



The layout of the old village. The site was severely flooded on separate occasions over many years.
Photo: Alejandro Diego Bravo/Colombian Red Cross



The dark stain reaching above the door shows the extent of flooding.
Photo: Alejandro Diego Bravo/Colombian Red Cross

Living conditions in the old village

The community of the 'old' village of Doña Ana, located within a lagoon system, was increasingly affected by seasonal, protracted, 2-metre-high floods, which lasted several months. The floods damaged houses and assets, reducing incomes and livelihoods, and ultimately made living conditions very difficult.

During flood periods, people built timber mezzanines inside their homes to elevate the floor, but this meant people could not stand up in their own homes. Sometimes water levels reached roof-level, collapsing some of the weaker structures, with the church and the school inaccessible for long periods.

Living conditions in the new village

Although the 'old' and 'new' Doña Ana settlements are located only half an hour from each other by boat, the change in living conditions is dramatic in terms of house typology, settlement density, access, livelihood development and general lifestyle pattern.

Children and younger people easily and happily adjusted to the new circumstances, especially given that they were forced to live confined inside their houses during several days or weeks when floods hit in the old settlement.

The elderly population found it more difficult to overcome the feeling of loss that they had, mourning the end of the old village. Feasibility studies are being carried out, as part of an environmental education and DRR project in the lagoon, to create a sort of 'memorial park' in the old (and often under-water) village, to ensure that people can return to honour the dead, who remain buried in the cemetery in the old village.

Currently the community envisages various collective projects, fundraising for new places of worship and creating new cooperatives in order to generate income and ties with the surrounding villages.

Beneficiary selection

The decision to move the entire community of Doña Ana to a new settlement with no risk of flooding was taken following an assessment of the winter floods by the National Authority for Disaster Management.

Project implementation

The project was completed in four phases, described below.

"The entire community needs to take responsibility and respect one another working hand in hand."
Villager

Phase 1

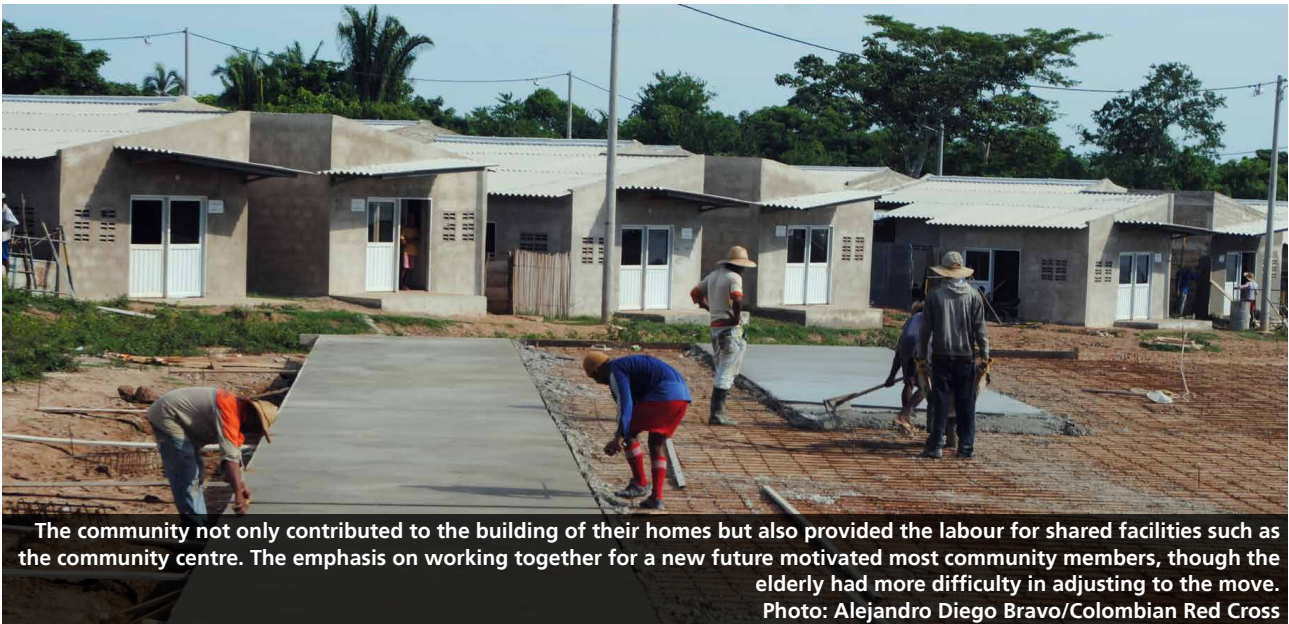
The first phase involved the establishment of the mechanisms for coordinating and managing the project, with the implementing organisation partnering with the National Unit for Risk Management (UNGRD). The management committee was made up of representatives from the municipality, the implementing organisation, private foundations, and the UNGRD.

Together with the community, the local authorities, and the technical support of the hydro-geologic department at Sucre University, a new location was identified. The privately-owned land was surveyed by the authorities as a contribution to the project.

The community took part in mobilisation activities and participatory planning workshops.

Phase 2

More stakeholders entered the programme, with local authorities, non-governmental organisations and private foundations joining together to collectively fundraise and share financial, human and technical capacities. A further 22 families received construction training and built their new houses, assisted in terms of the supply and quality control of materials as well as technical assistance from the implementing organisation.



The community not only contributed to the building of their homes but also provided the labour for shared facilities such as the community centre. The emphasis on working together for a new future motivated most community members, though the elderly had more difficulty in adjusting to the move. Photo: Alejandro Diego Bravo/Colombian Red Cross

A new water system was set up and the community established a development plan.

Phase 3

During this phase a further 73 houses were built and a number of infrastructure milestones were reached, including the construction of community buildings, the development of a sewage system and connection to the power grid. Small-scale livelihood projects began during this phase, such as kitchen gardens and poultry farming, with the government Department for Social Prosperity also providing livelihood support.

Phase 4

In the final phase, the construction of the school for 130 pupils will be completed, with intensive involvement of the community in the building process and associated themes of participation, accountability and maintenance of educational facilities. Further work on the development of community organisations will also be carried out.

Construction process

The community participated in all steps of the construction. The construction materials were purchased by the organisation, with the village leaders and committee kept informed of prices and progress. The organisation provided training for unskilled community labour for

the construction process, and hired qualified building professionals from outside for more specialised tasks.

Coordination

The most important element in the coordination of the project was the input of the community itself and the trust developed between the community and the implementing organisation and its government counterparts. Community participation was crucial since initially the community was divided over whether to move or not. Without a collective decision the project would have been unsuccessful.

The consortium of different organisations was initiated by Colombian civil society groups, who turned to the main organisation for assistance in identifying a long-term development project into which they could channel their resources.

The consortium led the engagement with the local community, and the implementation itself. The local authority was particularly active in the first phases, especially in terms of site selection and legal considerations. The organisation started a livelihood project of home-based

gardens, during which alliances were established with other institutions to ensure future technical assistance.

Disaster Risk Reduction (DRR)

There were three phases of DRR:

- Risk awareness raising and knowledge development through risk-mapping workshops and other exercises.
- Risk management through disaster management training and the creating of a brigade that assisted in the phase-by-phase move from the old to the new village.
- Recovery and risk-reduction through environmental awareness-raising and education, and initiatives to create a risk-informed community. While construction works were carried out in the resettlement site, regular monitoring of the old site took place to ensure that nobody was re-occupying the empty houses.

Technical solutions

Technical aspects of the project included:

- Land surveys to ensure a safe relocation site.

“Doña Ana is the proof that it is possible to save a community at risk, to build a better future for society.”
Project staff member



The layout of the new village.
Photo: Alejandro Diego Bravo/Colombian Red Cross

- The design and construction of durable housing, based on minimum space standards and disaster-resistant features.
- Water pumping with filtering beds to clean waste-water before it returned to the lagoon.
- Rainwater harvesting.

Materials

The majority of materials were purchased from local suppliers, following a tendering process. The materials were brought to Porto Franco, the closest town, and then transported by canoe to the project site.

When housing construction was underway in Phase 1, a road was built, which improved access for Phases 2 and 3.

Wider impacts

The project is unique in Colombia in its combination of funding from private foundations and civil society, and implementation by a well-established national humanitarian organisation, with the support of the community and local government.

The funding requirements of this multi-phased project may be difficult for other communities to replicate, but the modalities and mechanisms of implementation of this programme demonstrate a model that could be

replicated in other areas of Colombia or other parts of the world.

This project is an example of a success story for a community struggling with the adverse effects of flooding, a situation many remote communities around the world find themselves in. The story of the project has been disseminated at a number of high-level conferences including the World Urban Forum in Medellín.

Example of construction costs (Phase 3)

| Item | Cost (US\$) | % of total |
|--------------------------------|------------------|-------------|
| 72 houses (US\$ 11,100 each) | 799,200 | 49% |
| Preparation works | 7,500 | 0.5% |
| Plot clearing & site planning | 50,000 | 3% |
| Sanitation and electrics | 330,000 | 20.5% |
| Roads and other infrastructure | 439,000 | 27% |
| TOTAL | 1,625,700 | 100% |