



RECONSTRUCTION OF NAHR EL-BARED REFUGEE CAMP

Akkar, Lebanon

This is a post-war reconstruction project involving the rebuilding of Nahr el-Bared Refugee Camp after it was destroyed during the 2007 war that led to the displacement of 26,000 individuals (5000 families). Founded during the Arab-Israeli conflict of 1948, it is the oldest and largest Palestinian refugee camp in Lebanon and is located 16 kilometres north of the city of Tripoli on the shores of the Mediterranean.

The primary aim behind the reconstruction was to preserve the Camp's pre-destruction neighbourhood layout and social fabric, augmented by an improved urban environment (common area upgrading and infrastructure) and living conditions (proper ventilation and open space). To these ends, a community-based grassroots committee from within the Camp drafted a set of principles and guidelines stating the community's vision for reconstruction and initiated a massive asset-mapping operation; large-scale, walk-in maps were made to help residents indicate the precise locations of their houses, the neighbourhoods, landmarks, schools and so on, and these became a master plan for reconstruction.

In 2008, the work, divided into eight geographical construction phases, was begun by the United Nations Relief and Works Agency (UNRWA), with about 80% of the labour force Palestinian, aiding socio-economic recovery in the Camp. To make more public open space available and to increase natural light and ventilation, the footprint of buildings was reduced, but this deduction in plot area was made up for vertically in increased building height, up to a maximum of four storeys. Roads have been widened, pedestrian routes improved, open courts introduced and, most importantly, infrastructure networks laid – for water supply, storm water, sewage, electricity and telecommunications. Two layout options have been designed for each apartment type and roof terraces have been reintroduced to provide private outdoor space and views of the sea, as well as to house water tanks. Buildings are made of cast-in-place reinforced-concrete columns, steel beams, slabs and CMU blocks for the walls. Adjacent walls are set with a 5-centimetre air space between, thus aiding insulation as well as possible future expansion vertically as families increase in size but desire to remain in one building.

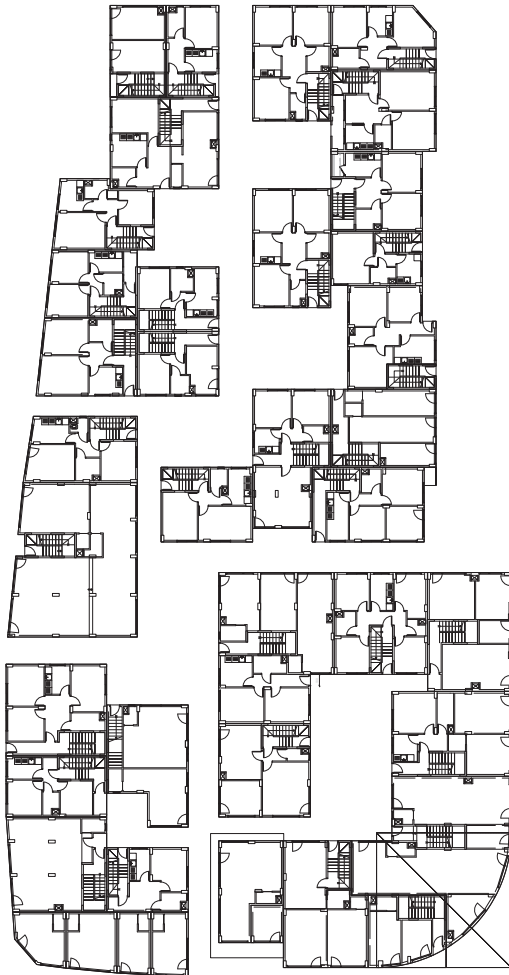
The phased construction approach means that displaced people can return as soon as their new homes are ready, while lessons learned in early phases can be incorporated in later ones: the first families returned in 2011.











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PROJECT DATA

Site area: 196,300 m²

Cost: 171,150,000 USD

Commission: July 2007

Design: July 2008–ongoing

Construction: December 2009–ongoing

Completion: April 2011–ongoing

UNRWA

UNRWA provides assistance, protection and
advocacy for some five million registered
Palestine refugees. UNRWA's human develop-
ment and humanitarian services encompass
primary and vocational education, primary health
care, a social safety net, community support,
infrastructure and camp improvement, micro-
finance and emergency response, including
in situations of armed conflict.

NBRC

NBRC is a local community grassroots initiative
that was launched by predominantly local
professionals and activists in 2007 during the
destruction of Nahr el-Bared. Its main aim was
to develop local consensus, studies and designs
for the Camp's reconstruction, while opposing
top-down planning for its post-war recon-
struction. After the master plan was approved
and the reconstruction initiated, the NBRC
was disbanded by 2011.

WEBSITE

www.unrwa.org/index.php