

SAFETY GALA ALBANIA

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FUTURE OF VET PROGRAMS IN DISASTER RISK MANAGEMENT

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SAFETY GALA ALBANIA

Visioning the future: Human Dimension, Safety and
Technology

November 14th, 2024 @ Marriott Hotel Tirana

AGENDA

- 1. Introduction to VET in Disaster Risk Management**
- 2. Current State of VET Programs**
- 3. Emerging Trends Influencing VET Programs**
- 4. Challenges to Implementation**
- 5. Conclusion**
- 6. Questions**

1. INTRODUCTION TO VET IN DISASTER RISK MANAGEMENT ^{1/1}

The Importance of Disaster Risk Management :

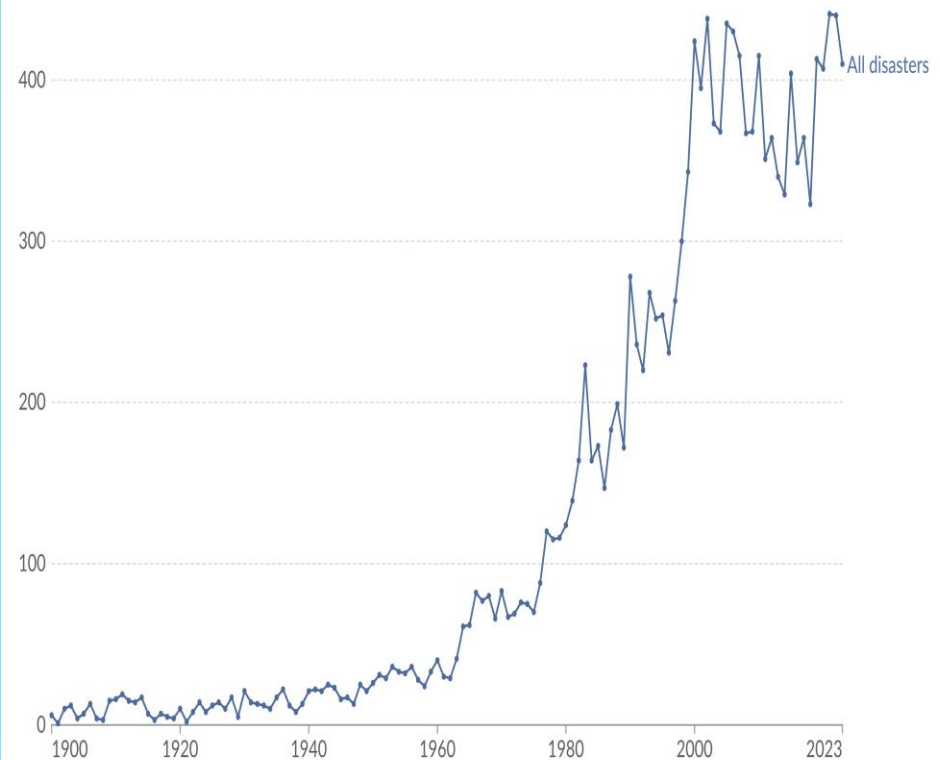
1. Frequency of Disasters

- **Increased Incidence:** The frequency of natural disasters has significantly increased over the past few decades. From 1980 to 2019, the number of recorded disasters rose from approximately 100 per year to over 400 per year.
- **Climate-Related Events:** According to the Centre for Research on the Epidemiology of Disasters (CRED), about 75% of major disasters in recent years have been climate-related, including floods, wildfires, and hurricanes.

Number of recorded natural disaster events, 1900 to 2023

Our World
in Data

The number of global reported natural disaster events in any given year. Note that this largely reflects increases in data reporting, and should not be used to assess the total number of events.



Data source: EM-DAT, CRED / UCLouvain (2024)

Note: Data includes disasters recorded up to April 2024.

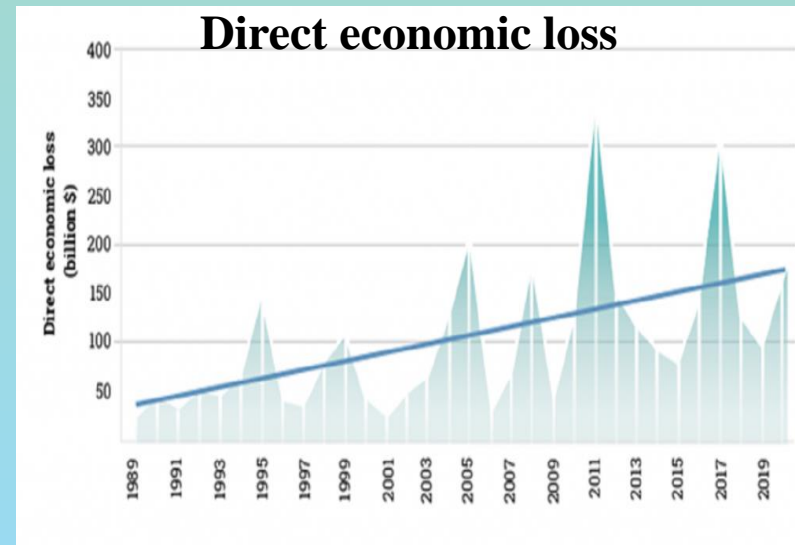
OurWorldinData.org/natural-disasters | CC BY

1. INTRODUCTION TO VET IN DISASTER RISK MANAGEMENT ^{1/2}

The Importance of Disaster Risk Management :

2. Economic Impacts

- **Global Economic Losses:** In 2020, global economic losses from disasters were estimated at about \$210 billion, with natural disasters accounting for a significant portion.
- **Insurance Claims:** According to Swiss Re, insured losses from natural catastrophes reached \$82 billion in 2020. This represents a substantial economic burden on businesses, governments, and individuals.
- **Long-Term Economic Effects:** The World Bank estimates that a single natural disaster can have long-term economic impacts, potentially lowering a country's GDP by 1% to 2% per year for up to a decade.



1. INTRODUCTION TO VET IN DISASTER RISK MANAGEMENT ^{1/3}

The Importance of Disaster Risk Management :

3. Human Cost

- **Deaths and Displacement:**
 - On average, natural disasters claim over 60,000 lives each year globally and result in millions of people being displaced. In 2019 alone, disasters displaced more than 50 million people (IDMC).
- **Vulnerability:**
 - Low- and middle-income countries disproportionately experience the brunt of disaster impacts. A World Bank report indicated that 90% of disaster-related fatalities occur in these regions.



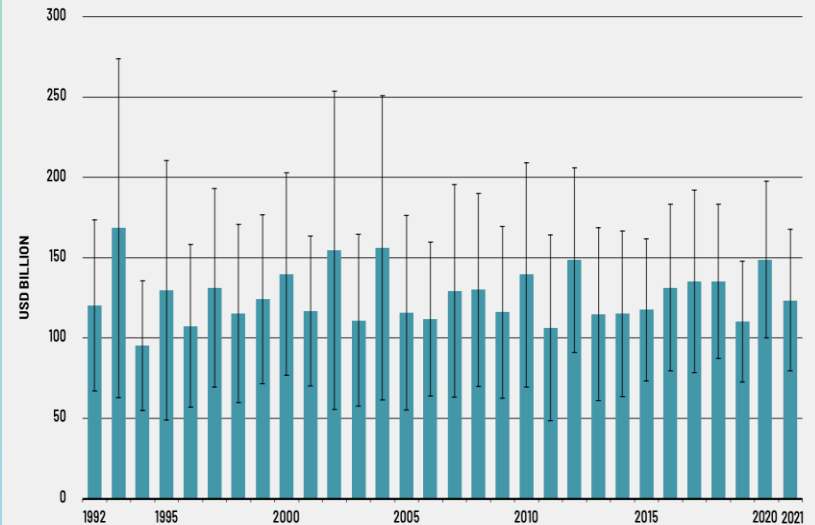
1. INTRODUCTION TO VET IN DISASTER RISK MANAGEMENT ^{1/4}

The Importance of Disaster Risk Management :

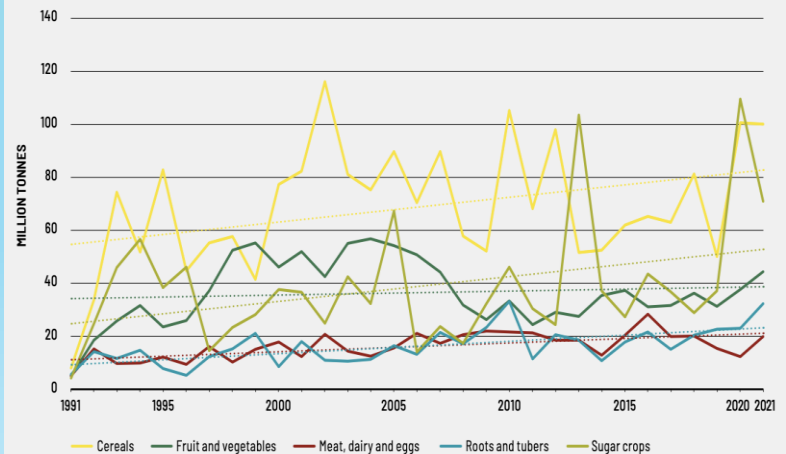
5. Sector-Specific Impacts

- **Agriculture:** Natural disasters can devastate agricultural sectors, with estimated losses exceeding \$200 billion annually in developing countries alone due to droughts, floods, and storms.
- **Infrastructure:** According to the United Nations, the average cost of damage to infrastructure from natural disasters ranges from \$100 billion to \$300 billion per year.

TOTAL ESTIMATED AGRICULTURAL PRODUCTION LOSSES



ESTIMATED LOSSES IN MAIN PRODUCT GROUPS (1991-2021)



1. INTRODUCTION TO VET IN DISASTER RISK MANAGEMENT ^{1/5}

The Importance of Disaster Risk Management :

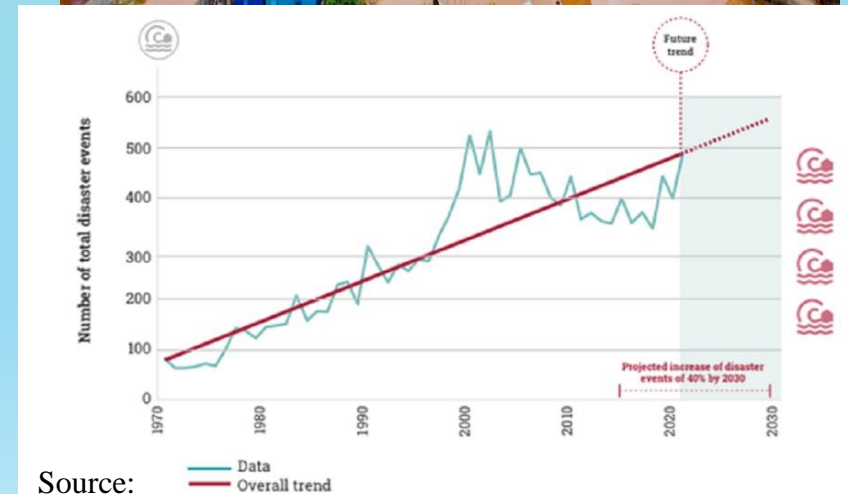
➤ Future Projections

1. Increased Costs of Climate-Related Disasters:

- By **2030**, it is estimated that climate-related disasters could cause annual global economic losses exceeding **\$400 billion**.

2. Vulnerability of Developing Nations:

- According to the Global Facility for Disaster Reduction and Recovery (GFDRR), the economic losses in developing countries from disasters could reach **\$1.5 trillion** by 2030, highlighting the need for increased investment in disaster resilience and preparedness.
- UNDRR Office emphasizes the importance of investing in disaster risk reduction strategies, projecting that every \$1 spent on disaster preparedness can save \$7 in recovery costs.



Source:

UNDRR analysis based on the International Disaster Database

1. INTRODUCTION TO VET IN DISASTER RISK MANAGEMENT ^{1/6}

The Importance of Disaster Risk Management :

6. Key Factors Contributing to the Rise in Disaster Occurrences

a) Climate Change

❖ Increased Frequency of Extreme Weather Events:

- hurricanes,
- floods,
- heatwaves, and
- droughts.

a) Rising Sea Levels:

- Coastal flooding

a) Urbanization and Population Growth

- **Increased Exposure to Risks:** Rapid urbanization, especially in developing countries,

2. CURRENT STATE OF VET PROGRAMS

1/1

Key Components of VET Programs in Disaster Risk Management:

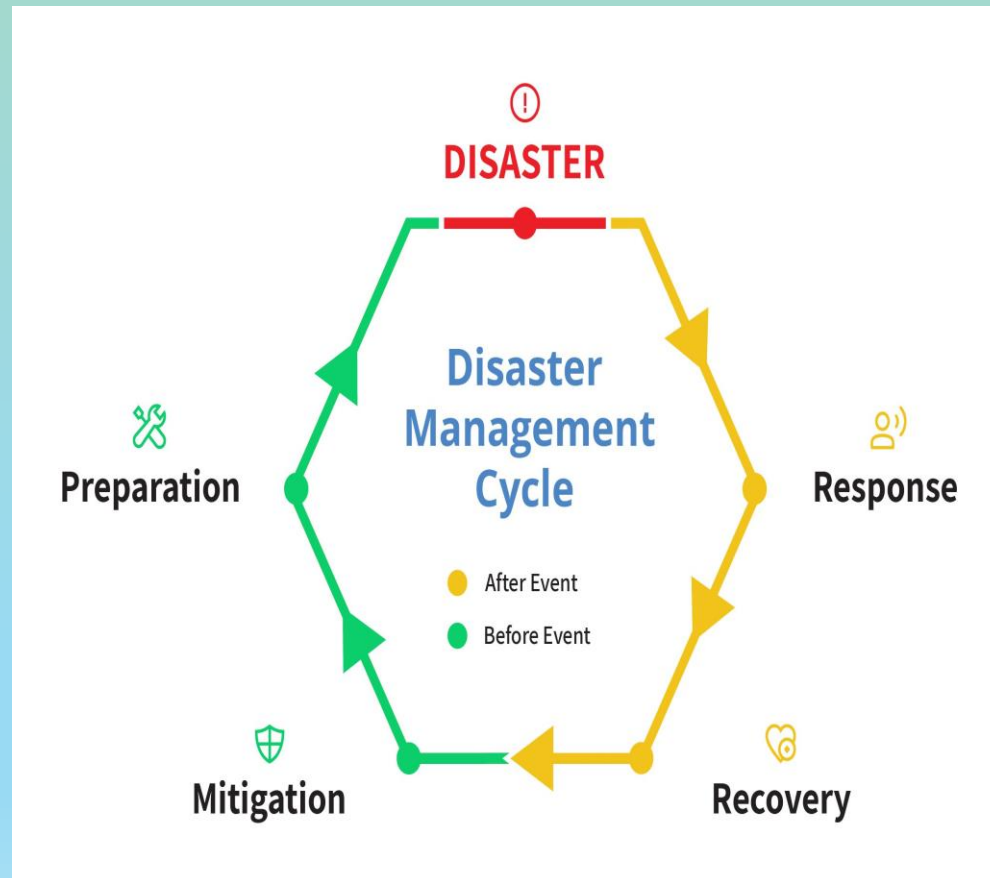
1. Risk Assessment and Mitigation

- **Hazard Identification :**

Programs teach risk identification techniques using tools like Geographic Information Systems (GIS), vulnerability assessments, and hazard mapping.

- **Risk Mitigation: :**

Students learn strategies to minimize disaster risks through improved urban planning, infrastructure development, and environmental management.



2. CURRENT STATE OF VET PROGRAMS

1/2

Key Components of VET Programs in Disaster Risk Management:

2. Disaster Preparedness and Planning

- **Emergency Planning:**
Training focuses on developing disaster preparedness plans, risk assessment methods, and emergency management strategies.
- **Community Engagement:**
Programs include ways to engage local communities in disaster preparedness efforts, raising awareness, and developing participatory risk reduction strategies.



2. CURRENT STATE OF VET PROGRAMS

1/3

Key Components of VET Programs in Disaster Risk Management:

3. Emergency Response

◦ Search and Rescue Operations:

Students learn first responder skills, including search and rescue techniques, medical first aid, and evacuation procedures.

◦ Crisis Management:

Courses cover incident management systems, emergency operations coordination, and decision-making under pressure during disaster events.



2. CURRENT STATE OF VET PROGRAMS

1/4

Key Components of VET Programs in Disaster Risk Management:

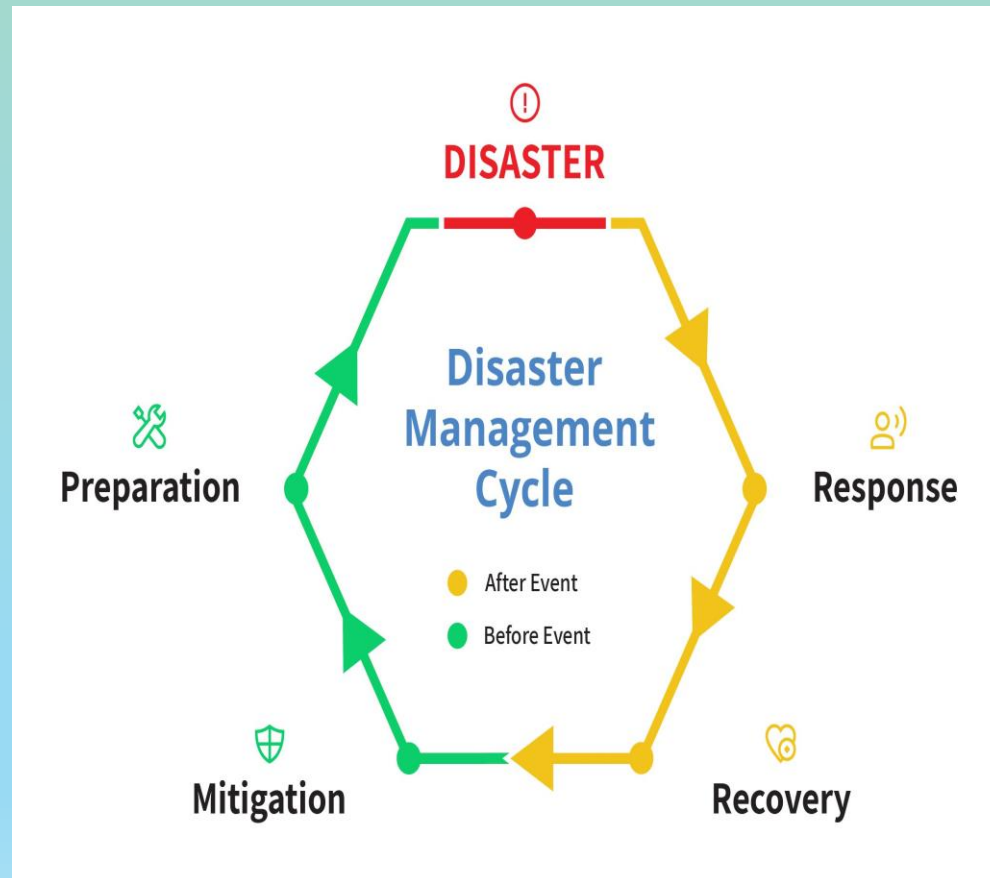
4. Post-Disaster Recovery and Rehabilitation

◦ Recovery Planning :

Training in post-disaster recovery strategies focuses on rebuilding infrastructure, providing humanitarian assistance, and supporting the economic and social recovery of affected communities.

◦ Resilience Building:

Emphasis is placed on building community resilience to future disasters through sustainable development and infrastructure improvements.



2. CURRENT STATE OF VET PROGRAMS

1/5

Key Components of VET Programs in Disaster Risk Management:

5. Technical Skills and Practical Training

- **Hands-On Learning:**

VET programs prioritize practical, field-based training that includes mock disaster exercises, simulations, and internships with emergency services or disaster management agencies.

- **Technology in DRM:**

Courses increasingly incorporate training on the use of new technologies such as drones, remote sensing, and data analytics to improve disaster response and risk assessment.



2. CURRENT STATE OF VET PROGRAMS

1/6

Key Components of VET Programs in Disaster Risk Management:

6. Specialized Areas within VET Programs

- **Humanitarian Logistics:**

Training in the logistics of disaster relief, including managing supplies, coordinating relief efforts, and transportation during emergencies.

- **Climate Change Adaptation :**

Programs increasingly focus on preparing communities for climate-related disasters by integrating climate risk management and adaptation strategies into disaster planning.

- **Public Health in Emergencies:**

VET programs also offer training in managing public health emergencies, including disease outbreaks and health services management during disasters.



2. CURRENT STATE OF VET PROGRAMS

1/7

Key Components of VET Programs in Disaster Risk Management:

7. Target Audience

- **First Responders and Emergency Services Personnel :**
- **Humanitarian Workers and NGO Staff:**
- **Local Government and Community Leaders:**
- **Youth and Students:**
- **Certifications and Qualifications**

2. CURRENT STATE OF VET PROGRAMS

1/8

In Europe:

- Vocational Education and Training (VET) offerings in disaster management are growing, especially through initiatives like **Erasmus+**, **EU UCPM Program**, **European Forum of Technical and Vocational Education and Training (EfVET)** and other.
- **The Erasmus+** program funds a wide range of VET-related projects focusing on disaster preparedness, response, and recovery, aimed at improving workforce capabilities to handle crises such as natural disasters or emergencies.
- Recent initiatives also include partnerships under the Erasmus+ "Capacity Building" framework, where international collaborations help improve training, especially in regions prone to natural disasters.
- European Vocational Skills Week is another event that highlights the role of VET in addressing global challenges, including disaster management, by promoting lifelong learning and reskilling across industries.

2. CURRENT STATE OF VET PROGRAMS

1/9

In Europe:

EU UCPM core training programme consists of courses that prepare different categories of experts – such as:

- European Union Civil Protection Team (EUCPT) experts, Technical Assistance and Support Team (TAST) members,
- technical experts, and modules and other response capacities key personnel – for deployment on UCPM missions.
- Additional core components of the programme train participants in their UCPM role linked to their national emergency management system.
- The UCPM Training Programme also offers online modules on different disaster management topics,
- Finally, the UCPM provides flexible training to respond to emerging risks and needs in the form of ad-hoc training courses, training of trainers, and thematic workshops and seminars.

2. CURRENT STATE OF VET PROGRAMS

1/10

In Europe:

European Forum of Technical and Vocational Education and Training (EfVET).

EfVET is based in Brussels and represents over 1500 VET Institutions in Europe reaching out to approximately 600 000 learners and 50 000 VET professionals, with links to the global state of Technical and Vocational Education and Training.

Main Purpose

- to facilitate networking and partnership
- to stimulate the creation of co-operative projects and thematic networks
- to enable widescale promotion and dissemination of innovative measures and transnational projects
- to provide technical support and advice to its members and help them access E.C. programmes
- to act as an agent for collaborative projects with TVET (technical and vocational education and training) organisations in outside Europe
- to represent the views of its members' issues in the European public forum and provide a platform for the European Commission and others to consult

3. EMERGING TRENDS INFLUENCING VET PROGRAMS ^{1/1}

Key emerging trends impacting VET programs in DRM

1. Climate Change and Environmental Focus

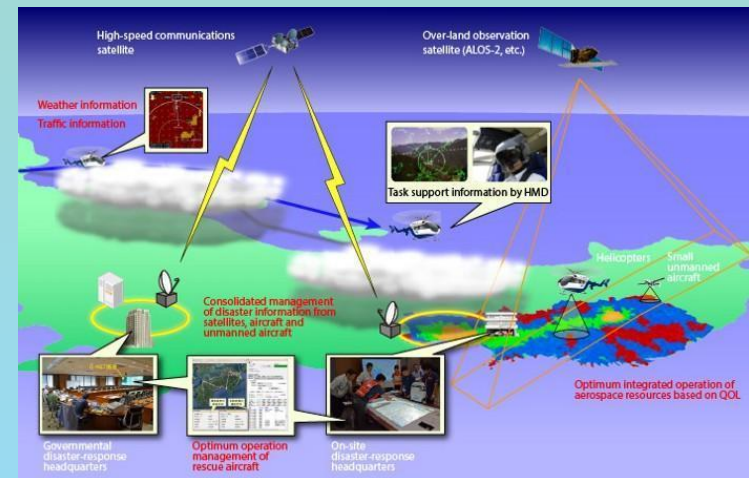
- Climate Adaptation and Mitigation.
- Sustainability and Eco-Friendly Practices.

2. Integration of Emerging Technologies

- Data Analytics and AI.
- Drones and Robotics.
- Geospatial Technologies (GIS, Remote Sensing).

3. Emphasis on Community-Based Disaster Risk Management (CBDRM)

- Local Knowledge and Community Engagement.
- Inclusive Disaster Management.



3. EMERGING TRENDS INFLUENCING VET PROGRAMS ^{1/2}

Key emerging trends impacting VET programs in DRM

4. Digital and Remote Learning in Disaster Risk Management

- E-Learning and Online Courses:
- Virtual Reality (VR) and Simulation-Based Training:

5. Focus on Humanitarian Logistics and Supply Chain Management

- Logistics and Supply Chain Resilience,
- Cross-Border Coordination and International Relief

6. Policy Advocacy and Governance Training

- Disaster Law and Policy
- Public-Private Partnerships (PPPs)

7. Health and Public Safety in Disasters

- Pandemic Preparedness and Health Emergency Management
- Mental Health and Psychosocial Support.



3. EMERGING TRENDS INFLUENCING VET PROGRAMS ^{1/3}

Key emerging trends impacting VET programs in DRM

8. Cross-Disciplinary and Multi-Sectoral Approaches

- Integration with Other Sectors
- Economic and Financial Resilience

9. Focus on Resilience and Long-Term Recovery

- Resilient Infrastructure and Urban Planning
- Sustainable Recovery and Reconstruction.

10. Globalization and International Collaboration

- Global DRR Frameworks
- Cross-Cultural Competence.

4. CHALLENGES TO IMPLEMENTATION_{1/1}

Implementation of VET programs in disaster management faces with following key challenges:

1. Funding Constraints

- Limited Resources
- Dependency on External Support

2. Infrastructural and Technological Limitations

- Inadequate Training Facilie
- Limited Access to Digital Tool

3. Shortage of Qualified Instructors and Training Personnel

- Lack of Specialized Trainers
- Inconsistent Training Standards

4. Curriculum Development and Relevance

- Rapidly Evolving Field
- Adaptation to Local Contexts

4. CHALLENGES TO IMPLEMENTATION ^{1/3}

Implementation of VET programs in disaster management faces with following key challenges:

5. Challenges in Student Accessibility and Engagement

- Geographic and Economic Barriers
- Low Awareness and Interest

6. Coordination with Government and Private Sector

- Fragmented Efforts and Overlapping Roles
- Limited Public-Private Partnerships

7. Sociocultural and Language Barriers

- Cultural Resistance to Disaster Preparedness Training
- Language and Literacy Barriers

8. Sustainability and Continuity Challenges

- Short-Term Project-Based Funding
- Lack of Continuity in Training

CONCLUSION

- VET programs in disaster risk management are critical to building the capacity of individuals and communities to prepare for, respond to, and recover from disasters.
- Emerging trends in VET programs focused on disaster risk management reflect the growing complexity of disasters, driven by climate change, technological advancements, and globalization.
- These programs are evolving to equip professionals with the skills needed to address current and future challenges, emphasizing climate resilience, technology integration, inclusivity, and sustainable recovery practices.
- By aligning with global frameworks and promoting cross-disciplinary collaboration, VET programs are helping to create a more disaster-resilient world.

**THANK YOU FOR YOUR
ATTENTION**

QUESTIONS????