

Gaza Interactive Workshop

September 2010

housing actors engage



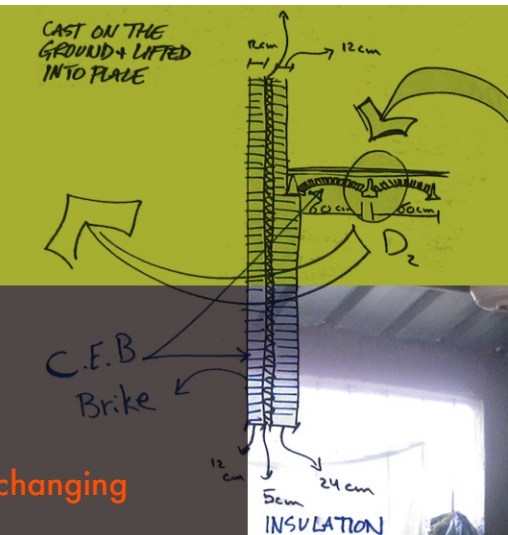
Participants involved: UN-HABITAT, UNRWA, FAO, ILO, UNDP, OCHA, CHF International, Islamic Relief Gaza, Coastal Municipalities Water Utility, Palestinian Housing Council, Sharek Youth Forum, Islamic University of Gaza, University College of Applied Sciences Al-Azhar University of Gaza, Al-Aqsa University, small-scale contractors/builders, engineering firms, and technical representatives of the Ministry of Public Works and Housing.

Palestine Regeneration Team (University of Westminster)
Murray Fraser, Nasser Golzari and Yara Sharif have set up the Palestinian Regeneration Team (PART) to carry out a range of projects in Palestine. Realising that the limitation with most western academic analysis is its fixation with the negative aspects of the Israeli/Palestinian conflict, the PART aims instead to find constructive ways to use architecture and urban design to help the West Bank and Gaza Strip. (www.palestineregenerationproject.com)



UN-HABITAT in the occupied Palestinian territory (oPt)

Filiep Decorte (Team Leader oPt) and Zeyad Elshakra (Deputy Team Leader Gaza Strip) are leading UN-HABITAT's work within the Gaza Strip, increasingly focusing on monitoring the overall housing needs and promoting "building back better", while highlighting the challenges of sustainable urbanization. UN-HABITAT is a specialized UN Agency focusing in oPt on planning, land and housing issues. (filiep.decorte@unhabitat.org, zeyad.elshakra@unhabitat.org)



Basic principles towards greener housing and sustainable neighborhoods

The workshop, hosted by UNRWA, gathered all the key housing actors and was opened with a speech of John Ging, Director for UNRWA in the Gaza Strip. Participants explored the affected neighborhoods and exchanged ideas about how to make the designs for typical concrete houses for extended families more energy-efficient - keeping in mind existing self-help building practices, daily habits and economic realities. Participants were keen not to dissociate the issue of house building from that of developing more sustainable neighborhoods. They looked at cost-effective ways to reuse 'grey-water' to make neighborhoods greener, more productive and inclusive, creating a less harsh microclimate.

1. Achieving sustainability requires action at all scales and levels, fully recognizing their interdependence: from the behavior of the individual and the family, to the house, to the neighborhood to the level of the Gaza Strip;
2. Greener housing means changing the way we live, design and build our houses, in addition to the way we consume water, energy and deal with waste;
3. Greener housing and sustainable neighborhoods can be achieved by using locally available materials and affordable technologies, building on the local socio-cultural reality;
4. Greener housing and sustainable neighborhoods are about improving the quality of the living environment and making it more productive, enhancing livelihoods;
5. Greener housing and greener neighborhoods can only be achieved through inclusive community-participation and engagement throughout the process.



The Six Rs + One principles*

Re-use, re-fuse, re-think, re-duce, re-cycle, re-pair & re-design. The above principles formed the basis and inspiration for one of the workshop components. It focused on alternative approaches to everyday habits, a key component in sustainable green practices. Work focused on testing and revising the component with site-specific design interventions allowing the translation of the above principles into practical and realistic action.

Rethink: Can a design achieve the outcome better? Can it be adapted?
Reuse: Could it be used again? Does it have another value without waste?
Reduce: Can we minimize the material and energy used? Can we use less?
Repair: How easy is it to repair and maintain? Can we replace parts?
Recycle: Is it easy to take apart? Is it possible to reprocess it?
Refuse: Is it needed? Is it necessary?
Redesign: How to redesign with all the above taken into account?

Ways to achieve greener housing & sustainable neighborhoods:

Building on the current condition and ongoing initiatives, the workshop allowed identifying potential areas to advance towards a more sustainable and greener Gaza.

Emergency repair and rehabilitation for existing

The need for quick repairs to improve the living conditions in war-damaged houses remains urgent. Families should be empowered to take the lead in implementing emergency repairs, using creative and affordable technologies to achieve energy efficient solutions. Training should go hand in hand with awareness raising.

More climate-friendly designs for new housing units

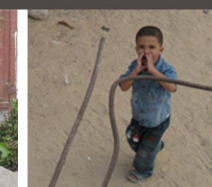
It is critical that more climate-friendly designs with higher energy efficient standards are achieved including improved passive ventilation using north/south court yards, creating layouts that facilitate seasonal living and providing better thermal mass. House designs should respond to cultural issues and shifting life styles, while reducing the need for heating and cooling.

Invisible technologies: changing habits

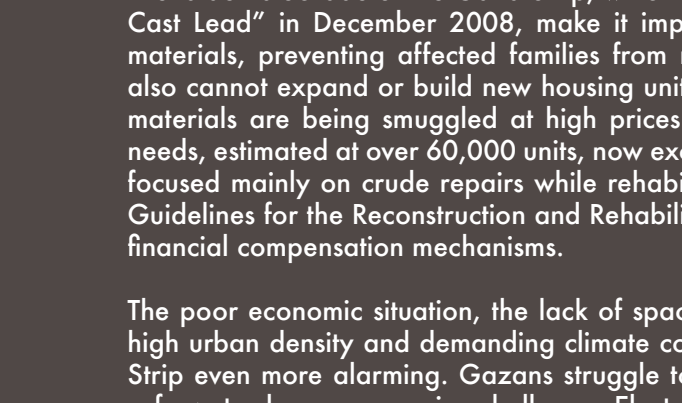
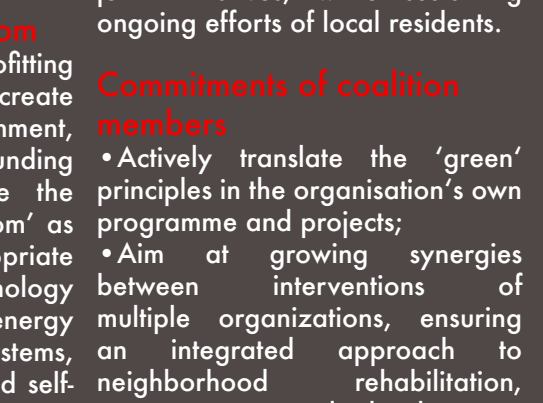
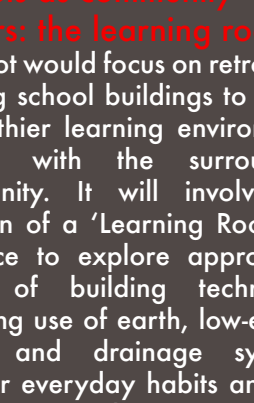
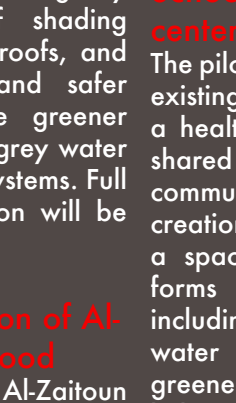
Changing daily practices, the way we use spaces and the introduction of small scale technical interventions can go along way in reducing water and energy consumption. This ranges from changing everyday habits of washing; switching lights off were possible, seasonal living, to simple daylight and ventilation techniques.

'Self-Help' Guidebook for Greener Living

The guidebook has emerged from the urgent need to provide immediate help and support for the individual families interested in self-help and 'building back better'. It aims to provide technical support for the construction of new houses. The booklet will be a UN-HABITAT initiative with inputs from the University of Westminster, focusing on practical advice to achieve 'greener' living



* The Six Rs + One principles are inspired from *The Sustainable Handbook for Design and Technology Teachers*, 2008



Green Pilot Initiatives

Based on the engagement with the different housing actors during the workshop, pilot projects were identified which would allow shared opportunities to create awareness, test new ideas and build practical knowledge. Pilot initiatives range from the neighborhood scale to the detailed scale of a building

Upgrading Al-Salam neighborhood: 'Green Stitching'

'Green stitching' focuses on creating a 'greener' environment within a neighborhood, connecting roof gardens with green public and private spaces at street level, introducing also green elements in the facades. 'Green stitching' promotes flexible and adaptable uses of spaces. Joint work on Al Salam, as a pilot neighborhood, would

include enhanced emergency repairs, creation of shading devices and greener roofs, and more child-friendly and safer public spaces, made greener through the re-use of grey water and clever drainage systems. Full community participation will be the key to success.

Green reconstruction of Al-Zaitoun neighborhood

The reconstruction of Al-Zaitoun neighborhood presents an opportunity to explore with the families more improved and energy-efficient designs and construction techniques to include use of courtyard space and passive measures to reduce the use of energy. Reuse 'grey water' to 'green' the neighborhood, through innovative low maintenance urban drainage systems. Recycle waste and promote the creation of horizontal and vertical gardens on walls and roofs.

Schools as community centers: the learning room

The pilot would focus on retrofitting existing school buildings to create a healthier learning environment, shared with the surrounding community. It will involve the creation of a 'Learning Room' as a space to explore appropriate forms of building technology including use of earth, low-energy water and drainage systems, greener everyday habits and self-help practices. The Learning Room would be the interface between the school and the local community, providing a community-laboratory to learn about, discuss and experiment with self-help green ideas.

Gaza Green Living Coalition

It is proposed to create a platform of organizations motivated to build on the momentum and further the 'green' agenda. The 'coalition' would provide an umbrella to facilitate exchange and promote

joint initiatives, while sustaining ongoing efforts of local residents.

Commitments of coalition members

- Actively translate the 'green' principles in the organisation's own programme and projects;
- Aim at growing synergies between interventions of multiple organizations, ensuring an integrated approach to neighborhood rehabilitation, reconstruction and development, including through joint pilot initiatives on specific neighborhoods;
- Test out certain new approaches and technologies for the benefit of the broader platform, within the framework of ongoing programme/projects;
- Make motivated technical staff and resources available to participate in Technical Task Force(s), in view of exchanging experiences, exploring new possibilities and supporting development of common tools and training activities.

The Israeli blockade of the Gaza Strip, which started in 2006, coupled with the Israeli invasion "Operation Cast Lead" in December 2008, make it impossible to supply the local market with legitimate building materials, preventing affected families from reconstructing their houses. Families across the Gaza Strip also cannot expand or build new housing units to deal with natural growth. Limited quantities of building materials are being smuggled at high prices through tunnels under the Egypt border. The real housing needs, estimated at over 60,000 units, now exceeds the need for reconstruction tenfold. Projects so far have focused mainly on crude repairs while rehabilitation of partially damaged buildings is slowly picking up. Guidelines for the Reconstruction and Rehabilitation for war affected individual housing focused mainly on financial compensation mechanisms.

The poor economic situation, the lack of space to build within the Gaza Strip, which already has a very high urban density and demanding climate conditions, makes the environmental degradation in the Gaza Strip even more alarming. Gazans struggle to dispose of sewage and garbage and access to clean and safe water become a major challenge. Electricity depends on fuel import, making it expensive and often irregular. The cost of water and energy is a real burden of the Gazans living under the poverty line.

UN-HABITAT and the University of Westminster help to design a 'greener' way forward

Once the blockade will be lifted and building materials can flow onto the local market, recovery and development is expected to be fast. There is a shared concern that the opportunity to build back better should not be missed. A visit to the Gaza Strip today reveals a remarkable amount of creative local initiatives and an energetic drive of a wide range of committed organizations and individuals ready to adopt greener practices. This provides fertile ground to introduce a more environmentally friendly and sustainable framework. Appropriate technical support and pilot initiatives would make it possible to take further small steps out of the current crisis towards a more sustainable future, starting from improving the current humanitarian and early recovery response. It was with this in mind that UN-HABITAT with the HABITAT Partner University of Westminster (London, UK) organized an inter-active workshop with all housing actors in September, 2010. The building blocks, resulting out of this joint initiative, for a 'greener' way forward are set out further in this brochure.

greener houses, sustainable neighborhoods

Bridging the gap between humanitarian response and a sustainable future

UN HABITAT
FOR A BETTER URBAN FUTURE

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