

## A.27 Romania - 2010 - Floods

### Case study:

#### Country:

Romania

#### Disaster:

Heavy rain and flooding in 24 counties of Romania

#### Disaster date:

June, July 2010

#### No. of houses damaged:

Over 800 houses completely destroyed  
More than 7,000 houses damaged

#### No. of people displaced:

15,000

#### Project target population:

400 households and 3 school

#### Occupancy rate on handover:

100%

#### Shelter size:

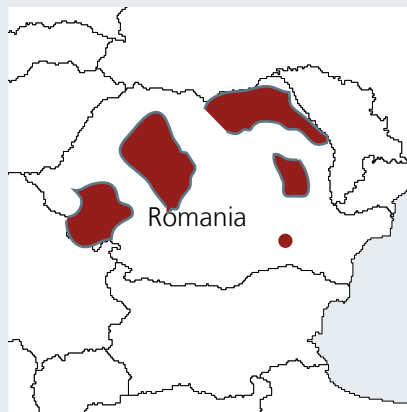
60 m<sup>2</sup>

#### Materials Cost per house:

Average 2,500 USD

#### Project cost per house:

Average 3,000 USD



#### Project timeline



#### Project description

This project mobilised 497 volunteers to help build and repair half of the homes damaged by the floods. It also built or repaired three schools. It managed to use donated materials and supplied families with materials and technical assistance to support self-help home repairs and renovations.

#### Strengths and weaknesses

- ✓ Beneficiaries contributed their time and labour towards construction of their new homes.
- ✓ Business partners were fast in reacting and providing much needed materials and financial resources.
- ✓ Partners mobilised their workers to volunteer at the construction site.
- ✓ The municipality was involved from the start which helped the project to proceed quickly.
- ✓ The government endorsement of the campaign helped generate needed resources and partnerships.
- ✓ Assistance was offered not only in reconstructing homes, but also in supplying and distributing construction materials through the resource centres. This allowed families whose houses were not severely affected to quickly renovate them with their own resources.
- ✗ Government delays in delivering on promises for materials.
- ✗ Logistics not adapted for acting in multiple locations (10 different locations at the same time).
- ✗ Difficulty in engaging the beneficiaries selected for relocation.
- ✗ Delay in developing the infrastructure for the plot of land selected for relocation of the new homes.
- ✗ The weak involvement of local volunteers interested in renovation activities.
- ✗ Severe weather conditions in winter and spring (-10C in April) delayed construction and prevented more local volunteers from taking part in the project as planned.
- ✗ Lack of sufficient local capacity in terms of skilled people available for running more resource centres.



Floods destroyed 800 over homes.

Photos: Ovidiu Micsik and Mihai Grigorean, Habitat for Humanity Romania

### Before the floods

Heavy rainfalls in June 2010 led to flooding in Romania. Over 800 homes were completely destroyed, more than 7,000 damaged, and over 15,000 people were displaced.

Many of the people most affected by the floods were from low income households, mainly old people or families with young children from rural communities. Two-thirds of Romania's poor live in rural areas. In times of disasters, these are the most vulnerable groups, as many of them find it hard to recover without additional support after losing all possessions and homes.

### After the floods

The first stage of the campaign "Now, more than ever!" focused on fund raising. At least 60 companies and over 20,000 individuals raised 650,000 USD in cash and 290,000 USD in construction materials.

Later stages of the response dealt with logistics and implementation. The first resource centre assisted 80 families to rebuild their houses.

Later, the second resource centre was established, and it focused on the distribution of materials in the area. In total, it assisted 240 families with timber for roof, aerated thermal blocks, sand, cement and plasticiser for external and internal walls, polystyrene stucco plaster for insulation and external finishes.

The project also mobilised local volunteers from the business community. 34 teams consisting of 497 volunteers were hosted by the community. These volunteers worked more than 3,200 hours over 54 days.

### Implementation

The city hall allocated a new plot of land for the construction of new houses along with the needed infrastructure: running water, electricity, sewage and access roads. All 30 allotments were in one area.

A warehouse was set up close to the main construction site to receive and store in-kind donations and materials, later distributed throughout the resource centre. It also disbursed materials for the construction of new houses. Two local companies were subcontracted to perform core/specialised work both with new constructions and renovations.

A local project team was formed to manage the project. It included a public relations specialist, a volunteer coordinator, a family support officer, and a construction site manager.

### Selection of beneficiaries

A selection committee was composed of two representatives from the organization, a town hall representative, and a community representative. Public information

meetings were held in the camp for flood victims in August 2010 to explain the housing project, eligibility criteria, conditions for participation and future obligations towards the project.

At the same time, social surveys were conducted for each family on the official victims list of the municipality. Through this process, 43 families were initially selected for the renovation project and 17 families for the construction of new homes during the first phase of the project. The 340 other beneficiaries were selected in the second phase of the project after the project staff team was strengthened and was able to perform an initial needs assessment.

General selection criteria took into account the vulnerability of the family, the urgency of the housing need, willingness to relocate and volunteer. For the renovations, single parent families and families with at least one minor child were prioritised.

The major problem for the selection process was that the number of beneficiaries kept changing, especially for the new builds project. This was mainly caused by that fact that some of the families finally refused to relocate. Other families did not perform the required number of working hours on the construction which was one



Interior of a repaired house. The project mobilised volunteers to build and repair flood damaged houses. Photo: Ovidiu Micsik and Mihai Grigorean, Habitat for Humanity Romania

of the main conditions for participating in the project. This problem was solved when the town hall approved a final official list that could not be amended.

To encourage families to work equally on all new constructions, the beneficiaries were not assigned a home until the very end of the project.

### Technical solutions

For the new builds, the aerated thermal blocks were chosen as a solution due to availability and climate conditions, the type of in-kind donations and related construction costs. All 30 new houses were built on the same plot of land, making it easier to develop the logistics and organise the production and supply chain management.

The houses were finished using standard quality materials for interiors, including drywall, laminate parquetry, stoves or tiles. The bathroom and kitchen were equipped with basic amenities; sinks and showers.

For the renovations of the partially affected houses, the solution was selected on a case by case basis. The bulk of work was on restoring walls, insulation, reinforcing foundations, replacing flooring and internal finishes.

Technical assistance was provided to a large number of families via the resource centres. Families received materials for their own work. Transport from the warehouse to each location was organised and offered to each family.

Construction workers were deployed to provide families with design and technical support in construction, and the use of tools and equipment, house to house in order to ensure the quality of construction and health and safety requirements.

### Materials list for 400 houses

Materials	Quantity
Aerated thermal blocks	9,800 m <sup>3</sup>
Timber	380 m <sup>3</sup>
Windows	120
Cement	250,000 kg
Iron	30,900 kg
Parquetry (flooring)	1,800 m <sup>2</sup>
Doors	210
Polystyrene	875 m <sup>3</sup>



Using volunteers, the project rebuilt half of the houses destroyed by the rain and flooding in Romania. Many of the volunteers were from outside Romania.

Photo: Ovidiu Micsik and Mihai Grigorean, Habitat for Humanity Romania