



Fighting the flames

Armenia: how a volunteer fire and rescue service was formed, and what can be learned in countries at increasing wildfire risk

■ **Passionate firefighter:** Tigzan Galstyan (63) is one of the volunteers at Meghradzor VFRG. Well-trained and equipped, he and his colleagues are now ready to respond to fires and emergencies around the community. Photo: P. Bolte

Countless countries around the world experience climate-fuelled increases of wildfire risk. This represents a huge challenge for fire services, especially when capacity is limited. In places like Armenia that have on-duty fire services mainly in cities and towns, capacity in rural areas tends to be thin. As a new project evaluation report illustrates, forming volunteer-based services can effectively increase firefighting capacity and reduce fire-related damages and losses.

The VolFiRe project (Institutionalising a Volunteer First Responder Service in Armenia) trained and equipped 13 Volunteer Fire Rescue Groups (VFRG). These groups now complement the capacity of 60 staff-based fire stations across Armenia. In 2025, VFRGs already responded to 120 fires and other emergencies — helping to save assets due to faster responses (by an estimated 33.5 minutes).

The VolFiRe project

VolFiRe was implemented between 2022 and 2026 by a consortium of Austrian Red Cross, Armenian Red Cross Society, Caritas Austria and Armenian Caritas. Funded by the Austrian Development Agency, the EUR 1.58 million project sought to establish a volunteer-based fire and rescue system as part of the civil protection architecture in Armenia.

Start-up: the foundations

Establishing new fire and rescue services is no easy feat. They are complex in nature, and it is crucial to get the fundamentals right. Technical gaps or systemic flaws may not only render a new service ineffective or unsustainable but also put the lives of new firefighters at risk.

The VolFiRe project got these fundamentals right. It had **technical expertise** in its team, was guided by a **sound vision**, and nurtured critical **buy-in from stakeholders**.

Much of the first half of the project timeframe was invested in systems development: assessing existing resources and gaps at focus locations, understanding Armenia's environment for emergency services, and nurturing networks.

Two aspects are especially noteworthy.

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First, a tripartite model served as the foundation for VFRGs. This included clear roles for local governments (covering operational costs), Armenia's fire service (training), and Armenian Red Cross Society (insurance). This model enabled the long-term viability of the VFRGs.

Second, the team created a set of technical resources (648 pages in total) that then formed the basis for training and operational management. Developed in collaboration with Armenia's training organisation for firefighters, the resources include standard operating procedures, guidance on volunteer management, and technical standards. Great care was taken to ensure the safety of all volunteers, both through procedural guidance and high-quality personal protective equipment (PPE).

Launching the new service

With the foundations in place, by mid-2024 the VolFiRe project started work on establishing the thirteen new VFRGs. This included:

- ▶ **Recruitment and training volunteers** through basic courses, regular training sessions, and emergency simulations. Training was provided with the Ministry of Internal Affairs Rescue Service (MIA-RS), which issued rescuer passports to graduates;
- ▶ **Setting up VFRG stations**, either by refurbishing re-purposed buildings of local governments or by constructing new buildings;
- ▶ **Providing fire trucks**: older trucks were donated by MIA-RS and upgraded by the project to meet technical standards;
- ▶ **Procuring equipment**: all VFRGs were issued with full sets of PPE as well as firefighting and rescue equipment.

"The VFRG is absolutely needed! It makes a huge difference, especially when it comes to protecting assets from an ongoing fire."

Local government administrator, Aragatsavan

Current status and early results

Progressively, the new VFRGs became fully operational during the latter half of the VolFiRe project. The groups have since responded to structural fires and wildfires, traffic accidents, and other emergencies. Volunteers are highly motivated and encouraged by success stories.

For instance, the VFRG in Yervandashat managed to limit the losses from a haystack fire in late 2025 by preventing the fire to spread to a nearby house, cattle, and nearby fields. "We had already refilled our truck three times by the time the crew from Baghramyan (*the nearest MIA-RS*

station, ed.) arrived", reports a VFRG member. Similar stories of faster responses and avoided losses were reported by many groups.

Some of the VFRGs were also involved in the responses to major wildfires in Tavush province — complementing the capacity of MIA-RS crews and disaster management agencies. The integration of volunteer-based teams in disaster operations was furthermore tested in two major emergency simulations. As MIA-RS staff highlighted, VFRGs provide critical surge capacity for earthquakes, floods, and other hazard events.

Spearheading inclusion

While emergency services are typically staffed by men (in Armenia and around the world), the VolFiRe project promoted inclusion by identifying and then addressing barriers to entry of women, persons with disabilities, and other excluded groups.

Some 28 of 195 VFRG members are women (14.4%), with most of them belonging to core teams and acting in leadership positions. "Women can be rescuers, and they can also be team leaders", stressed one volunteer.

The VolFiRe project team also invested in other measures to make emergency services more accessible and to change mindsets more broadly. This included to production of easy-to-read material and inclusive communication.

Evidence-based advocacy

VolFiRe demonstrates a **proof of concept** for integrating volunteers into formal emergency response systems. The initiative followed a **practice preceding policy** approach, where operational experience was used to demonstrate feasibility before a comprehensive legal framework existed.

Through **bottom-up institutionalisation**, local communities, volunteers, and emergency services jointly developed and validated the model in practice.

The project also generated a strong basis for **evidence-based advocacy**, using real operational results to support policy dialogue and institutional reform.

Overall, the project represents a **whole-of-system approach**, combining community ownership, professional emergency services, local government support, volunteer management, operational standards, and institutional development into a single coherent model.



These characteristics make the approach highly relevant for replication in countries seeking to strengthen emergency response capacity in underserved areas.

“The VFRG is very active. Communication is going well. There have been a few fires recently, and the VFRG had already extinguished them by the time we arrived at the scene.”

Firefighter, Talin MIA-RS fire station

Outlook

The number of incidents attended by VFRGs is estimated to reach around 400 per year, as the recent evaluation report found based on case-load data from response zones. With VFRGs being much faster on scene to rural incidents than the MIA-RS crews in towns further afield, this translates to reduced economic losses from fires on a larger scale. The added surge capacity of VFRGs is also expected to make a difference in future disaster response operations.

Although the volunteer-based system has many foundations in place that facilitate the sustainability of the VFRGs (e.g., cost coverage, regular training, support by stakeholders), the extent to which the new service is formally embedded in Armenia’s civil protection system requires further efforts.

For the upcoming second phase, the evaluation therefore recommends to facilitate a **national vision** for volunteer-based emergency services

(where and how should further VFRGs be established, how should they operate?).

This vision will then need to be canvassed into a **legal framework** (such as a sub-legislative normative act related to Armenia’s new law on disaster risk management).

Further growth and improvement of the VFRG model should be based on the national vision. This may include expansion to other rural areas, upgrades of fire trucks (the current trucks require lots of repairs and have limits in accessing steep terrain), and aspects to further improve volunteer management.

Lessons and replicability

As many countries around the world witness escalating risk of wildfires, ambitions to expand and improve firefighting capabilities abound.

In countries that have mostly staff-based fire and rescue services, integrating volunteers provides the opportunity to increase coverage of fire stations (faster responses, more capacity) at comparatively low cost.

The experience of the VolFire project shows this is possible with careful management. Several lessons may guide efforts in other contexts.

1. Embed strong technical and strategic expertise into your team.

A lot of attention must be paid to technical detail and strategic vision to ensure that new

■ **Volunteers to the rescue**
VFRG members practice firefighting techniques during a training exercise. Photo: ARCS



VFRG firefighters in Aragatsavan are getting ready to extinguish a structure fire during an exercise.

Photo: ARCS

fire services are effective, sustainable, and safe for firefighters. Having fire and rescue experts in the project team is essential.

2. Conduct a robust assessment of systemic gaps and opportunities.

No two contexts are the same: countries differ in terms of hazard profiles, institutional and legal arrangements, gaps and opportunities. Robust assessments must be conducted that include stakeholder mapping, policy review, and an exploration of the willingness amongst key actors to support volunteer-based systems over the long term.

3. Construct a suitable model to ensure the long-term viability of volunteer crews.

Engage with all key actors to develop a model that covers all aspects required for the long-term viability of the new system. Agree on specific roles of each actor (in the case of VolFiRe, the tripartite model includes local government, MIA-RS, and ARCS).

4. Adjust or develop technical standards, training systems, and procedures.

Start with a review of existing resources for firefighters, checking what needs to be added or modified for the context of volunteer-based services. Keep the safety of firefighters in mind at all times. Limit the capability profile to basic techniques at first instance (e.g., do not include the use of breathing apparatus, which is technically demanding and possibly dangerous

without adequate support). Ensure that firefighters are always insured for their volunteer work.

5. When recruiting members, aim for inclusive, diverse and dynamic volunteer groups.

Team spirit and cohesion amongst groups are strong motivating factors. Consider the VolFiRe project experience (*see evaluation report*) to render groups inclusive and effective.

6. Train, train, train.

Keeping skills fresh is essential for safe and effective firefighting. While initial training courses must be the start, they should not be the end. Facilitate systems for regular and ongoing training and have provisions for the onboarding and training of new members, and for reviews of incident responses. Practice cooperation between various agencies through large-scale emergency simulations. Ensure good volunteer management through award systems, exchanges, exercises and competitions.

7. For full institutionalisation of volunteer-based services, facilitate a legal framework.

Embedding volunteers in emergency services should have a legal framework. If this does not exist yet or has critical gaps, facilitate stakeholder discussions and advocate for regulations that cover all aspects needed for effective and sustainable volunteer-based services (see the report on what may need to be covered).



For more information on the VolFiRe project, see the project website at <https://volfirearmenia.org/> and read the evaluation report (click title or image):

► Fighting the flames.

Evaluation report: Institutionalising a Volunteer First Responder Service in Armenia (VolFiRe). Austrian Red Cross, 2026.