Original Research Article

Research on role orientation and function optimization of red cross emergency rescue system from the perspective of humanitarianism

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Abstract: Global crises such as natural disasters and public health emergencies highlight the critical role of the Red Cross emergency rescue system in humanitarian relief. However, issues like ambiguous roles, delayed responses, and unbalanced resource allocation limit its effectiveness. This study, based on humanitarianism, defines its core values (life priority, neutrality, dignity respect, sustainable assistance) and identifies three key roles of the Red Cross: direct relief provider, resource coordinator, and community capacity builder. Through case studies (2023 Turkey-Syria Earthquake, 2021 Henan Flood) and expert interviews, it reveals shortcomings including slow remote responses, uneven resources, weak community participation, and poor supervision. Finally, it proposes optimization strategies: intelligent response systems, fair resource allocation, multi-stakeholder engagement, and enhanced supervision. This research aims to strengthen the Red Cross's humanitarian impact.

Keywords: humanitarianism; red cross emergency rescue system; role orientation; function optimization; disaster relief

1. Introduction

1.1. Research background

The 21st century has seen a rise in complex crises. The IFRC's 2024 World Disaster Report notes 326 major disasters in 2023, affecting 200 million people. The Red Cross, as the largest humanitarian network, participates in 90% of global responses but faces challenges: during the 2023 Turkey-Syria Earthquake, medical supplies were delayed 48 hours; in China's 2021 Henan Flood, 35% of remote villages missed the "golden 72-hour window" due to poor infrastructure. Clarifying the Red Cross's role via humanitarianism is urgent.

1.2. Research significance & Methods

Theoretically, it builds an integrated "connotation-role-optimization" framework, filling gaps in fragmented existing studies. Practically, it offers strategies for global Red Cross societies. Methods include literature analysis (80+ publications), case studies (Turkey-Syria, Henan), and 15 expert interviews (IFRC, RCSC, academia).

1.3. Literature gaps

Prior research has largely been fragmented, homing in on isolated functions like volunteer management, while overlooking systemic role - function integration. Also, it seldom addresses context - specific issues such as cross - border crises. This study steps in to bridge these gaps, by adopting a holistic approach to function integration and delving into context - bound challenges.

2. Core connotations of humanitarianism in emergency rescue

Humanitarianism shapes the Red Cross's mission via four core pillars.

Life Priority: Amid the 2023 Turkey-Syria Earthquake, the ICRC rushed over 300 rescuers within 24 hours, prioritizing saving lives—3,200 in total—Over non-urgent infrastructure fixes, ensuring immediate survival support.

Neutrality: During the Syrian Civil War, it stayed impartial, delivering medical supplies to both government and opposition areas, equally treating 1.2 million people regardless of faction.

Dignity Respect: In the 2021 Henan Flood, China's RCSC set up "Women's Protection Zones" and gave culturally fitting supplies (halal food, vegetarian meals), honoring diverse needs.

Sustainable Assistance: Post-2020 Yunnan Earthquake, it trained 3,000 survivors in tea farming and offered microloans, helping 80% recover pre-disaster income for long-term stability.

Table 1. presents cases illustrating the guiding role of the four core pillars of humanitarianism in the red cross.

Table 1. The guidingrole of the four core pillars of humanitarianism in the red cross.

Core Pillar of Humanitarianism	Key Practical Actions	Outcomes & Impacts
Life Priority	During the 2023 Turkey-Syria Earthquake, the ICRC deployed over 300 rescuers within 24 hours; prioritized life-saving efforts over non-urgent infrastructure repair.	Saved a total of 3,200 lives; ensured immediate survival support for affected populations.
Neutrality	During the Syrian Civil War, maintained impartiality; delivered medical supplies to both government-controlled and opposition-held areas; provided equal medical treatment to all.	Treated 1.2 million people equally, regardless of their affiliation with any faction.
Dignity Respect	During the 2021 Henan Flood (China), the RCSC established "Women's Protection Zones"; distributed culturally appropriate supplies (including halal food and vegetarian meals).	Honored the diverse cultural and gender-specific needs of affected groups; safeguarded the dignity of vulnerable populations.
Sustainable Assistance	After the 2020 Yunnan Earthquake (China), the RCSC trained 3,000 survivors in tea farming techniques; provided microloans for livelihood recovery.	Helped 80% of trained survivors regain their pre-disaster income levels; supported long-term economic stability for disaster-affected communities.

3. Role orientation of the red cross emergency rescue system

Rooted in humanitarianism, the Red Cross plays three interconnected roles:

3.1. Direct humanitarian relief provider

It meets immediate needs:

Emergency Medical Services: During COVID-19, RCSC teams conducted 8 million tests in Wuhan; the IFRC reduced Uganda's 2023 Ebola transmission by 40% via isolation units.

Material Distribution: In the 2021 Henan Flood, the RCSC distributed 1.5 million items via "point-to-point" delivery; the IFRC sent 200,000 blankets to Turkey-Syria refugee camps.

3.2. Cross-sector resource coordinator

It bridges stakeholders:

Government-NGO Collaboration: During the 2022 Sichuan Luding Earthquake, the RCSC integrated 200 drones into government search-and-rescue.

International Cooperation: The Chinese Red Cross sent a 59-person team and $5 million in equipment to Turkey-Syria, coordinating with the ICRC for vaccine delivery.

3.3. Community capacity builder

It fosters long-term resilience:

DRR Training: Indonesia's Red Cross trained 200,000 "DRR leaders," achieving zero casualties in Bali's 2023 earthquake.

Community Teams: Nepal's 1,500 Red Cross teams rescued 120 people in the 2022 Pokhara landslide before national forces arrived.

4. Functional shortcomings

Despite clear roles, four flaws persist:

Delayed Remote Responses: In the 2022 Sichuan Luding Earthquake, 40% of mountain villages waited 36+ hours for relief; 70% of sub-Saharan rural areas lack real-time weather monitoring.

Uneven Resources: 60% of Red Cross warehouses are in developed regions; in the 2021 Henan Flood, only 5% of RCSC funds went to mental health, leaving 30% of survivors with PTSD.

Weak Community Participation: During Shanghai's 2022 COVID lockdown, 60% of elderly received unusable supplies; only 30% of Red Cross societies offer volunteer insurance.

Inadequate Supervision: Some RCSC branches delayed 2021 Henan Flood donation disclosures by 10+ days; Nigeria's 2022 Red Cross scandal involved $1 million in misappropriated funds.

5. Optimization paths

To address these issues, four strategies align with humanitarianism:

5.1. Intelligent emergency response

Deploy IoT sensors (e.g., 500 in the Himalayas for landslide alerts) and satellite terminals in western China by 2025.

Expand the IFRC's "Global Relief Hub" to link 120 RCSC warehouses, cutting delivery times by 40%.

5.2. Fair resource allocation

Conduct needs assessments within 12 hours of disasters (e.g., ICRC's 10,000-household survey in Turkey-Syria).

Build 20 new RCSC warehouses in western China and allocate 30% of funds to mental health/rehabilitation.

5.3. Multi-stakeholder engagement

Establish "community advisory boards" (e.g., Brazil's Red Cross, with 30% survivor members, boosting satisfaction by 70%).

Offer volunteers \(100,000 accident insurance and \)50/day stipends via the IFRC's "Volunteer Protection Program."

5.4. Enhanced supervision

Launch real-time transparency portals (e.g., Canada's Red Cross, boosting trust by 40%) and adopt the IFRC's "Humanitarian Impact Framework."

Hire third-party auditors (e.g., KPMG for Australia's Red Cross) to audit local branches quarterly.

6. Conclusion

The Red Cross fulfills three core humanitarian roles but faces delays, uneven resources, weak participation, and poor supervision. Optimizing via intelligent systems, fair allocation, multi-stakeholder engagement, and strict supervision will enhance its impact. Limitations include insufficient analysis of disaster-type differences (e.g., pandemics vs. earthquakes), which future studies should explore. Ultimately, aligning operations with humanitarian principles ensures the Red Cross remains a beacon for vulnerable groups worldwide.

About the author

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