

Chapter 8: Green Belt and Woods

Introduction

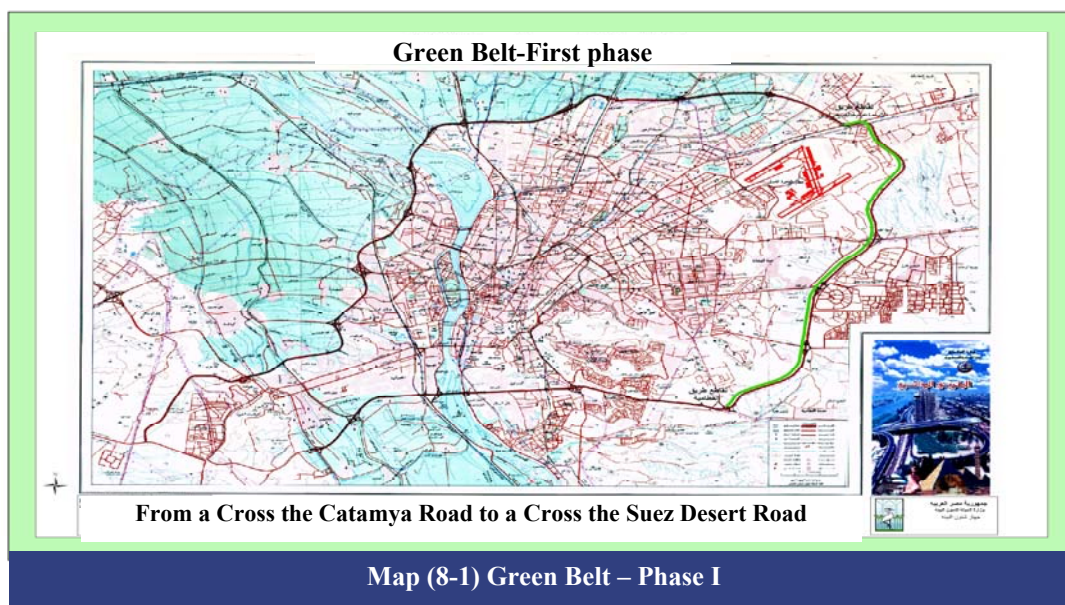
Cairo is geographically situated in a depression surrounded by the desert from one side and Moqattam hill from the other, which makes it subject to dust from the desert and Moqattam, particularly during sand storms which negatively impact air quality. In an attempt to limit these negative impacts on one hand, and maintain treated sanitary drainage water resources on the other, MSEA is organizing and supporting numerous activities of tree-planting, green-belting, green spaces as wind breaks and at the same time absorbing part of carbon dioxide produced due to different developmental activities.

MSEA Achievements

First: Green-belting Greater Cairo Project

Greater Cairo is seasonally subject to dust winds coming from adjacent hills and desert areas as well as other pollutants resulting from factories, energy use, open burning of wastes, emissions from different means of transportation, in addition to burning agricultural wastes in neighboring governorates, and noise from roads and vehicles, all of which have resulted in a poorly functioning environmental system unable to mitigate pollutants.

On that basis, MSEA started in 2005 green-belting Greater Cairo, main road intersections and new cities, in addition to afforestation, tree-planting and planting green spaces and parks to a distance of 50 km of Greater Cairo. The Green Belt is a dense belt of trees surrounding Greater Cairo Ring Road 100 km long with about half a million trees.



The project benefits from treated sanitary drainage water instead of wasting it in the desert despite huge investments incurred for it. The purpose is to provide job opportunities for youths and generate economic revenue from timbers, in addition to protecting Cairo residents from lung diseases and different forms of environmental pollution.

On the World Environment Day (5th June) 2005, Egypt's First Lady Mrs. Mubarak grew the first tree of the project Phase I of 22 km long and 50 m wide on 2 sub-phases (14 km and 8 km respectively).

On 5th June 2006, sub-phase 1 was finalized, starting from Qattameya-Sokhna road intersection with the ring road till Cairo-Suez road intersection. 65,000 camphors, casuarinas, cypresses and acacias were planted.

With the beginning of 2007, sub-phase 2 implementation protocol was jointly signed by EEAA and Military Works Department. It includes implementing the main irrigation line of the Belt eastern arc (14 km long) as well as planting 10 km with a total of 50,000 trees. Construction works and networks are underway.



Picture (8-1) Cypresses of Green Belt Sub-Phase 1

Second: Tree-planting and planting green spaces and parks

1. MSEA participated in the World Environment Day celebrations by distributing half a million trees on all Egypt governorates, in addition to 150,000 trees to the 5 desert governorates. In 2007, additional 110,000 trees were distributed to all governorates.
2. In cooperation with local authorities, MSEA contributed to establishing international and public parks of historical character as well as children parks in all governorates. Total park areas are about 22,000 feddans, most significantly is Fostat Religions Complex Park (18 feddans) and Port Said al-Dawahi district park (8.5 feddans) after transforming it from a waste dumpsite to a public park. Furthermore, MSEA developed al-Salam public park (15 feddans) at the entrance of al-Kharga City, New Valley, in addition to al-Azhar Sheikhdom Park, Saqulta markaz park, Sohag, and 2 parks in Kafr al-Dawar, Beheira, besides tree-planting Sayeda Zeinab Children's Tumours Hospital, al-Marg One-Day Surgery Hospital, and Shubra al-Kheima Integrated Care Society (ICS) Children's Library parks, as well as developing garbage collectors area in Manshiyet Nasser (7 feddans) and Aswan and Port Said (Sharq al-Tafri'a) public parks.



Picture (8-2) Tree-planting works of Children tumours hospital in Sayeda Zeinab

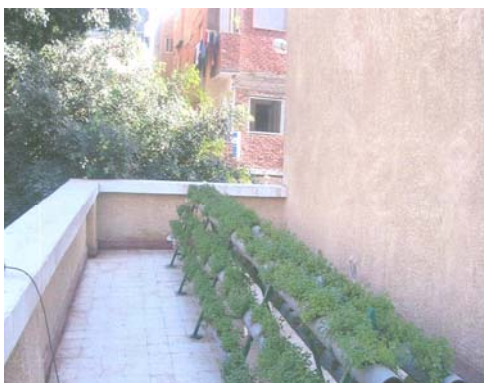


Picture (8-3) Receiving Suzanne Mubarak Women's International Peace Movement members at al-Salam Botanic garden , Sharm El Sheikh



Picture (8-4) ICS Children's Library Park, Shubra al-Kheima

3. MSEA contributed to developing nurseries in the governorates for governmental authorities or NGOs with areas ranging between 1 and 10 feddans per nursery. It also participated in developing 32 nurseries for producing trees, shrubs and ornamental plants.
4. MSEA tree-planted many schools (29) in residential communities and different districts in Greater Cairo and governorates, besides planting school roofs (25) and spaces in front of mosques, inside monasteries, hospitals, security units and public squares. It gave trees as gifts to various NGOs.
5. Furthermore, MSEA contributed to tree-planting and beautifying some universities and faculties, including Fayoum University Campus, Beni Soueif University Faculty of Law, Cairo University Faculty of Mass Communication, Helwan University Faculty of Applied Arts and Leader Preparation Institute.
6. It also contributed to tree-planting and beautifying a set of desert roads to protect them against sand such as Cairo-Fayoum Road (10.9 km), Ismailia Desert Road, as well as phase I of North Sinai roads and cities (40 km). Moreover, Cairo International Airport landing runway was paved and irrigation networks implemented and 60 feddans of olives planted in coordination with ICS.



Picture (8-5) Planting school roofs (Mint in the Intellectual Education School, Haram)



Picture (8-6) Ismailia Desert Road Tree-planting

7. In light of informal squatter development, a 10 feddan public park was finalized in Ezbet al-Walda, a 6 feddan public park in Maasara and a 1500-m² public park in the Environmental Awareness Center, all of which are in Helwan; besides, a public park in Nahda, Madinet al-Salam.



Picture (8-7) Ezbet Al Walda park in Helwan

Third: Planting woods using treated sanitary drainage water

1. In cooperation between MSEA, MOA, and MOHUUC, the National Program for Treated Sanitary Drainage Water Safe Use in Cultivating Timbers is implemented. Till 2004, the infrastructure was developed and 10,350 feddans planted with timbers. Furthermore, 845 feddans were planted in 2005, and in 2006, the infrastructure was finalized and the cultivation of 890 feddans incepted. Investment and private sectors continued to participate in cultivating timbers, starting with the 400-feddan Ataq Woods in Suez, fully cultivated with jatropha for producing biofuels of high economic return. In 2007, the infrastructure was finalized and 1000 feddans cultivated. Such woods amount to 24 in 16 governorates.
2. MSEA opened training classes for 60 trainees in Luxor Woods in light of the State's directives for encouraging dual vocational education and training (VET) as per Mubarak-Kohl Initiative (MKI) in order to provide vocational labor practically and academically trained on production and technology methods according to labor market requirements. As workers of woods depending on treated sanitary drainage water are not available and rare, and with the expansion of timber cultivation, particularly in Upper Egypt, this training was important.
3. In light of testing plant species prescribed in 2005 Egyptian Code for Using Treated Sanitary Drainage Water in Agriculture, a number of experiments were conducted on different crops types under ICRM Project (Hayah) implemented by MSEA on an area of 10 feddans in Luxor Woods. Crops of jatropha, jojoba, flax, roses, bird of paradise, gladiolus, white duranta, fodder sorghum and African mahogany. Initial results indicate the success of cultivating these economically significant crops using treated sanitary drainage water, which provides various investment as well as job opportunities for youths and fresh graduates.



Picture (8-8) Jatropha trees in Luxor pilot field



Picture (8-9) Cultivating flax using treated sanitary drainage water, Luxor

Map (8-2) Locations of woods cultivated using treated sanitary drainage water

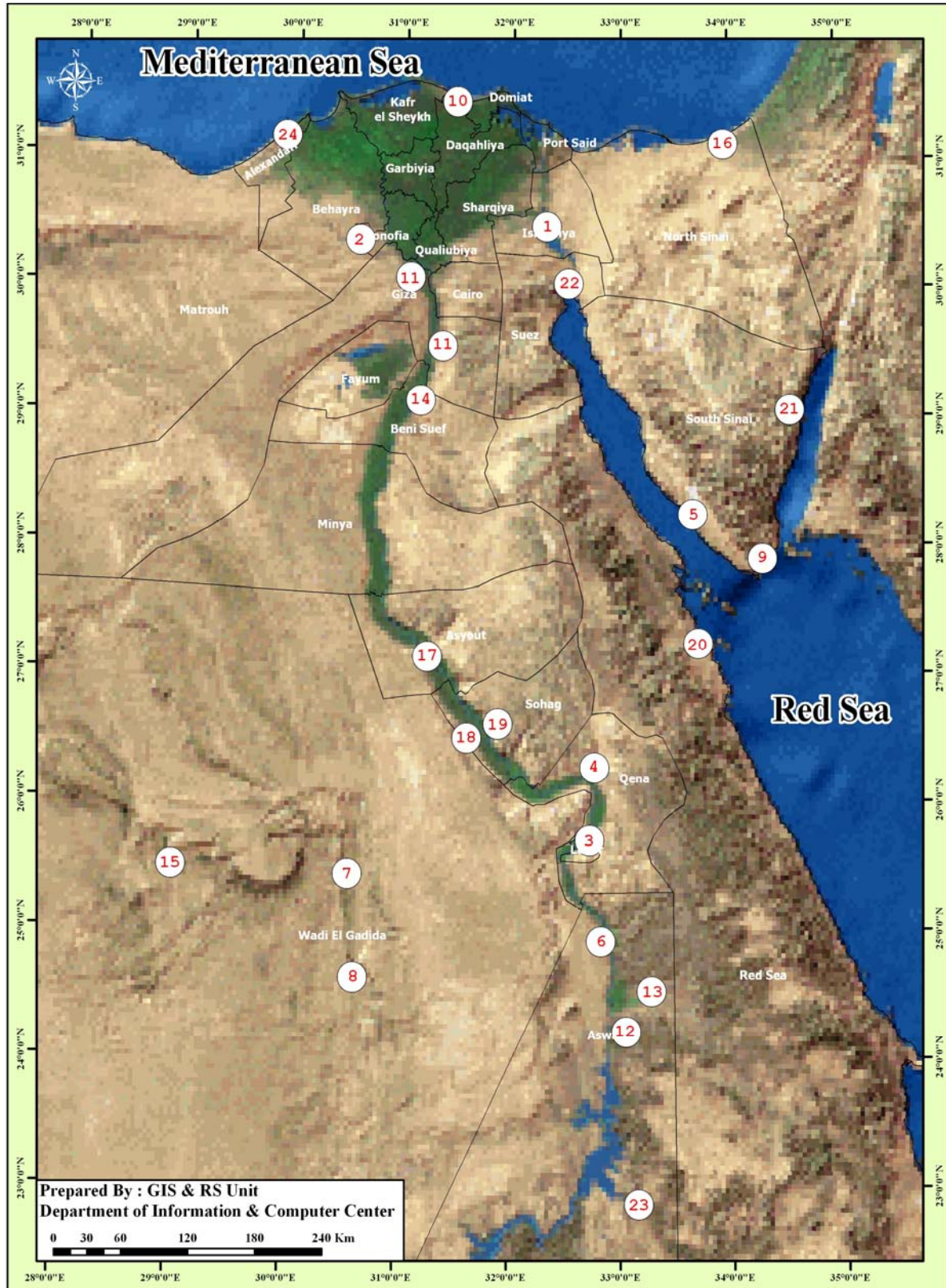


Table (8-1) Statement of woods planted using treated sanitary drainage water

Sr.	Governorate	Woods	Area (Feddan)	Station daily drainage (m ³ /day)	Irrigation system	Cultivated plant
1	Ismailia	Serapiom	500	90000	Drip-Trickle	Cypress, pine, kaya, casuarina, camphor, sisal, berry, bamboo, concarpus
2	Monoufeya	El-Sadat	500	18000	Drip-Trickle	Cypress, pine, acacia, casuarina, camphor, sisal, berry, ornamental trees
3	Luxor	Luxor	1700	30000	Drip-Trickle and developed surface irrigation	Kaya, jatropa, camphor, acacia, jatropa, berry trees
4	Qena	Qena	500	23000	Developed surface irrigation	Camphor, kaya
5	South Sinai	AlToar	200	3500	Drip-Trickle and developed surface irrigation	Casuarina, camphor, berry, botany, cancarpus
6	Aswan	Edfo	300	8000	Developed surface irrigation	Kaya
7	New Valley	AlKharga	400	13000	Developed surface irrigation	Kaya, terminalia, tamarix, casuarina, camphor
8	New Valley	Paris	200	18000	Drip-Trickle	Cypress, pine, acacia, casuarina, camphor
9	South Sinai	Sharm ElShiekh	60	3000	Drip-Trickle	Casuarina, camphor, decorating trees
10	Daqahleya	Gamassa	150	1500	Drip-Trickle	Cypress, pine, concarpus
11	Giza	AlSaf	500	65000	Drip-Trickle	Kaya, casuarina
12	Aswan	Blanna	1235	32000	Drip-Trickle	Kaya
13	Aswan	Nasr AlNoba	100	14000	Drip-Trickle	Camphor, kaya, terminalia
14	Beni Soueif	AlWasta	500	10000	Drip-Trickle	Kaya, jatropa
15	New Valley	Mout	700	10000	Drip-Trickle	Kaya, terminalia
16	North Sinai	AlAresh	200	15000	Drip-Trickle	Kaya, jatropa
17	Assiut	Assiut	40	50000	Drip-Trickle	Kaya, jatropa
18	Sohag	Gharb	1000	28000	Drip-Trickle and developed surface irrigation	Kaya, jatropa
19	Sohag	Shark	1000	28000	Drip-Trickle and developed surface irrigation	Kaya, Jatropa
20	Red Sea	Herghada	200	94	Drip-Trickle	Kaya, casuarina
21	South Sinai	Newabaa	200	4000	Drip-Trickle	Kaya, casuarina
22	Suez	Atakka	400	30000	Drip-Trickle	Jatropa
23	Aswan	Allaky Valley	550	8000	Drip-Trickle	Camphor, kaya, terminalia
24	Alexandria	N9	60	10	Drip-Trickle	Kaya, casuarina
Total			11195 Feddan			