## Projects library of the specialised group of construction

#### **SHELTER**

Project	Housing

**Durable Solutions for Collective Centre Residents** Project name

**DuSoCC in North Caucasus (Russian Federation)** 

"(Roof +) One Dry Room" Programme

Region/Town	Chechnya (ChR)
GIS data (WGS 84)	
Project type	Repair & partial rehabilitation (2000-2005) Extended rehabilitation (2006/2007) Reconstruction (2008/2009)
Typology	Individual housing
Approach	Self help
Beneficiaries	IDPs
Climate	Moderately continental
Special constraint	Earthquakes, landslides
Start / End of project	2000 / ongoing
Country GDP	9,075 USD/cap (2007)
Update	17 September 2009



#### **Partners**

Donor

Organisation (Implementer) **UNHCR Northern Caucasus** 

> (UNHCR Sub-Office Vladikavkaz & UNHCR Field Office Nazran) UNHCR NC shelter programmes co-funded by SDC/SHA

Danish Refugee Council - DRC IO/NGO partners

GO partners Local administrations

#### Context to project

Initial Situation Chechnya:

UNHCR reintegration programme in favour of Chechen IDPs

displaced in Chechnya itself

Goals, Beneficiaries Durable housing solution in favour of temporarily accommodated especially

vulnerable individuals (female headed families, elderly people, ...)

3 phases of the programme 2000-2009:

- 2000-2005: "(Partial) Roof repair + 1 dry room"

(minor repair; partial rehabilitation of slightly damaged objects) - 2006/2007: "Complete roof reconstruction + 1 dry room" (extended rehabilitation of seriously damaged objects)

2008/2009: "Complete house reconstruction" (reconstruction of completely destroyed objects)

9,612 "One Dry Room" housing units 2000-2009 implemented in Chechnya: Implementations / Results

2000-2005 – "(Partial) Roof repair + 1 dry room": 9,447 2006/2007 – "Complete roof reconstruction + 1 dry room": 165

2008/2009 - "Complete house reconstruction": 59

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Reference data (comparative) figures 2009 for phase 3 "Complete house reconstruction" only					
Land plot (per house unit)	(not defined)	Garden (per house unit)	(not defined)		
Ground floor (walls included)	48 m² basis: RUS48 "self-help" standard layout (10.00 x 4.80); alternative solution: free layout (8.00 x 6.00)	Floor	1 floor, ground floor only		
Occupants Ø	5.3 persons	Occupants min.	2 persons		
Total house area	32.54 m²	Surface/occupant	6.14 m <sup>2</sup> /cap(5.3)		
House volume (gross volume)	202.03 m³	Volume/occupant	38.12 m <sup>3</sup> /cap(5.3)		
Number of rooms	2 rooms	Occupants/room (= Occupants/object)	2.65 cap(5.3)/room		
Heated area (= Total house area; net object area)	27.66 m²	Heated area/occupant (= Surface/occupant)	5.22 m <sup>2</sup> /cap(5.3)		
Cost/unit (building material) DRC-ChR'09 "One Dry Room" Programme budget: RUB 8,017,445 as on 17 September 2009 (30 objects – 159 beneficiaries)	8,732 USD CBR Central Bank of Russia 17 September '09 30.6067	Cost/occupant	1,647 USD/cap(5.3)		
Cost/m <sup>2</sup>	182 USD/m <sup>2</sup>	Cost/m <sup>3</sup>	43 USD/m³		
Total housing cost (= Cost/unit)	8,732 USD CBR Central Bank of Russia 17 September '09 30.6067	Self help, virtual value of labour (material cost : work cost ~ 1 : 2)	~ 17,463 USD/object		
Community development projects cost => infrastructure:	+ $\sim$ 873 USD (= + $\sim$ 10% of Total housing cost)	Community development projects cost/occupant => infrastructure:	$+ \sim 165$ USD/cap(5.3) (= $+ \sim 10\%$ of Total housing cost)		

#### Approach to results

#### **Initial Situation**

2002, when the programme has been started, immediately after the armed conflicts in the Caucasus ended ( $1^{\rm st}$  &  $2^{\rm nd}$  war in Chechnya 1994-1996 & 1999-2001, the war following the secession of South Ossetia from Georgia 1989-1992 and the Prigorodny conflict between Ingushetia and North Ossetia 1992) there was a substantial number of IDPs and refugees in need of shelter assistance in North Caucasus.

The figures for Chechnya reads as follows:

- Chechnya (figures update as on 31.12.2005):
  - . IDPs (displaced in Chechnya itself): 59,879 Chechens

These IDPs and refugees have either been accommodated in collective centres in Chechnya, Ingushetia and North Ossetia or found a temporary accommodation in private sector. They live mostly in very poor conditions.

#### Approach

Individual dwelling houses rehabilitation; continuous programme upgrading since 2006: massive quantity reduction in favour of a substantial quality improvement, from simple minor roof repair to complete reconstruction of completely destroyed house.

Self-help approach: building material supply for reconstruction of a 48 m<sup>2</sup> housing unit; programme implementation by DRC as implementing partner.

#### Problems/Constraints

Volatile security situation 2000-2009 in Chechnya: substantial number of construction sites not accessible due to security reasons

#### Federal Department of Foreign Affairs FDFA Swiss Agency for Development and Cooperation SDC

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**Lessons learned** Housing objects construction in general under the following conditions only:

- plot developed: utilities available on site (water, power, gas)

- access all-weather road trafficable by trucks (building material supply)

Lesson learned from the "One Dry Room" programme in particular:

- requests of the beneficiaries for extension of the given maximum layout area (48 m²) should be consistently rejected to avoid delay or failure of completion (risk of "never ending project" in case of "self-help" approach)

**Evaluation** A complete final 2000-2005 programme evaluation has never been done

due to the enormous number of objects to be assessed (9,447 objects) and the volatile security situation in Chechnya (frequent unavailability of escorts provided by Khankala, the Chechen headquarters of NC security forces).

Final evaluations of all shelter programmes in Chechnya since 2006 (DRC-

ChR'06, 07, 08) have been performed.

Prospects Resumption of the improved "One Dry Roof" programme planned for 2010

#### Legal framework

Politically attached to Numerous local administrations in Chechnya, mainly in Grozny town,

Grozny rural, Gudermes, Urus-Martan & Achkhoi-Martan districts

Type of ownership Private property

Construction information						
figures 2009 for phase 3 "Complete house reconstruction" only						
Construction	Building material supply to the beneficiary (self-help approach): full package for complete reconstruction of a 48 m² house; material delivery in parts, i.e. upon completion of each construction phase: 1) foundations, 2) shell (bricklaying, roofing), 3) interior work (joinery, floors/ceiling, plastering, painting, installations)					
			Cost USD	Repartition [%]		
<b>Building shell</b>	Foundations	reinforced concrete; h ≥ 1.00	1,572	18		
	Façades	two layers: outer shell $d = 12^5 + inner shell d = 12^5$	2,357	27		
	Partitions	interior brickwork d = 12 <sup>5</sup>	262	3		
	Carpentering	roof type: gabled or hipped; roof slope 30° - 45°	524	6		
	Covering	corrugated zinc-plated steel roof sheets, ridges capped	349	4		
Interior work	Joinery	2 plastic windows (~ 1.08 x 1.39); entrance steel door (1.10 x 2.05)	699	8		
	Floors	timber planking in bedroom; cement coating in all other rooms	961	11		
	Ceiling	sandwich-type gypsum plasterboards & mineral wool (d = 5)	349	4		
	Plastering	wall plastering in cement plaster	611	7		
	Painting	walls & ceiling whitewash	175	2		
	Installations	power (wiring), heating (gas connection), sanitation (water supply)	873	10		
Total assistance, admin, transport costs & loading/unloading costs included 17 September '09		8,732	100			

#### Urban planning

**Distance to** Health center --- (not defined; numerous locations)

Education facilities --- (not defined; numerous locations)
Income activities --- (not defined; numerous locations)
Public transport --- (not defined; numerous locations)
Shopping facilities --- (not defined; numerous locations)

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### **Humanitarian Aid construction group**

#### For further information

Involved SHA construction group consultant	René Edward Knupfer Technical Coordinator SDC/SHA Secondee at UNHCR Northern Caucasus UNHCR Sub-Office Vladikavkaz
Other involved SHA consultants	Philippe Genoud (2002) Hans Weigum (2004)
Author/Contact:	René Edward Knupfer Technical Coordinator SDC/SHA Secondee at UNHCR Northern Caucasus UNHCR Sub-Office Vladikavkaz knupfer@unhcr.org
Recommended institutions:	UNHCR Northern Caucasus (UNHCR Sub-Office Vladikavkaz)
Recommended partners:	Danish Refugee Council - DRC
Recommended books/reports:	<ul> <li>UNHCR Shelter in Northern Caucasus 2000-2007 (PowerPoint presentation, 2007)</li> <li>UNHCR Mission to Chechnya on 04 March 2009: UNHCR funded DRC 1-dry-room programme 2008 final report</li> </ul>
Relevant other projects (links):	<ul> <li>DuSoCC-NC Housing Programme 2006-2009         (SDC/SHA Secondment at UNHCR Vladikavkaz)         RUS48 Standard "Self-Help" Houses Programme</li> <li>DuSoCC-NC Housing Programme 2002-2007         (SDC/SHA Secondment at UNHCR Vladikavkaz)         "Box Tents" (BT) Programme</li> </ul>
Annex	- Photo documentation I & II

#### Annex

# Durable Solutions for Collective Centre Residents (DuSoCC) in North Caucasus (Roof +) One Dry Room" Programme 2008 in Chechnya (DRC-ChR'08) photo documentation I

housing object in Alkhan-Kala (Urus-Martan district), ulitsa Marksa 22 DRC-ChR'08-22 – Tsokaeva Zina Usmanovna





(first) status of completion on 17 September 2008





(final; the 3<sup>rd</sup>) status of completion on 04 March 2009

#### Annex

# Durable Solutions for Collective Centre Residents (DuSoCC) in North Caucasus (Roof +) One Dry Room" Programme 2008 in Chechnya (DRC-ChR'08) photo documentation II

housing object in Alkhan-Kala (Urus-Martan district), pereulok Krasnopartizanski 15 DRC-ChR'08-21 – Matsagova Zargan Zaidinovna





(first) status of completion on 17 September 2008





(final; the 3<sup>rd</sup>) status of completion on 04 March 2009