

Type of Project:	Shelter Housing Durable Solution	Country:	Armenia
Approach:	Social Apartments	Realisation Year:	2003
Project name:	Avan, previous W14 boarding school dormitory	Version:	1
		Date:	December 2003



Initial Situation, Context

The declared independence of Armenia from the Soviet Union in 1991, led to the collapse of the entire economy, leaving thousands of unfinished buildings in the country; from started till almost completed constructions. From 1988 till 1992, more than 400 000 refugees arrived in Armenia among them some 300 000 ethnic Armenians, who had left Azerbaijan following the escalation of the interethnic conflict over the dispute territory of Ngorno Karabakh.

The influx of the ethnic Armenian refugees coincided with a massive earthquake in northern Armenia in December 1988, claiming the lives of 25 000 people and rendering 500 000 homeless.

Goals, Beneficiaries

Initially, in 1991, the 4 story-dormitory was planned only as a temporary accommodation for refugees. Upon the requested inspection in 2002 by the Department of Migrant and Refugees (DMR), the observed layout showed single rooms, occupied by families, housing on each floor, one totally broken communal male and female toilet, plus two washing areas. The intention was to remodel the previous school dormitory used as Collective Center, into an apartment building. The alteration required the search of new shelter space for several condominium-occupants, as more inhabitants were living in the inspected building then the new planned layout could accommodate in future.

Approach

The requested inspection of the in 1978 built school dormitory had to give an answer, if the present structure and layout would allow a total alteration and remodeling of the building. The clarification was executed in two steps. First; the suitability for an alteration of the present floor layouts in the existing complex had to be checked and cleared. Second; a seismic structure-control had to be ordered and executed.

Following the general approval of a total building alteration, several sketch floor-layouts, offering different numbers of needed apartments, were worked out. The most suitable, economical proposal was finally approved and drawn up. For the entire alteration and surrounding works, 6 firms participated in an open public tender. The second cheapest one, considered to be the best qualified general builder, received the contract. Within 7 months, the entire alteration including the surrounding works were completed.

Prior to the beginning of the general alteration, UNHCR and DMR jointly announced the allocation of apartments for refugee- and vulnerable local families, which could be resettled in the transformed building.

Partner(s)

The alteration was implemented in cooperation with UNHCR, DMR and the Local Municipality. The technical adviser (TA) seconding UNHCR and representing SDC, designated the NGO (YMCA) for all planning and construction work. After the warranty period, SDC/TA will execute the guarantee check up. The Armenian Seismic Institute (ASI) controlled the existing structure, ordered strengthening measures and acted responsible for the final approval of the remodeled building.

Implementations/Results

The local NGO, YMCA was designated by SDC/TA and UNHCR, to be the overall responsible implementing partner for remodeling (planning, all works and its contracts), as well as the observer of the guarantee works. The general builder had to announce all sub-contractors upon signing the contract.

Two new building entrances were allocated to the existing staircases as the street access to the site had to be changed to the back of the building. A new protecting site-partition wall was erected towards the school grounds. The internal traffic areas were minimized to gain maximum apartment space. Except for the engineering structures, 2 staircases and elevations; the entire roof construction, all partition walls on all levels got demolished, liberating the 4 floors for a totally new apartment layout planning.

SDC/TA "Construction Specification" and "Warranty Liability" papers had to be followed during the planning and execution of works. Negotiations with the Authorities, all instructions, controls, work supervisions, final building inspection etc., were executed by SDC/TA within its three / 3-4 weeks missions during the year, from April – November 2003.

The total remodeling and alteration of the school boarding house into an apartment bloc, took 7 months, the task was literally executed with no technical building equipment, engaging 50 to 110 workers, of whom 30% were jobless local refugee workers. The contracted total remodeling price was not exceeded.

Remodeling of school dormitory into a apartment building

Year	Total Apartments	1-Bedroom Unit 40.5m2	2-Bedroom Unit 56.5 m2
2003	44	36	8
Beneficiaries	Approx. 180	Approx. 125	Approx. 55

Cost, Financing

The sound structural grid, judged by ASI, measuring 6.00m x 6.00m, proved to be suitable to integrate the needed number of shelter units. Only minor seismic reinforcing had to be attached to the existing columns and beams. For the total remodeling the building was transferred by the Local Council free of cost to UNHCR. UNHCR, SDC as main financier and various other minor donors paid for the total building remodeling.

Name of site	Contracted Price	Total Apartments	Total 1-Bedroom Unit Area	Total "1-Bedroom Unit Area	Total Circulation Area	Overall Building Area	Costs per m2	Price 1-Bedroom Unit	Price 2-Bedroom Unit
Avan, W14	US\$ 134 640	44	1458 m2	452 m2	320 m2	2230 m2	US\$ 60.5	US\$ 2890	US\$ 3825

Problems/Constraints

The existing main infrastructure on the site was in very bad condition, especially the water and sewerage system. Most of the piping on the site had to be repaired or replaced on contract cost.

Lessons learned what was useful in the approach?

During the Soviet period, construction grids for domestic buildings were standardized. Usually it measures 6.00m x 6.00m, that grid system is suitable for any shelter apartment planning.

Lessons learned what should be done different next time?

The decision to let some families stay during the construction period in the to be remodeled building proved to be wrong. It slowed down the work procedure and was unpleasant for the families.

Preconditions and Limitations for this approach

The well functioning collaboration between the Authorities, UNHCR, SDC/TA and YMCA proved to be successful.

Evaluations for further information: Joint SDC / UNHCR Evaluation; RLSS Mission 2001

Recommended Contacts:	Sergio Buzzolini, SDC/HA
Recommended Institutions:	SDC/HA, Desk Europe + CIS
Recommended books/reports:	Joint SDC / UNHCR Evaluation; RLSS Mission 2001 / 18 Geneva
Relevant other projects (links):	UNHCR shelter structures in Armenia

Annex: (technical drawings, schemata) see page: none