kept safely to avoid unauthorized access. The study made sure that no participant faced any harm, pressure, or discomfort during the research process. Their dignity, privacy, and freedom of choice were respected throughout the study.

Participants were also allowed to withdraw from the study at any time without facing any negative consequences. Ethical permission was obtained from the concerned academic or institutional authority wherever required.

3.14 Assumptions, Limitations & Scope

Assumptions

- It is assumed that the cross-sectional research design will effectively capture and present the real-life experiences, motivations, and challenges faced by Civil Defence volunteers at a particular point in time.
- The participants will respond honestly and accurately to the questions based on their personal experiences in Civil Defence activities.
- The selected sample reflects the wider population of Civil Defence volunteers in Pathanamthitta District.

- It is assumed that the motivation, training, organizational support, and challenges identified in the study are directly related to their involvement in Civil Defence service.
- The data collection tool, mainly the questionnaire, is appropriate for gathering relevant and meaningful data from the respondents.
- It is assumed that the environment and context in which the data is collected, such as disaster awareness, volunteer participation, and administrative support, remain stable throughout the study period.

Limitations

- The study is limited to Civil Defence volunteers in Pathanamthitta District only, so the findings may not fully represent Civil Defence volunteers in other districts or regions.
- The sample size of the study is limited, and therefore the results may not reflect the opinions and experiences of all Civil Defence volunteers.
- The study is based mainly on the responses given by the participants through questionnaires, so there may be chances of personal bias or incomplete answers.
- Some respondents may not have shared their real opinions openly due to lack of time, hesitation, or fear of giving negative responses.
- The study was conducted within a limited time period, so changes in motivation, training, organizational support, and challenges over a longer period could not be studied.
- Since the study follows a cross-sectional design, the data was collected at one particular point in time and does not show changes in the experiences of Civil Defence volunteers over time.
- The study mainly focuses on motivation, training, support, confidence, and challenges, and may not cover all aspects of Civil Defence service in detail.

Scope

This study aims to examine the motivation, training, organizational support, confidence, and challenges faced by Civil Defence volunteers in Pathanamthitta District, Kerala. It explores key aspects such as reasons for joining Civil Defence, level of preparedness, training opportunities, confidence in disaster response activities, support received from the organization, and difficulties experienced during voluntary service.

The geographical focus of the study is limited to Pathanamthitta District, which is an important area in Kerala due to its exposure to natural calamities such as floods, landslides, and other disaster-related situations. The study includes Civil Defence volunteers from different parts of the district with varying backgrounds, education levels, employment status, and years of service.

The study covers various areas related to Civil Defence service, including volunteer participation, disaster response readiness, training effectiveness, communication, resource availability, and challenges faced while performing duties. The findings of this research aim to highlight the major factors affecting the performance and participation of Civil Defence volunteers and provide useful insights for improving training programmes, support systems, and volunteer management in the district.

CHAPTER IV: DATA ANALYSIS & INTERPRETATION

4.1 Introduction

This chapter presents the statistical analysis of data collected from formal disaster volunteers in Pathanamthitta District. The analysis is arranged according to the main objective of assessing motivations, perceived organizational support, disaster management training experiences, challenges, and confidence levels among formal disaster volunteers. Descriptive statistics, reliability analysis, scale scoring, cross-tabulations, chi-square tests, and Spearman rank correlations were used to summarize and interpret the findings.

The valid sample consisted of 60 respondents. Scale scores were computed as mean scores so that higher values represent greater endorsement of the construct. The Volunteer Functions Inventory (VFI) and perceived organizational support items used a 1 to 7 response scale. Confidence and challenge items used a 1 to 5 response scale. The negatively worded perceived organizational support item POS6 was reverse scored before computing the POS mean score. Four out-of-range zero values in Likert-scale items were treated as missing because zero was a valid code only for the training-area checkbox variables.

For interpretation, 7-point scale means were grouped as Low = 1.00-3.00, Moderate = 3.01-5.00, and High = 5.01-7.00. For 5-point confidence and challenge scales, means were grouped as Low = below 3.00, Moderate = 3.00-3.99, and High = 4.00-5.00. Cross-tabulations were interpreted cautiously where expected cell counts were small.

4.2 Profile of Respondents

Table 4.1: Descriptive statistics for age and years of service

Variable	N	Mean	SD	Minimum	Maximum
Age	60.00	38.22	7.56	22.00	54.00
Years of service	60.00	3.94	1.98	0.50	9.00

The respondents had a mean age of 38.22 years (SD = 7.56), with ages ranging from 22 to 54 years. The average length of service was 3.94 years (SD = 1.98), indicating that the sample consisted largely of volunteers with several years of disaster volunteering experience.

Table 4.2: Socio-demographic profile of respondents

Variable	Category	Frequency	Percent
Age group	31-40 years	29	48.30
Age group	41-50 years	18	30.00
Age group	Up to 30 years	11	18.30
Age group	Above 50 years	2	3.30
Gender	Male	55	91.70
Gender	Female	5	8.30
Education	Graduate/Degree	31	51.70
Education	School/Higher secondary/Pre-degree	23	38.30
Education	Diploma/Professional	4	6.70
Education	Postgraduate	2	3.30
Employment status	Employed	32	53.30
Employment status	Self-Employed	21	35.00
Employment status	Unemployed	7	11.70
Years of service	2-3 years	23	38.30
Years of service	4-5 years	18	30.00
Years of service	6 years and above	14	23.30
Years of service	Less than 2 years	5	8.30
Proximity to disaster-prone areas	I live far from risk zones	37	61.70
Proximity to disaster-prone areas	I live near a high-risk zone	23	38.30
Marital status	Married	32	53.30
Marital status	Single	24	40.00
Marital status	Divorced/Separated	3	5.00
Marital status	Widowed	1	1.70
Taluk	Kozhench	17	28.30
Taluk	Konni	16	26.70

Taluk	Adoor	15	25.00
Taluk	Thiruvall	8	13.30
Taluk	Ranni	4	6.70
Distance to nearest Fire & Rescue Station	5–10 km	32	53.30
Distance to nearest Fire & Rescue Station	Less than 5 km	17	28.30
Distance to nearest Fire & Rescue Station	10–20 km	11	18.30

The sample was predominantly male (91.7%). Nearly half of the respondents were in the age group of 31-40 years (48.3%), followed by 41-50 years (30.0%). More than half were employed (53.3%), and 35.0% were self-employed. In terms of education, 51.7% were graduates or degree holders, while 38.3% had school, higher secondary, or pre-degree education. Most respondents had 2-5 years of service, although 23.3% had six years or more. A majority reported living far from risk zones (61.7%), while 38.3% lived near a high-risk zone.

4.3 Reliability of the Scales

Table 4.3: Reliability and descriptive statistics of major scales

Scale	Items	Valid N	Cronbach alpha	Mean	SD	Min	Max
Values	5	60	0.87	5.55	0.61	4.60	7.00
Career	5	60	0.98	1.26	1.03	1.00	6.60
Protective	5	57	0.94	1.19	0.84	1.00	7.00
Understanding	5	58	0.94	4.55	1.22	1.80	7.00
Social	5	59	0.79	2.75	1.08	1.00	7.00

Enhancement	5	60	0.80	3.39	1.15	1.60	7.00
Perceived Organizational Support	10	58	0.83	5.00	0.59	4.00	7.00
Confidence	12	59	0.79	3.70	0.40	3.00	4.67
Challenges	14	58	0.89	2.91	0.54	1.21	5.00

Note. POS6 was reverse scored. Alpha was computed using complete cases for each scale.

The internal consistency of the scales was acceptable to excellent. Cronbach alpha values ranged from .786 for confidence to .985 for career motivation. The VFI subscales, perceived organizational support scale, confidence scale, and challenge scale all showed adequate reliability for dissertation-level analysis. Very high alpha values for career and protective motives should be read alongside their low mean scores, showing that respondents consistently rejected those motives as reasons for volunteering.

4.4 Motivational Factors Influencing Disaster Volunteering

The first objective was to identify motivational factors influencing participation in disaster volunteering using the Volunteer Functions Inventory. Six motivational dimensions were scored: Values, Understanding, Enhancement, Social, Career, and Protective motives.

Table 4.4: Ranking of VFI motivational functions

VFI function	Mean	SD	Minimum	Maximum	High frequency	High percent
Values	5.55	0.61	4.60	7.00	43	71.70
Understanding	4.55	1.22	1.80	7.00	17	28.30
Enhancement	3.39	1.15	1.60	7.00	4	6.70
Social	2.75	1.07	1.00	7.00	2	3.30
Career	1.26	1.03	1.00	6.60	2	3.30

Protective	1.19	0.84	1.00	7.00	1	1.70
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Note. Higher mean scores indicate stronger motivational endorsement. High percent refers to respondents scoring above 5.00 on the 1-7 scale.

Values motivation emerged as the strongest motivational factor ($M = 5.55$, $SD = 0.61$). This indicates that volunteers were mainly influenced by humanitarian and community-oriented values such as helping people during disasters, compassion for affected persons, and moral responsibility toward the community. Understanding motivation was the second strongest factor ($M = 4.55$, $SD = 1.22$), suggesting that disaster volunteers also valued learning, practical emergency response knowledge, and better understanding of disaster situations.

Enhancement motivation was moderate ($M = 3.39$, $SD = 1.15$), while social motivation was comparatively low ($M = 2.75$, $SD = 1.08$). Career motivation ($M = 1.26$, $SD = 1.03$) and protective motivation ($M = 1.19$, $SD = 0.84$) were the least endorsed. Therefore, volunteering in this sample appears to be driven more by altruistic values and learning-oriented motives than by career advancement, social pressure, or personal problem avoidance.

Table 4.5: Dominant motivation among respondents

Category	Frequency	Percent
Values	50	83.30
Understanding	8	13.30
Enhancement	2	3.30

Note. Dominant motivation refers to the highest VFI subscale mean for each respondent. Where ties occurred, the first highest dimension in the VFI scoring order was retained.

At the individual level, Values was the dominant motivation for 83.3% of respondents. Understanding was dominant among 13.3%, and Enhancement among 3.3%. No respondent had Career, Protective, or Social motives as the dominant motivational function. This strongly supports the interpretation that formal disaster volunteering in the sample is primarily value-driven.

Table 4.6: Highest and lowest VFI item means

Item	Statement	Mean	SD
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Values5	I am genuinely concerned about vulnerable populations in Pathanamthitta.	5.72	0.69
Values3	I volunteer because I believe in serving the community.	5.67	0.77
Values4	Helping others through Civil Defence gives me a sense of moral responsibility.	5.58	0.74
Values2	I feel compassion toward people affected by emergencies.	5.47	0.75
Values1	I volunteer in Civil Defence because I feel it is important to help people during disasters.	5.33	0.77
Career3	I volunteer to gain experience relevant to my profession.	1.25	1.11
Career1	Volunteering enhances my employment opportunities.	1.20	0.71
Protective 3	Being active in Civil Defence helps me escape personal stress.	1.18	0.87
Protective 5	Helping others distracts me from my own problems.	1.12	0.79
Protective 4	Volunteering makes me feel less lonely.	1.12	0.78

Note. The table shows the five highest and five lowest VFI items to illustrate the pattern behind the subscale results.

4.5 Perceived Organizational Support

The second objective was to assess the level of perceived organizational support among formal disaster volunteers. The POS score was computed after reverse coding POS6, with higher values indicating stronger perceived support.

Table 4.7: Level of perceived organizational support

Category	Frequency	Percent
High	34	56.70
Moderate	26	43.30

The mean perceived organizational support score was 5.00 (SD = 0.59), indicating a moderate-to-high level of perceived support. More than half of the respondents (56.7%) fell into the high POS category, while 43.3% were in the moderate category. No respondent fell into the low POS category.

Table 4.8: Perceived organizational support item means

Item	Statement	Mean	SD
POS4	I receive adequate guidance and supervision from Fire & Rescue officers during duty.	5.67	0.84
POS9	The department provides sufficient training and resources for effective disaster response.	5.60	0.94
POS2	The department appreciates the time and effort I contribute without financial reward.	5.33	0.88
POS1	The Fire & Rescue Department values the voluntary service I provide as a Civil Defence volunteer.	5.32	0.91
POS3	The department genuinely cares about my safety during disaster response activities.	5.30	0.87
POS10	I feel respected as a volunteer member within the unit.	5.22	0.94
POS5	The department recognises and acknowledges Civil Defence volunteers' contributions.	4.92	0.93
POS7	My opinions and suggestions as a volunteer are taken seriously by the department.	4.33	0.82
POS8	If I face personal or service-related difficulties, the department tries to support me.	4.32	0.81
POS6 (R)	Reverse scored: disagreement with the statement that the department shows little concern for volunteers	3.90	0.66

Note. POS6 (R) was reverse scored so that a higher score indicates stronger perceived organizational support.

Item-level results show that volunteers gave the strongest ratings to guidance and supervision from Fire & Rescue officers ($M = 5.67$), sufficient training and resources ($M = 5.60$), departmental appreciation of voluntary time and effort ($M = 5.33$), and valuing of voluntary service ($M = 5.32$).

Relatively lower scores were observed for opinions and suggestions being taken seriously ($M = 4.33$), support during personal or service-related difficulties ($M = 4.32$), and the reverse-coded concern item ($M = 3.90$). Thus, while overall support was positive, participatory decision-making and personal support mechanisms appear to be areas for improvement.

4.6 Disaster Management Training Experiences

The third objective was to identify the types and extent of disaster management training received by formal disaster volunteers. The SPSS dataset recorded whether respondents had received formal Civil Defence/Fire Force training and whether specific training areas were covered.

Table 4.9: Formal training received

Category	Frequency	Percent
Yes	60	100.00

Table 4.10: Types of disaster management training received

Training area	Received n	Received %
First Aid / CPR	60	100.00
Search and Rescue	60	100.00
Fire Fighting	60	100.00
Flood Rescue (Boats/Swimming)	60	100.00
Psychosocial Support	0	0.00
Other	0	0.00

Table 4.11: Extent of training received

Category	Frequency	Percent
3-4 areas	60	100.00

All respondents (100.0%) reported having received formal training from the Civil Defence/Fire Force. All respondents also reported training in First Aid/CPR, Search and Rescue, Fire Fighting, and Flood Rescue. None reported training in Psychosocial Support or any other additional category. Since every respondent had the same training count of four areas, the dataset does not permit comparison between trained and untrained volunteers or between low and high training exposure groups.

A practical implication is that the training base is strong in rescue-oriented and operational domains, but psychosocial support is a clear gap. This is important because disaster volunteers often interact with traumatized victims and affected families during preparedness, response, and recovery activities.

4.7 Confidence Levels of Formal Disaster Volunteers

The main objective also included assessing confidence levels. Confidence was measured across 12 disaster response tasks using a 1 to 5 scale. The overall confidence mean was 3.70 (SD = 0.40), indicating a moderate level of confidence overall.

Table 4.12: Overall confidence level

Category	Frequency	Percent
Moderate	43	71.70
High	17	28.30

Table 4.13: Confidence item means

Item	Statement	Mean	SD
Confidence1	Administering First Aid / CPR.	4.22	0.45
Confidence2	Using rescue equipment (ropes, boats, extinguishers).	4.12	0.49

Confidence10	Operating communication devices (Walkie-Talkies/Ham Radio).	4.12	0.58
Confidence11	Managing large crowds or panic situations.	4.12	0.58
Confidence8	Reading topographic maps or using GPS devices.	4.08	0.65
Confidence12	Using social media for official coordination.	4.08	0.59
Confidence3	Evacuating people during a flood/landslide.	3.82	0.68
Confidence4	Responding to urban fire outbreaks.	3.53	0.89
Confidence5	Assisting in building collapse scenarios.	3.53	0.81
Confidence9	Setting up temporary relief camps/shelters.	3.08	0.99
Confidence6	Providing psychological support to traumatized victims.	2.95	0.96
Confidence7	Swimming in open water bodies (rivers/canals) with currents.	2.77	0.79

Note. Higher values indicate greater confidence.

The highest confidence was observed for administering First Aid/CPR ($M = 4.22$), using rescue equipment ($M = 4.12$), operating communication devices ($M = 4.12$), and managing large crowds or panic situations ($M = 4.12$). Respondents also showed good confidence in reading topographic maps/GPS and using social media for official coordination (both $M = 4.08$).

Lower confidence was observed in setting up relief camps/shelters ($M = 3.09$), providing psychological support to traumatized victims ($M = 2.95$), and swimming in open water bodies with currents ($M = 2.77$). The relatively low confidence in psychosocial support corresponds with the absence of recorded psychosocial support training. The low confidence in open-water swimming

suggests that flood rescue training may need more emphasis on water safety, swimming proficiency, and current-related rescue situations.

4.8 Challenges Encountered During Disaster Preparedness and Response

The fourth objective was to identify challenges encountered by formal disaster volunteers. The overall challenge mean was 2.91 (SD = 0.54), which falls near the border between low and moderate challenge levels. Most respondents were in the moderate challenge category (56.7%), 40.0% were in the low category, and only 3.3% were in the high category.

Table 4.14: Overall challenge level

Category	Frequency	Percent
Moderate	34	56.70
Low	24	40.00
High	2	3.30

Table 4.15: Challenge item means

Item	Statement	Mean	SD
Challenge 8	Inadequate transportation to remote disaster sites.	3.40	0.87
Challenge 9	Lack of proper identification cards or uniform allowances.	3.30	1.03
Challenge 2	Financial burden (travel expenses, lost wages).	3.13	0.91
Challenge 14	Language barriers dealing with migrant laborers.	3.05	0.63
Challenge 12	Difficulty handling the emotional trauma of victims.	3.03	0.64
Challenge 1	Lack of proper safety gear/equipment.	3.00	0.69

Challenge 11	Physical exhaustion or health issues due to long hours.	2.92	0.72
Challenge 7	Lack of clear instructions from the "Command and Control" center.	2.92	0.65
Challenge 5	Coordinating with spontaneous (untrained) volunteers.	2.87	0.95
Challenge 6	Difficulty communicating guidelines to the public.	2.87	0.75
Challenge 3	Conflict with my regular job or family time.	2.80	0.88
Challenge 4	Fear of legal liability if something goes wrong.	2.52	1.02
Challenge 13	Lack of recognition or appreciation from authorities.	2.52	0.89
Challenge 10	Political interference in the functioning of the unit.	2.45	1.00

Note. Higher values indicate greater challenge.

The strongest challenges were inadequate transportation to remote disaster sites ($M = 3.40$), lack of proper identification cards or uniform allowances ($M = 3.30$), financial burden such as travel expenses or lost wages ($M = 3.13$), language barriers with migrant labourers ($M = 3.05$), and difficulty handling the emotional trauma of victims ($M = 3.03$). Lack of safety gear/equipment was also at the neutral-to-moderate level ($M = 3.00$).

Lower-rated challenges included political interference ($M = 2.45$), lack of recognition or appreciation from authorities ($M = 2.52$), and fear of legal liability ($M = 2.52$). The main operational concerns therefore appear to be logistical and support-related rather than motivational or political.

4.9 Summary of Major Findings

Table 4.16: Objective-wise summary of findings

Objective	Major finding
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Motivational factors using VFI	Values motivation was the strongest function (M = 5.55); 83.3% had Values as the dominant motivation. Career and protective motives were least endorsed.
Perceived organizational support	POS was moderate to high overall (M = 5.00); 56.7% had high POS and 43.3% had moderate POS. Guidance, supervision, training, and appreciation were rated strongly.
Training experiences	All respondents had formal training. All had First Aid/CPR, Search and Rescue, Fire Fighting, and Flood Rescue training; none had psychosocial support training recorded.
Confidence levels	Confidence was moderate overall (M = 3.70). Highest confidence was in First Aid/CPR, equipment use, communication, and crowd management. Lowest confidence was in psychosocial support and open-water swimming.
Challenges encountered	Challenges were low to moderate overall (M = 2.91). Main challenges were transportation to remote sites, identification/uniform allowances, financial burden, language barriers, and emotional trauma of victims.

Overall, the analysis indicates that formal disaster volunteers in Pathanamthitta District are primarily motivated by values-based service and community concern. They perceive moderate-to-high organizational support and have a strong base of formal operational training. However, confidence and challenge patterns point to specific gaps: psychosocial support, open-water swimming in current conditions, transportation to remote disaster sites, identity/uniform support, and financial burden. Strengthening these areas may improve volunteer preparedness, morale, and effectiveness during disaster response.

CHAPTER V: FINDINGS, SUGGESTIONS & CONCLUSION

5.1 Introduction

This chapter presents the major findings, suggestions and conclusion of the study titled “Motivation, Organizational Support, Preparedness and Challenges among Civil Defence Volunteers in Pathanamthitta District.” The study was conducted to understand the motivations, perceived organizational support, training experiences, confidence levels and challenges faced by Civil Defence Volunteers in Pathanamthitta District.

The previous chapters established the importance of Civil Defence Volunteers in disaster management, especially in a disaster-prone district like Pathanamthitta, which is vulnerable to floods, landslides and other emergencies. The literature review showed that volunteers play a significant role in preparedness, response, relief and community resilience. The methodology chapter explained that the study followed a quantitative research design, using a structured questionnaire among 60 active Civil Defence Volunteers selected through purposive sampling.

This chapter summarizes the findings according to the objectives of the study and provides practical suggestions for improving volunteer training, organizational support, preparedness and overall effectiveness.

5.2 Major Findings of the Study

- The study found that the respondents were mostly experienced Civil Defence Volunteers. The average age of the respondents was 38.22 years, and the average years of service was 3.94 years. This shows that most respondents had a reasonable level of experience in voluntary disaster-related service.
- The sample was predominantly male, with 91.7% male respondents and 8.3% female respondents. This indicates that female participation in Civil Defence volunteering in the selected sample was comparatively low. Nearly half of the respondents belonged to the age group of 31–40 years, followed by those in the 41–50 age group. This suggests that Civil Defence volunteering in the district is mainly carried out by adults who are physically and socially active.

- Most respondents had a good educational background. More than half of the respondents were graduates or degree holders, while a considerable number had school, higher secondary or pre-degree education. This indicates that the volunteers had the basic educational capacity to understand training, instructions, communication systems and disaster response procedures.
- The findings show that the strongest motivational factor among Civil Defence Volunteers was **values-based motivation**. The mean score for values motivation was 5.55, and 83.3% of respondents had values as their dominant motivation. This means that most volunteers joined and continued Civil Defence service because of humanitarian concern, compassion, moral responsibility and the desire to serve the community.
- The second strongest motivational factor was **understanding motivation**, with a mean score of 4.55. This shows that many volunteers were also motivated by the opportunity to gain knowledge, learn disaster response skills and understand emergency situations better. Enhancement motivation was moderate, while social, career and protective motives were low. Therefore, the study clearly shows that Civil Defence Volunteers in Pathanamthitta are mainly motivated by service-mindedness rather than career benefit, social pressure or personal gain.
- The level of perceived organizational support was found to be moderate to high. The mean perceived organizational support score was 5.00. Among the respondents, 56.7% reported high organizational support and 43.3% reported moderate organizational support. No respondent reported low organizational support. This shows that most volunteers generally felt supported by the Civil Defence system and Fire and Rescue Department.
- The highest-rated areas of organizational support were guidance and supervision from Fire and Rescue officers, availability of training and resources, appreciation of voluntary service and concern for volunteer safety. However, relatively lower scores were found in areas such as volunteers' opinions being taken seriously, support during personal or service-related difficulties and overall concern for volunteers. This indicates that although the organizational support system is positive, there is scope to improve participation, welfare support and volunteer feedback mechanisms.
- All respondents reported that they had received formal Civil Defence or Fire Force training. All respondents had received training in First Aid/CPR, Search and Rescue, Fire Fighting

and Flood Rescue. This shows that the basic operational training system is strong among the respondents. However, none of the respondents reported receiving training in psychosocial support. This is an important gap because Civil Defence Volunteers often work with disaster victims who may be emotionally distressed, traumatized or displaced.

- The overall confidence level of the respondents was moderate, with a mean score of 3.70. The highest confidence was found in administering First Aid/CPR, using rescue equipment, operating communication devices and managing crowds or panic situations. This reflects the effect of operational training received by the volunteers.
- But, lower confidence was found in providing psychological support to traumatized victims, setting up temporary relief camps or shelters and swimming in open water bodies with currents. These findings show that while volunteers are confident in basic rescue and response activities, they need further training in psychosocial support, relief camp management and advanced flood rescue or water safety skills.
- The overall challenge level was low to moderate, with a mean score of 2.91. Most respondents reported moderate challenges, while 40% reported low challenges. Only a small number of respondents reported high challenges. This indicates that volunteers are able to manage many aspects of their work, but they still face certain important difficulties.
- The major challenges identified were inadequate transportation to remote disaster sites, lack of proper identification cards or uniform allowances, financial burden such as travel expenses or lost wages, language barriers while dealing with migrant labourers and difficulty handling the emotional trauma of victims. Lack of proper safety gear and equipment was also reported as a moderate concern.
- Lower-rated challenges included political interference, lack of recognition from authorities and fear of legal liability. Therefore, the main problems faced by volunteers are not mainly political or motivational, but practical and operational. The findings show that logistics, identity support, financial support, emotional preparedness and communication support need greater attention.

Overall, the findings reveal that Civil Defence Volunteers in Pathanamthitta District are highly service-oriented, moderately to highly supported by the organization and well trained in basic disaster response areas. At the same time, gaps exist in psychosocial support, open-water rescue

confidence, transportation facilities, financial support, volunteer identification and personal welfare support.

5.3 Suggestions

Based on the findings of the study, the following suggestions are made to strengthen the role, preparedness and effectiveness of Civil Defence Volunteers in Pathanamthitta District.

- Regular refresher training programmes should be organized for Civil Defence Volunteers. Although all respondents received basic training, regular refresher sessions are necessary to maintain skills and confidence. These sessions should include First Aid, CPR, Search and Rescue, Fire Fighting, Flood Rescue, evacuation procedures, communication methods and disaster response protocols.
- Psychosocial support training should be introduced as an important part of Civil Defence training. The study found that none of the respondents had received psychosocial support training, and confidence in handling traumatized victims was low. Volunteers should be trained to provide basic emotional support, psychological first aid, communication with distressed victims and referral to professional services when needed.
- Advanced flood rescue and water safety training should be strengthened. Since Pathanamthitta is vulnerable to floods and river-related disasters, volunteers should receive practical training in swimming, rescue in flowing water, use of life jackets, boat safety and rescue operations in water-current conditions.
- Proper identification cards and uniform support should be provided to all active Civil Defence Volunteers. Lack of identification cards and uniform allowances was one of the important challenges identified. Providing official identity cards, badges, uniforms and protective clothing will improve recognition, discipline, public trust and coordination during emergency duties.
- Transportation support should be improved, especially for volunteers responding to remote disaster sites. The study found inadequate transportation to remote locations as the strongest challenge. The concerned authorities may arrange transport facilities, fuel support, vehicle coordination or travel reimbursement during disaster response and training activities.

- Financial burden faced by volunteers should be reduced. Since many volunteers spend their own money on travel and may lose wages during service, a system of travel allowance, duty allowance, insurance coverage or emergency support fund may be considered. This will help sustain volunteer participation without creating financial pressure.
- Safety gear and equipment should be made available in sufficient quantity. Volunteers should have access to helmets, gloves, boots, life jackets, raincoats, torches, ropes, first aid kits and other essential response equipment. Safety should be treated as a priority because volunteers often work in risky environments.
- Volunteer feedback mechanisms should be strengthened. The study found that volunteers gave comparatively lower ratings to their opinions and suggestions being taken seriously. Regular meetings, feedback sessions and review discussions should be conducted so that volunteers can share their field experiences and suggestions with officers and authorities.
- Participation of women in Civil Defence volunteering should be encouraged. Since the sample had very low female representation, awareness programmes and recruitment efforts may be conducted to encourage more women to join Civil Defence. Women volunteers can play an important role in relief camps, community awareness, psychosocial support, support for women and children and household-level disaster preparedness.
- Training on communication with migrant labourers and diverse communities should be provided. Language barriers were identified as one of the challenges. Basic multilingual communication tools, emergency instruction cards and awareness materials in different languages may help volunteers communicate better during emergencies.
- Recognition and appreciation systems should be continued and strengthened. Although lack of recognition was not a major challenge, recognition can improve morale and long-term retention. Certificates, public appreciation, awards, media acknowledgment and official letters of appreciation can encourage volunteers to remain active.
- Coordination between Civil Defence Volunteers and other disaster management stakeholders should be improved. Volunteers should be regularly linked with the District Disaster Management Authority, Fire and Rescue Services, Police, Health Department, Revenue Department, local self-government institutions, NGOs and community groups. Joint mock drills and coordination exercises can improve role clarity and response efficiency.

- Relief camp management training should be added to the training curriculum. Since volunteers showed lower confidence in setting up temporary relief camps or shelters, they should be trained in camp layout, registration, food and water distribution, sanitation, protection of vulnerable groups, crowd management and coordination with local authorities.
- A structured volunteer welfare system should be developed. Volunteers may face physical exhaustion, emotional stress and family or work-related difficulties. Welfare measures such as counselling support, rest periods after intense duty, health check-ups, insurance and family support during emergencies can improve volunteer well-being and retention.

5.4 Conclusion

The present study examined the motivation, organizational support, preparedness, confidence and challenges among Civil Defence Volunteers in Pathanamthitta District. The findings show that Civil Defence Volunteers are an important human resource for disaster management in the district. Their role is especially significant because Pathanamthitta is exposed to floods, landslides and other disaster risks that require timely local response.

- The study found that volunteers are mainly motivated by humanitarian values, community service and moral responsibility. This confirms that Civil Defence volunteering in the district is strongly service-oriented. The volunteers do not appear to be mainly motivated by career benefits, social pressure or personal gain. Instead, they are driven by the desire to help people during emergencies and contribute to community safety.
- The study also found that perceived organizational support is generally positive. Volunteers feel that they receive guidance, supervision, training and appreciation from the department. However, there is a need to improve volunteer participation in decision-making, personal support mechanisms and welfare-related support.
- The training base of the volunteers is strong in operational areas such as First Aid/CPR, Search and Rescue, Fire Fighting and Flood Rescue. However, the absence of psychosocial support training is a major gap. Since disaster response involves not only physical rescue but also emotional support to affected people, psychosocial training should be included in future capacity-building programmes.

- The confidence level of volunteers is moderate overall. Volunteers are confident in first aid, rescue equipment use, communication and crowd management. However, they are less confident in psychosocial support, open-water swimming and relief camp management. These areas need focused training and practical exercises.
- The challenges faced by volunteers are mainly logistical and support-related. Transportation to remote disaster sites, lack of identification cards or uniform allowance, financial burden, language barriers and difficulty handling emotional trauma are important issues. Addressing these challenges can improve volunteer effectiveness, morale and retention.

In conclusion, Civil Defence Volunteers in Pathanamthitta District are motivated, committed and trained in key operational areas. They represent a valuable bridge between formal disaster management agencies and local communities. Strengthening their training, welfare support, equipment availability, recognition, psychosocial preparedness and logistical support will help improve disaster preparedness and response in the district. A better-supported Civil Defence volunteer system can contribute significantly to community resilience and safer disaster management in Pathanamthitta District.

CHAPTER VI:

REFERENCES & ANNEXURES

6.1 References

1. **Aldrich, D. P., & Meyer, M. A.** (2015). Social capital and community resilience. *American Behavioral Scientist*, 59(2), 254–269.
<https://doi.org/10.1177/0002764214550299>
2. **Asghar, H. M.** (2015). The Volunteer Functions Inventory: Examination of dimension, scale reliability and correlates. *International Journal of Innovative and Applied Research*, 3(4), 52–64.
3. **Azad, M. A. K., Uddin, M. S., Zaman, S., & Ashraf, M. A.** (2020). Community-based disaster management and its salient features: A policy approach to people-centred risk reduction in Bangladesh. *Asia-Pacific Journal of Rural Development*, 29(2), 135–160.
4. **Bryman, A.** (2016). *Social research methods* (5th ed.). Oxford University Press.
5. **Civil Defence Branch, Department of Defence.** (2018). *Civil defence volunteer policy*. Department of Defence.
6. **Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P.** (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology*, 74(6), 1516–1530.
<https://doi.org/10.1037/0022-3514.74.6.1516>
7. **Creswell, J. W.** (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE.
8. **Creswell, J. W., & Creswell, J. D.** (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
9. **Cretney, R. M.** (2016). Local responses to disaster: The value of community-led post-disaster response action in a resilience framework. *Disaster Prevention and Management*, 25(1), 27–40. <https://doi.org/10.1108/DPM-02-2015-0043>

10. **Department of Fire and Rescue Services, Government of Kerala.** (n.d.). *Civil defence*. Government of Kerala.
11. **Directorate General Fire Services, Civil Defence & Home Guards.** (n.d.). *About civil defence*. Ministry of Home Affairs, Government of India.
12. **Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D.** (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507.
<https://doi.org/10.1037/0021-9010.71.3.500>
13. **Ganoe, M., Roslida, J., & Sihotang, T.** (2023). The impact of volunteerism on community resilience in disaster management. *Jurnal Ilmu Pendidikan dan Humaniora*, 12(3), 199–213.
14. **Government of India.** (1968). *The Civil Defence Act, 1968* (Act No. 27 of 1968). India Code / Ministry of Home Affairs.
15. **Government of India.** (2005). *The Disaster Management Act, 2005*. Ministry of Law and Justice.
16. **Haski-Leventhal, D.** (2009). Altruism and volunteerism: The perceptions of altruism in four disciplines and their impact on the study of volunteerism. *Journal for the Theory of Social Behaviour*, 39(3), 271–299. <https://doi.org/10.1111/j.1468-5914.2009.00405.x>
17. **Hossain, M. A.** (2013). Community participation in disaster management: Role of social work to enhance participation. *Antrocom Online Journal of Anthropology*, 9(1), 159–171.
18. **Huq, S. M. S.** (2016). Community based disaster management strategy in Bangladesh: Present status, future prospects and challenges. *European Journal of Research in Social Sciences*, 4(2), 22–35.
19. **Inter-Agency Standing Committee.** (2007). *IASC guidelines on mental health and psychosocial support in emergency settings*. IASC.

20. **Institute of Land and Disaster Management.** (2022). *International Conference on Landslide Risk Reduction 2022: Conference proceedings*. Government of Kerala.
21. **International Federation of Red Cross and Red Crescent Societies.** (2011). *Volunteering in emergencies: Advocacy report*. IFRC.
22. **Jaime, D., Martínez, P., Contreras, D., Bonacic, C., & Marín, M.** (2023). Volunteers' capabilities and their perceived satisfaction and performance in volunteering tasks during socio-natural disasters. *International Journal of Disaster Risk Reduction*, 85, Article 103510. <https://doi.org/10.1016/j.ijdrr.2022.103510>
23. **Jibin, K., & John, A.** (2023). Risk informed development: A case of Pathanamthitta. *International Journal of Advances in Engineering and Management*, 5(5), 1259–1267.
24. **Kerala Fire and Rescue Services.** (n.d.). *Civil defence*. Government of Kerala. <https://fire.kerala.gov.in/en/civil-defence/>
25. **Kerala State Disaster Management Authority.** (n.d.). *Disaster management plans*. Government of Kerala. <https://sdma.kerala.gov.in/disaster-management-plans/>
26. **Kerala State Disaster Management Authority.** (n.d.). *Hazard maps*. Government of Kerala.
27. **Kothari, C. R.** (2004). *Research methodology: Methods and techniques* (2nd rev. ed.). New Age International Publishers.
28. **Mathbor, G. M.** (2007). Enhancement of community preparedness for natural disasters: The role of social work in building social capital for sustainable disaster relief and management. *International Social Work*, 50(3), 357–369. <https://doi.org/10.1177/0020872807076049>
29. **Nahkur, O., Orru, K., Hansson, S., Jukarainen, P., Myllylä, M., Krüger, M., Max, M., Savadori, L., Nævestad, T.-O., Meyer, S. F., Schieffellers, A., Lovász, G., & Rhinard, M.** (2022). The engagement of informal volunteers in disaster management in

Europe. *International Journal of Disaster Risk Reduction*, 83, Article 103413.

<https://doi.org/10.1016/j.ijdrr.2022.103413>

30. **National Disaster Management Authority.** (2012). *Handbook for training and capacity building of Civil Defence and sister organisations: Part I.* Government of India.
31. **National Disaster Management Authority.** (n.d.). *About Aapda Mitra.* Government of India. <https://aapdamitra.ndma.gov.in/about/>
32. **National Institute of Disaster Management & Delhi Disaster Management Authority (West).** (2022). *Training of the trainers programme on "Understanding mitigation measures for urban resilience: Role of Civil Defence."* Government of India.
33. **Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L.** (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41(1–2), 127–150. <https://doi.org/10.1007/s10464-007-9156-6>
34. **Phung, V.-H., Trueman, I., Togher, F., Ørner, R., & Siriwardena, A. N.** (2018). Perceptions and experiences of community first responders on their role and relationships: Qualitative interview study. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine*, 26, Article 13. <https://doi.org/10.1186/s13049-018-0480-z>
35. **Rhoades, L., & Eisenberger, R.** (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714. <https://doi.org/10.1037/0021-9010.87.4.698>
36. **Samuel, L.** (2022). Socio-economic status of population in flood-prone areas of two Grama Panchayath in Pathanamthitta District, Kerala. *Journal of Research in Humanities and Social Science*, 10(3), 53–61.
37. **Saunders, M., Lewis, P., & Thornhill, A.** (2023). *Research methods for business students* (9th ed.). Pearson.

38. **Snyder, M., & Omoto, A. M.** (2008). Volunteerism: Social issues perspectives and social policy implications. *Social Issues and Policy Review*, 2(1), 1–36.
<https://doi.org/10.1111/j.1751-2409.2008.00009.x>
39. **Stukas, A. A., Snyder, M., & Clary, E. G.** (2016). Understanding and encouraging volunteerism and community involvement. *The Journal of Social Psychology*, 156(3), 243–255. <https://doi.org/10.1080/00224545.2016.1153328>
40. **United Nations Human Settlements Programme.** (2009). *Cuba: A culture of safety* (State of the World's Cities case study).
41. **United Nations Office for Disaster Risk Reduction.** (2015). *Sendai Framework for Disaster Risk Reduction 2015–2030*. United Nations.
42. **United Nations Office for Disaster Risk Reduction.** (n.d.). *Preparedness*. UNDRR Terminology.
43. **United Nations Volunteers.** (2011). *Volunteerism and disasters: An extract from the 2011 State of the World's Volunteerism Report*.
44. **Whittaker, J., McLennan, B., & Handmer, J.** (2015). A review of informal volunteerism in emergencies and disasters: Definition, opportunities and challenges. *International Journal of Disaster Risk Reduction*, 13, 358–368.
<https://doi.org/10.1016/j.ijdr.2015.07.010>
45. **World Health Organization, War Trauma Foundation, & World Vision International.** (2011). *Psychological first aid: Guide for field workers*. WHO.
46. **Zhou, S., & Kodama Muscente, K.** (2022). Meta-analysis of volunteer motives using the Volunteer Functions Inventory to predict volunteer satisfaction, commitment, and behavior. *Nonprofit and Voluntary Sector Quarterly*. Advance online publication.
<https://doi.org/10.1177/08997640221129540>
47. **Sphere Association.** (2018). *The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response* (4th ed.). Sphere Association.

6.2 Annexures

Research Questionnaire

Section A: Socio-Demographic Profile

1. Name
2. Age
3. Gender
 - Male
 - Female
 - Others
4. Educational Qualification
5. Employment Status
 - Student
 - Employed
 - Self-Employed
 - Unemployed
 - Retired
6. Specify Employment/Livelihood
7. Years of Service in Civil Defense
8. Proximity to Flood/Landslide Prone Areas
 - I live in a high-risk zone
 - I live near a high-risk zone
 - I live far from risk zones
9. Marital Status
 - Single
 - Married
 - Widowed
 - Divorced/Separated
10. Which Taluk in Pathanamthitta do you currently reside in?
11. Previous experience working with other uniformed forces such as NCC, Police, etc.?
 - Yes

- No

12. Distance from home to nearest Fire & Rescue Station

- Less than 5 km
- 5-10 km
- 10-20 km
- More than 20 km

Section B: Motivation

Instruction: Please indicate how accurately each statement describes your reason for volunteering in Civil Defence, Pathanamthitta.

Response Scale:

- 1 - Not at all accurate
- 2 - Slightly accurate
- 3 - Somewhat accurate
- 4 - Moderately accurate
- 5 - Mostly accurate
- 6 - Very accurate
- 7 - Extremely accurate

Values

1. I volunteer in Civil Defence because I feel it is important to help people during disasters.
2. I feel compassion toward people affected by emergencies.
3. I volunteer because I believe in serving the community.
4. Helping others through Civil Defence gives me a sense of moral responsibility.
5. I am genuinely concerned about vulnerable populations in Pathanamthitta.

Career

1. Volunteering enhances my employment opportunities.
2. Civil Defence experience will benefit my future career.
3. I volunteer to gain experience relevant to my profession.
4. Civil Defence training strengthens my resume.
5. Volunteering helps me explore career options in disaster management.

Protective

1. Volunteering helps me deal with my own personal issues.
2. I volunteer to reduce feelings of guilt about being more fortunate than others.

3. Being active in Civil Defence helps me escape personal stress.
4. Volunteering makes me feel less lonely.
5. Helping others distracts me from my own problems.

Understanding

1. I volunteer to learn new disaster management skills.
2. Civil Defence helps me gain practical emergency response knowledge.
3. I enjoy learning through real-life rescue and relief work.
4. Volunteering allows me to better understand disaster situations.
5. I gain new perspectives through my Civil Defence experience.

Social

1. My friends or family support my involvement in Civil Defence.
2. Volunteering strengthens my social connections.
3. People important to me value community service.
4. I feel a sense of belonging in the Civil Defence team.
5. Being part of Civil Defence improves my social network.

Enhancement

1. Volunteering makes me feel important.
2. I feel better about myself when I volunteer.
3. Civil Defence increases my self-confidence.
4. Volunteering allows me to grow as a person.
5. I feel proud to be a Civil Defence volunteer.

Section C: Perceived Organizational Support

Instruction: Please indicate your level of agreement.

Response Scale:

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Slightly Disagree
- 4 - Neutral
- 5 - Slightly Agree
- 6 - Agree
- 7 - Strongly Agree

1. The Fire & Rescue Department values the voluntary service I provide as a Civil Defence volunteer.
2. The department appreciates the time and effort I contribute without financial reward.
3. The department genuinely cares about my safety during disaster response activities.
4. I receive adequate guidance and supervision from Fire & Rescue officers during duty.
5. The department recognises and acknowledges Civil Defence volunteers' contributions.
6. The department shows little concern for volunteers like me.
7. My opinions and suggestions as a volunteer are taken seriously by the department.
8. If I face personal or service-related difficulties, the department tries to support me.
9. The department provides sufficient training and resources for effective disaster response.
10. I feel respected as a volunteer member within the unit.

Section D: Preparedness and Training

1. Have you received formal training from the Civil Defense/Fire Force?
 - Yes
 - No
2. If yes, which areas were covered?
 - First Aid / CPR
 - Search and Rescue
 - Fire Fighting
 - Flood Rescue, including Boats/Swimming
 - Psychosocial Support
 - Other: _____
3. Rate your confidence level in performing the following tasks.

Response Scale:

- 1 - Not Confident
- 2 - Less Confident
- 3 - Neutral
- 4 - Confident
- 5 - Very Confident

1. Administering First Aid / CPR.
2. Using rescue equipment, such as ropes, boats, and extinguishers.

3. Evacuating people during a flood/landslide.
4. Responding to urban fire outbreaks.
5. Assisting in building collapse scenarios.
6. Providing psychological support to traumatized victims.
7. Swimming in open water bodies, such as rivers/canals, with currents.
8. Reading topographic maps or using GPS devices.
9. Setting up temporary relief camps/shelters.
10. Operating communication devices, such as Walkie-Talkies/Ham Radio.
11. Managing large crowds or panic situations.
12. Using social media for official coordination.

Section E: Challenges

Instruction: To what extent do the following challenges affect your ability to volunteer?

Response Scale:

1 - Not a challenge

2 - Less Challenging

3 - Neutral

4 - Challenge

5 - Major challenge

1. Lack of proper safety gear/equipment.
2. Financial burden, such as travel expenses and lost wages.
3. Conflict with my regular job or family time.
4. Fear of legal liability if something goes wrong.
5. Coordinating with spontaneous, untrained volunteers.
6. Difficulty communicating guidelines to the public.
7. Lack of clear instructions from the "Command and Control" center.
8. Inadequate transportation to remote disaster sites.
9. Lack of proper identification cards or uniform allowances.
10. Political interference in the functioning of the unit.
11. Physical exhaustion or health issues due to long hours.
12. Difficulty handling the emotional trauma of victims.
13. Lack of recognition or appreciation from authorities.

14. Language barriers while dealing with migrant laborers.