

PLAN



ISOCARP
Knowledge for better Cities

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SPATIAL VISIONING REFLECTIONS Gaza

Planning for the State of
Palestine

Creating productive
places

From quick urban
interventions to
ecological systems

Sports, art, food and the
culture that defines a city

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Editor's note

Welcome to the second edition of ISOCARP's magazine *Plan*, with each edition focused on a place seen through the lens of visiting architects, designers and urban planners. The first three editions of the magazine explain the experiences and ideas of an Urban Planning Advisory Team who visited Gaza and the West Bank in June 2015, and who tried to envision the types of urban environments that might exist in a future State of Palestine.

Not many people are able to visit Gaza, so on page 8 we begin with some facts and photographs before talking to the United Nations Development Programme about their work with the Palestinian people. One recent project of UNDP was to work with UN Habitat and the International Society of City and Regional Planners to assemble our Urban Planning Advisory Team to undertake a spatial visioning exercise for a future State of Palestine, and in the case of Gaza, hold a conversation on how to build back better after the devastation of last year's war.

The team enjoyed talking with Gazan planners and policy makers, to learn more about the challenges of planning for a young and growing population with heavily constrained resources. In this edition we interview the dynamic Dr Nihad Almughany to get his views on planning for Gaza City and Dr Jeremy Dawkins reflects on the team's design workshops and community engagement sessions to set out a possible future spatial vision for Gaza.

The current blockade of Gaza not only suppresses socio-economic development, but also fuels a cycle of violence and suffering. For Gaza to realise its full potential, not only does the blockade need to be lifted, productive places need to be created. On page 37, The Portland Trust gives an overview of the economic climate in Gaza. One sector particularly disadvantaged by the blockade is Gaza's agricultural industry, and given the worrying rates of malnutrition, it is particularly important to consider the role of farming in Gaza then, now, and next (page 41).

On page 44, Stefan Netsch interviews young Gazans on their hopes for the future and we take a look at the Gaza Sky Geeks, an incubator for talented entrepreneurs aiming to leap the blockade and create local jobs through technology.

For the economy of Gaza to recover, critical environmental constraints also need to be addressed. On page 48, Martina van Lierop introduces Wadi Gaza, flowing from the Negev Mountains to the Mediterranean, the Wadi is an important stopover for migratory birds, yet suffers from severe environmental degradation. Ghada Zeiada then shows how a lack of building and energy resources need not prove a barrier to creating beautiful, sustainable buildings (page 51). On page 46, we give Gaza the High Line treatment and picture how a former rail line might be reinvented as a sustainable transport link.

The enforced, physical separation of Gaza is a rare but not unprecedented situation, and on page 54 Gizem Caner talks about the division of the city Nicosia, Cyprus. On page 59, Julien Giquel explains the special relationships between Gaza and its twin cities, focusing on how it came to be tied with the French city of Dunkirk. In the final part of our magazine we also look at the other side of Gaza, one not often shared with the world, but sparkling with creativity, humour and a zest for life. From delicious local delicacies (page 62), urban surfers (page 53), contemporary art and a red carpet premier with a difference. On page 56, Muneer Elbaz and Salem Al Qudwa also take us on a tour of the last souk in Gaza and share some of the incredible built heritage that remains in a place with a 4,000 year old history of human settlement.

This magazine has been created thanks to the goodwill (and sleepless nights) of a great team of urbanists brought together by ISOCARP for UNDP and UN Habitat - we hope that you enjoy the magazine and, one day, also get the chance to walk the streets of Gaza.

Elizabeth Reynolds, editor.

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Contributors



Elizabeth Reynolds

Elizabeth is editor of this Gaza edition of Plan and along with Nader Atta enjoyed capturing photos of life in Gaza. Elizabeth leads the London based studio Urben that focuses on planning, design and problem solving for urban environments. Despite living in Abu Dhabi for almost four years, Elizabeth's Arabic is appalling and she hopes to get more opportunities to return to Gaza for practice.



Martina van Lierop

Martina is a Landscape Architect with experience in practice, research and education. She participated in several international workshops. Martina's professional focus is on ecological design and ecosystem services, and she has written our feature articles on Wadi Gaza and farming in Gaza. In addition, Martina designed the layout of Plan magazine and is responsible for all things concerning graphic design.

Stefan Netsch

One of the most positive aspects of traveling to Gaza is meeting the local people - Stefan interviewed urban planning counterparts and young professionals to give an insight into life in the Gaza Strip and their hopes for the future. Stefan is currently a Lecturer at the Karlsruhe Institute of Technology (KIT) in Germany where he is also completing a PhD in the re-use of abandoned churches.



Muneer El Baz

An expert in Planning and cultural heritage, Muneer wrote our story on Al-Qissariya Market - the last remaining Bazaar in Gaza Strip. Muneer has previously worked with the Aga Khan Trust for Culture and currently lectures at the University College of Applied Sciences (UCAS) in Gaza, alongside his role as a Senior Planner at planning projects and studies with consultant offices and NGOs.



Jeremy Dawkins

At the heart of this edition is an imagining of a future Gaza, written by Professor Jeremy Dawkins. Imagining life beyond the current context in Gaza can be difficult yet is a vital part of a campaign by the United Nations Development Programme to build back better. Jeremy has previously worked as Lead Planner for the Oman National Spatial Strategy and Chairman of the West Australian Planning Commission.

Gizem Caner

Both Turkish Cypriot and a Londoner, Gizem wrote our article on the old city of Nicosia. Gizem has a PhD in Multiculturalism, Division and Planning and has previously worked as project coordinator for the Istanbul Financial Centre urban renewal project. Her professional specialities are resilience oriented regeneration and disaster preparedness.



Julien Gicquel

Julien is a Technical Advisor to the United Nations Development Programme and helped write the first of our series on twin cities. Julien's experience in local planning and regeneration projects spans from Egypt to Mauritania and from Mongolia and Morocco, but he is currently at home in Paris working on the Métropole du Grand Paris project to reconnect and regenerate greater Paris.

Ghada Zeiada

Ghada and her husband Rashid live in Gaza where they lead architecture studio Girih Design and Sustainable Solutions. Ghada wrote our case study on architecture and innovation in Gaza, which includes some great examples of her attempts to help rebuild Gaza with local, sustainable materials.



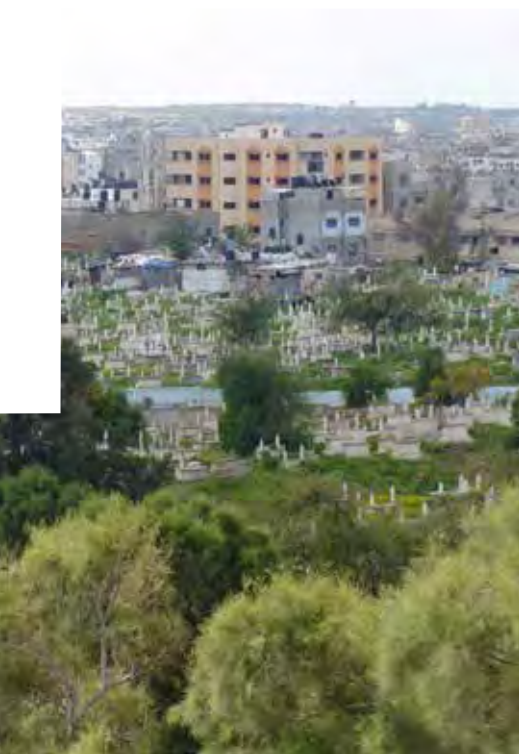
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United Nations
Development Programme
United Nations Habitat
Save Youth Future Society
Women's Affairs
Technical Committee

Impressions of Gaza





106,600

people
displaced

2,251

people killed
(551 children, 229
women)

300,000

need emotional
and psychosocial
support

18,000

housing units
destroyed or
severely damaged

100,000

Palestinians
are cut off from
public water
networks

Hope and resilience for a better future in Gaza

UNDP Programme of Assistance to the Palestinian People
UNDP/PAPP image bank: by Shareef Sarhan
Data source: OCHA, UNICEF and EWASH



*Empowered lives.
Resilient nations.*

UNDP

Since 1978, the United Nations Development Programme / Programme of Assistance to the Palestinian People (UNDP/PAPP) has provided funding and technical support to the Gaza Strip and the West Bank.

In founding PAPP, the UNDP was requested “to improve the economic and social conditions of the Palestinian people by identifying their social and economic needs and by establishing concrete projects to that end”. The continued and deepening occupation of the territory, and its severe socio-economic consequences, serve as a stark reminder of the critical role that UNDP/PAPP continues to play today, over three decades after its establishment.

With a long-standing presence in the occupied Palestinian territory (oPt), UNDP/PAPP has acquired a deep understanding of the local context. A trusted partner and convener, UNDP/PAPP enjoys a close partnership with Palestinian institutions, civil society, communities, academia, the United Nations Country Team (UNCT) and international development partners. Unlike many other development agencies, UNDP/PAPP works throughout the occupied Palestinian territory including, and as requested by the Palestinian Authority and the international community, in East Jerusalem, the Gaza Strip, and what is today Area C of the West Bank.

UNDP’s goal is to empower the Palestinian People to establish a viable State that is able to realize the right to development for its people. UNDP operates in the sectors of democratic governance and the rule of law; economic empowerment of the most vulnerable and private sector investment; environment and management of natural resources; and public and social infrastructure.

The Gaza Strip was handed over to the Palestinian Authority (PA) as part of the Oslo Accords agreement. With a population of 1,760,037 squeezed into a territory of 365 square kilometres, the people of Gaza have been living in extremely difficult circumstances, with restricted access and movement with the outside world since the outbreak of the second uprising against Israel’s occupation (Intifada) in September 2000. In 2005, Israel withdrew (disengaged) unilaterally and dismantled its settlements from the Gaza Strip, however, it continued to maintain a regime of restrictions. In June 2007, a series of armed clashes between Palestinian factions culminated in the civil-war that till today has left a deep scar

in Palestinian society. Since 2007, Gaza has witnessed three major armed conflicts with Israel, the last being in the summer of 2014, which saw the greatest destruction, and loss of life to date.

The recent conflict in Gaza has been devastating for the civilian population, with about one quarter of inhabitants (475,000 people) displaced from their homes by the fighting. Artillery, airstrikes and ground-level combat have caused large-scale destruction of Gaza’s social and economic infrastructure. The conflict, as well as destroying thousands of homes, has also levelled businesses and other productive assets, hospitals, schools, electricity generation facilities, in addition to water and sewage treatment systems.

The severe humanitarian toll of these hostilities comes against a backdrop of close to a decade of heightened vulnerability and recurring crises in Gaza that continue to exacerbate poverty and inequality.

The urgent need for immediate life-saving assistance, recovery and rebuilding activities need to begin



in earnest to ensure that humanitarian efforts can translate into short, mid and long-term strategies for recovery, resilience, and socio economic development.

Gaza and the West Bank are in need of new approaches to ensure the future viability and prosperity for their communities, citizens and enterprises. First of all, this region must ensure the basic needs for food, housing, basic infrastructure, services, safety, education, culture, healthcare, and freedom of movement. Secondly, cities should make use of the human potential, creativity and talent of their inhabitants. Thirdly, urban development must preserve and restore the natural and cultural assets to ensure viability and modern continuity with the historical past. Amongst the chal-

**“urban development
must preserve and
restore the natural and
cultural assets to en-
sure viability and mod-
ern continuity with the
historical past”**

lenges that needs to be addressed are enabling the future urban development in Gaza and the West Bank, enhancing public transport and transit oriented development, protecting vulnerable landscapes, natural resources, cultural and religious heritage and to enhance industries, trade, tourism and the economy in this region.

Working with UN-Habitat and supporting the vital ongoing work of the United Nations Relief and Works Agency (UNRWA), UNDP decided to commission an Urban Planning Advisory Team (UPAT) to provide support to a visioning process for the future strategic and spatial development of Gaza as part of an integrated State of Palestine. We are proud to present the first in a short series of magazines focused not just on current conditions in the occupied Palestinian territory, but looking ahead to a future of open, safe, prosperous and sustainable inter-connected metropolitan regions.

Facts & figures



365

km² total land area.

Almost equivalent
to the land area of
Dublin, Ireland

1.8 m

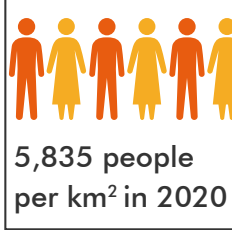
people

A dense place



17%

of the total area is
restricted by Israel



5,835 people
per km² in 2020

Equivalent to the
City of London

of people under the
age of 30
Young population!

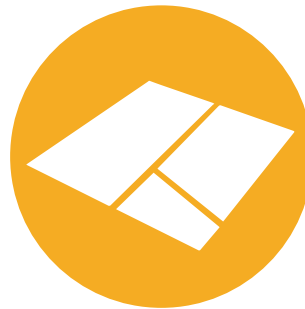
48%



67%

youth unemployment

According to The World
Bank, highest in the world!



186 km²

vacated Israeli
settlements

Potential land for future
development?



\$174

is the average monthly
wage in Gaza



95%

of water is unfit for
human consumption and
by 2020 there will be no
drinkable water



more than

50%

of industry closed

Due to the latest assault
and years of blockade



57%

of people in Gaza
endure food insecurity

Map

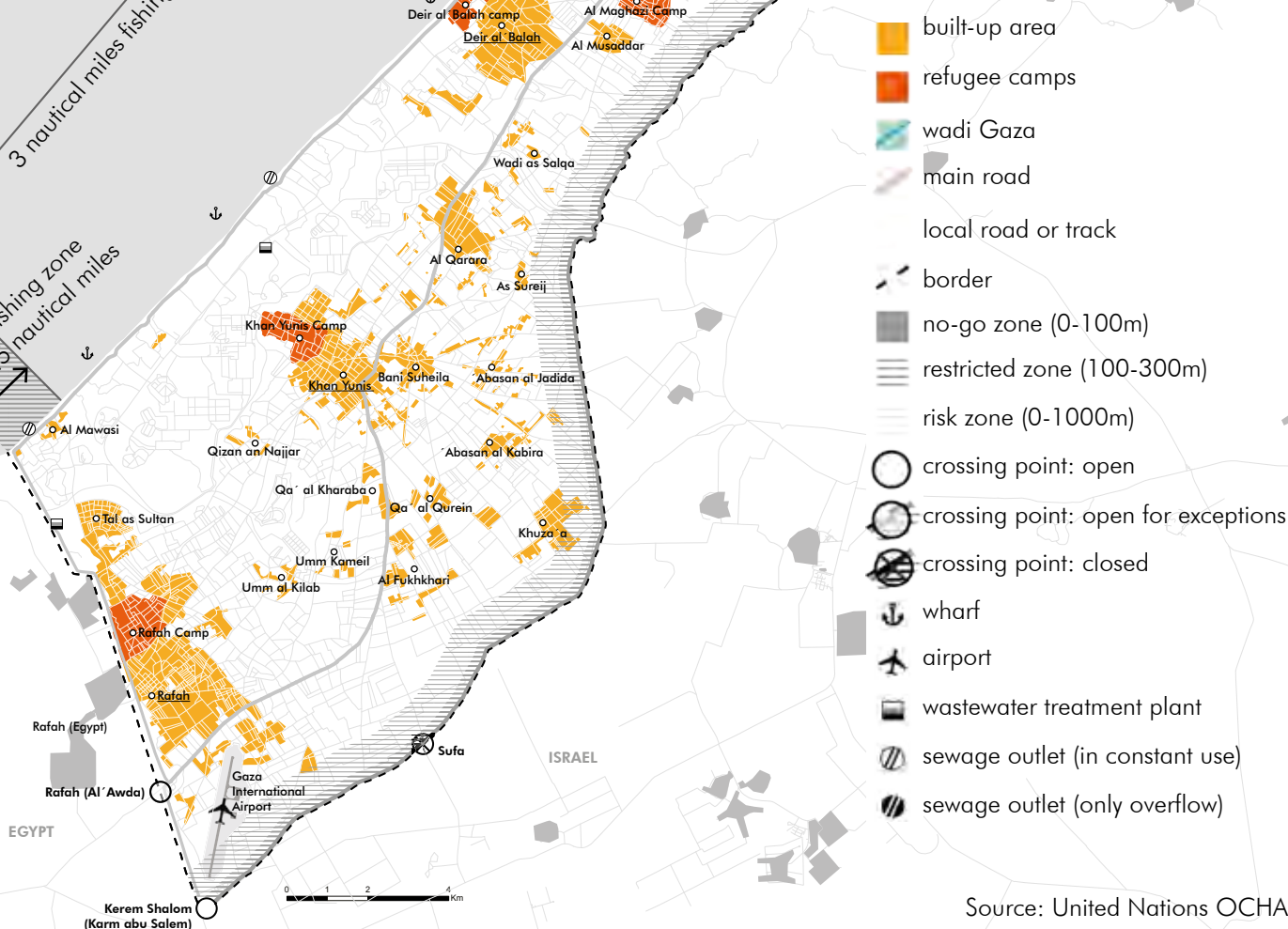


6 nautical miles fishing limit
enforced by Israeli Army from
November 2012

3 nautical miles fishing limit enforced by Israeli Army till November 2012

No fishing zone
1.5 nautical miles

No fishing zone
1.5 nautical miles



Source: United Nations OCHA oPt

A UPAT for Gaza

Martin Dubbeling, ISOCARP Vice President UPATs



Founded in 1965, the International Society of City and Regional Planners (ISOCARP) brings together individual and institutional members from more than 80 countries worldwide, who collectively seek to improve cities and territories through planning practice, training, education and research. ISOCARP is based in The Hague and formally recognised by the United Nations and the Council of Europe, it also has a formal consultative status with the United Nations Educational, Scientific and Cultural Organization.

One service that ISOCARP provides to cities and regions is Urban Planning Advisory Teams (UPAT), these are made up of between five and nine planning and design professionals who are brought together from around the world for four to eight intensive days of devising creative solutions and strategic advice in response to specific urban challenges. The teams typically comprise a Team Leader and a

Team Rapporteur, plus two to four senior planners and two young planning professionals – all with a broad range of skills and experiences. Over the course of their visit to the host city, the team will have undertaken field investigations, spoken to local counterparts and community stakeholders, hosted design sessions and presented their interim findings. Following the UPAT workshop a professional report concludes the research and suggested urban response then presents the final results at a dedicated seminar at the ISOCARP annual congress.

The strength of ISOCARP's approach lies in the diversity of each team, with a context and perspective that is entirely exclusive to a certain location and point in time. Bringing together ISOCARP members and local professionals creates an alchemy that leads to creative and robust urban strategies. Since 2004 ISOCARP has organised over 22 UPATs in countries

including China, Mexico, Russia, Spain, USA, Austria, the Netherlands, Switzerland and Singapore. Repeated requests from these countries shows there is a strong demand for expertise and independent advice from international teams of planning and design professionals.

The UPAT held between 7th and 14th June 2015 on Capacity Building and Test Planning Exercises for Gaza and the West Bank, is perhaps the most ambitious UPAT organised by ISOCARP to date. The team and all those they engaged with were asked to look past the present situation of physical and administrative barriers that separate the territories of Israel and a future State of Palestine, and consider the 1967 borders (or Armistice Line) as fully open for travel and trade. From this starting point, the challenges needing to be addressed included how to enable future urban development in Gaza and the West Bank; enhance public

transport and create Transit Oriented Development; plan for corridor development; protect vulnerable landscapes, natural resources, cultural and religious heritage; and to enhance industries, trade, tourism and the economy in the region.

Gaza and the West Bank area are in need of new approaches to ensure the future viability and prosperity of their communities, citizens and enterprises. First of all, this region must ensure basic needs are met for food, housing, safety, utilities and amenities, education and culture, healthcare and mobility. Secondly, cities should make use of the potential, creativity and talent of their inhabitants. Thirdly, urban development must preserve and restore natural and cultural assets to ensure that modern, liveable communities still have a link with their historical past.

The UPAT team was invited to suggest practical visions, designs, implementation tools and steps for both Gaza and the West Bank. A UPAT workshop was seen as having the potential to make a valid and crucial contribution to increase capacity, to enhance awareness, to develop strategies, to propose policies and to stimulate a set of integrated activities that would help the region and its communities to become more liveable, sustainable and prosperous and, at the same time, generate more tenable economic activity for the future prosperity of the region. The objective of the UPAT was to develop simple, practical and original solutions that improve the quality of life in the region and that can be implemented in a National Spatial Plan for the State of Palestine.

For this UPAT workshop two teams were selected by the UN Development Programme, UN Habitat and ISOCARP, one for Gaza and one for the central West Bank. Local planning professionals supported each of the two teams and all the team members gave their time voluntarily. Both international teams met and worked together during the first day of the UPAT workshop in Jerusalem, one team then visited and worked in Gaza while the other team was based in the West Bank, then during the two concluding days of the workshop both teams met and worked together in Ramallah.

This magazine brings together the initial findings and experiences of the ISOCARP Urban Planning Advisory Team for Gaza and will soon be followed by two further editions, focused on central West Bank and a future State of Palestine respectively. I thank the Gaza Team for their efforts in the workshop and the production of this magazine.





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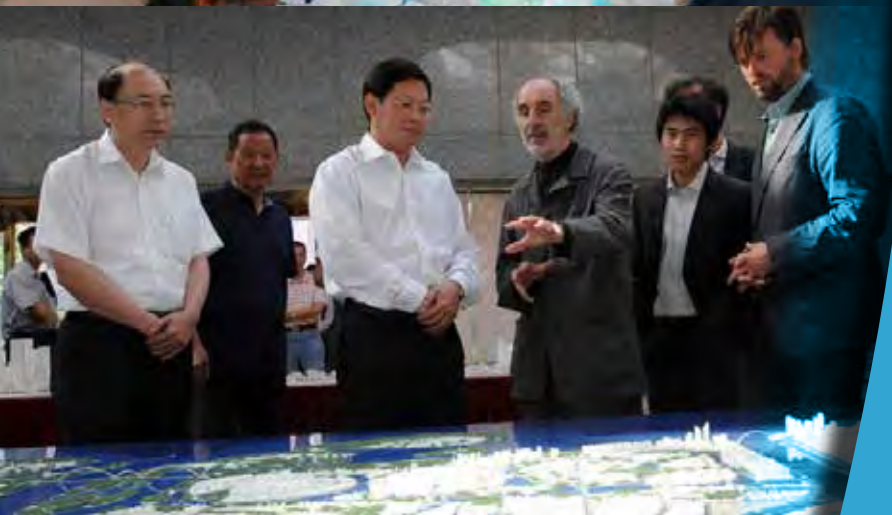
Network opportunities
for international
planning professionals,
academics and
practitioners

Workshops, seminars,
congresses and training
programs

Collaborations with UNESCO,
UN-Habitat and UNDP

Our motto is
'Knowledge for Better Cities'

Meet and join us at www.isocarp.org!





Experiencing Gaza

Jeremy Dawkins

The members of the Gaza Urban Planning Advisory Team were alternately shocked, disturbed, delighted and inspired by our four days in Gaza, and we feel intense admiration and gratitude towards all the Gazans that we met. Despite the difficulties inherent in visiting under conditions of hostile occupation, we saw many parts of Gaza from one end to the other, and met many people with many different roles to play in the future of Gaza.

Can such a short visit be useful? An ISOCARP Urban Planning Advisory Team (UPAT) brings together a fresh team of professionals from diverse places and backgrounds, to engage in intense interactions and to produce creative and imaginative responses to what they see and hear. The visit of a UPAT brings people together in workshops who might not otherwise engage in this way, offers new perspectives, and invites participants to discuss issues that might be novel and challenging. The members of the Gaza UPAT believe that our visit did achieve these outcomes. We greatly appreciated the information and ideas generously offered by the participants, and we admired their readiness to enter into vigorous discussion and debate.



Our focus throughout the UPAT visit was on a positive future that could and should exist for Gaza, although no-one knows how or when. The Gazans we met all generously entered into the spirit of this approach, and enabled us to bring together an integrated view of such a future. That view is presented in this document, in the hope that it is useful as a realistic vision of a possible future, and that such a vision can guide short term and medium term reconstruction and development.

In the SWOT workshop we learned that Gaza's *strengths* are in its educated, cosmopolitan, entrepreneurial and hard-working people, its favoured location, and the depth of Palestinian culture. As in most places, the main *threats* are the opposite to this: a loss of human resources through brain drain, continuing social inequalities, and political choices that might prioritise the wrong objectives. *Weaknesses* were identified as demographics (the challenge of enabling the exceptionally high proportion of children to participate fully in the economy and society as they reach adulthood), resources (Gaza's principal resources are human capital, not land or minerals or existing wealth), and too many governments (and the possibility that building efficient regional government structures may not been seen as a priority). In the workshop, the primary *opportunities* were seen to be related directly to Gaza's strengths: local, regional and international trade routes; innovation; and the opportunities that an integrated metropolitan Gaza, alongside an integrated capital region centred on Jerusalem, would be able to generate.



Building back better

UNDP/PAPP

During the 2014 Israeli attacks on the Gaza strip, hundreds of Palestinians were killed and many more injured in a short span of 51 days. The targeting of Gaza's infrastructure left this small area that is home to 1.8 million Palestinians almost entirely destroyed and its people devastated. It has been documented that at least 2,220 people were killed, of which 612 were children and 1,492 were civilians. On the Israeli side, five civilians (including a child) were killed. At least 11,231 Palestinians were injured, and an estimated 899 people have been permanently disabled. Of the 3,827 children injured, more than half were under the age of 17. Further, it has been documented that at least 373,000 children are in dire need of critical and specialized psycho-social support. At least one-third of the population (almost 500,000 people) were displaced by the war.

In addition to the loss of life, the recent attack and war on Gaza has devastated the local infrastructure. The physical destruction of both public and private buildings has contributed towards the systematic de-development of both human and economic life in Gaza. Although the damage is widespread, some of the heaviest fighting was witnessed in the eastern parts of Gaza such as Beit Hanoun. The destruction is also heightened by the on-going siege of Gaza, which has critically disabled the capacity of local structures. In this post-war context, Gaza still continues to suffer and is unable to re-build even the most basic and necessary infrastructure to recover from the war and disaster. To this end, both local and international stakeholders face grave challenges ahead for the reconstruction, recovery, and development of a Gaza, which is both sustainable and resilient towards future crises. By applying the principle of Build Back Better (BBB) a clear and positive vision can be created to rebuild critical urban infrastructure in a manner that multiple stakeholders can benefit from. This article seeks to summarise the on-going efforts of UNDP to work with planners, policy-makers, practitioners, and donors to identify damaged urban infrastructure and plan how to build back better.

Infrastructure: The Need to Revive and Recover

The overall infrastructure of Gaza has suffered greatly through the last war, however it is further weakened due to restrictions imposed by Israel on the import of building materials and the other necessary tools for development. The infrastructure of Gaza can be divided into four sub-sectors: housing and urban-development, energy, water and sanitation. Each of these sub-sectors is in critical need of support and recovery to drastically improve access for people and goods, living conditions and the livelihoods of ordinary Gazans.





Housing and Urban Development

In the pre-war context, Gaza's population and building patterns reflected its natural geography. The central areas of Gaza were dedicated to agricultural purposes and attracted rural communities to cultivate the land, which was connected by road to other urban areas. While the core agricultural area remains critical to Gaza's sustainability, Gaza City and Khan Younis (in the South) are the two largest urban centres in Gaza, with smaller villages in between. In addition to the city centres, Gaza is home to eight refugee camps, each of which are extremely dense. Of the 1.8 million Palestinians living in Gaza, 1.1 million are registered refugees with UNRWA. Further, the growing population is estimated to rise to an estimated 2.13 million by the year 2020 which will only serve to exacerbate the current poor living conditions. The population density of urban settlements in Gaza is greatest within the refugee camps, further compounding risks to people during times of war and disaster. Outside the refugee camps, poorly planned communities are emerging in response to the growing population of Gaza, which is barred from further expanding its territory.

To facilitate the needs of the population in Gaza, 25 municipal authorities are in charge of providing services including water, sanitation, construction, maintenance, solid-waste collection, public parks, sports and cultural institutions. These municipalities are also responsible for urban-planning, issuing of permits and the facilitation of development of housing units to accommodate the growing displaced population. In 2012, plans to develop Gaza's infrastructure had been proposed to match the needs of future projected population growth and resources. It was noted that prior to the 2014 war, there was a shortage of approximately 75,000 homes as a result of previous wars, siege related restrictions, and limited financial capital to build and sustain housing. With at least 97 per cent of buildings in Gaza being constructed using concrete blocks, the use of cement is a core-building tool across infrastructure and housing development. The Israeli – imposed restrictions on concrete make it particularly difficult for Gaza to reconstruct and recover.

In the aftermath of the 2014 Israeli attacks on Gaza, at least 150,000 homes across Gaza have suffered minor to serious damage. The cost of repair and reconstruction

tion of affected homes is an estimated \$780 million alone. In rebuilding housing, there is also a need to include the re-development of related infrastructure in order to improve local living conditions. This can include the building of key roads and routes in order to facilitate reconstruction, storage, and waste-disposal. Further, areas of water, waste and sanitation which have been completely destroyed (such as munition riddled water towers) are also in dire need of rebuilding. Similarly, the “soft” infrastructure of health and education institutions is badly needed, alongside community spaces for culture and sport. While rebuilding efforts will primarily focus on housing as a first stage of recovery, community-based planning is critical to ensure long-term, sustainable, and resilient development.

Energy

Prior to the Israeli attacks of 2014, Gaza experienced shortages in power as a result of fuel scarcity, inadequate infrastructure, power leakages, and the limited financial capacities of the local population due to high unemployment and siege. The overall shortages in power have a multiplying effect across other aspects of local livelihoods and service delivery. In particular, the lack of adequate power impacts medical aid, waste management, and wastewater management severely. The daily cuts in power also have a serious effect on the private sector in Gaza, raising risks for investors and shrinking social-entrepreneurial activities that constantly rely on power for global access. Prior to the recent war, there were three main sources of power in Gaza: imported electricity from Egypt (27-28 MW); Gaza City power plant (60-65 MW generated), and imported electricity from Israel via 12 core feeder lines. The overall distribution of power was reduced via poor infrastructure, high-costs and power theft. In the aftermath of the war, severe damage sustained to the local power networks left at least 190,000 people in Gaza without power. Moreover, the remaining population has a limited supply of power for about six to eight hours a day.

The lack of power and access to it also impacts the abilities of industry to operate, further creating gaps in production and employment across Gaza. For instance, of the 28 gas stations, most are only able to operate partially. It has also been documented that damage to the energy sector is valued at an estimated \$58 million. The overall assets and infrastructure of the energy sector has been almost completely destroyed through

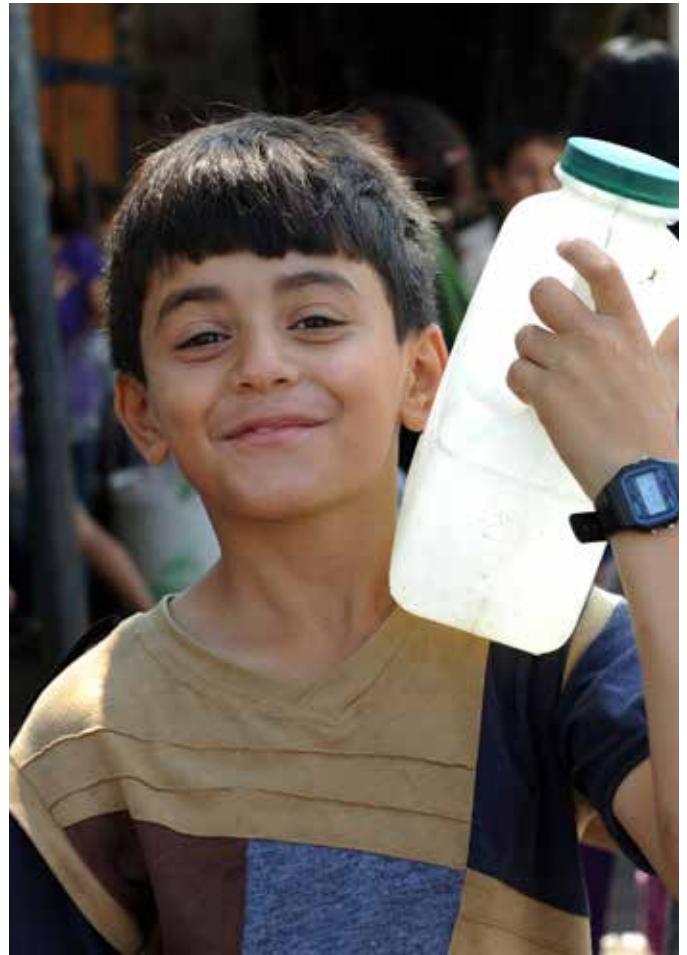


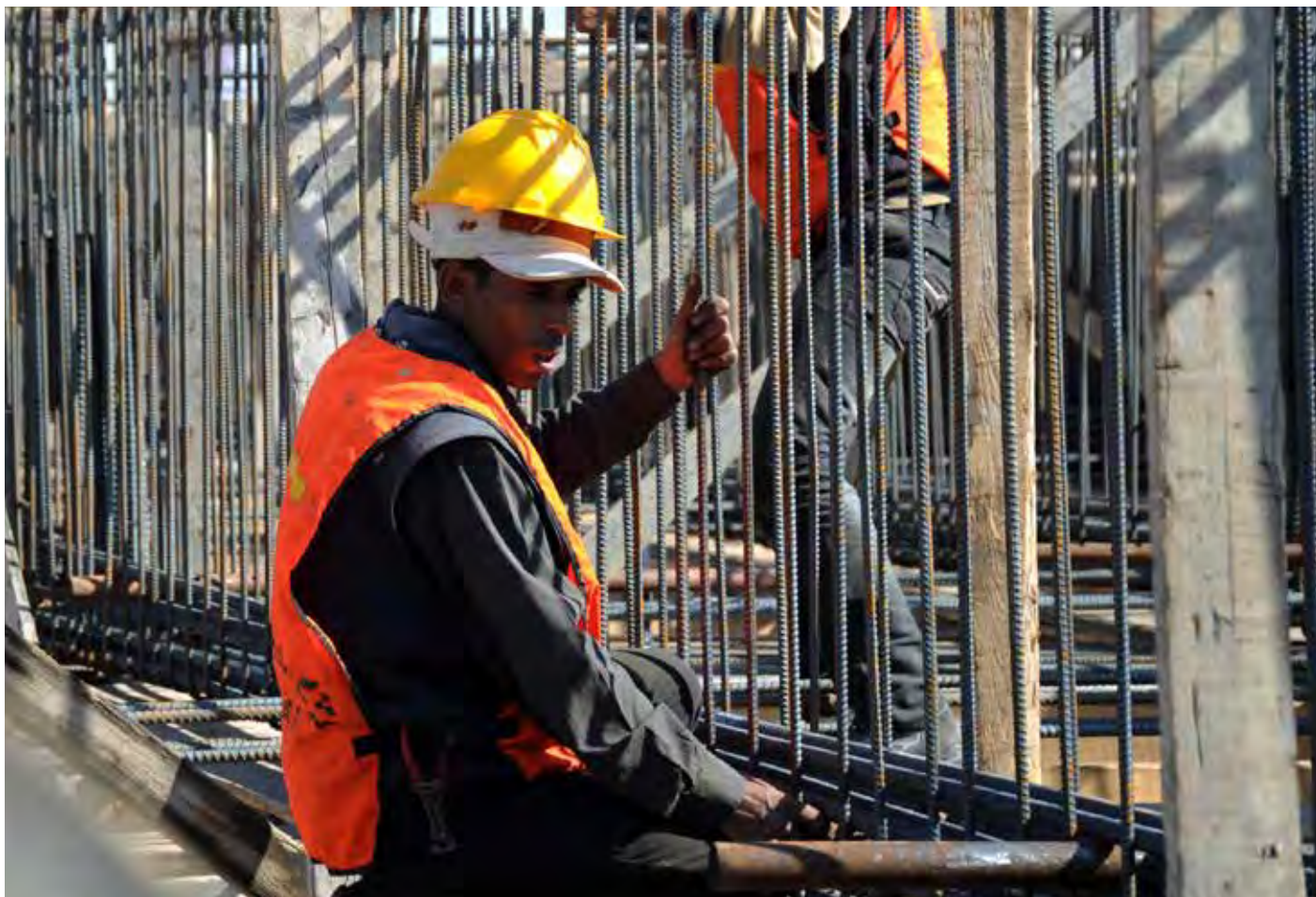
the war. Similarly, distribution and network systems have also sustained damage, that requires immediate replacement in order to match the needs of the civilian population in the upcoming winter weather. The systematic devastation of the energy sector has also resulted in creating gaps in the local economy, which predicts annual losses of \$308 million per year.

The reconstruction efforts in the energy sector have to go beyond the traditional restoration of basic services, in fact they must aim to generate and meet full demand to improve both economic and living conditions. Further, with the constant threat to war and disaster, there is a need to plan and protect energy related infrastructure in order to protect and sustain livelihoods in future escalations. This level of planning and implementation requires both funding and political will to address indiscriminate targeting of basic infrastructure of Gaza which in-turn heightens both vulnerabilities and risks for a largely civilian and refugee population in Gaza. Further, as part of BBB, Gaza offers a unique site to plan and build renewable energy platforms. In particular, the introduction of green technologies can help support the provision and delivery of basic social services.

Water and Sanitation

Currently, Gazans rely entirely on groundwater from its coastal aquifer as the main water source. This means that the water demands between the agriculture and domestic- municipal use is sourced locally. An estimated 200 million cubic meters / year is pumped and Gaza imports an approximate 4.7 million cubic meters from Israel. Prior to the Israeli bombardment of 2014, in 2008 and 2012, Israeli wars had already devastated the water and sanitation networks in Gaza. In the aftermath of the 2014 war, an estimated \$33 million in damages was reported across water and sanitation infrastructure and networks. The Northern parts of Gaza faced significant losses in respect to physical damages, whereas a compounded impact is witnessed in central and Southern areas. Overall losses include the destruction of water pumps, generators, trucking water, and sanitation related infrastructure. The recovery and reconstruction of water and sanitation sector, similar to the energy sector requires a long-term vision towards how to improve the delivery, and sustainability of water and sanitation networks. The current status is not sustainable in the long-term whereby Gaza's main source of domestic and agriculture water (the coastal aquifer)





will be unusable in the next couple years. The current interventions seek to improve the efficiency of Gaza water utility, limit losses, and develop the existing networks and distributing channels; explore desalination plans; and maximise areas for treated wastewater reuse for agricultural purposes. The objectives are in addition to ensuring that destroyed water supply networks are rebuilt, new networks and alternatives are sourced, and coordination with other sectors in order to plan and implement in a sustainable manner. The water sector has ties and links to the overall productive capacities of Gaza. More specifically, sustainable water resources can help improve and increase productivity in the agriculture sector. Similarly, other areas including manufacturing, mining, construction, power, and trade also intersect with water and sanitation.

Principles of Recovery

The recovery strategy for Gaza given the current context requires the following principles: co-ownership, participation, communication, capacity and accountability. Co-ownership is both the right and responsibility of the government and its partners in order to oversee the recovery and coordination process. Participation is critical

in the recovery process whereby both beneficiaries and institutions have a role to play in ensuring consensually-agreed upon change agenda which is meaningful and beneficial at the community and individual level. Communication for the purpose of effective provision of information in order to build trust and support for the recovery process. Capacity is crucial towards the recovery and reconstruction process in Gaza. The need of supportive, creative, innovative and cross-cutting interventions depends on the ability of actors to work together, reduce duplication and limit the gaps in social provision. Accountability as it will shape and guarantee transparency to the Palestinian people and paves the path for future interventions geared to further build and develop resilient infrastructure across Gaza.



Urban planning in Gaza

An interview with

Dr. Nihad Almughany

Stefan Netsch



A Fulbright Scholar and expert in the conservation of historic buildings, Dr Nihad Almughany is the Director General for Engineering and Planning in the Municipality of Gaza. We visited Dr Almughany at the newly restored Municipal office to discuss his views on urban planning.

1 From your perspective as an Urban Planner at Gaza City Municipality what are the key factors in making cities vital places to live and work?

Aside from physical services such as roads, infrastructure, and buildings; social factors are important as cities reflect the culture of their residents; finally economic factors are also vital in terms of providing job opportunities and investment.

2 What is your vision for Gaza?

My vision for Gaza is to be a focal city in the Mediterranean region, based on commercial activities and light industry based commerce. This could be achieved by re-planning the Gaza Strip and Gaza City in a manner that is oriented to expected future population patterns and linked to economic plans.

3 How should the city of Gaza be perceived?

Gaza City should be seen as the central city within the Gaza Strip and act as a capital city for the Palestinian coastal area. Administrative measures should support this and key institutions should be based here. The city of Gaza already has its own economic, social and cultural assets that need to be further developed to fulfil its lead urban role.

4 Thinking about the reconstruction and extension of neighbourhoods in Gaza City, how do you think

they should be developed in the future? For example, are there any particular housing typologies, densities or policies that are being, or could be considered?

Yes, the reconstruction and extension of neighbourhoods in Gaza City should be developed according to special planning regulations. The existing neighbourhoods have a shortage of open spaces, green areas, social facilities and regulatory planning systems in terms of building density, heights, setbacks, materials and colours. The re-planning of Gaza City should also consider density, as this needs to be increased to reduce pressure on land. I propose having a density of 15 residential units per donum (1,000 square meters) in urban area (the overage existing density is 5) – this should help make enough space available for social and public facilities.

5 Do you have suggestions on how to continue the work started by UNDP with the ISOCARP UPAT?

I suggest continuing the work by establishing a regional plan for the Gaza Strip to govern its future development. The ISOCARP planning team together with a local team of planners have to spend enough time together discussing a suitable and realistic plan for the region of Gaza. This work could be extended to propose detailed development plans for existing neighbourhoods, new housing developments and for the landscape of open spaces.

6 Are there any key techniques or ideas the UPAT should follow and where do you see gaps in research or practice so far?

Yes, they should follow the participatory technique in planning: study the existing situation in detail in terms of prevailing physical, economic and social conditions, proposing planning scenarios, discussing these with a wider community of people and then propose a new plan. The gap is that there was quick and fast work done by a small group - yes it was useful, but it needs to be done in a wider circle and must go into more detail.

7 One preliminary suggestion of the UPAT is to develop several areas for industry and technology, some of which could be situated on the urban fringe, do you see this as a problem, given density would increase in these locations and therefore create conflicts between land needed for housing and labour?

No, on the contrary the proposed industry and technology clusters are the basic elements for any future planning of Gaza because it

helps with economic and social development. Since there would be a comprehensive plan there should be no conflicts, but rather complementary opportunities.

8 Most land in Gaza is privately owned. To provide affordable housing and public open space, do you have any ideas for how the city could increase its land ownership?

The land ownership system that exists in Gaza is a rather complicated system and it affects future planning. Detailed urban plans for privately owned land should provide necessary open spaces and public facilities like schools and green areas. A substitution process by the government should take place either by paying money or giving land from government owned land in other places. Without doing this there will be severe urban and social problems in the future.

9 Do you think that Urban Planning and design could be a dedicated university subject at university (it is currently included as a subject within architectural degrees)? Which aspects should the program focus on in order to best serve a State of Palestine?

Yes, urban planning and urban design are now taught in architectural departments at local universities as courses (usually two courses in BSc Degree). Some universities like the University of Palestine teach it as a major in the BSc degree in Architecture (20 credit hours). If this will be developed as a separate specialisation I think it must include some aspects such as land admin-

istration and management, urban governance, rehabilitation of urban centres and neighbourhoods, conservation of historic buildings and areas and Geographic Information Systems.

10 Gaza and the West Bank have more than 130 municipalities.

Do you have any thoughts as to how planning on this administrative scale could be organised? Thinking specifically about the implementation of current planning projects, are there any specific aspects of governance that could help?

On the administrative scale in West Bank and Gaza Strip there must be a major change of what exists. Currently, each municipality is doing plans for its territory although some cities are difficult to separate from each other, as they are connected and one entity from urban point of view. I propose to apply the system of the Metropolis: where adjacent cities and towns are grouped and become one urban and administrative city governed by the capital city with participation from others. This would provide better planning, service provision and Governance.



Imagining Gaza

Jeremy Dawkins

A shift in time, a shift in scale

Gazans retain a strong sense of Palestinian tradition, perhaps as a form of resistance. The Gaza region is seen as a region of distinct towns and villages (each with deep roots, social ties and traditions) and a region in which, accordingly, one of the strongest expressions of Palestinian identity is the continuation of farming. This sense of tradition is not necessarily inconsistent with the changes predicted in this document, but it can stand in the way and, in particular, impede movement towards new forms of metropolitan governance.

Counter-intuitively, reforming local government through occasional amalgamations, or giving amalgamated municipalities greater powers and resources, is not a pathway to more effective metropolitan governance. Stronger and fewer municipalities will resist even more vigorously the changes that will be inevitable in the end. Similarly, reinstating the Governorates, reducing their number, and/or increasing their powers, would only make the move to metropolitan governance more difficult in the long run.

The Gaza urban planning advisory team sees Palestinian traditions being strongly expressed and continued – as noted above, these are amongst Gaza’s greatest strengths – but reimagined in the context of ‘Gaza’ being a single, vibrant, prosperous urban region.

Continuing to call this region the Gaza Strip works against this reimagining. The region needs a new name, to express its historic potential and future role in the State of Palestine and the world. We do not know what that name might be but for present purposes, throughout this document, we refer to the Gaza region in a positive way that reflects its history and strengths. We call it Palestine’s Gaza Coast.

When peace returns...

As described elsewhere, the terms of reference for the Gaza urban planning advisory team envisaged a future when the State of Palestine and Israel exercise full sovereignty on either side of the 1949-1967 green (Armistice) line. At that future time, the Gaza region will not be referred to as a ‘strip’ – an essentially colonial military and demeaning designation. Indeed, a new name for Palestine’s Gaza Coast is needed today, to turn attention to the great, historic potential that belongs to this part of the State of Palestine. In that spirit we refer here to the Gaza region as Palestine’s Gaza Coast.

We asked the participants in our four workshops to make that leap, and to help us describe Gaza as it could be. We are immensely grateful that our Gazan friends joined us in that endeavour. Many participants thanked us for creating a moment removed from the present and asking them to imagine how Gaza could be. Of course, no one can say if this Gaza will be achieved, and even less can we say how or when it can be achieved. However, in the workshops, and in meetings at Rafah City Council, Gaza City Council, the Technical Committee of Women’s Affairs and the Save Youth Future Society, we asked participants to think about that Gaza. The results of those discussions are summarised here, where we attempt to describe *that* State of Palestine, and *that* Gaza.





At that future time, the State of Palestine is an active and universally recognised member of the international community of nations. It has full sovereignty. Its society draws on deep roots in the land and a rich and complex culture.

At that future time, the country faces an immense backlog of challenges, and the economy is distorted and dependent on international support, but the following positive changes are emerging strongly.

- The economy of the State of Palestine is diversified, innovative and growing.
- Job opportunities are expanding as imports are replaced.
- Job opportunities are expanding as exports grow, particularly in the area of services, especially tourism.
- The economy is actively supported by the Palestinian diaspora and the international community.

At that future time, Palestine's Gaza Coast provides the nation with specific social and economic advantages, including the following contributions to national life.

- Palestine's Gaza Coast is a uniquely Palestinian metropolitan region with a critical mass of population, building on the historic significance of Gaza City.
- Gaza City has recovered the dynamism of a distinctive, imageable city in a favoured location and with an orientation towards commerce, trade and entrepreneurialism.
- The accelerating economic activity along the Gaza Coast includes ports, marinas, fishing and aquaculture, offshore gas, coastal resorts, tourist attractions and activities, and attractive locations for clusters of creative and knowledge economy participants.

At that future time, to make the most of these advantages, the State of Palestine has progressively implemented the following initiatives.

- A Gaza Coast Metropolitan Government has been formed to provide a single voice for Palestine's Gaza Coast, and to provide integrated urban management across what is, functionally, economically and environmentally, a single urban region.
- The Gaza Coast Metropolitan Government has sufficient scale and legitimacy to provide strong government, relatively stable political leadership, technical expertise and high quality administration of the Gaza metropolitan region.
- The State of Palestine and the Gaza Coast Metropolitan Government recognise that enduring, long-term strategic regional planning needs to be the responsibility of independent expert authorities that are not engaged in day-to-day politics and not subject to relatively short political cycles.
- The State of Palestine and the Gaza Coast Metropolitan Government recognise that effective agencies must have sufficient scale and resources to carry out their functions at a high level of expertise.
- Accordingly independent expert authorities and commissions, at the national and regional levels, are given responsibility (under ultimate accountability to the Metropolitan and National Governments and Legislatures) for metropolitan planning including transport planning and public transport services, energy planning and provision, water and waste services, economic planning and facilitation, environmental management and regional parks systems.
- The five Gaza Governorates (restructured, and possibly renamed) provide local planning and property services and local delivery of Gaza Coast Metropolitan Government services and programs.

- Gaza’s 25 municipalities - indicated on the map - no longer regulate development or provide urban services but continue to ensure that local priorities and concerns are heard

Palestine’s Gaza Coast as a metropolitan region

Compared to metropolitan regions around the world, there is no doubt that Palestine’s Gaza Coast is unusual, as a result of its constraining boundaries and its physical separation from the rest of the State of Palestine. Although when borders are free and open for travel and trade, the effects of *physical separation* (as opposed to the symbolic meaning of dividing what was once whole) can be overestimated. The State of Palestine joins other nations that are physically separated by other nations – examples of pene-exclaves are Oman’s Musandam and Russia’s Kaliningrad – not to mention nations that are split between mainland and islands, or simply between islands. However, Palestine’s Gaza Coast is not unusual in relation to area, density and structure.

Size of the metropolitan region

Palestine’s Gaza Coast, with an area of 360 km², is small compared with most major cities, but it is not small compared with many other metropolitan regions. The table on the right shows just a few of the urban areas that are comparable with Gaza. A metropolitan region of 360 km² is large enough to support not only a central business district (CBD) in a significant, dense urban centre but also a full range of living areas and town centres, commercial and industrial districts, urban infrastructure, farms, nature reserves and recreation areas. It is also an appropriate size for a single Metropolitan Government, with expert metropolitan-wide authorities for urban and transport planning and services, economic facilitation, water, energy, environment protection and regional parks.

Metropolitan population density

Districts within Gaza City, the city itself, and places like the camp at Deir al Balah have high population densities, the latter essentially from serious overcrowding resulting from high birth rates under conditions of limited housing construction. Overall, however, the population density across Palestine’s Gaza Coast is comparable with many other urban areas, including London, Moscow, Madrid, Tokyo and Buenos Aires, and far lower



Gaza’s 25 municipalities

Urban areas with an area between 340 km ² and 390 km ²			
Urban area	Population (million)	Area (km ²)	Density (people/km ²)
Glasgow	1.2	368	3300
Medina	1.2	350	3500
Manama	1.3	389	3400
Stockholm	1.5	382	3900
Mecca	1.6	389	4200
Gaza	1.8	360	5000
Tunis	2.0	363	5500
Isfahan	2.4	350	6800
Amman	2.5	344	7200

Source: Demographia, national census and UN

than the most crowded of these. The table at this page shows the overall densities of urban areas that are the same size as Palestine’s Gaza Coast.

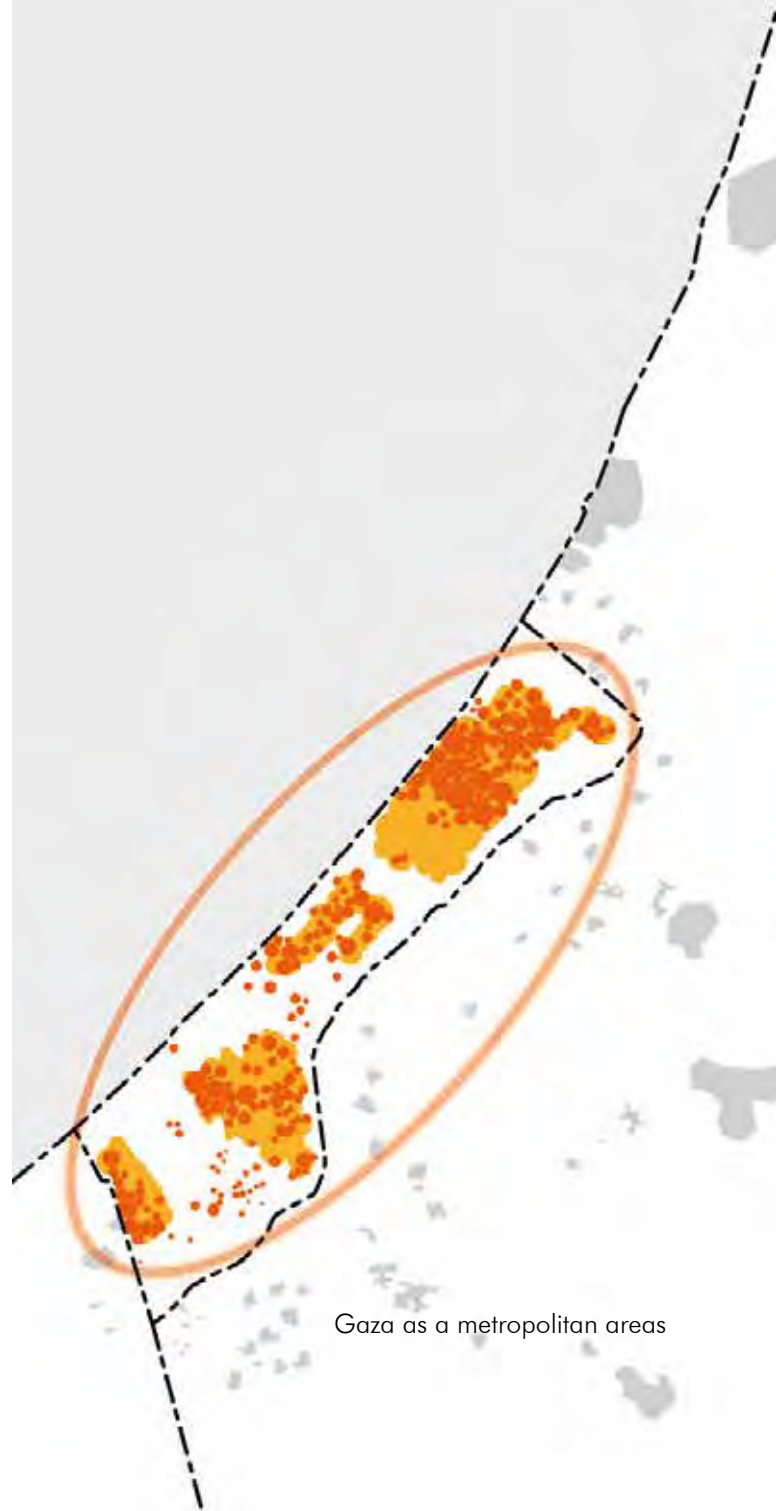
Across the metropolitan region, a density of 5,000 persons per square kilometre (that is, 50 persons per hectare) is ‘urban’ as compared with ‘suburban’ or ‘exurban’. In many places, achieving a density of 50 to 100 persons per hectare, or sometimes significantly higher

densities, is a strategic planning target, since an urban environment of this kind generates increased economic opportunities, higher levels of interactions, support for innovation, and safer and more vibrant public spaces. Importantly, such densities make the provision of community services and transport services more accessible and efficient.

Metropolitan spatial structure

When borders are free and open for travel and trade, the existing spatial structure of Palestine's Gaza Coast will be one of its greatest assets. Gaza may face exceptional problems, but urban management (reinforced by prolonged adversities) have ensured that sprawl, inefficient development, stranded infrastructure and other problems common to many cities will not distort future development in Gaza.

The urban pattern, which includes one dominant city and two major centres in the middle and south of the region, is ideal for future metropolitan development. The long coastline, defining the region, is a magnificent social, environmental and economic asset. The linear configuration of Gaza will facilitate the creation of a strong regional framework. The linear shape allows for an efficient and productive distribution of urban activities and land uses. In particular, it enables the most efficient forms of transport infrastructure to be built progressively and affordably.



Ideas for Palestine's Gaza Coast

Jeremy Dawkins



The ISOCARP Gaza Urban Planning and Advisory Team, Gizem Caner, Muneer Elbaz, Julien Gicquel, Stefan Netsch, Elizabeth Reynolds, Martina Van Lierop and I, spent our four days in Gaza – when we were not out visiting all parts of the region – in conversation with many people, and workshopping ideas. In the evenings (and in some cases for most of the night) we responded to all that we had seen and heard. This report sums up our findings.

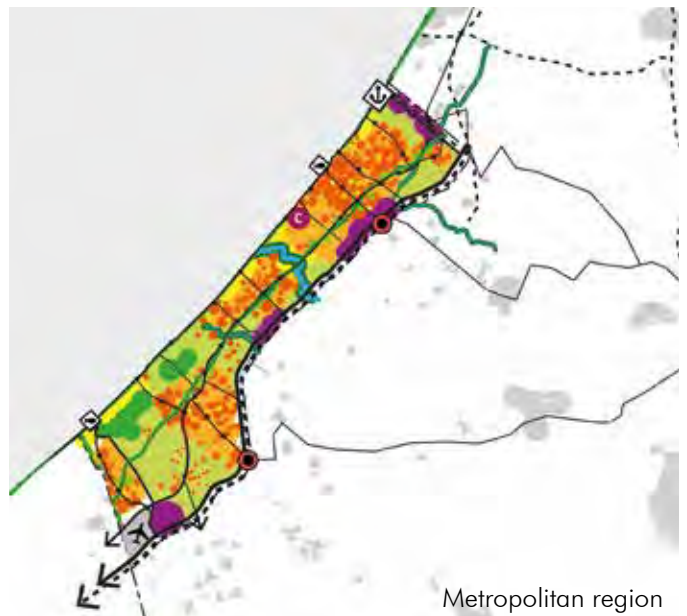
The following ideas for Palestine's Gaza Coast are not a set of recommendations. We know that the experts are the people of the Gaza region. We know that the specialists and politicians and officials managing the Gaza region know what plans are needed, and how to deliver the plans. And of course we know what makes delivering long-term planning impossible today. But we also know that ideas from an international, objective group of experienced professionals, offered in good faith as reactions to what we have learned, can shine a new light on old problems.

Our descriptions of a future Gaza region are possibilities. Such a sketch of the future can be inspiring, and can guide short term choices, including options for reconstruction. Our descriptions are also predictions. We predict that the State of Palestine is likely to see the necessity of a metropolitan government to provide integrated planning and management for Palestine's Gaza

Coast. In turn, we predict that the metropolitan government will decide on initiatives such as those described below, to make the most of Gaza's great, historic potential.

Palestine's Gaza Coast is a metropolitan region.

This is clear from everything we learned about Gaza. The schematic map is intended to show that Gaza is one urban entity. It is potentially a viable, vibrant, prosperous entity, with deep historic traditions and cultures that will underwrite its place in the world. To embrace and act on this fact is to begin to prepare for the great, historic potential that ultimately belongs to Palestine's Gaza Coast.



Palestine's Gaza Coast has a striking and very positive pattern of urbanisation – coastal, rural and agricultural as well as urban.

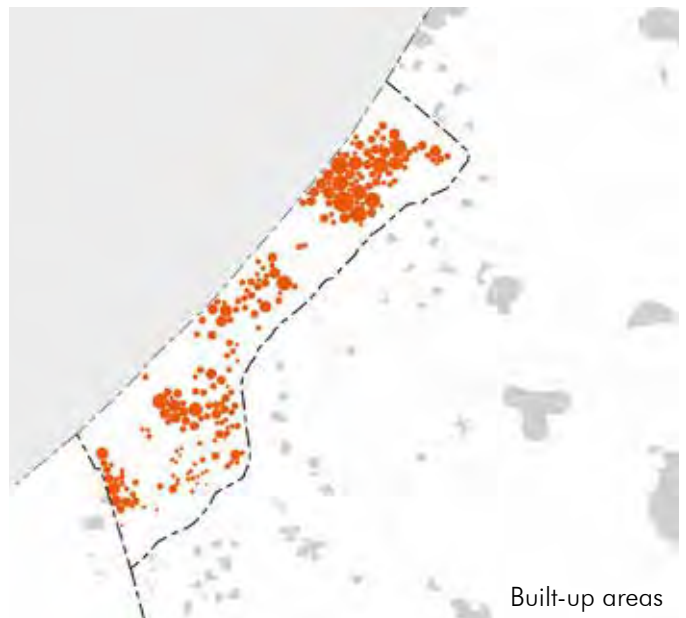
As the schematic map indicates, the dense urban areas are distributed in such a way that an integrated metropolitan region will emerge almost spontaneously. There is a clear hierarchy of centres across the region that can maintain their separate identities and offer different characters and specialisations. These living areas are interspersed with a complex distribution of other activities, from commercial and industrial to recreational, cultural and the conservation of nature.

The urbanisation of Palestine's Gaza Coast has not eliminated the underlying structure of watercourses, coastal environments and natural places.

The schematic map indicates the main watercourses with large catchments and aquifers despite the interception of water flows. The green spine is the old rail alignment, a perfect route for walking and cycling, and therefore for the location of local playgrounds and green spaces like beads on a string, connected to one of the principal future 'green' resources, Wadi Gaza. Regional parks for the restoration of biodiversity and contact with nature will be essential. The schematic map suggests some possible places for regional parks.

Palestine's Gaza Coast can have efficient networks for all modes and forms of movement.

The most likely route for fast, heavy traffic and freight is a new expressway on the eastern border. This is an international route, connecting Istanbul with Cairo, and more immediately connecting Gaza with Jerusalem, Hebron and Haifa. With lateral connections to the coast and to the ports the new expressway can provide excellent access to all urban and industrial areas and the rebuilt airport. On this alignment it does not impact negatively on urban areas and does not divide communities. The main urban arterial will be Salah al-Din Road, the route of the ancient *grand* trunk road or Via Maris. This primary north-south connector can be a normal urban road with many intersections, and without expanding so as to divide the communities it connects; it should not be a wide and noisy multilane highway, difficult to cross. Al Rasheed Coastal Road can serve slow local, recreational and tourist traffic without being expanded into an arterial that divides the coastal activity centres and neighbourhoods from the beach.



Built-up areas



Blue and green infrastructure



Road network



Public transport network

Every place on Palestine's Gaza Coast can have access to high frequency public transport.

Palestine's Gaza Coast is fortunate in having (in the future) three trunk routes that can provide excellent public transport connections to the entire metropolitan region: the coast road, the central spine and the expressway on the border. High frequency buses on these three routes can provide the entire metropolitan region with some of the best connectivity anywhere. Feeder buses and service taxis will connect the major bus stops with the local areas.

Palestine's Gaza Coast will be bike-friendly.

Priority for pedestrians and cyclists can be built into every urban street, and the three trunk roads can have separate bike paths. In addition, the old rail alignment – in future a green pedestrian and recreation spine – provides a perfect long-distance bike route connecting north and south Gaza. Along its 40-km route it will have bike-friendly connections to the coast.



Bicycle routes

Palestine's Gaza Coast is at a key point on future international rail routes.

The State of Palestine is likely to seek to reinstate international rail connections from Istanbul to Cairo and to make new connections to the Gulf, where high-quality rail connections are planned to link all Gulf states to ports on the Arabian Sea. The most likely alignment is along the eastern border, alongside the main highway and freight route. Two passenger stations are likely, but these would be for relatively infrequent long-distance services rather than for high-frequency urban transit services. The latter would be best provided by buses, as set out above.



Rail network

Palestine's Gaza Coast will be highly productive.

Productive activities – commerce, trade, creative and knowledge industries, financial and production services, fabrication, transport services, agricultural industries, maritime industries and much more – provide jobs and goods and services, and in the process generate business for other firms. They replace imports and create exports, including intangible goods and services such as information and software.

These activities can be dispersed throughout the region, giving energy and activity to urban areas. In addition, the State of Palestine and the Gaza Coast Metropolitan Government are likely to ensure that large parcels of zoned and serviced industrial land are available for local enterprises and specific estates are created for foreign direct-investment enterprises, as indicated on the map. Specific conditions are needed for incubating innovative and start-up enterprises, where mutual support and services are available, for instance in the coastal campus shown on the map.

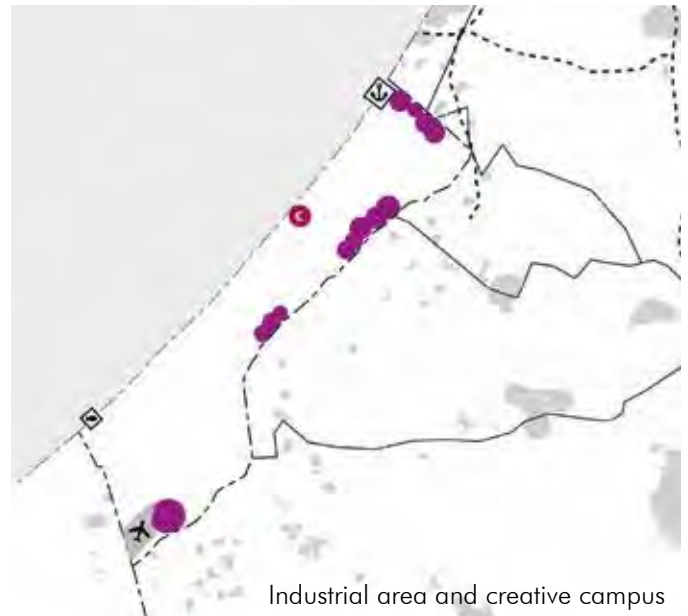
Palestine's Gaza Coast has exceptional cultural assets.

Gaza values its ancient heritage, alongside respect for sites that express Palestinian culture and traditions, for sites that reflect the character of the region, and for significant sites relating to more recent history. We expect these sites to be systematically identified and protected by a Gaza Coast Metropolitan Government, primarily to build the nation and strengthen communities, but also to enrich lives, to attract investment in the creative economy and to support tourism and recreation industries.

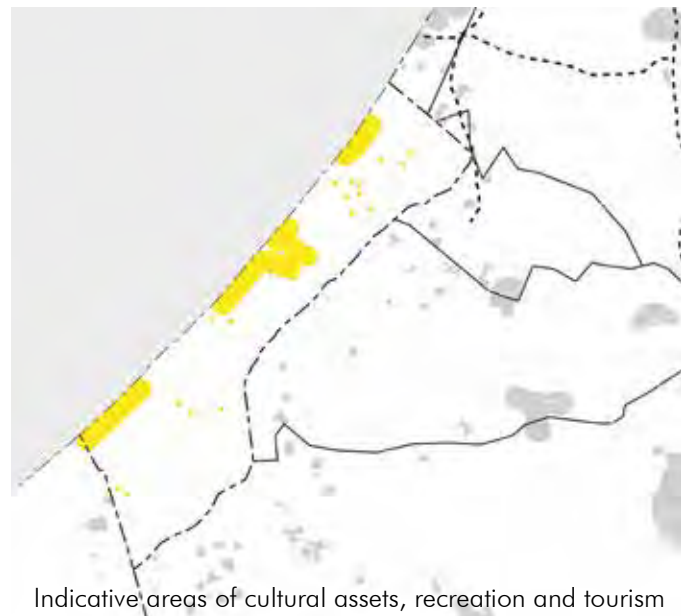
The urbanisation of Palestine's Gaza Coast has not yet removed the possibility of traditional Palestinian production.

Despite the ban on exports, the destruction of orchards and market gardens, the interception of groundwater, and sea-water intrusion into aquifers, there are farms across the region, and there are many areas of fertile soils to be farmed in the future, if favourable conditions and markets exist. Amongst those necessary conditions will be control of urban expansion, tax arrangements to make farming viable, and a comprehensive approach to water use and recycling.

As with most productive activities, farming is not confined to specific zones. Urban agriculture, in streets and small public and private spaces, has an important future in all urban regions. On Palestine's Gaza Coast water conservation and recycling will be a key ingredient to the success of urban agriculture.



Industrial area and creative campus



Indicative areas of cultural assets, recreation and tourism



Agricultural areas

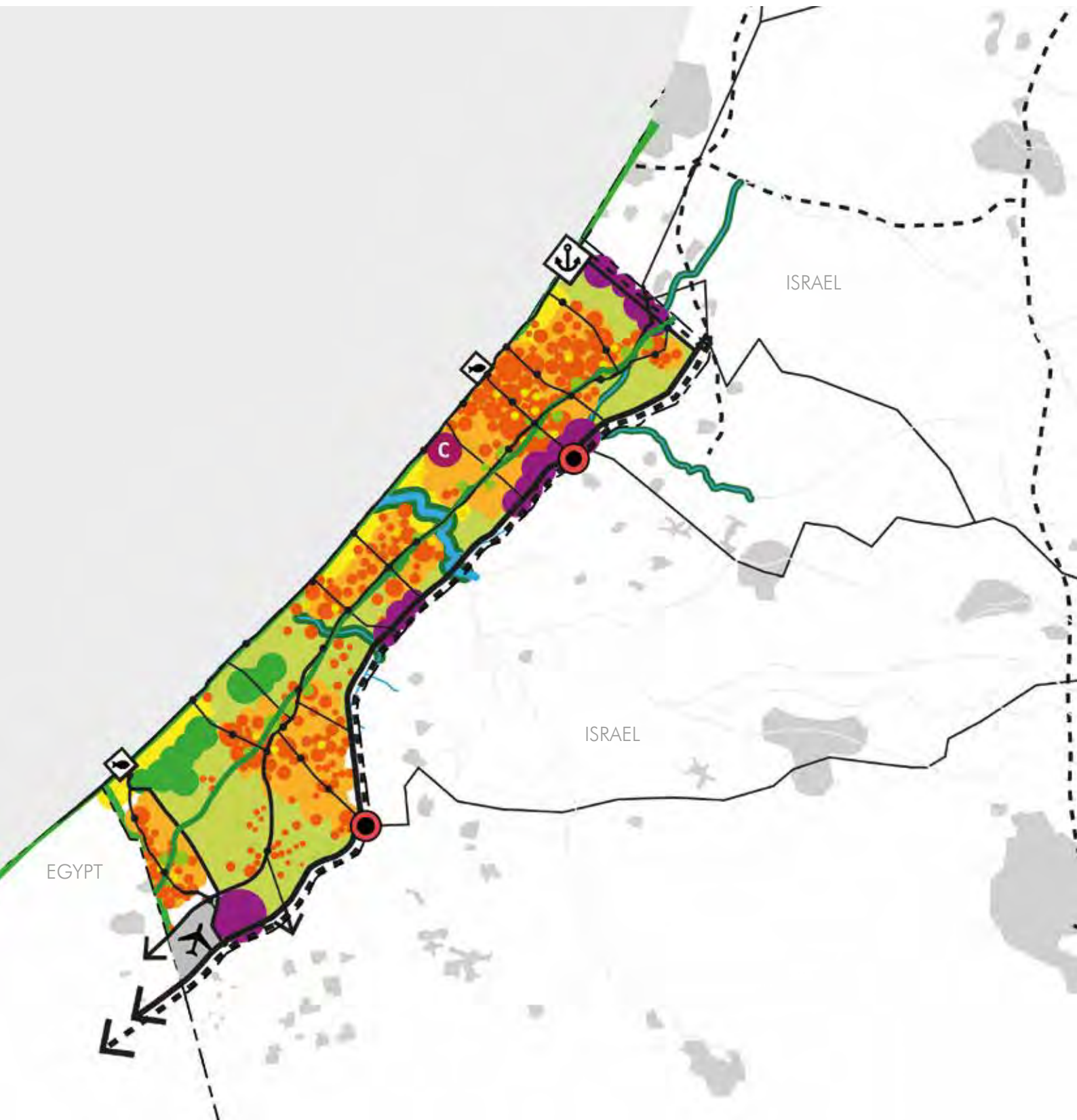
Palestine's Gaza Coast is a metropolitan region with a great future.

The schematic map overlays the above nine maps. The map demonstrates that Gaza is already one urban entity – and potentially a viable, vibrant, prosperous metropolitan region. A strategy for such a region might seek to achieve the following outcomes.

- A single, dominant CBD leading the urban hierarchy, with a powerful sense of place.
- A good spatial distribution of secondary, tertiary and minor centres.

- A region-wide distribution of other land uses – commercial, industrial, institutional, educational, horticultural, recreational, transport, etc.
- A distinguishing and unifying element such as the coastline.
- A linear structure to make connections efficient and affordable.

Gaza has them all!



From economic instability to a bigger vision

The Portland Trust

The analysis in the next section is taken from The Portland Trust's Palestinian Economic Bulletin, which in December 2014 featured a special report on Gaza's reconstruction. The monthly Bulletin and other research work by The Portland Trust can be accessed at www.portlandtrust.org/publications.

Gaza: 20 years of instability post-Oslo

Gaza's economy has been characterised by extreme volatility over the last 20 years, with a cyclical pattern of destruction of economic value (driven by political and security related events) followed by periods of short-term recovery. Following the signing of the Oslo Accords and the establishment of the Palestinian National Authority (PNA) in 1994, Gaza's economy moved onto a positive growth trajectory and by the late 1990s per capita GDP was on the rise. However, the onset of the Second Intifada in 2000 led to a severe contraction in economic activity, with per capita income falling sharply through to 2002. The period 2003-2005 then saw a resumption of positive growth in

Gaza, with economic performance exceeding that of the West Bank – by the end of 2005 per capita GDP had nearly recovered to late 1990s levels. Since then, however, a succession of political upheavals and military operations in Gaza has set the economy on a divergent growth path from the relatively more stable economy of the West Bank. Sustained internal divisions and violence between Palestinian factions had significant negative effects on the economy in 2006 and 2007, culminating in Hamas's takeover in 2007. This was followed by the intensification of restrictions on the movement of people and goods in and out of Gaza by the Government of Israel, marking the onset of a period of increased economic

isolation. Gaza's economy entered a period of recovery from 2009, driven by both donor-supported reconstruction efforts after the 2008 Israeli military operation and increased private sector activity. Increased trade following the construction of tunnels under the border between Egypt and Gaza aided the latter. A new military operation in 2012 and the closure of the trade tunnels by the Egyptian government in 2013 left the economy in a fragile state – with the latter suffocating private sector activity and leading to reduced access to vital commodities. Most recently, Gaza's economy suffered a new shock following extensive damage derived from the war in the summer of 2014.

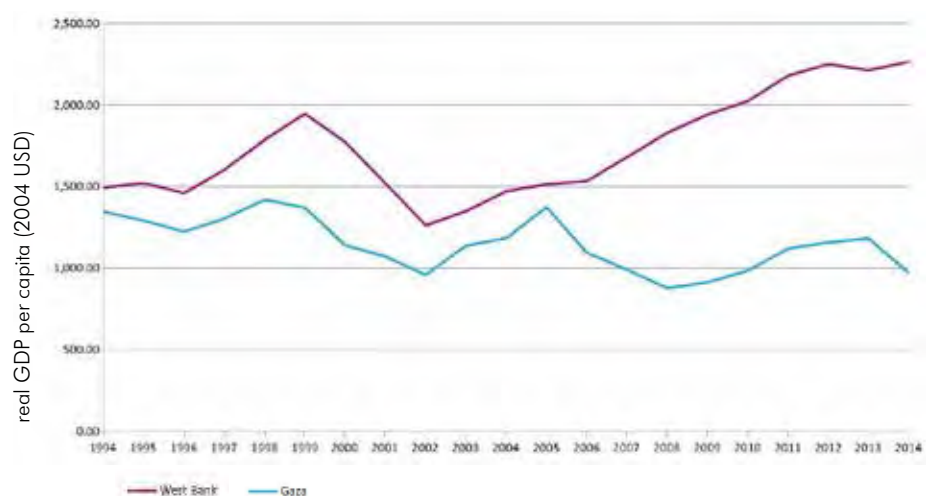


Figure 1: Real GDP per capita (2004 USD), Gaza Strip and West Bank 1994 – 2014.

Long-lasting effects

Two decades of volatility and increased economic isolation have seen Gaza's contribution to overall Palestinian GDP drop from almost 36% in 1994 to around 24% in 2013. By the end of 2014, Gaza's real GDP per capita was 28% lower than in 1994, with the West Bank growing by more than 50% over the same period. Other economies in the region have registered much higher income per capita growth over the same period, including Egypt (69%) and Jordan (56%).

Poor economic performance has also heavily impacted Gaza's labour market. Total unemployment reached 43.9% by the end of 2014, almost triple the 17.1% registered in 1999 before the onset of the Second Intifada. With 21.6% of Gaza's population aged 15-24 and youth unemployment reaching almost 68% in 2014, there is an urgent need to create sustainable jobs to avoid a total collapse of the labour market over the coming years.

Political and economic instability has also fundamentally altered the structure of Gaza's economy. Traditionally strong sectors such as manufacturing and agriculture have seen their share in GDP decline from 21% and 10% in 1994 to just 10% and 6% in 2013, respectively. This can be explained in part by the collapse of exports in the wake of the restrictions on the movement of goods and people. The decline in tradable sectors corresponds almost exactly to a substantial growth in public administration and defence, which saw its share of total output rise from 9.5% in 1994 to 25.6% in 2013

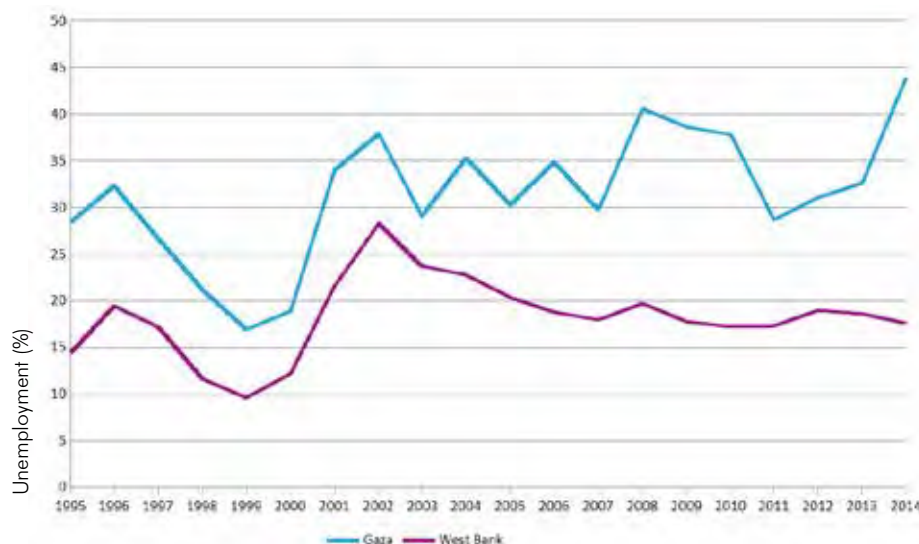


Figure 2: Total Unemployment (%), Gaza Strip and West Bank, 1995-2014

(Figure 3). Construction has also gained heightened importance in recent years in the wake of repeated destruction and subsequent reconstruction efforts. However, the sector's performance has also been volatile, being heavily correlated to restrictions on the import of construction materials into Gaza.

Looking forward: recovery, reconstruction and beyond

The military operation in Gaza in the summer of 2014 marks yet another profound shock in its history of economic volatility. Following severe contraction in economic activity during the war, minimal recovery has occurred during the first half of 2015 as a result of reconstruction efforts announced at the Cairo donor conference in October 2014 having not progressed as intended. However, in the light of past post-conflict experiences, the main challenge lies in ensuring that the effects of reconstruction are not short-lived. While short-term relief continues to be vital, longer-term efforts must focus on creating the

conditions necessary for a viable, sustainable economy, with a vibrant private sector at its heart.

The PNA's National Early Recovery and Reconstruction Plan for Gaza, produced in advance of the Cairo conference, defines the vision for Gaza as one of "...sustainability and self-sufficiency, where Gaza is an integral driver of a growing Palestinian economy, united with the West Bank and opened up to the rest of the world." The government also expects business to play a key role in the recovery and reconstruction efforts and is committed to providing a "proper enabling environment for the private sector to work efficiently." In particular, the Government wishes to "leverage the private sector via Public Private Partnerships", including in several 'keystone' infrastructure projects. With a long-standing infrastructure deficit and extensive damage to utilities during the last war it is an absolute priority to improve the provision of power, water and sanitation facilities in Gaza.

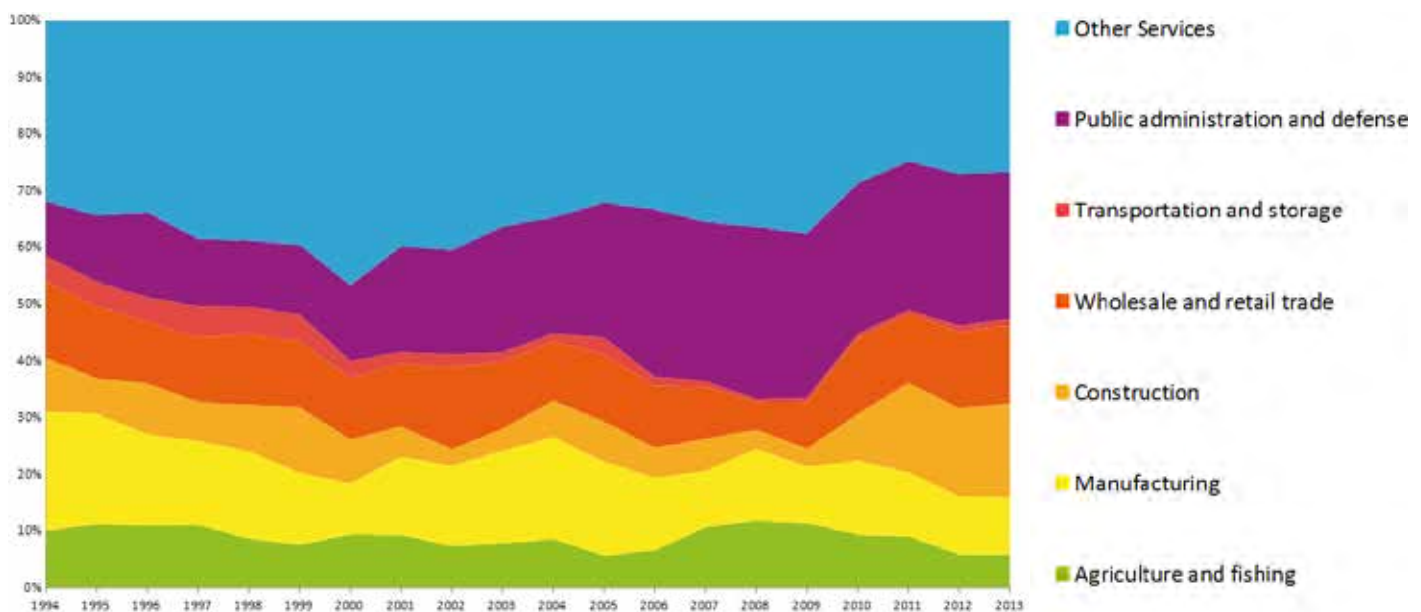


Figure 3: Sectorial Breakdown of GDP (%), Gaza Strip, 1994-2013

On top of the critical need to improve basic infrastructure, the PNA notes that sustainable private sector development “cannot be achieved without ensuring the removal of the blockade and access and movement restrictions, allowing for normal trade between Gaza and the West Bank, neighbouring countries, and world markets”. At the same time, strong governance and political stability in Gaza are also pre-conditions for the implementation of the recovery plan and for stimulating private investment. The PNA plan recognises these requirements, stating: “the National Consensus Government will seize the opportunity presented by its recent formation to harmonize and integrate the previously divided government structures (...), maintaining and expanding [its] operational capacity.” Despite internal reconciliation efforts, ensuring political unity and stability remains a major challenge for the Consensus Government.

Robert Serry, the former UN Special Coordinator for the Middle East Peace Process, echoed the PNA’s sentiments at the UN Security Council in September 2014, claiming that “Gaza must now be opened up for reconstruction and recovery”, whilst also acknowledging the need to address “legitimate security concerns regarding ‘dual-use’ materials”. As a result, the UN designed and launched a trilateral agreement, including the PNA and Israel, to monitor the entry of dual use construction materials into Gaza with the objective of ensuring that they do not get diverted for other purposes. The implementation of the needed mechanism implies both heavy costs and additional logistic arrangements, and has proved challenging.

Other stakeholders’ views

The Portland Trust interviewed a number of leading stakeholders in the Palestinian private sector and academic community to understand their views on Gaza’s reconstruction. While they all envi-

sion economic opportunities moving forwards, a need for a definitive change in the political front is widely acknowledged as a necessary condition for sustainable development.

The economist Omar Shaban, founder and director of the Gaza-based think tank PalThink for Strategic Studies, criticised the PNA plan for what he regards as ‘bottom up’ planning without specific development goals, lack of adequate participation of business and civil society in its development, and an absence of clear criteria for measuring macroeconomic impact and progress. Mr Shaban said that whilst current efforts for reconstruction should be welcomed they also need to be placed within a longer-term strategic vision for Gaza’s development. He added “...the current pace of progress in reconstruction activities is too slow. The process must be accelerated not just to improve living conditions for the people in Gaza, but also to prevent the resumption of

violence.” Looking to the future Mr Shaban said: “...with unemployment already at unsustainably high levels and thousands of new labour market entrants every year (including some 20,000 graduates), job creation is an absolute priority. The coalition government, while a necessary political development, will need to absorb current Hamas employees into its payroll. If this happens, the PNA will not be able to absorb any new workers for a decade, leaving the private sector as the only part of the economy capable of creating jobs in the coming years.” Beyond job creation, Mr Shaban sees the private sector playing a vital role in facilitating reconstruction through service delivery and domestic investment, and particularly by leveraging expertise and capital from the Palestinian diaspora. “The private sector can bring prosperity and change the landscape in Gaza. For this, it is essential to harness business creativity and innovation by involving the private sector in decision-making around future planning in Gaza”, he concluded.

Dr Nabeel Kassis Director General of the Palestine Economic Policy Research Institute (MAS), believes that Gaza has great potential for development: “Gaza, along with other Palestinian regions, needs to be given the opportunity to build on its comparative advantages and to become competitive in specific economic activities, by leveraging its young, educated and vibrant human resource base”, he said. Dr Kassis stressed that such potential can only be untapped within a context of national political and economic unity and through broad en-

gagement of the public and private sectors and civil society. However, he concluded that a drastic change in the political situation is still the main prerequisite for economic development, considering that “we simply cannot put the economic cart before the political horse”.

The private sector must take the lead in driving Gaza’s reconstruction according to Samir Hulileh, CEO of PADICO Holding: “With the government failing to function properly, there is a lack of a real reconstruction process in Gaza. Private sector firms should not wait for donors’ money, which may not come, or government actions, which may be delayed. Instead, with the economy slowing down dramatically, business has a vital role to play in leading Gaza’s reconstruction through investment.” Mr Hulileh thinks that companies must get back to business as soon as possible, “Factories need to be re-built and resume production as soon as possible; farmers need to access and farm their land. Within their capacity, efforts by private investors can add value and create much-needed employment opportunities for the people of Gaza.”

For his part local business leader Jawdat Al-Khoudary pointed out the urgent need to improve the provision of private services as a critical enabler for business and sustainability. In this sense Mr Al-Khoudary said: “In the past Gaza was a sustainable, thriving economy open for trade with the region. In order for Gaza to regain this position immediate solutions are needed in essential sectors such as energy, water and solid waste.

Once this is achieved efforts should be directed towards regaining the stature of Gaza as an economic engine for the rest of the country.”

A bigger vision

Two decades of instability have resulted in a pattern of declining GDP per capita, high unemployment and continued deterioration of Gaza’s historically strong productive sectors. In the aftermath of the latest war, and as early recovery is still underway, it is encouraging to see the objectives of the government, business and academia directed towards the development of a bolder, long-term vision for Gaza with the private sector at its heart. However, the extent to which such a vision can be translated into concrete action will depend on a wide range of factors. While a definitive political solution is a pre-requisite for any real progress, current reconstruction efforts could be a first step by public, international and private sector actors towards long term development and economic sustainability.

In this context, creating a vision for an open, stable, connected and thriving Gaza can help guide shorter-term interventions to improve the living conditions on the ground. Both are essential to create hope and showcase the potential of Gaza and its people. Breaking the cycle of conflict recurrence is as essential as laying the foundations for a new development paradigm in Gaza.

The Palestinian Economic Bulletin is prepared by The Portland Trust in partnership with the Palestinian Economic Policy Research Institute.

Farming and fishing

Then, now and next

Martina van Lierop



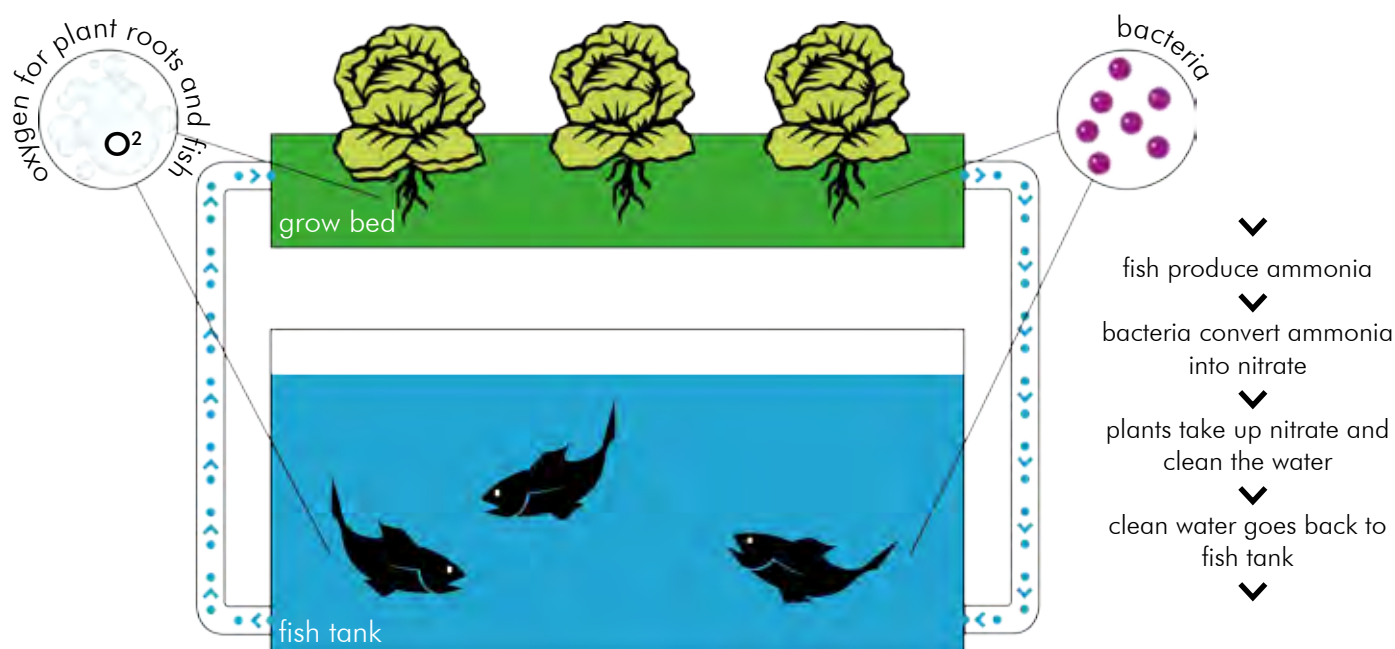
The landscape of Gaza is scattered with olive and citrus orchards, vegetable fields, and shepherds herding their goats. Each region of Gaza has its own specific crops; with strawberries in the north, dates in the centre, and in the dryer southern areas guava, almonds, olives and field crops. Various farms provided dairy and meats products. Gaza has always been a productive land able to sustain its inhabitants and export its produce. Yet, under the current economic and political constraints, increasing pressure is being placed on farmers and their environment. Even when Gaza's borders reopen and sanctions are removed, the agricultural industry will face many challenges, prompting the question: how can Gaza's agriculture industry grow in a viable and sustainable direction?

Until the 1980s agriculture was the main land use in Gaza, with citrus accounting for 48% of the agricultural production. Gradually emphasis shifted from citrus cultivation to high-value cash crops like vegetables and flowers. This shift was induced by new methods of cultivation, such as greenhouses, but also by political, economic and ecological considerations. More recently, hostilities have caused substantial damage to agricultural infrastructure such as green houses, irrigation systems, animal farms and fodder stocks. Farmland has been degraded, destroyed and chemically contaminated, and many orchards of olives, lemons and oranges have been bulldozed. Currently, up to 35% of the Gaza's arable land is not safe for farmers or shepherds to access by as it lays in the "security buffer zone". Furthermore, Gaza has strict import and export restrictions as a result of the blockade by Israel. Only a small amount of agricultural products are allowed to be exported each year, and then only through Israeli com-

panies, and not to the West Bank. The import of basic agricultural resources like seeds and seedlings, irrigation pipes, water pumps and filters, veterinary drugs, and animal feed are also restricted.

When the borders open and economic sanctions are taken away, many of these problems should disappear, yet others would likely remain. The economic and political conditions have led to intensive non-sustainable agricultural practices with limited land and water resources. These resources are eroded, degraded and polluted. The Gaza water aquifer is overexploited, causing groundwater to become increasingly saline. Due to salination, strawberry production in Beit Lahiya, north of Gaza city, has already declined, with citrus and olive production also affected. Sewage dumping, waste





Schema aquaponics

water seepage from damaged water treatment facilities, and uncontrolled use of fertilizers and pesticides is causing further pollution of ground and surface water. Additionally, there is increasing pressure on land due to Gaza's population growth. Within the agricultural sector, solutions need to be developed that address these problems, and at the same time bring prosperity.

There are two directions in which Gaza's agriculture can hope to develop itself; either towards small-scale, locally oriented and often organic, urban agriculture; or up-scale and intensified agriculture brought together with other businesses to form agroclusters.

Urban agriculture

Traditional Palestinian urban society is already familiar with urban agriculture, with many gardens planted with date palms, olive and citrus trees, vegetables and herbs like mint. Additionally, many families had ponds with fish, or kept animals like chickens, rabbits, goats, sheep and sometimes cows. This type of agriculture small-scale urban farming often helps families to support themselves. By bringing together these traditions and extending urban agriculture to spaces such as rooftops, patios, and community centres, limited space and resources can be optimised. A new farming method that has already been introduced and could be extended in Gaza is aquaponics. This is a combination of soil-less vegetable growing and fish farming within a closed recirculating system. To address the issue of water qual-

ity and quantity, rainwater could be harvested in tanks or cisterns, and grey water from households could also be used for urban farming. By extending urban farming, productivity can rise not only to give sustenance to families, but also support small enterprises selling produce or food. Educational assistance and knowledge exchange in producing and conserving food, and small business management could be undertaken through NGO's, in particular women's groups, and in educational gardens in schools.

Agroclusters

As pressure on land increases, some parts of Gaza could be designated as agroclusters. In these clusters, agriculture would be given priority and room to scale up and intensify. More importantly, these clusters focus on re-use of resources in closed cycles – for example, by-products or waste from one business could be input into another. Grey water from waste water treatment units could be distributed daily to these agroclusters, providing supplementary irrigation. An example is the up scaling of the aquaponics system whereby a fish farm provides nutrient-rich water to a vegetable producer for fertilisation of plants, and in return receives filtered water. Another example could be farmers bringing waste material as manure or spoiled products to a company that turns the waste into fertiliser and compost, these materials can then be sold back at discount prices to the contributing farmers. Crucial for these agroclusters is cooperation between farmers, and be-

tween farmers and companies. A supportive body can be set up which can help farmers to find co-operative partners, explore new markets and marketing options, and improve business management. To further assist farmers, additional practical, technical, and logistical training could be offered by universities, NGO's and government departments. For instance, to look for alternative crops which can deal with the increasing salinity.

The future of Gaza's agriculture lies in a combination of these two approaches, each underpinned by traditional agricultural methods. A Palestinian government could support movement towards a viable and sustainable agricultural future in Gaza, through a supportive legislative framework and promoting education and cooperation to make the agricultural future of Gaza viable and sustainable.

Fishery

Aside from its proud agricultural history, Gaza's location at the Mediterranean Sea provides rich fishing grounds. Originally, sardines were the main catch, yet it is now almost impossible to catch adult sardines as their schools are beyond the 3 nautical miles Palestinian fishermen are allowed to go. Fishing in the 3 nautical mile zone imposed by Israel also puts pressure on these coastal zones which are often breeding and nursery grounds for fish. Yet, even when fishermen in the future are free to fish again, it might be hard to sustain a living out of fishing.

Fish stocks in the Mediterranean Sea are depleting due to overexploitation, and additional pressure is being imposed by pollution from garbage and waste water disposal. First and foremost, this pollution needs to be stopped. Then sustainable fishery management measures need to be established to keep the Palestinian fishing sector healthy. Such measures could include fish quotas; introducing new fishing methods and equipment to reduce fish and by-catch mortality. Alternatives also need to be established, such as the reuse of traditional fish ponds, the expansion and improvement of current aquaculture projects, and once the waters around Gaza are clean again, one might also introduce shellfish farming.

Gaza is fortunate to have a Mediterranean, coastal environment with a rich cultural heritage of farming and fishing. If sufficient infrastructure was to be provided and barriers to trade lifted, then the residents of Gaza could not only enjoy more delicious and nutritious local food, but also share it with an eager international market.





Elizabeth Reynolds

Economic and physical blockade has been the primary cause of economic decline in Gaza over the past eight years, yet there is a place in Gaza City where entrepreneurs can meet, innovate and reach an international market. Gaza Sky Geeks was founded in 2011 with an aim to transform Gaza's most talented youth into international business leaders and in doing so, realize Gaza's potential as a startup hub.

Based in an apartment beside the port in Gaza City, the Sky Geeks programme provides a dedicated workspace and mentoring for tech start-ups. Sky Geeks is run by Mercy Corps with investment from Google, Bayt and other major sponsors, supplemented earlier this year with a successful crowd funding campaign on Indigogo. The young men and women based at Sky Geeks face not only the usual challenges of starting a business, but also face obstacles such as equipment and energy shortages. With record unemployment rates, it is also challenging to keep talented young professionals involved in the (generally) unpaid accelerator programme when other paid employment can be secured elsewhere. Yet despite this challenges, the annual Start Up Weekends hosted by the Sky Geeks are heavily oversubscribed – with 650 applications for the event held in June 2014.

It is said that necessity is the mother of invention, and one of the first start up companies at Sky Geeks to have received seed funding is focused on improving a common transport challenge in Gaza. Wasselni is a carpooling and taxi ordering network that helps users to share transportation efficiently, this is particularly important as the combination of high fuel costs and lack of public transport make it costly and time consuming to travel to work. Start up businesses like Wasselni are just a small example of the latent social and economic potential in Gaza. With 48% of the population under the age of 30, a literacy rate of 96% and a large number of university graduates seeking work, Gaza Sky Geeks hints at a model that could be successful for other service based sectors able to trade internationally and shine through the dark cloud of blockade.

Bright & young

Stefan Netsch

The Save the Youth Future Society was established in 2001 and aims to enhance the quality of education, economic conditions and social participation of children and youths in Gaza. The ISOCARP UPAT met with a few members of the SYFS for a lively discussion on how they see a future State of Palestine - here are just a few of their views.

Mohamed Kaloub (27)

English teacher, working at SYFA since 2010 as a project coordinator, married with two children and lives in Gaza City.

Alaa' Altibi (26)

Sociologist, began working for SYFS earlier this year as a field coordinator, single and living in Gaza City.

Arwa Abd-Elateef (24)

Studied Business Administration, and also started work with SYFA earlier this year as a field coordinator, single and living in Rafah, a daily 3 hour round trip to Gaza City.



“If the borders surrounding Gaza and the West Bank were opened, what is the first thing you would do?”

(Mohamed) I would visit my family in the West Bank and visit Al-Aqsa Mosque.

(Alaa') I have never been to the West Bank and I would like to see my family there. It would also be very important for me to visit the Al-Aqsa Mosque. These historical places are very important for our culture. Hamas and Fatah are also the reason we are separated within our country the State of Palestine. The relationship between Israel and us is totally different compared to people in the West Bank. We are separated from Israel; but they live with them tighter as neighbours.

(Arwa) I have not seen my family in the West Bank for 18 years. The West Bank is a place for me, that is very different. We have a good relation with our relatives there, but the cultural difference is very significant.

“What do you think about your own future?”

(Mohamed) It is a hard situation for me in Gaza - I am renting a small flat, which is very expensive. My family lives in basic conditions, so I have to support them in some ways financially to have the bare neces-

sities. Having my own house would be a dream, but building material is just not affordable. So it is impossible to do this, but maybe one day.

(Alaa') I am not going to leave Gaza. I will look for possibilities to develop myself in a professional way and build up my family here. This would make me very proud. It would be interesting to leave the country to get other cultures to know. But I would miss Gaza and it would be important to live here in peace and freedom, but I cannot imagine leaving Gaza to live somewhere else, only if my family would come with me.

(Arwa) Travelling would be nice, but only to build up experience and then to come back to improve Gaza with my knowledge. The people of Gaza should not migrate to another country. Maybe only for a short time, like for education, medical treatments or vacation. I would not go for a long time, because Gaza needs me.

“How should Gaza develop?”

(Mohamed) We have a lot of good, educated young people, and that is what we should build on. We should promote our talents and develop their skills further. The problem at the moment is that a lot of them are educated but cannot get any kind of decent work, they

have to work far under their level and get deprived. But still Gaza is a very beautiful place, where I want to live. Gaza is very stressful place with a lot of tension and danger for young people especially kids. A lot of them are orphans and have to develop themselves without a family. Also everyday life is for them quite harsh, because their playgrounds are either ruins or crowded street.

‘I don't want to dream about the future of Gaza, because then I would have to wake up...’

(Alaa') We have to change the mentality of the young people. A lot of them would like to work but cannot, some do not want to and have to be encouraged by vocational training.

(Arwa) We have to get in contact in other cultures to get to know about their values and ways of living. We are open-minded in thinking and want to learn from them too.

Gaza rail trail

Elizabeth Reynolds

The successful transformation of a former elevated freight rail line in New York, into a public walking path has triggered a wave of similar projects from Miami to Singapore. Could lessons from the High Line be introduced in Gaza? Palestinian Railways once operated a rail line through the centre of Gaza, with stations at Beit Hanoun, Gaza City, Deir al-Balah, Khan Yunis and the Egyptian border city of Rafah. Although almost all traces of the railway have been erased, successive governments safeguarded the corridor for public use. Generally 30 metres wide, the former rail corridor still snakes through Gaza, acting as a local connector road surrounded by dense urban areas. Gaza benefits from a Mediterranean climate and a relatively flat topography, making walking and cycling ideal modes of transport. The former rail line could offer a unique opportunity to create a walking and cycling trail linking the greater Gaza metropolis which allows safe and convenient travelling between homes, work places and schools.

Although the High Line exists in a very different context to the rail trail in Gaza, some of the design principles used on that project could be helpful when redesigning Gaza's rail trail, namely:

- Keep it simple, keep it slow
- Preserve sight lines and linear consistency
- Preserve unusual, found and historic conditions.

Initial concepts for the Gaza trail include gabions filled with rubble to separate vehicles from pedestrians and provide seating, planting date palms or other edible landscaping to further define the space and provide shade, and marking a dedicated cycle lane. Over time, the trail could integrate other services like solar powered mobile phone charging stations and drinking taps. This type of trail supports affordable, healthy and sustainable modes of transport. Shops and homes overlook the trail so it provides a safe space for different user groups. Detailed design is needed to create an appropriate layout for each block of the trail, and implementation of the project would also need to include traffic diversions and driver education – not easy tasks

in any city but surely worth testing on a small section of the trail to gather public feedback. Yet the success of Gaza's port side Corniche suggests that a pedestrian and walking trail could be an important addition to Gaza's few, but much loved public spaces.



Part of the Gaza rail trail
before and an impression
after the possible
transformation



Restoring Wadi Gaza

Martina van Lierop

Amidst the densely populated Gaza Strip lies a green valley - a unique ecosystem with a rich biodiversity: Wadi Gaza. Though small, this natural reserve is important for wildlife in Gaza, the region, and across the globe. It provides a stop-over point for migratory birds, and habitat for different resident birds, mammals, reptiles and amphibians of which many are rare or threatened. Wadi Gaza was a place for recreation, with drinkable water and plentiful fish to sustain a living for local people.

This lush green Wadi Gaza is gone, replaced by a mosquito infested, rotten smelling stream fed by waste water within a degraded area. Three major sewage pipes or culverts discharge untreated sewage into the wadi. The water is further polluted by the overuse of fertilisers in agriculture, chemical waste, oils, and pesticides to combat the mosquitoes. The banks of the wadi are subject to cutting, overgrazing, waste disposal and quarrying of sand and gravel for construction. Land adjacent to the banks is increasingly being converted into agricultural and housing plots. Additionally, the influx of water has diminished in recent decades due to abstraction of groundwater and water diversion upstream.

The water running through the valley originates from the Negev Mountains and the southern heights of Hebron city. The last nine kilometres of this water course meanders from east to west through the Gaza Strip. The width varies from place to place from 20 up to 270 metres at the mouth where the watercourse flows into the Mediterranean Sea. Before entering the sea, the wadi course spills into an estuary lake and wetlands,



the only surface water resources in Gaza Strip. Inland the wadi gradually changes into dry riverbed. Steep sandy cliffs and sand dunes border the wadi. In winter, when the flash floods come, the floodplains north of the estuary lake and riverbed become inundated. Along the wadi are intensive agricultural fields and the closest urban development, Gaza refugee camps El Bureij and en-Nusairat, are just 1000 metres from Wadi Gaza's course.

Wildlife dwindles under this loss and degradation of habitat. Moreover, animals are at risk as they are perceived as dangerous or pests, or are hunted for consumption. Yet, the degradation of ecosystems also has an effect on human well-being. Fish is no longer suitable for consumption and the dumping of garbage and sewage water imposes poor environmental conditions and severely endangers public health with diseases as typhoid and dysentery. To restore Wadi Gaza to its former glory is a multifaceted and complex problem that is hard to solve, let alone under the current political situation.

Attempts to restore the wetland have been made in the past. In the course of the project, communication between different agencies and local stakeholders, especially between the implementing agency Environmental Quality Authority (EQA) and local inhabitants, started to fail. Then with the Al-Alqsa Intifada in 2000, international funding was frozen and due to travel restrictions, communication worsened. Many people lost their income, which caused local residents to refocus on their basic needs instead of aspects such as participation, conservation, and education. Simultaneously, the Palestinian government failed to continue work, lacked control and enforcement. The ensuing conflicts led conditions to deteriorate even further for the people of Gaza, as well as Wadi Gaza and its wildlife.

To cope with the multifaceted and complex restoration and conservation of Wadi Gaza, integrative rather than sectoral solutions are needed. These solutions are not just for Wadi Gaza, but also solutions to many underlying social and environmental problems, both in the short as well as long term. One of the most crucial issues is to stop pollution by raw sewage, and eradicate its health risks. In the short term, raw sewage can be collected in septic tanks before waste water treatment facilities are operating. Treated sewage could in turn

be used for fertilising and watering agricultural fields. Waste disposal could only be stopped if next to adequate legislation and enforcement there are also waste disposal facilities. Waste sorting can reduce the initial problem by offering recycling of materials. Organic waste can for instance, in combination with waste water, produce energy through biogas, or be used as livestock fodder. By producing livestock fodder the pressure of overgrazing is reduced. Additional measures can be to grow plants, and to designate areas for grazing. The same accounts for agriculture and urban development, by only designating areas the pressure on land will not reduce – it is important to come up with alternatives for urban expansion.

Despite the mishap of the previous Wadi Gaza project, its proposed measures, successes and failures provide good starting points for future work. The integrative project covered environmental restoration, conservation, socio-economic development, education, recreation, and eco-tourism, as well as a management plan to secure the future of the project. From its failures, we can only learn. The previous project was right to acknowledge the importance of raising awareness and



education of environmental management in the community. Making people understand the project's aim, time frames, and benefits is essential for the project to be effective. A healthy ecosystem holds many benefits for inhabitants. Reedbeds can help to purify water while providing materials for craft, livestock fodder and a nursery habitat for fish. Animals such as snakes, frogs and birds play an important role as pest control agents for mosquitoes, mice and rats. Moreover, people need to learn what the impact of their actions is on the ecosystem, and its benefits for human well-being. This approach shows that although some measures might not be beneficial for individuals, it is better for the greater good of the Gazan people. Such measures could turn agricultural fields into floodplains for flood protection, or keep them open for the occasional extreme flash flood.

The project also shows the importance of retaining the commitment of parties towards a shared goal; communicating well between stakeholders on different levels (from the UNDP and Ministry of Planning, to International organisations, local cultural leaders and residents); and also between different sectors, if integrative solutions are to be implemented. Good collaboration between government bodies is also required to align land use plans with the boundaries of the nature reserve, and enforce existing legislation. Cooperation on an international level might also be productive to creating larger ecological corridors and dealing with calamitous flash floods like those in February 2015. A program considering the whole catchment area of Wadi Gaza would also allow regulation of the influx of upstream water.

A future for Wadi Gaza as a natural reserve can only be established when the afore mentioned measures are considered. Only then can Wadi Gaza be restored to a lush green valley with a meandering river, salt marshes and wetlands to which birds pay a visit. Only then can Wadi Gaza become an area that provides habitat to the flora and fauna of Gaza, recreational walking trails for its inhabitants, and an ecosystem that provides many benefits for people. With help, Wadi Gaza can become a place that touches people's heart to sustain it for the future.





Local architecture and innovation

Gizem Caner and Ghada Zeiada

Girih for Design and Sustainable Solutions is an architectural studio owned by two architects, couple Ghada & Rashid Al Ruzzi. Girih design and management was established in 2013 in Gaza, with a special interest in green architecture. The Girih team consists of ten engineers with 2 - 14 years experience in civil, electrical and mechanical engineering.

The construction sector in the Gaza Strip is hugely affected by unstable local conditions, both in terms of the blockade, and repeated aggression by Israel that has resulted in the destruction of a huge num-

ber of buildings – leading to a disproportionate demand for building materials. Despite a recognised need for reconstruction of homes, businesses and infrastructure, the construction sector in Gaza effectively became idle due to restrictions imposed on the import of construction materials more than 8 years ago. A high demand for housing projects could be a good opportunity for architects and urban planners, yet the siege is a significant obstacle to progress.

Although the lack of cement and energy in Gaza led us to think about sustainability in architectural

design eight years ago, there are many other compelling reasons to design and construct buildings in an environmentally sustainable manner. As architects familiar with the world, we are inspired by an international movement towards sustainability and look for examples of sustainable solutions across all walks of life. History, location, climate, and natural resources should all be considered the foundation of sustainable design solutions, for example prior to the trend for cement that began 60 years ago Palestinian grandfathers would build with materials sourced locally such as mud and sandstone. Nowadays



soil is considered the only alternative local building material, due to the scarcity of cement. Yet as earth based construction has not been widely used in recent years, an opportunity invites us as architects to spread these ideas, despite some local opposition to this type of building solution.

CSEB technology in Gaza

The idea of using Compressed Stabilized Earth Block (CSEB) technology in Gaza commenced eight years ago whilst trying to find solutions for the creation of alternative basic and essential building materials for construction and maintenance of buildings after the war on Gaza 2008. Many studies of local materials had been undertaken before CSEB technology was decided as the most realistic and suitable for Gaza's circumstances, it also provided good opportunities for the creation of jobs in environmental services. CSEB technology is based on compressing a certain type of soil with a small portion of cement to produce molded regular blocks using manual equipment manufactured by a skilled craftsman that compacts the soil. More recently a hydraulic machine was manufactured, with a construction factory to lead production of a project to construct shelters for the United Nations Relief and Works Agency (UNRWA).

Images

A) CSEB technology in Gaza- Private one storey House, designed by Rashid Al Ruzzi, 2008.

B) CSEB technology in Gaza- 60 single storey Shelters By UNRWA, designed by Rashid Al Ruzzi, 2009.

C) CSEB technology in Jericho two storey Women's Center, UNESCO, Designed by Rashid Abdulhamid & Rashid All Ruzzi, 2012.

A recent project of Girih design and management was undertaken at the height of the crisis relating to construction materials in 2013. The Women's Centre of Um Al Nasser (a Bedouin community) was designed with Vento De Terra in Italy and funded by the European Commission. The Centre was designed in a combination of CSEB technology and T-section concrete beams for roofing to reduce the use of land and cement, and also to encourage the community to accept these type of building. The Building is on a 1000m² parcel of land, measures about 150m² across 2 storeys, with the ground floor used for carpentry and tailoring workshops and exhibitions, the first floor is for administration and a multi-purpose hall, and the roof was designed to lay solar system panels for power supply. The project is currently under construction and is expected to be finalised and furnished within two months.





Gaza Surf club

Muneer El Baz and Stefan Netsch

www.gazasurfclub.com

Each day Mohammed Abu Jayyab checks the weather, hoping for a swell in the Mediterranean Sea to reach Gaza's shoreline. Mohammed is a member of the Gaza Surf Club and although the waves only reach 2-4 meters in height a few days in the year, he is amongst a small and passionate group of surfers living in Gaza.

Mohammed was born in the Al-Shatee'a refugee camp that is located north of Gaza City, close to the beach. From a young age he used wooden sheets from old furniture pieces to go surfing with his friends. Encouraged by watching surf videos on TV channels, Mohammed and his friend Ahmad Abu Hassera made a surfboard entirely with local materials – nicknamed the "Gaza board" it was heavy and caused many accidents.

After a few years of using makeshift Gaza boards, Mohammed and Ahmad had the chance to buy a used surfboard from a market that sold second-hand Israeli furniture and materials. The surfboard was intended for professional rather than beginner level surfers and Mohammed noticed it needed considerable practice to balance. Since first buying the board 9 years ago, Mohammed has needed hospitalization for spinal injuries four times. Another group of young men, who succeeded in buying windsurfing boards around the same time have also suffered a number of injuries.

One day while Mohammed was surfing, a foreign journalist from the Los Angeles Times saw him in front of the beach front hotel and decided to interview him. The resulting article about Mohammed and his friends surfing in Gaza helped explain his challenging circumstances to the American public and generate significant attention. Luckily, one of the founders of surfing in the United States Dorian "Doc" Paskowitz read the article and donated 15 surfboards to Gaza. Unfortunately Dorian was not able to join Mohammed in the surf as security prevented him from going further than the Erez border crossing where they met. With help from the US non-profit organization Explore Corps and Palestinians with American citizenship, the Gaza Surf Club was founded in 2008 and was able to receive 25 more surf boards and 20 wetsuits, yet it took two and a half years to obtain approval from Israel for sports equipment to enter Gaza as the Israeli Government thought it could help Palestinians to reach Israel's beaches from the sea.

With no Government funding or private sector sponsorship, the Surf Club continues to survive through the efforts of its members and friends, including several female surfers. Although Mohammed hopes to one day travel internationally and represent his country, whilst the Gaza Strip remains under siege he will continue to seek out a momentary sense of freedom on the Mediterranean waves.

Conflicts abroad:

Nicosia

the last divided capital of Europe

Gizem Caner

The division of Cyprus represents a long-standing challenge for international relations experts, however recent developments are heralding a new chapter for this European island state.

Although Cyprus and Gaza are very different places, the physical separation of Nicosia and gradual efforts by communities on both sides to improve urban spaces could be seen as a useful case study for thinking about the movement of people and goods in cities.

Located between Europe, Africa and Asia, Cyprus is an island with a rich cultural history, stretching back to 10,000 BC. In the 1950s the tolerant relationship that had existed for centuries between the Greek and Turkish communities collapsed, escalating to interethnic violence following the independence of Cyprus from the British in 1960. In 1964 United Nations peacekeeping forces landed on the island and separated the Turkish and Greek Cypriot militias by using a green felt tip pen to draw a 'Green Line' buffer between the



two sides. A decade later in 1974, following a coup organised by Greece against the Republic of Cyprus (RoC), Turkey reacted with a military intervention, taking hold of the northern third of the island, thus dividing the ancient walled city of Nicosia into two parts. By 1983, the northern part of Cyprus was declared the sovereign state of the Turkish Republic of Northern Cyprus (TRNC), however this remains only to be recognized by Turkey.

In 2004 a referendum was held in Cyprus on the Annan Plan for reunification. Although the plan was backed by Turkish Cypriots and rejected by the Greek Cypriots, ultimately the Republic of Cyprus entered the EU as representative of the whole of the island. Today, Nicosia represents two capital cities - Lefkoşa (Lefkoshā) for the TRNC and Λευκωσία (Lefkosia) for

the RoC, with the two parts connected via three gates and a sewerage system. The joint sewerage system was agreed upon in 1978 and paved the way for further co-operation between the two sides of the conflict. Amidst all challenges in 1979 representatives of the two communities agreed to collaboratively prepare a physical Master Plan for the whole of Nicosia. The Nicosia Master Plan (NMP) aimed to define a general planning strategy for the rational development of the city, and took a scenario-based approach to address both current political circumstances as well as potential reunification in the future. A focal point of the plan is Nicosia's Walled City and special emphasis is also given to conservation of cultural heritage, something that is seen as a common ground for both communities.



The NMP was conceived in three phases, the first two of which have been finalised. The third phase is a series of twinned projects within and around the Walled City of Nicosia, referred to as “Gluing Projects”. Emphasis is placed on housing rehabilitation, upgrading or the provision of new community facilities, landscaping and pedestrian schemes. USAID and the EU financed all of the bi-communal projects through United Nations Development Programme and United Nations Office for Project Services, while other publicly funded projects were carried out within the framework of the Rehabilitation Programme of the Government

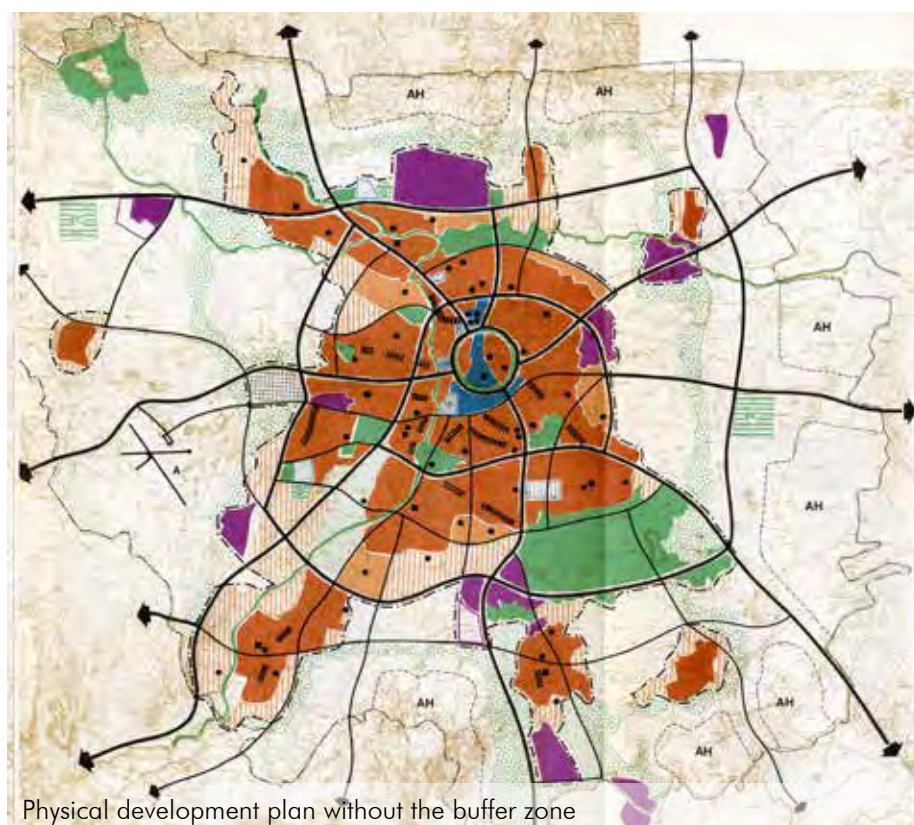
The NMP has won two awards – the 1989 World Habitat Award for ‘Innovative housing and planning ideas’; and in 2007 the Aga Khan Award for Architecture for ‘Rehabilitation of the Walled City of Nicosia’. The National Master Plan process is therefore regarded as a unique and successful attempt at collaborative planning.

Recently Cyprus has featured in the international press with optimistic stories such as ‘Divided Cyprus begins to build bridges’ (The Guard-

ian, 1 June 2015) and ‘An unfamiliar emotion has washed over Cyprus: hope’ (The Economist, 13 June 2015). With the election of centre-left politician Mustafa Akinci as the new president of TRNC and his good relations with Greek counterpart Nicos Anastasiades, the mood on the island has lifted – with positive steps towards reconciliation including a decision to lift visa requirements at existing border crossings, and the opening of another crossing at Dherynia.

Time will show whether these developments can overcome fifty years of entrenched division, however experience with Nicosia Master Plan demonstrates that when two sides of a conflict are determined to achieve a common vision, they can.

The views presented in the article are those of the author and do not necessarily represent those of the United Nations or the UNDP.



Physical development plan without the buffer zone

Tourist guide

Al-Qissariya market

The last bazaar in Gaza

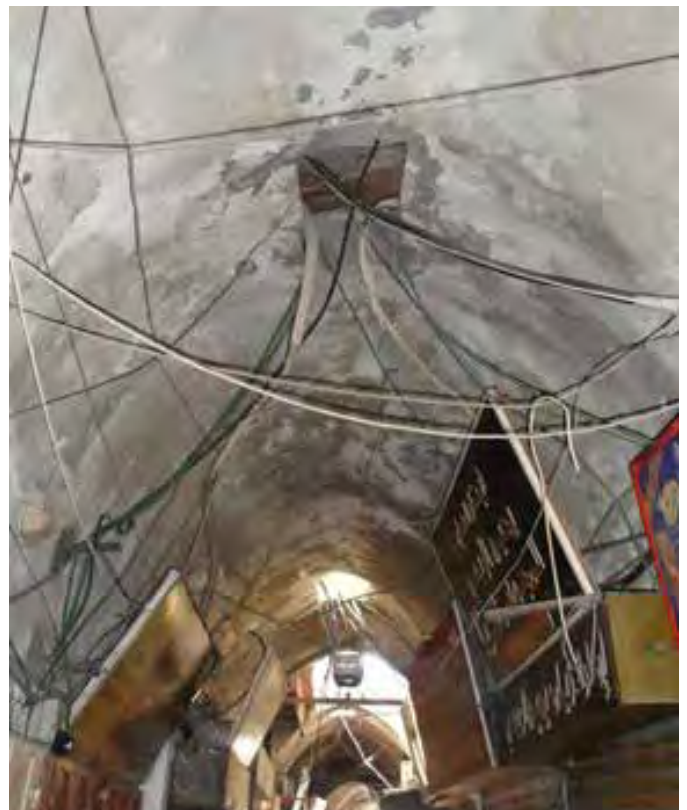
Muneer El Baz and Salem Al Qudwa



Throughout history Gaza City has been viewed amongst the most important cities of State of Palestine. The historic centre of Gaza bustles with activity and is the place of major historic, cultural, and architectural legacy for the region. Al-Qissariya Market is at the centre of the action, a narrow, covered passageway no more than 3 metres wide and 60 metres long located in the old quarter of Gaza. Al-Qissariya Market lies along the southern edge of Al-Omari Great Mosque, beside Omar al-Mukhtar Street and is known as the gold market on account of its many jewelers. The Market is configured with a pointed and vaulted roof above the central passage, which is lined on both sides by small shops that are beneath the cross vaults of a covered central passage. The date of establishing this bazaar is unknown but most historians expect it was built between 1260 - 1517AD, in the Mamluk Era and originally formed part of a much bigger covered market. The rest of the market was destroyed during the World War I.

Although architecturally and culturally rich, Gaza Old City is mostly in poor condition, with buildings ill-suited for expanding commercial activities; a rickety collection of poorly paved and maintained roads further undermine ease of pedestrian circulation. The outdated and overwhelmed infrastructure grids are unable to support increased utility demands; there no suitable solid waste collection system; a scarcity in media and information systems to interpret the area's cultural assets; and a local commercial presence that is unfamiliar with catering to an external tourist market.

The shops within the market are very small with length of 2 metres and a width also of 2 metres. Ceilings are an impressive crossed vaulted style, but the floors, walls and finishes are in bad condition, water systems are inadequate, and sanitary appliances are absent. Additionally, adequate windows for natural ventilation are absent and a bad air-conditioning network is available. Some changes to these shops has been made by their owners who showed the willingness to participate in changing the way they use the market, however, they only repair the most urgent items using modest tools which affects the historic buildings badly.



According to the findings of our needs assessment conducted during 2012 to 2015, 18% of the area is in bad condition. The necessary repairs include interventions in selected buildings, infrastructure, pavement and solid waste, traffic and accessibility and services and local activities.

We designed a comprehensive urban plan to develop the Al-Qissariya Market and the surrounding area. An area of 25,500m² is considered a key action area that consists of the whole surrounding areas of Al-Qissariya Market. Due to technical aspects of revitalisation plans and fund limitations, this area is divided into three stages: Al Qissariya Market and its surrounding (4,500 m²), Al Zawia Traditional Market (9,000 m²), and the Northern district of Al Omari Mosque (12,000 m²).

In Stage 1 the main goal of the plan is improving conditions of the historic and surrounding area to cultivate socio-economic development, supporting this goal are many objectives such as identifying historic market and design obstacles to the downtown's success. The plan provided Gaza City Municipality with recommendations for district ordinances and streetscape improvements to rejuvenate the local market and enrich the Old City character; contribute to improving the social status of society through better conditions and trading environment; to restore a historic monument (Al-Qissariya Market); and implement a façade improvement scheme for surroundings, as well as improve the quality of the pedestrian environment for residents and visitors.



In order to create a healthy and dignified living environment for people, renovation of the historic area is urgently needed. The recommended intervention works would activities such as:

- Restore and rehabilitate the monument (Al-Qissariya Market) with a focus on façade improvement on surrounding buildings to enhance the visual feel of the passageway.
- Upgrade the sewage, water and electrical systems to the long-term betterment of businesses and residents in the area.
- Define pavement types by matching materials to usage and suggesting realistic refuse collection points based on limitations of the current service provider.
- Signage, lighting and vegetation: the proposed scheme refreshes existing general elements and supplements them with visitor-focused improvements.
- Any other relevant works that contribute to achieve the project goal such as improving and controlling circulation through restricting vehicle movement by creating non-motorised and pedestrian zones, enforcing no parking laws and controlling street encroachments.

Despite more than three years of preparing the plan, there is no funding for this kind of comprehensive urban planning project in the Gaza Strip, and difficult questions remain, like should heritage preservation really be a key priority over the pursuit of more obvious goals such as building of schools or hospitals for instance? If so, who gains from this? Who has an interest or a stake?



Sights to see

Martina van Lierop



▲ The **Tell Umm Amer** site contains the ruins of the monastery of St. Hilarion which consisted of two churches, a burial site, a baptism hall, a public cemetery, an audience hall, dining rooms and baths. To serve pilgrims and merchants the Holy land from Egypt to the Fertile Crescent through the main route of Via Maris, the monastery was provided with good infrastructure facilities, including water cisterns, clay-ovens and drainage channels. Its floors was partially paved with limestone, marble tiles and coloured mosaics, decorated with plants and animals scenes.

St. Porphyrius Church is the oldest active Orthodox Christian Church in Gaza. The original construction dates back to 425 AD, but was further constructed by Crusaders and dedicated to St. Porphyrius.

The Great Mosque or **Al-Umari Mosque** is located in the old Daraj Quarter of Gaza city and draws your attention by its unusual minaret. After the Muslim conquest in the 7th century, this former Byzantine church was transformed into a mosque.



▲ **Qasr Al-Basha (The Pasha's Palace)** served as a seat of power in the Mamluk and Ottoman periods, and as a police office under the British mandate. Its height and fortifications made this place a strategic point. On the palace's grounds were soldier's lodgings, a mosque, granary, an armoury, and cannons. As Napoleon spent three nights here in 1799, the palace is also known as Napoleon's Fort. Nowadays, the building houses a girls' school and a museum which exhibits archaeological artefacts of the Department of Antiquities.

Anthedon Port is the first known seaport in Gaza. It was part of the well-developed and flourishing city known as Tida, inhabited from 800 BC to 1100 AD. The site holds remains from the late Iron Age, Persian, Hellenistic, Roman and Byzantine periods.

Located in the old Daraj Quarter is the **Sayed Al-Hashim Mosque**, one of the oldest and largest mosques in Gaza. The Mosque housed a *madrasa*, a religious learning centre in the 19th and parts of the 20th century.

The city of **Deir Al-Balah** dates back from the Late Bronze Age when it served as a fortified outpost for an Egyptian Kingdom. Its long history is reflected in the archaeological sites. Also the Mosque of Al-Kidr in the city holds clues to the city's diverse history.

Khan Yunis grew from a village to city when a fortress (*khan*) was constructed in the 14th century where caravans, travellers, and pilgrims could have a safe place to rest on the route Mecca-Jerusalem. The weekly market is a fascinating picture of traditional life.

Twin Cities

Dunkirk

Julien Gicquel



Source: Claus Ableiter, Creative Commons BY-SA 4.0

Despite Gaza's international isolation, the Gaza City Municipality has twin or sister city agreements with Moyle, in the United Kingdom, Tabriz in Iran, Turin in Italy, Tromsø in Norway and Dunkirk in France. Initiated after the Second World War, the concept of twin cities was intended to establish friendship between different cultures as a means of supporting peace, more recently city twinning agreements have been used as part of building strategic business links.

In 1996 the Mayor of Dunkirk Michael Delabarre was inspired to establish a co-operative relationship with the City of Gaza. The supportive twin city agreement with Gaza allowed a joint realisation of building the city's first library which opened in 1999, a city park then followed in 2004. At the request of the Mayor of Gaza at the time, Aoun Shawa, a more ambitious project concerning Rehabilitation of a City district of Gaza was then undertaken in 2003, by Gaza and its three European twin cities - Barcelona, Dunkirk and Turin. Throughout this period artistic, cultural exchanges, sports, academic, economic and medical professionals cooperated to share knowledge between Dunkirk and Gaza, with strong support from each community.

In December 2002, Dunkirk hosted the first conference of the communities and European associations committed to the Palestinian territories. This conference was supported by and saw the active participation of Leïla Shahid, who at the time was acting General of Palestine in France. On this occasion Ghassan Shakah, then mayor of Nablus and President of the association of the Palestinian local government agencies, asked for a political support from Europe to put an end to the occupation of the Palestinian territories and encourage the advent of establishing peace between Israelis and Palestinians. The agencies aimed to develop concrete actions and immediate co-operation between French and Palestinian communities to avoid the destruction of the Palestinian economy. It is in this spirit that the co-operation between Dunkirk and Gaza developed, also leading to the establishment of the Free Palestinian Association of Dunkirk and Gaza (AFPDG) in 1999.

A meeting between the parties in December 2002 was followed by others to Italy, Belgium, Israel, elsewhere in the State of Palestine, and Spain, and ultimately led to the creation of the network of the "European Communities for Peace

in the Middle East" (COEPPO) in which the elected official and the services of the CUD in charge of the international relations play a very active part.

"Decentralised co-operation" was recognised officially in French law on February 6th 1992 and served as an important tool for international relations. The law makes it possible to associate many partners including cultural, education and healthcare and carries within it a human dimension to support a citizenship of proximity, in the spirit of the AFPDG.

For further information on the relationship between Dunkirk and Gaza see <http://www.dunkerquegaza.fr> or the works of Philippe Nouveau in 'Dunkerque l'aventure Urbaine' (2006).

P21

Elizabeth Reynolds

A short walk from London's busy Euston Road lies P21, a gallery and event space dedicated to promoting contemporary Middle Eastern and Arab identity by focusing on art and culture, particularly in relation to the State of Palestine. I met with gallery Director Yahya Zaloom to understand more about Palestinian art and the gallery's current exhibition Gaza on Gaza.

P21 was founded as a space to promote the rich culture of the State of Palestine, using fine art and visual culture to communicate with a broad audience, away from the political arena. The gallery opened in December 2012 and holds readings, workshops, film screenings and other events, almost all of which are curator or donor funded. Although the gallery welcomes art in a variety of mediums, Yahya explains there is a growing trend towards photographic and video based material, largely due to the cost and complexity associated with sending paintings and sculptures from the occupied Palestinian territory (and then carefully returning them to the artists). This is particularly the case in Gaza where the current blockade not only makes painting and sculpture materials cost prohibitive; it is also difficult to export any completed works.

The current exhibition at P21 is called Gaza on Gaza and has managed against the odds to bring together video, illustrations and paintings from artists living in Gaza. One of the most ambitious pieces is by the artist Majdal Nateel who created almost 400 paintings on pieces of cement bags that had been used to rebuild the homes where children were killed during the 2014 war. The art could only be displayed after the journalist Jon Snow kindly agreed to risk carrying the fragile pieces in his luggage when returning to London from a Gaza where he had been reporting on Gaza one year after the most recent war. Another artist displaying her work in the current exhibition is Lama Shakshak, just 16 when she was pulled from the rubble of her home last year, Lama has drawn a remarkable series of portraits of other young children also affected by the war. Form-



ing part of the exhibition titled Through Young Eyes, Lama's work sits alongside incredible sketches by six other Gazan teenagers who have also used simple pencil and paper to convey the suffering of other young children and their families. The Culture and Free Thought Association and Christian Aid have worked with P21 not only to give these artists an international platform through which to display their work, but are also using art as a form of therapy for the many young people traumatised by conflict.

The lens through which artists and their audience perceive work can vary significantly, and Yahya sees interesting variation between Palestinian artists living in different parts of the occupied territories and internationally. In Gaza art comes in waves and is less structured than the very well regarded and long established art communities in Bethlehem, Ramallah and Hebron. In the West Bank creative arts students are drawn into institutions such as the International Academy of Art to learn from lecturers that have successfully exhibited work overseas and know the international market.

For artists such as Majdal (who was not permitted to leave Gaza for the exhibition of her work), physical galleries like P21 and online spaces such as YouTube are vital for supporting cross-cultural communication and promoting the next generation of talented Palestinian artists. Looking to a future where Gaza is a vibrant international metropolis, let's not forget to allow space for art in all its forms, as Palestinian artists continue to gather critical acclaim, there are sure to be people wishing to travel and visit artists in their studios and galleries closer to the source of their inspiration than Euston Road.



Source: <http://lama-film.net/gaza-rolls-red-carpet-film-festival-amid-ruins/>

Gaza Film Festival

Elizabeth Reynolds

There are many significant personal tragedies in Gaza, but the impacts of on-going conflict on the urban environment are sometimes more subtle, from the streets people no longer feel safe walking, to the shops that have lost their customers and the loss places where people enrich their lives through culture and play. One of the saddest and most surprising comments we heard in relation to these everyday losses was a young lady who told us she had never been to the cinema. Gaza's largest cinema, the al-Nasr was a large multiplex that closed during the first Intifada (1987 – 1991), although reopened briefly by the Palestinian Authority, it sits as a remnant of a very different time. Where costs permit and electricity is available, some families are able to watch TV or download films at home, yet providing a space in Gaza to enjoy films could provide a much needed distraction from the hardships of everyday life and act as a forum for local storytelling.

Last year a local production company Lama Film worked with the annual Karama Human Rights Film Festival to bring the event to Gaza. The festival served as a stark contrast to the Palm D'Or film festival running concurrently in Cannes. Rather than celebrities, local residents were invited to walk a red carpet through the rubble of homes recently destroyed in Shujaiyeha. Thousands of Gazan people watched films from around the world that were projected onto the only remaining wall of a house, festival organiser and Producer at Lama Films Khalil al-Mozayen explained 'The people of Shujaiyeh still don't have homes until today, and this festival is a message to everyone to think of them as human beings. I want the festival to send a message to the whole world that people of Gaza deserve life -- that they love life and seek peace'.

In developing some initial ideas for urban improvements in Gaza we discussed the concept of open-air cinema. Popular in many cities over summer, only limited equipment is needed to bring people together and share positive, maybe educational and hopefully entertaining films. Beginning with something as a street corner with a building wall or even a disused petrol station, all that is then needed is a projector, laptop, speakers and perhaps a power generator. Next, seating or picnic blankets can be supplied either by the event organiser or brought with customers from home. Finally, savvy street vendors could sell food or hire out blankets if the weather turns cold. The most important thing is to create places for people to come together and perhaps in time enough interest in cinema and theatre might return to one day host a film festival at the once great Al-Nasr cinema.



Cooking with Arwa

Lamb Fatta

Gizem Caner

Arwa Nayef is a professional translator who worked with great humour and patience to help the ISOCARP UPAT meet the people of Gaza and host a series of design charrettes and presentations. Arwa has kindly shared her version of lamb fatta, a dish The Gaza Kitchen describes as “often made for guests, fatta is inheritor to a long Arab tradition of serving roasted meat with broth-soaked bread, said to be Prophet Mohammed’s own favourite food. It is customary to eat fatta with one’s (right) hand: the broth soaked bread is used to scoop up the rice’. So follow Arwa’s steps to prepare a perfect dinner for friends and family to enjoy!

Ingredients

- +/-4 kg of mutton meat (preferably ribs and neck)
- Fried almonds for decoration

Dry spice rub:

- 4 whole garlic cloves
- 7 grains of cardamom
- 1 table spoon grain mustard
- 2 table spoons of meat condiment

Marinade:

- 3 onions, chopped
- 6 cloves of garlic, minced
- 1/2 cup plain yogurt,
- 2 tablespoons of soft butter
- 1 tablespoon of natural vinegar
- Mint leaves, parsley and fresh rosemary, chopped
- 1/2 teaspoon cinnamon
- 1 teaspoon ground nutmeg
- 1 tablespoon curcuma
- Pinch of salt

Rice:

- 6 cups of Egyptian rice
- Ghee
- 11 cups meat broth (or half water, half broth)
- 1 teaspoon ground nutmeg
- Pinch of salt

Crisps:

- 1 kilo white flour
- 1 teaspoon salt
- A pint of warm water or milk

Step 1. Prepare the meat:

Make holes in the meat for better absorption, then mix the ingredients for the marinade in a cup before covering the lamb and chilling in the refrigerator for at least two hours, or until the meat absorbs the flavour of the sauce. Roast the dry spices in a saucepan with some oil to bring out their full flavour. Remove the meat from the fridge and drain the excess sauce - only a small amount needs to remain on the meat. Rub the roasted dry spices on both sides of the lamb. Wrap the meat firmly with aluminium foil and place it in a pre-heated oven. Let it cook for 3 hours, lowering it to medium heat after the first hour. Turn the meat over in about 1.5 hours.

Step 2. Prepare the rice:

While the meat is cooking, rinse the rice well under running water and drain. Stir rice with a little ghee over low heat for about two minutes. Add the meat broth, hot water, salt and ground nutmeg. Cover and move to low heat and leave to cook for about 35 minutes.

Step 3. Prepare the crisps:

Put the white flour, salt and the warm water or milk in a hollow pot and begin kneading with your hands until dough is in the desired consistency for the crisps. Cover the dough with a plastic bag and leave it to rest for half an hour. Remove the dough from the bag and place it on a floured surface before making small balls from the dough. Using a rolling pin, roll each ball into the shape of a square or circle as desired. The thickness of the round / square shaped dough portions (pita crisps or chips) should not exceed a quarter of a centimetre. Fry each of the flat pieces of dough over high heat in a bowl on the stove until they are a pale golden colour, then turn over to fry the other side. Leave the pita crisps in the open air to dry.

Step 4. Pulling it all together – the Fatta:

Put the crisps on a large dish and pour some meat broth until they are fully soft. Distribute the rice over the chips and then place the meat on top. Decorate the dish with fried almonds. The dish is best served with green pepper sauce.



Food facts

Though it sounds like a joke in rather poor taste, The Forbes Falafel Index is an indication of the cost of living in different parts of the Middle East. This annual cost of living review uses a common food product (in this case a falafel, in Europe typically a Big Mac burger), to see how many you can buy for the same nominal amount. The 2014 Index found that a total of 17 delicious chick pea falafels could be purchased in Rafah, Gaza for \$10 USD, yet the same amount would only buy six in Ramallah or two in Tel Aviv. Stopping for a quick lunch between meeting community groups in Gaza City we enjoyed delicious falafels wrapped in pita bread and stuffed with tomato, lettuce and creamy dill sauce for just two Shekels each about 25 US cents.

<http://www.forbes.com/sites/realspin/2014/04/28/the-falafel-index-a-way-to-assess-purchasing-power-in-the-middle-east/>

Conflict may have seriously damaged Gaza's production and import of food, yet local people are passionate about making and enjoying great food. The style of cuisine in Gaza reflects that of elsewhere in the region but certainly has it's own unique accent. In the book *The Gaza Kitchen – A Palestinian Culinary Journey*, Laila El-Haddad and Maggie Schmitt explain that Gaza was an important stop on the spice route between southern Arabia and the Mediterranean, and that this along with the arrival of refugees from elsewhere in the State of Palestine has helped shape a unique cuisine. Some of the signature local dishes include Zibdiyit Gambari (Shrimp in Claypot), Dagga (Gazan Salad), Fattit Ajir (Spicy Roasted Watermelon Salad), and Knafa Arabiya (Walnut and Cinnamon Pastry). Key ingredients in Gazan cooking include aromatic spices such as cardamom (which is often served in coffee), chilli that accompanies most dishes as a hot sauce, citrus fruits (previously a key export), and the herb dill that is used with many fish, salad and sauce recipes.

