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Type of Project:	Shelter Housing Durable Solutions	Country:	Armenia		
Approach:	Social Apartments	Realisation Yea	r:		2002
Project name:	Yerevan G3, previous Kinder- garten complex structures	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 then 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 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

The completion of the skeletons of the started previous kindergarten complex appeared to be a possible cost-effective solution, to create housing for needy refugees in the area. In addition, the empty space between the four started kindergarten-structures gave the possibility to build a new connecting apartment building in between.

Completing and extending the vast started building complex near the center of a busy Yerevan suburb, offers ideal living condition to the numerous needy refugees and some of the local vulnerable families.

Approach

The Local Municipality offered UNHCR a never completed complex of four individual kindergartens to be used as shelter for the refugees. It was also stressed, that a well functioning infrastructure is located next to the site. The potential of the site was evident. Planning began after the confirmation by the Armenian Seismic Institute (ASI), that the offered structures can be used for completion. Various layout plans confirmed that the required mix of different apartments could be placed into the existing complex and its site. The final proposal of the project was approved including its surrounding work and was announced in an open public tender. The cheapest general building offer received the contract. Six months were needed for the completion of the entire scheme including its infrastructure.

Prior to the start of the construction work, UNHCR and the Department of Migration and Refugees (DMR) finalized the selection of beneficiaries for the allocation of apartments (refugees and vulnerable local families).

Partner(s)

UNHCR, DMR and the Local Municipality implemented the works. SDC, with its technical adviser (TA) seconded UNHR and acted responsible for all planning, construction and financial issues. At the end of the warranty period SDC/TA liberated the 5% detained cash guarantee. The designated local NGO (YMCA) was responsible for all planning- and execution works. ASI checked the structures, ordered strengthening measures, accompanied the planning and construction during all phases and acted responsible for the final approval of the building structures.

Implementations/Results

The local NGO (YMCA) was designated by SDC/TA and UNHCR to be the overall responsible shelter implementing partner (planning, all works and its contracts, as well as the observation of warranty works). The defined general builder announced all sub-contractors upon signing its contract.

The "Construction Specification" and "Warranty Liability" paper, written by SDC/TA, formed the base for the planning and execution of works. The plans and construction details got approved previous of the public tender. The overall supervision of works, executed by SDC/TA, happened in various steps. (Site/inspection and its qualification, planning-supervision, execution-controls, final building inspection, warranty check up and liberation of the one-year cash guarantee detainment). These controls were executed during four 2-3 weeks missions during the year, from April – November 2002.

The entire complex, four 2 stories high previous kindergarten structures including the new 3 stories high connection building with 24 apartments, was completed within 6 months.

During construction almost no technical building equipment was at disposition. The contractor engaged 60 to 130 workers, of whom 35% were jobless refugee workers. The contracted price was in line with the budget.

Completion of existing four kindergarten structures and construction of a new connecting building

Year	Total Apartments	1 – Bedroom Unit 36 m2	2 – Bedroom Unit 52m2
2002	72	44	28
Beneficiaries	Approx. 300 Persons	Approx.130 Persons	Approx. 170 Persons

Cost, Financing

SDC /TA philosophy: To achieve the most economical costs for shelter apartments an inspection and qualification of the existing, but never completed building complex took place together with DMR and UNHCR. The kindergarten structures proved to be suitable for the transformation into shelter apartments. The site was given free of charge to UNHCR for this transformation.

UNHCR and SDC as its main financier, plus other minor donors, paid for the entire execution of all works.

Name	Con-	Total	Total 1-	Total 2-	Total	Overall	Costs	Price 1-	Price 2-
of site	tracted	Apart-	Bedroom	Bedroom	Circula-	Complex	per m2	Bedroom	Bedroom
	Price	ments	Unit Area	Unit Area	tion Area	Area		Unit	Unit
Yere-	US\$	72	1584 m2	1456 m2	510 m2	3550 m2	US\$	US\$	US\$
van G3	336 960						95	4085	5615

Problems/Constraints

Construction started to late in the year (June). Due to this fact, the render work had to be executed in the cold season. Cracked interior plasterwork throughout the new apartment building was observed and rejected by SDC/TA.

The fixing of the rejected render work got executed free of charge during the warranty period.

Lessons learned what was useful in the approach?

Using existing structures cost free at disposition for transformation into shelter, proved again to be economical. The combination of old structures with a new building helped to reduce the average price for the apartments in the new building.

Lessons learned what should be done different next time?

YMCA didn't follow the requested instructions by SDC/TA, concerning the start of work. Due to the Armenian climate, construction works has to begin in April. Render work should not be done after mid of October.

Preconditions and Limitations for this approach

The well functioning teamwork between, Authorities, UNHCR, DMR, SDC/TA and YMCA was successful.

Evaluations: Joint SDC / UNHCR Evaluation; RLSS Mission 2001

For further information

Recommended Contacts:	Sergio Buzzolini, Technical Adviser, 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