

## **Connecting Cairo to the Nile: Renewing Life and Heritage on the River**

Mise en relation du Caire avec le Nil : pour une réappropriation du fleuve

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### **RÉSUMÉ**

La désindustrialisation des rivières présente des opportunités riches aux villes qui peuvent désormais offrir des espaces verts et des pistes pour les transports doux ; ces actions encouragent le retour des résidents et des visiteurs sur les rives. En Janvier 2011, des étudiants diplômés de l'Université de Caire, l'Université américaine à Caire, et de l'Université de Californie à Berkeley ont récolté des données hydrologiques, environnementales, socio-économiques, culturelles et ont caractérisé l'utilisation de la terre de quatre districts le long de la rive est sur un tronçon de 12 km du Nil. Travaillant ensemble au sein d'équipes interdisciplinaires, ils ont conçu des plans à long-terme pour le développement du secteur riverain du Nil au centre de Caire. Notre recherche démontre que la ville de Caire a d'opportunités remarquables pour renouer le lien entre sa population et la rivière en offrant un accès accru aux riverains, amélioration de l'environnement, des passages piétons et des espaces publics attrayants. Reconquérir les rives du Nil pour la population de Caire permettra d'offrir des espaces verts et de faire de la rivière le cœur, une fois de plus, de cette ville dynamique et richement texturée.

### **ABSTRACT**

As urban waterfronts around the world de-industrialize, cities are increasingly capitalizing on these opportunities to provide open space and alternative commuting routes along riverbanks, bringing residents and visitors back to the waterfronts. In January 2011, graduate students from Cairo University, The American University in Cairo, and University of California, Berkeley surveyed hydrologic, environmental, socioeconomic, cultural, and land use characteristics of four distinct districts along the east bank of a 12-km stretch of the Nile River. Working together in interdisciplinary teams, they developed long-term plans and designs for the Nile waterfront in central Cairo. Our research demonstrates that Cairo has remarkable opportunities to reconnect its people with the river through increased access to the waterfront, environmental improvements, pedestrian pathways, and attractive public spaces. Reclaiming the banks of the Nile for the people of Cairo will provide much-needed green space and make the river once again the heart of a dynamic and richly-textured city.

### **KEYWORDS**

Cairo, environmental planning, flood plain, Nile River, public space.

# 1 CONNECTING CAIRO TO THE NILE: RENEWING LIFE AND HERITAGE ON THE RIVER

## 1.1 Introduction

As urban waterfronts around the world de-industrialize, cities are increasingly capitalizing on these opportunities to provide open space and alternative commuting routes along riverbanks, bringing residents and visitors back to the waterfronts. Cairo has remarkable opportunities to reconnect its people with the river that was historically its heart. With a population of over eleven million, Cairo is one of the densest cities in the world. The urban population is underserved by parks and other public open space. The need for open space – and the compelling attraction of the wide river – is put in sharp focus by a common sight on Cairo's traffic-snarled bridges: families set up chairs and picnic on the sidewalks, overlooking the river and enjoying the open space, seemingly oblivious to the honking traffic that crawls besides them. Most of the river banks are fenced off from public access, but those that are open to the public are heavily used by Cairenes of all ages and all walks of life. Many reaches of the Nile are flanked by flat, 'inset' floodplains 20-100m wide and typically two meters above the water surface; because of the High Dam they are no longer subject to flooding and are thus suitable for trails and other features. The potential for human use of the river banks as open-space is enormous.

## 1.2 Methods

In this case study involving 23 students and seven faculty from Cairo University (CU), The American University in Cairo (AUC), and the University of California, Berkeley (UCB), interdisciplinary teams systematically inventoried existing conditions along a 12-km reach of the Nile from Maadi to Tahrir Square, recording river-bank relations, building heights and conditions, circulation, and landuse. Student teams focused on collecting specific data to inform planning for increased public access to the river, increased urban green space along the river corridor, and improved connections between the Nile and Cairo's urban fabric. Teams also focused on identifying potential waterfront pedestrian promenade and bicycle routes, and determining unique characteristics of each study site that could be preserved or rehabilitated during recommended potential restoration and planning efforts.

## 1.3 Results

Based on this field work the student teams identified specific opportunities and challenges for interventions along the Nile. The low, wide flood plains along much of the Nile bank have great potential to be reconfigured into accessible and active public spaces. It was also identified as a feasible route for a continuous pedestrian/bicycle trail. Air quality measurements along the river bank showed that particulate matter levels along the flood plain were on average 30% lower than street level measurements.

The presence of historic landmarks and tourist attractions along the Nile provides significant opportunities for urban revitalization and economic development. The excellent views of the Nile and the Pyramids of Giza available at many waterfront locations provide a unique opportunity that interventions along the waterfront can capitalize on. While some stretches of the Corniche have wide sidewalks that can be redesigned to function better as public spaces, the Nile bank provides ample opportunities for ecological restoration at many places. The presence of vacant lots along the Corniche provides opportunities for strategic developments and also for better open space connectivity with the rest of the city. The visible public interest in the limited ferry routes along the river illustrates the potential the Nile holds to function as a significant public transportation corridor if the city is able to expand the existing ferry system.

There are also significant challenges related to existence of incongruent public and private land-uses along the Nile Corniche. Appropriate institutional and regulatory frameworks would be required to ensure that proposals for public space restructuring are implemented and maintained well. Urban waste management is a significant concern in Cairo and the Nile waterfront is no exception.

Building on the identified opportunities and challenges, a strategic plan for a longitudinally continuous trail network along the Nile with lateral connectivity to important nodes in Cairo was developed. Detailed plans for two key zones (Athur El Nabi and Old Cairo) were also developed.

## 1.4 Conclusion

Our results show that the Nile could potentially be the fundamental, unifying structure in the regeneration of Cairo's civic spaces. While there have been many past efforts to rehabilitate the city and 'plan' the future growth of Cairo, including the 'Cairo 2050 Vision Plan' (a multi-year planning effort initiated by the Egyptian government and undertaken by international consultants), none of these prior efforts have highlighted the potential to develop the Nilotic riverfront..In a new period in history, the river can serve the city's citizens in ways that can transform everyday urban experiences for the better. Around the world, urban rivers that seemed to be in a hopelessly degraded state have been brought to fresh social, economic, and environmental vitality by incremental yet persistent improvement, usually over decades. The Nile provides a tremendous opportunity to be a global model for a river renewed, a reflection of a city and nation meeting the challenges of the future. Bringing the people to the river banks could significantly improve daily life for millions, and could contribute to democratization of society and strengthening of the social fabric.

## LIST OF REFERENCES

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