



"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it's the only thing that ever has."  
Margaret Mead

# SHEHRI

CITIZENS FOR A BETTER ENVIRONMENT

JULY - DECEMBER 2017

## ORANGE TO GREEN - EXTRAORDINARY STORY OF FOREST REGENERATION

Almost 20 years ago, barren pasture in Costa Rica choked by invasive grasses was dumped with orange peel and flesh. Del Oro, a newly established orange juice manufacturer in Costa Rica was looking for a way to get rid of the rinds and pulp left over after juice extraction.

They planned on building an expensive processing plant, but two ecologists from the University of Pennsylvania approached them with a different idea. If the company would donate some land it owned adjacent to a national

forest they could dump their organic waste on degraded areas nearby.

The deal was closed and thousands of trucks carrying 12,000 metric tons of peels and pulp dumped their contents near the Guanacaste National Park. Del Oro working close to the natural area had a cost effective solution to get rid of their waste and the ecologists got a new experiment site.

However another orange juice company, TicoFruit,

sued Del Oro saying that they had "defiled a national park" by dumping waste nearby and caused the project to end. Now, the effects have grown large and wide.

What was once a nearly barren farmland now blooms anew with a rich tangle of jungle plants. The magic ingredient for this resurgence? Oranges.

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Views expressed herein do not necessarily express the views of the Editor/Editorial Board.

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**SHEHRI-CBE**

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*Editorial***HERITAGE AT RISK**

Katas Raj Temple, spread over 50 acres, is situated in Chakwal District in Punjab. It is the second most sacred site in Hinduism. 5,000 years old Katas Raj comprises of the Satgara temples, Hari Singh Nalwa's haveli, Bairagi's house, and ancient Buddhist structural remains.

Recently Chief Justice of Pakistan Justice Mian Saqib Nisar has taken a Suo Moto notice of the drying out of the sacred pond of the Katas Raj Temple Complex and ordered concerned authorities to submit a report as well as formulate a special committee of experts to save the temple.

According to the latest reports by the Additional Advocate General of Punjab and Chakwal District Coordination Officer, the fabled pond is drying out because of the extensive water extraction by the nearby cement factories in Kahoon Valley, constructed in 2004. Over hundred bores have been illegally dug, resulting in reduced subsoil water level. The cement factories had an EIA done, was this aspect not identified. In our opinion Environmental Impact Assessments are being promoted as a project justification tool instead of a decision making tool.

In the past, water could be extracted from a depth of 20 feet to 50 feet for domestic purposes but now it is found at the depth of 350 feet. Indigenous vegetation and historic agricultural trends are also being lost to depleting water resource and airborne pollution. It is estimated that more water is being extracted by the Cement factories than what is utilized by the total population of Chakwal. Absence of a proper water supply in the area is further aggravating the crisis.

Coupled with climate change and global warming, careless human interactions with nature are destroying heritage sites that have stood tall over thousands of years. We need to build awareness among the people to prevent this impending catastrophe. Only the people can force the government to ensure that major policies and plans undergo strategic environmental assessments. Therefore, Shehri-CBE demands the government to take our natural environment seriously and to punish the culprits behind desecration of nature.



Today, that land is a verdant patch of jungle standing in stark contrast to the sparse pastures it lies next to. A new study from researchers at Princeton and the University of Pennsylvania analyzed the health and composition of the small area and found a nearly 200 percent increase in woody biomass and three times as many species as a control area next door.



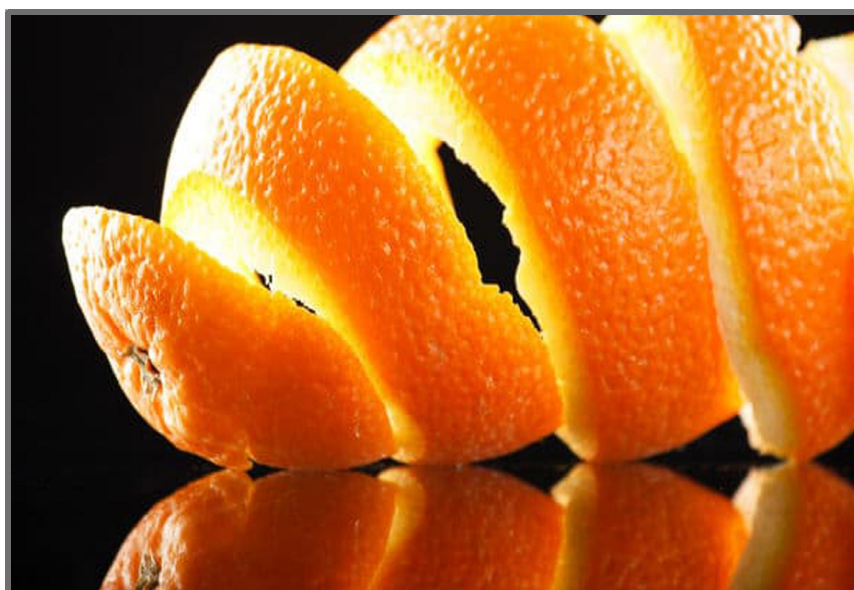
At one time a field for grazing, the area was initially overrun with African pasture grasses, leaving little room for native plants.

Once spread with orange rinds, however, the grasses were smothered and the loamy, nutrient-rich soil that the rinds produced provided fertile ground for native plants

to take hold. The pressed oranges were actually perfect for the task because they had been leached of essential oils and acids, which would normally harm plant life.







## Nutrition Facts

Serving Size 100 g

Amount Per Serving

**Calories 97**

% Daily Value

**Total Fat** 0.2g 0 %

**Sodium** 3mg 0 %

**Total Carbohydrate** 25g 8 %

Dietary Fiber 11g 44 %

**Protein** 1.5g 3 %

Vitamin A 8 % • Vitamin C 227 %

Calcium 16 % • Iron 4 %

Daily values are based on 2000 calorie diet.

Instead, the orange treatment injected essential nutrients like potassium, nitrogen and, especially, phosphorus - which they found little of in the soil, indicating it had all been used up - into the soil. Aside from the initial disposal, the researchers didn't intervene in the area - the rest was all Mother Nature.

Soil samples, published last month in the journal *Restoration Ecology*, yielded significantly elevated nutrient levels, which persisted even as late as 2014, when the last round of sampling took place. There were 24 species of tree in the treated area, compared to eight in the control, and the composition of species was much more balanced.

The shade cover was more complete, and the researchers say that they didn't even begin to count things like woody shrubs, vines and other smaller species. In short, it looked like a jungle again.



"In the area surrounding where the orange peels were deposited, the few trees that we found were almost all just two species of pasture-associated trees that are not typically found in the mature forests of that part of Costa Rica," says co-lead author Tim Treuer, an ecology PhD student at Princeton.

"In the fertilized area there was a much greater diversity of trees, including many species that are typically only seen in older forests. Not only did the orange peels jumpstart the return of forest, but they've already triggered the return of a rapidly

maturing forest."

While the application of agricultural waste to denuded jungle lands is essentially a win-win situation for all involved, it may not always produce such amazing results. It worked here because the orange peels were able to effectively block out an invasive species and produce thick loam for new growth.

In other environments, simply dumping organic waste may not provide the kind of blank slate it did here. In addition, Costa Rica is warm and humid year-round

- similar tactics might not be as effective in places where it's below freezing part of the year.

Still, the project didn't produce any of the pollutants or pests detractors worried it might, and the results are clearly visible.

There are unfortunately no plans to continue the project at the moment owing to the decades-old lawsuit. However, there is a similar experiment ongoing in the country involving coffee cherries, though it doesn't seem to have produced any results yet.



*Figure 1 The treated area is to the right of the dirt road, the control area is to the left*



## THE GREAT GREEN WALL OF AFRICA



To contain the advancing Sahara Desert, 11 adjacent countries of Africa lying in the Sahel Region are working together to plant the Great Green Wall of Africa.

The Sahara is currently the second largest desert in size, only smaller than Antarctica. However, unlike its frozen relative, the Sahara is actually expanding.

The United Nations estimates that, by 2025, two thirds of Africa's arable land will be covered in Saharan sand, vastly expanding the

current 9 million square kilometers.

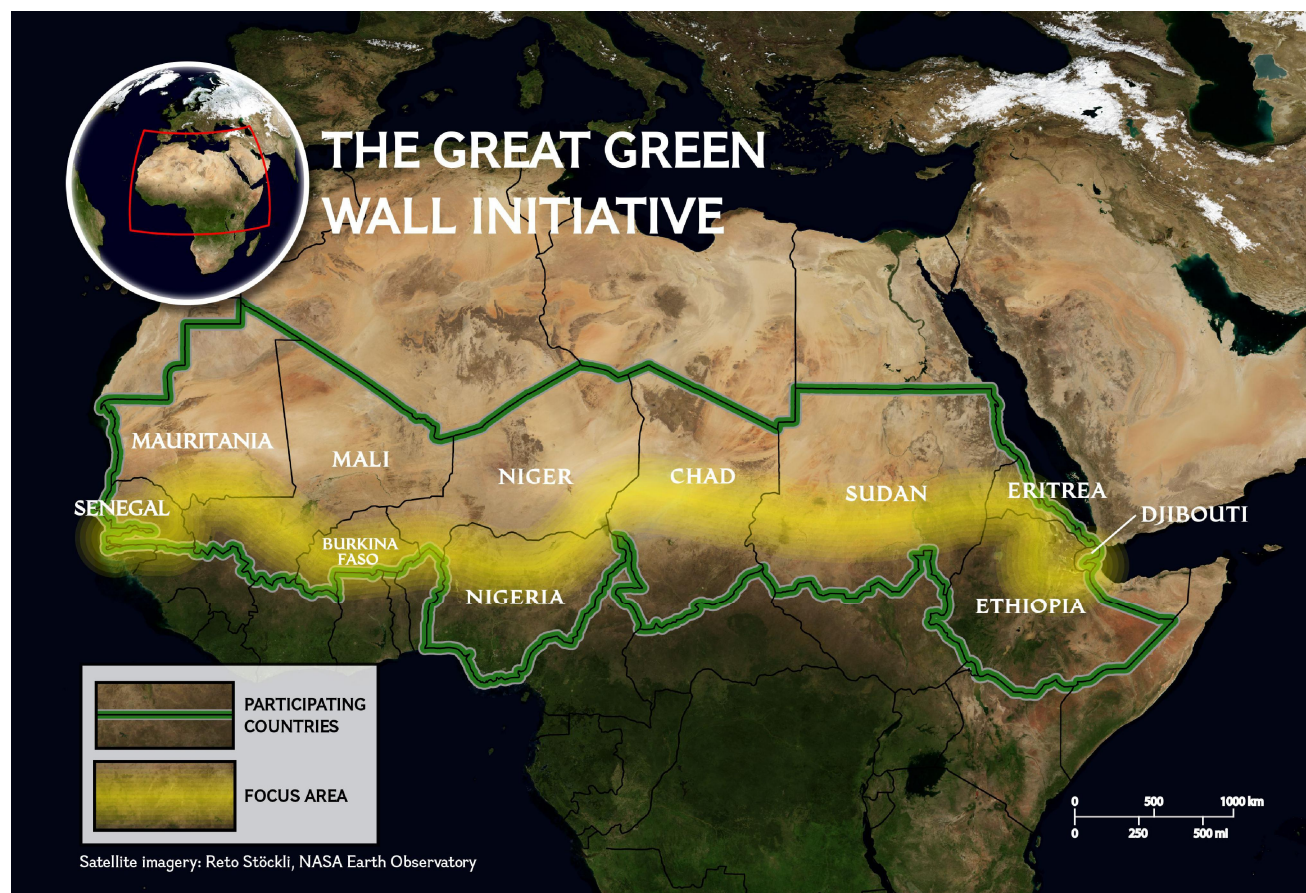
With this peril in sight, the leaders of Senegal, Mauritania, Mali, Burkina Faso, Niger, Nigeria, Chad, Sudan, Eritrea, Ethiopia, and Djibouti have banded together on an unprecedented endeavor to stave off impending catastrophe.

Once complete, Africa's Green Wall will be a manmade forest of drought-resistant trees (principally acacia) stretching across the entire continent.

The Sahel region of Africa is a 3,860-kilometre arc-like land mass lying to the immediate south of the Sahara Desert and stretching east-west across the breadth of the African continent.

A largely semi-arid belt of barren, sandy and rock-strewn land, the Sahel marks the physical and cultural transition between the continent's more fertile tropical regions to the south and its desert in the north.

Geographic definitions of the Sahel region vary. Commonly, the Sahel stretches from Senegal on the Atlantic coast, through parts of Mauritania, Mali, Burkina Faso, Niger, Nigeria, Chad and Sudan to Eritrea on the Red Sea coast.





Nine miles wide and 4,750 miles long, the vision for the project is as ambitious as it is necessary. So far, only 330 miles of greenery stands guard in Northern Senegal, which cost the Senegalese government over \$6 million since the start of digging in 2008.

International organizations such as World Bank have pledged over \$6 billion to the monumental defense system.

It was observed that tree plantation across the semi-arid grassland and savanna in the Sahel belt restores the ecosystem by retaining water in the soil. The water table rises and agricultural practices become viable. The

air quality also improves preventing several diseases in the local populace.

Moreover, the rift between farmers and herders is settled as grass covers the area dotted with trees providing food for livestock. Foul has more chances of survival too.

Leaders point out that the Great Green Wall is about more than just protection from windblown sand. The project will bring thousands of jobs to impoverished communities, and has already transformed otherwise unusable land into gardens scattered with tree nurseries.

The influx of tourists,

scientists, and medical professionals has also brought attention and resources to a neglected region in which aid is scarce and doctors are not readily available for the needy populations.

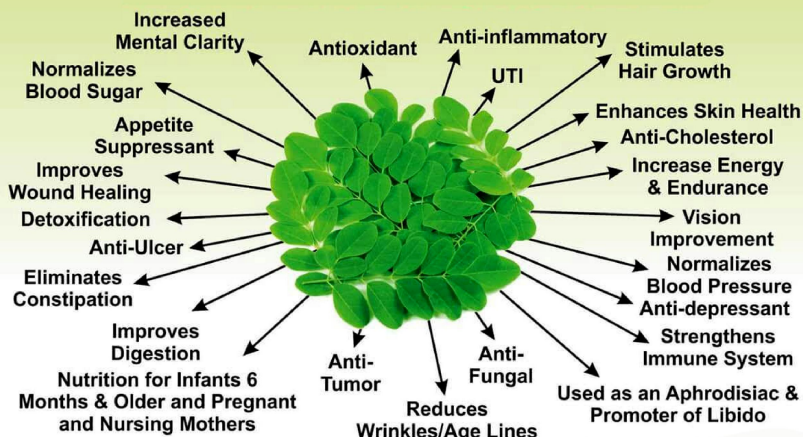
The Great Green Wall is already impacting lives the better way. Pakistan can benefit from the experience of this experiment by planting trees in grasslands near the Thar Desert. The shift in ecosystem will not only improve health of the local population but also help replenish much needed water in the region. It will also empower local communities economically by enabling farming and livestock care. Let us grow trees for our better future.



# THE MIRACLE TREE - MORINGA OLIFERA



## ADVANTAGES OF MORINGA OLEIFERA LEAVES

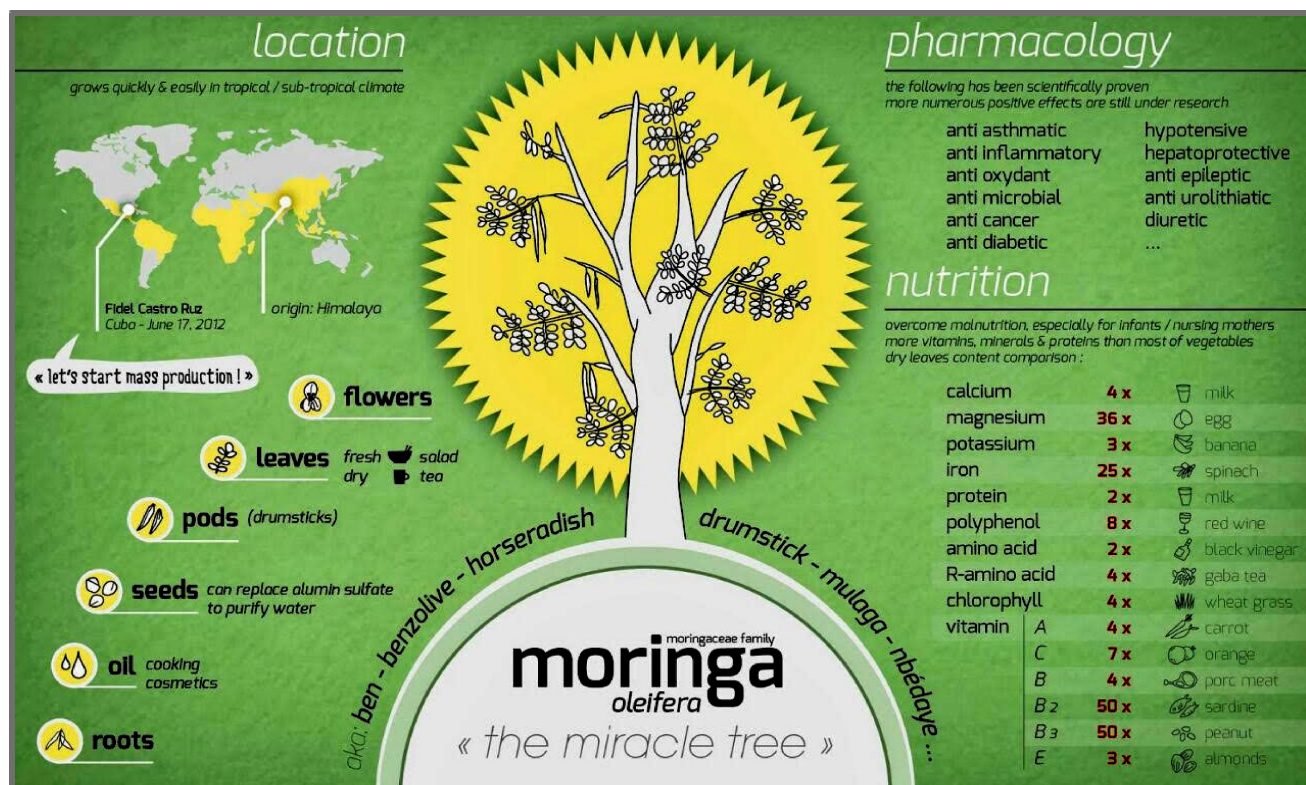


Moringa Oleifera is native to sub-Himalayan tracts of northern India but is now found worldwide in the tropics and sub-tropics. It grows best in direct sunlight

and tolerates a wide range of soil conditions, but prefers a neutral to slightly acidic (pH. 6.3-7.0), well-drained sandy or loamy soil. Minimum annual rainfall

requirements are estimated at 250mm with maximum at over 3,000mm, but in waterlogged soil the roots have a tendency to rot. Presence of a long taproot makes it resistant to periods of drought. Trees can be easily grown from seed or from cuttings. Temperature ranges are 25-35 degrees Celsius.

This miracle tree can be easily planted in Karachi. Its drumsticks and flowers are also used in cooking. Overall, this tree has various health benefits to people as illustrated in the images.





## REDUCING CARBON FOOTPRINT FOR A SAFE FUTURE



Global warming and Climate Change transcend boundaries. These global phenomena need global endeavors from the citizens of the world to protect our future. 2017 has been one of the hottest years in recorded history second to only El Niño-amplified 2016. We need to act now to stall this environmental crisis. Few steps that can be undertaken at an individual level are as follows:

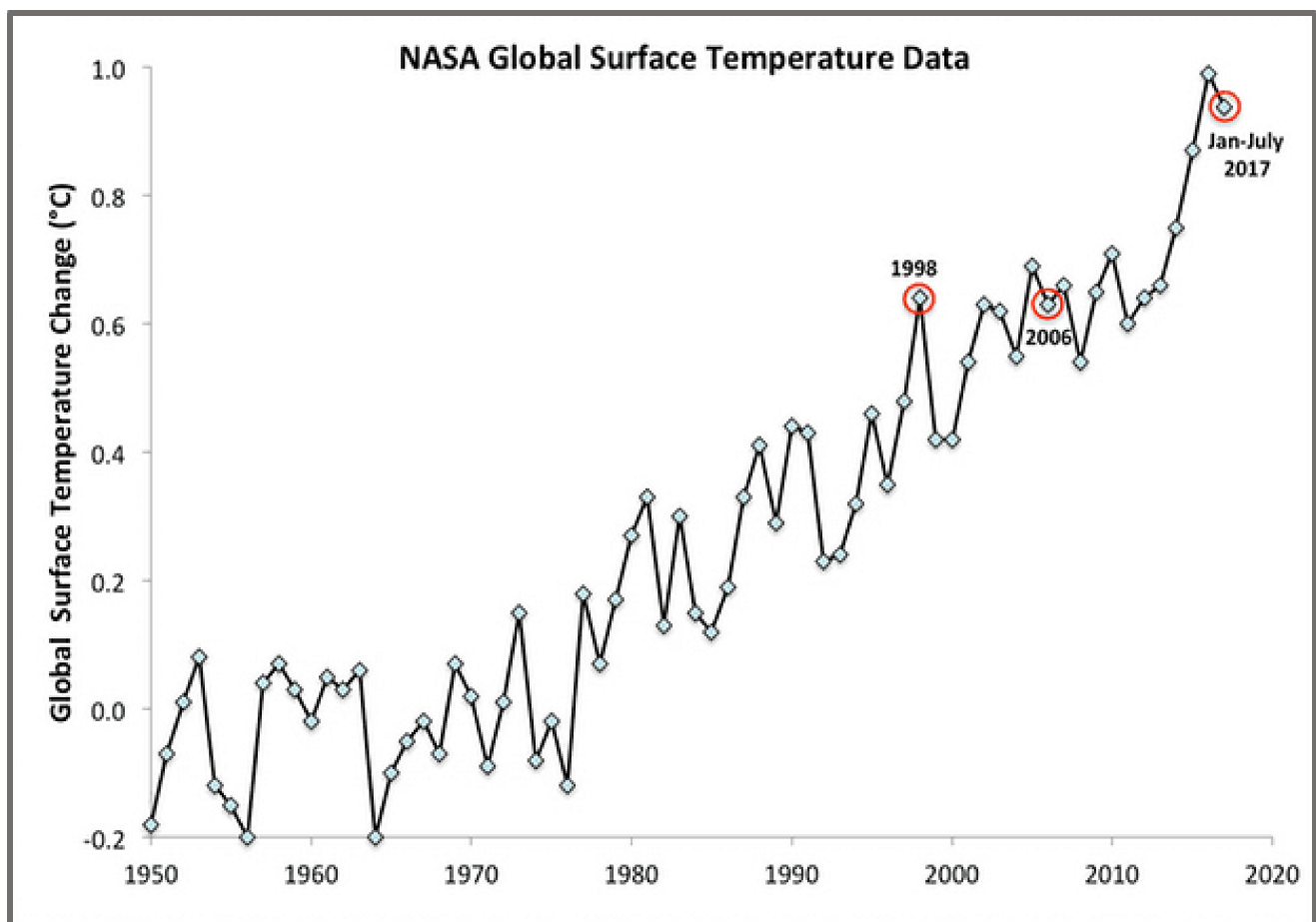
### **Upgrade your appliances, especially if they are more than five years old**

New appliances are at least twice as efficient or more compared to the old ones. Look for the Pakistan Energy Label preferring three stars over lesser stars to save on energy. Freezers, furnaces, air conditioners, and water heaters use the most energy, therefore pay more heed while buying these. Upgradation of appliances

will not only cut your bills but also help the planet conserve fuel and energy and this way you will invest in saving the world from an aggravating existential crisis.

### **Buy less stuff**

Reduce, re-use, and recycle-it's not just about pollution, but the strategy will lower your emissions too and help combat global warming. The more stuff we use, the more



it ends in a landfill which costs our municipality and us in taxes, while at a larger scale it costs our planet by destroying natural ecosystems in dumping sites.

### Eat less meat

Food accounts for a sizable portion of our emissions. If you want to make cuts here, your best option is to reduce your consumption of meat, especially beef. This is because a kilogram of beef is responsible for 18 times more emissions compared to the same amount of pasta.

AN AVERAGE FAMILY OF FOUR THAT CUTS THEIR MEAT INTAKE IN **HALF** COULD AVOID ROUGHLY **3 TONS** OF EMISSIONS ANNUALLY

### Stop disposing organic waste through municipal services

Almost 30% of our garbage is composed of biodegradable organic waste which can be easily discarded in green areas instead of utilizing municipal services to dispose it. This in turn will fertilize the soil and sequester carbon for free in an eco-friendly way.

### Go for Carpooling or Public Transport

Carpooling and Public Transport drastically reduce CO<sub>2</sub> emissions by spreading them out over many riders. It also saves the national exchequer millions of dollars over the years.

### Use Solar Panels instead of Gas, Diesel and Petrol Generators to produce household/office electricity

Gas, Diesel and Petrol Generators produce pollution alongside electricity. Use solar panels instead to generate cheaper as well as cleaner energy through a free and abundant source of energy.

### Unplug appliances when not in use

Appliances consume power when connected to the grid. Unplugging devices and appliances will not only help you save your electricity bill but also reduce your carbon footprint.

## So how can emissions be reduced?

BP's economics team has calculated several different ways to cut carbon dioxide emissions on a global scale by the same amount – in this case, by 110 million tonnes.

Options:

Replace coal with gas in power (% of total power)



Change required:

1%

Increase renewables power generation



11%

Increase nuclear power generation



6%

Improve vehicle energy efficiency



2%

# RENEWABLE ENERGY: THE NEED OF THE HOUR



SALEKA ENVER

As the world wakes up to the reality of climate change, electricity will increasingly have to come from renewable sources such as wind and solar. Major sources of electricity generation are:

1. Thermal (Both gas and oil)
2. Hydro-power (dams)
3. Nuclear power
4. Renewable energy (Solar and wind)

Thermal generation capacity is distributed among WAPDA, IPPs, and K Electric. WAPDA supplies to the whole country except Karachi and its adjoining areas, where electricity is supplied by K Electric.

Electricity generation has increased by 3.18% since 2015 as a result of China Pakistan Economic Corridor. The country has begun diversifying its energy producing capacity investing in coal, nuclear energy, solar and wind energy to help offset the energy shortage, while larger projects greater than 1,000 MW, such as Daimar-Bhasha Dam, Kohala Hydropower project, Pak Port Qasim Power project,

Sahiwal Coal Power Project, Thar Engro Coal Power Project, Hub Coal Power Project and new nuclear plants are now under construction or planned.

**ALL OF THE ABOVE DO NOT MEET OUR ENERGY NEEDS. SO WHAT IS THE OPTION? IT IS RENEWABLE ENERGY.**

Pakistan is in a good position to exploit these because it has abundant sun and wind.

It is clearly evident that Pakistan is a suitable country for the installation of wind and solar due to the high winds near the cities, the presence of rivers and lakes as well as the availability of wind turbines from India.

## SOLAR ENERGY

Solar energy is radiant light and heat from sun that is harnessed using a range of ever evolving technologies such as solar heating photovoltaics, solar thermal energy, solar architecture, molten salt power plants and artificial photosynthesis.

This is an important source of renewable energy and its technologies are broadly

characterized as either passive solar or active solar depending on how they capture and distribute solar energy or convert it into solar power.

In 2011, the International Energy Agency said: "The development of affordable, inexhaustible and clean solar energy technologies will have huge long term benefits. It will increase country's energy security through reliance on an indigenous, inexhaustible and mostly import-independent resource, enhance sustainability, reduce pollution, lower the costs of mitigating global warming and keep fossil fuel prices lower than otherwise.

Fortunately Pakistan is among those countries in the world in which sun warms the surface throughout the year and therefore has a strong potential for solar power generation.

The average monthly solar radiation intensity remains 136.05 to 287.36 W/m<sup>2</sup> in the country. The results indicate that the values of solar radiation intensity greater





*Quaid-e-Azam Solar Power Plant in Cholistan Desert, Punjab*

than 200 W/m<sup>2</sup> were observed in the months of February to October in Sindh, March to October in Baluchistan, April to September in KPK, and Northern areas, and March to October in Punjab. For 10 hours a day, average solar radiation intensity ranges from 1500 W/m<sup>2</sup> per day to 2750 W/m<sup>2</sup> per day in Southern Punjab, Sindh and Baluchistan region s throughout the year. In an area of 100m<sup>2</sup>, 45MW to 83 MW power per month maybe generated in the above mentioned regions.

Sunshine and clarity of atmosphere is paramount. The output from solar cell is

directly proportionality the sunshine level. While it is adversely affected by temperature, atmospheric dust, pollution, humidity and wind speed. Any lapses in evaluating the solar resource and other relevant climate factors can result in significant impact.

The development of elaborate solar maps by the World Bank and the Alternate Energy Development Board (AEDB) is a step in the right direction. However Pakistan has been extremely slow in capitalizing on it.

According to Dr. M. Asif, who is the author of: 'Energy

Crisis in Pakistan: Origins, Challenges and Sustainable Solutions', 'India is amongst the leading countries in the world in terms of both solar and wind power, while Bangladesh has over 2 million systems installed in the residential sector alone.

At a small scale level these have been wide-ranging business models dealing with technologies like solar home systems, communal solar systems, biogas plants and improved cooking stoves".

In Pakistan, besides solar PV, there is a Hugh scope for solar thermal power generation. Given the prevalent electricity shortfall

and reliance on imported oil and gas to meet national energy requirements, solar energy as an indigenous resource can greatly help address this energy insecurity.

Whatever the project, it must be based on a strong business case. Given the fact that a large proportion of the population in Pakistan lacks access to the national grid, it is a better option to focus on small to medium scale and distributed power generation projects. This would help avoid overloading of the already fragile network, curb losses, and electrify remote communities.

According to International Energy Agency (IEA) Executive Director Mr. Fatih Birol: "A new era of solar power is now upon us. We see renewables growing by about 1,000 GW (gigawatts) by 2022, which equals about half of the current global capacity in coal power, which took 80 years to build.... We expect that solar PV capacity growth will be higher than any other renewable technology through 2022."

When it comes to power generation, the IEA said that renewable electricity was seen growing by over a third

by 2022, hitting more than 8,000 terawatt hours. This figure, the IEA said, was equivalent to the power consumption of China, India and Germany combined.

Birol believed the cost of solar energy would continue to decline. "The era of expensive renewables is over," he said.

An innovative solar technology is Rick-E, an electronic, solar-powered rickshaw, developed by WRL technologies. Rick-E can run at a maximum speed of 60kmh while its full charge lasts up to 150km, takes 16 to 30 seconds to charge up and is operable in knee-high water. The company has also developed a retrofitted kit, which could be installed in other rickshaws and one battery could last up to 45 years.



#### WIND POWER

The cheap and environmentally friendly wind energy, introduced late in Pakistan is gaining popularity as it ensures quick

return in short cycle of 3 years.

Wind power is a form of renewable energy in Pakistan which makes up less than 0.1% of the total electricity production in the country. As of 2017, wind power capacity in Pakistan was 591 MW. It is interesting to note however, that while India has 45,000 MW of wind energy potential and a much larger surface area, Pakistan has at least 50,000 MW potential.

#### The Viability of Wind Power in Pakistan

Pakistan is fortunate to have something many other countries do not, which is high wind speeds near major centres. Near Islamabad, the wind speed is anywhere from 6.2 to 7.4 metres per second (between 13.8 and 16.5 miles per hour). Near Karachi, the range is between 6.2 and 6.9 (between 13.8 and 15.4 miles per hour).

Pakistan is also fortunate that in neighboring India, the company Suzlon manufactures wind turbines, thus decreasing transportation costs. Its turbines start to turn at a speed of 3 metres per second. Vestas, which is one of the world's largest wind turbine manufacturers, has

wind turbines that start turning at a speed of 4 metres per second. In addition to Karachi and Islamabad, there are other areas in Pakistan that receive a significant amount of wind.

In only the Balochistan and Sindh provinces, sufficient wind exists to power every coastal village in the country. There also exists a corridor between Gharo and Keti Bandar that alone could produce between 40,000 and 50,000 megawatts of electricity.

Given this surplus potential, Pakistan has much to offer Asia with regards to wind energy. In recent years, the government has completed several projects to demonstrate that wind energy is viable in the country. In Mirpur Sakro, 85 micro turbines have been installed to power 356 homes. In Kund Malir, 40 turbines have been installed, which power 111 homes. The Alternative Energy Development Board (AEDB) has also acquired 18,000 acres for the installation of more wind turbines.

In addition to high wind speeds near major centres as well as the Gharo and Keti Bandar corridor, Pakistan is also very fortunate to have many rivers and lakes. Wind

turbines that are situated in or near water enjoy an uninterrupted flow of wind, which virtually guarantees that power will be available all the time. Within towns and cities, wind speeds can often change quickly due to the presence of buildings and other structures, which can damage wind turbines. In addition, many people do not wish for turbines to be sited near cities because of noise, though these problems are often exaggerated. Wind turbines make less noise than an office and people comfortably carry on conversations while standing near them.



*Pakistan's Zorlu Wind Farm*

Presently 5 wind turbine generator (WTG) projects each with 50 MW capacity are operating at Gharo - Jhimpir wind corridor. However, the 9 other WTG

projects which are in the phase of development will produce 450 MW.

Some of the plants are as follows:

- Jhimpir Wind Power Plant
- Fauji Foundation Wind energy I & II
- Three Gorges First Wind Farm
- Sapphire Wind Power Plant
- Tapal Wind Farm
- Metro Power Company Ltd.

### **WHY WIND AND SOLAR ENERGY**

They are an ideal renewable energy because:

- It is pollution-free,

infinitely sustainable form of energy

- It doesn't require fuel
- It doesn't create greenhouse gasses
- It doesn't produce



toxic or radioactive waste

- It meets electricity demands
- It increases generation capacity
- It gives clean and pollution free atmosphere
- Carbon credit
- It reduces power tariff

Wind energy is quiet and does not present any significant hazard to birds or other wildlife.

When large arrays of wind turbines are installed on farmland, only about 2% of the land area is required for the wind turbines. The rest is available for farming, livestock, and other uses. Landowners often receive payment for the use of their land, which enhances their income and increases the value of the land.

Ownership of wind turbine generators by individuals and the community allows

people to participate directly in the preservation of our environment.

Each megawatt-hour of electricity that is generated by wind energy helps to reduce 0.8 to 0.9 tons of greenhouse gas emissions that are produced by coal or diesel fuel generation each year. It would therefore be wise to utilize green energy to meet our power needs instead of relying on other energy sources.



## 27TH ANNUAL GENERAL MEETING OF SHEHRI-CBE



Shehri-CBE conducted its 27th Annual General Meeting (AGM) at its office on September 19, 2017.

Dr. Kaiser Bengali (Founder Member), Mr. Danish Azar Zuby (Founder Member), Mrs. Amber Alibhai (Executive Member), Mrs. Amra Javed (Executive Member), Mr. Mohammad Ali Rasheed (Executive Member), Mr. Khatib Ahmed, Mr. Syed A. Mateen, Mr. Khursheed Javed, Mr. Aijaz Nabi, Mrs. Saleka Enver, Mr. Maqsood Akbar, Mr. Muneer Ahmed, Mrs. Radia Khatib, Mr. Saeed Ahmed Sethar, Mrs. Syeda Naseem Bukhari, and Mr. Pervez Sadiq attended the AGM.

The introduction was given by Dr. Kaiser Bengali while the General Secretary Shehri-CBE Mrs. Amber Alibhai presented the Annual General Report (July 1, 2016 to June 30, 2017) to the members for analysis.

The AGR outlined the activities undertaken by Shehri during the reporting period as well as the audited statement of accounts.

Since it was the election year a new managing committee was elected for the term 2017-2019.

Total 25 votes were cast by secret balloting. Fifteen (15) votes were cast by the present General Body Members while ten (10) proxy votes were cast on behalf of absent members who submitted their proxy vote forms.

Chairperson, Vice Chairperson, General Secretary and Treasurer were elected unopposed while Mr. Danish Azar Zuby, Mrs. Saleka Enver and Mr. Mohammad Ali Rasheed secured 24, 23, and 22 votes respectively to assume the office of executive member for the current term.



### ELECTED MANAGING COMMITTEE (2017-2019)

1. Dr. Kaiser Bengali  
(Chairperson)
2. Mr. Sameer Hamid Dodhy  
(Vice Chairperson)
3. Mrs. Amber Alibhai  
(General Secretary)
4. Mrs. Amra Javed  
(Treasurer)
5. Mr. Mohammad Ali Rasheed  
(Member)
6. Mrs. Saleka Enver  
(Member)
7. Mr. Danish Azar Zuby  
(Member)





## WORKSHOP ON CLIMATE CHANGE - REDUCING CARBON FOOTPRINT THROUGH MASS TRANSIT SYSTEM IN THATTA, SINDH



A workshop on 'Reducing Carbon Footprint through Mass Transit System' was conducted by Shehri-Citizens for a Better Environment in collaboration with Friedrich Naumann Foundation Pakistan in Thatta, Sindh on October 8, 2017.

Senior Researcher Social Policy and Development Centre Manzoor Hussain Memon conducted the workshop which hosted 34 participants.

Measures to enhance resource efficient urban

growth were discussed such as the development of mass transit system to cut down carbon emissions by urban centers.



Emphasis was laid on ecological awareness of citizens to pressurize the government to adopt policies for mitigating the impact of climate change.

Thatta is one of the districts worst affected by climate change.

There is an intense need to develop climate friendly infrastructure to pacify environmental challenges.

Mass transit system will not only reduce economic burden of oil imports but also assist in reducing Greenhouse Gas emissions.



## KARACHI MILLION TREES CAMPAIGN



Governor of Sindh Mohammad Zubair and his wife Najma Zubair planted trees in the Governor House, Karachi to support the Karachi Million Trees Campaign.

Shehri-CBE was represented by Mrs. Amra Javed, Mrs. Saleka Enver and Mr. Farhan Anwar.





## 15TH IAF ALUMNI CONFERENCE, MURIDKE, PAKISTAN



15th IAF Alumni Conference themed on 'Democratic Values in the Digital Age' was organized by Friedrich Naumann Foundation Pakistan in Muridke during 27-29 October 2017.

Shehri-CBE was represented by Dr. Kaiser Bengali, Mr. Rehan Ashraf, Mr. Sarwar Khalid and Ms. Humna Mehwish.

Founder Member and Chairperson Shehri-CBE Dr. Kaiser Bengali was also requested to speak on "Free Market - Free People" as a panelist in the conference.

More than 40 alumni from all over Pakistan participated in the conference.



## NGO MEMBERS OF IUCN IN PAKISTAN PROPOSE PRIVATE/PUBLIC BODY TO MONITOR THE CONSERVATION AND ENVIRONMENTAL DEGRADATION IN THE COUNTRY



A meeting of the IUCN Pakistan Members' National Committee was held at its Country Office on October 24, 2017. The meeting was chaired by Mr. Amjad Rashid, CEO, Taraqee Foundation. The Pakistan Committee of IUCN Pakistan Members is composed of the Ministry of the Climate Change, Six Government Agencies and 35 Non-Governmental Organizations.

The Pakistan National Committee discussed a wide variety of issues which included a loss of biodiversity due to deforestation in the country; impact of the industrialization on the ecology, and impacts of the mega projects on environment. The NGO members unanimously agreed to form a body composed of the Public and Private organizations to act as a monitoring body to ascertain the environment based on the facts and figures and to interact with the concerned authorities to find effective solutions.

Some Members also opined about the need to closely work with Chinese and Pakistani governments on the CPEC corridor to ensure full implementation of the EIAs, creation of a green belt and



conservation of ecological systems along the corridor. Since the project has its own system in place, we only need to ensure that it works properly.

In the opening remarks, Mr. Mahmood Akhtar Cheema, Country Representative, IUCN Pakistan welcomed all the participants. He appreciated the role of IUCN Members and their contribution towards conservation of natural resources in the country. He said that Pakistan has the largest number of IUCN Members in Asia. He also lauded the role of Pakistan Navy in mangroves plantation and its protection along the coastal areas. Mr. Cheema also informed that IUCN is facilitating a process between Chinese and Pakistan governments at a policy level to ensure that the conservation

remains high on the agenda in this mega development process. He said that response from the higher level officials from both sides was very positive towards incorporating environmental concerns in the CPEC. He stressed on the need to promote public private partnerships to effectively contribute to achieve the sustainable development goals.

Mr. Amjad Rashid, Chairperson, Pakistan National Committee of the IUCN Members appreciated the role of IUCN Secretariat in bringing together the concerned organizations so as to discuss and debate on emerging environmental issues. He also stressed on the need to strengthening partnership with other member organizations in Asia for regional level initiatives to mitigate the impacts of Climate Change.



Mr. Malik Amin Aslam, IUCN global Vice President and Regional Councilor Asia briefed the Members on the global trends towards conservation and efforts for mitigating the impacts of Climate Change. He said that 2015 was an apex year in view of the Paris Climate Agreement, but the disaster struck when the US government walked out of the agreement. A few countries took a serious stance on Climate Change, of which two are worth mentioning i.e. Government of China and France. The Chinese government is spending trillions of dollars in the next 5 years. Their entire policy pattern has shifted which is based on the concept of Eco-civilization and its objectives are laid out very clearly. IUCN is involved with both China and France. France has started an initiative called Global Pact for the Environment. He mentioned that Mangroves for the Future Programme is highly admired at the world level as a model programme which needs to be replicated in the other regions of the world.

Mr. Naeem Ashraf Raja, Director Biodiversity, Ministry of Climate Change strongly proposed a Red List of species at the Country Level. He was of the view that by the time the specie is reported it already reaches to the next category of red listing. He

suggested that it is imperative to have a National Red List so that proper measures are taken at the right time.

Mr. Tahir Rashid, CEO of the South Punjab Forest Company made a detailed presentation on the potential of the commercial forestry in Southern Punjab. He said that under this programme local species of trees are being introduced. He further said that the project has a potential to turn a wasteland into a very productive forest that can contribute billions of rupees to the exchequer.

Ms. Meher Marker Noshirwani, Technical Advisor of Trust for Conservation of Coastal Resources made a presentation on IUCN Commission on Environmental, Economic and Social Policy activities. She focused on the realization of a human rights-based approach to conservation. She emphasized on exploring points of collaboration at the

regional level on gender issues and entry points into gender networks and international processes on women's issues.

The IUCN member organizations participated in the meeting included: Trust for Conservation of Coastal Resources; National Institute of Oceanography (NIO); SHEHRI-Citizens for a Better Environment; World Wide Fund for Nature (WWF)-Pakistan; South Asian Agriculture Conservation Network (SACAN) Foundation; Taraqee Foundation; Khwendo Kor; THARDEEP Rural Development Programme; Aga Khan Rural Development Programme (ARSP); HANDS; Participatory Village Development Programme (PVDP); Sindh Forest and Wildlife Department; Ministry of Climate Change; Baanhn Beli; Indus Earth Trust Strengthening Participatory Organization (SPO); SUNGI Development Foundation; and Sindh Coastal Development Authority.



## WORKSHOP ON RIGHT TO INFORMATION - MIRPURKHAS, SINDH



Shehri-Citizens for a Better Environment organized a workshop in collaboration with Friedrich Naumann Foundation Pakistan on Right to Information on September 16, 2017 at Bisma Inn, Mirpurkhas, Sindh.

Right to information is a constitutional right granted to the citizens of Pakistan under Article 19-A.

Sindh Governor Mohammad Zubair recently signed the latest 'Sindh Transparency and Right to Information Bill 2016' into an act on April 10, 2017.

On March 13, 2017 the Sindh Assembly had unanimously



passed the Sindh Transparency and Right to Information Bill - 2016 that promises a proper mechanism with defined timelines for citizens to get

information related to any public authority in the province. The law proposes a system of penal action against an official withholding or obstructing the due release of such information.

The RTI training was conducted by Advocate Sarwar Khalid who helped the participants understand the use and advantages of the RTI law. 30 citizens attended this training.

Certificates were awarded to the attendees by the General Secretary District Bar Association Mirpurkhas Mumtaz Jarwar.





# CIVIC HACKATHON - MAKING KARACHI A LIVABLE CITY!!



A two-day Civic Hackathon Session was held on October 21/22, 2017 - at the Alumni Students Center, IBA Main Campus to brainstorm on some critical civic issues facing Karachi and to strategize how through use of mobile applications, the city residents and the civic agencies of Karachi can better contribute, by themselves, or in collaboration with each other to make Karachi a more livable city. This activity was part of the project - Empowered Citizens for Improved Governance. This project has been funded by the American people through the United States Agency for International Development under the Small Grants and Ambassadors Fund Program.

In this session, ten (10) groups of students belonging to Karachi's leading higher education institutions, developed mobile applications that would facilitate a more pro-active role of citizens and greater positive connectivity with the service providers in the following areas of urban governance:-

- Public Spaces and Recreation
- Solid Waste Management



- Health
- Education

The session was facilitated by a team of 'Mentors' who were experts in the Civic Hackathon thematic areas and assisted the student teams in understanding each sector and developing their mobile applications.

The staff of Shehri-Citizens for a Better Environment and technical staff of Vortechs Innovations were present

throughout the proceedings of the two days to assist the participating teams. Of the prepared applications three winners (Team The Gardeners, Team Teddict and Team Public Spaces) as judged by Shehri-Citizens for a Better Environment's appointed panel, were awarded prizes.

These mobile applications will now be placed on Play Store for free access and downloading by those interested.





## SOLUTIONS TO PREVENT URBAN FLOODING



The recent rash of torrential rainstorms across Pakistan and indeed around the world has cast a bright spotlight on the serious problem of intensified flooding events. The injuries, fatalities, damage to homes and businesses, and the entire municipal infrastructure, are devastating. And given the reality of climate change, these flooding disasters will escalate unless we take some proactive measures to mitigate the problem. Here are some initiatives we can undertake to prevent urban flooding from wrecking our homes and infrastructure:

### GREEN ROOFS/ROOFTOP GARDENS

Green roofs (roofs that are covered with vegetation), by their very nature, absorb rainwater and help to mitigate flooding. They have become very popular across Europe. The benefits, as they relate to water, are straightforward: for the building owner, it's a storm water management tool; for the community, it reduces storm water runoff; and for the environment, it prevents combined sewer overflow, neutralizes the acid rain effect and removes nitrogen pollution from the rainwater.





**CREATE FLOOD PLAINS AND OVERFLOW AREAS FOR RIVERS**

There was a time when floodplains covered large stretches along the rivers. Today, because of urban sprawl, less than half remain. There is a need to restore these floodplains because of their significant role in flood protection, water management and nature conservation. Essentially, what floodplains do is retain and absorb water, thereby shielding nearby cities from the effects of heavy rainfall. Cities like Karachi need to get rid of encroachments along the river banks and nullahs as well as clean the area of solid waste.

**SEPARATING RAINWATER FROM THE SEWAGE SYSTEM**

To improve water management and protect the sewage system from damage, cities are beginning to revamp their underground pipe and drainage systems - by separating rainwater from the sewage system. The already overloaded sewage system of Karachi cannot withstand rainwater causing it to overflow each time. Separation of the two systems will prevent any such overflows in the city.

**SUSTAINABLE DRAINAGE: PERMEABLE PAVEMENT, SIDEWALKS AND GARDENS**

In some urban areas, green space is considered a luxury. On the ground and on rooftops, there is so much concrete. Concrete is not permeable. It does not absorb rainwater. It blocks it and redirects it to the drainage systems which, in turn, often become clogged and then the water overflows into the streets and sidewalks. The concept of sustainable drainage makes perfect sense. As part of environmental initiatives that are underway across the globe, the recommendation is that impermeable surfaces be replaced with permeable materials such as grass and gardens. This will allow the rainwater to drain into the soil. The process, known as infiltration, also serves to sustain the plant life.





**STOP USING PLASTIC**

Plastic is non-Biodegradable. The bags that we use often end up in the sewage drains clogging it and causing overflow. By choosing bio-degradable bags like cloth and paper, we can not only prevent sewerage overflows but also protect our environment from this nasty material.

**TAKE ACTION!**

We can't just leave it up to the government, municipalities, environmentalists or urban planners to put an infrastructure in place to prevent urban flooding. We - each of us - must make it our personal responsibility to adapt to climate change. Whether it's collecting rainwater or building a garden on top of our roofs, it's imperative that we take the steps necessary to be part of the rainwater management solution.





## SHEHRI IN ACTION



## SHEHRI HELP DESK

Our citizen helpline became active in 1995 when SHEHRI-CBE and members decided to provide rights based information to the complainants that approached the organization for assistance. It is now an integral part of our system.

We are proud of our unique initiative to benefit the society. You can call us for help on **34530646**

88-R, Block-2, P.E.C.H.S., Karachi-75400, Fax : 021-34530646, Email : [info@shehri.org](mailto:info@shehri.org)

Website : [www.shehri.org](http://www.shehri.org), Facebook : [www.facebook.com/shehri.citizens](https://www.facebook.com/shehri.citizens), twitter : @shehricbe

# SHEHRI - CITIZENS FOR A BETTER ENVIRONMENT



## INTRODUCTION

Shehri- CBE is a Karachi-based voluntary advocacy group established by concerned citizens in 1988 to project their apprehensions about the deterioration of the built and natural environment.

There is a special emphasis on tackling illegal construction and zoning violations, and their related symptoms, e.g., drainage, encroachments, parking and infrastructure. Shehri monitors the regulatory bodies and government agencies and encourages civil society to do the same.

### SUCSESSES

Passing of Sindh Senior Citizens Welfare Bill 2014 Demolition of Glass Towers illegal encroachment on the notified road-widening of Clifton Road.

Saving of 480-acre Gutter Baghicha Park on Manghopir Road. This is the largest open recreational space in a low income congested area of Lyari-inhabited by approximately one million people.

Saving of 62-acre Kidney hill Park in Karachi Cooperative Housing Society Union inclusive of 18-acre notified KWSB installations.

Establishment of the Oversee Committee of the KBCA and a

Public Information Counter.

Halting commercialization and sale of 11 KTC and 15 SRTC bus-depot plots in Karachi and Sindh. Today these plots are to be used by the CDGK for intercity bus terminals and other related transportation activity.

Saving (Makro) webb Ground playfield in Lines Area, Karachi.

Demolition of apartment structure Costa Linina in amenity Bagh-e-Ibne-Qasim, Clifton. CDGK has now developed it as a park.

Preventing commercialization of Doongi Ground park / playfield in Lahore.

Reducing, as part of Lahore Bachhao Tehrik, the amount of damage from Canal Bank Widening Project.

Reaffirmation of seismic building code in Quetta.

Training 1600 (Approx) police officers all over Pakistan on participatory citizen-police interaction, human rights violations and police reforms.

Over the years, Shehri's expertise has been recognized by superior courts and it has been called as amicus curiae (friend of the court) in cases dealing with built environment violations.

### OBJECTIVES

Establishment of an aware and pro-active civil society, good governance, transparency and rule of law.

Promotion of research, documentation, dialogue with and influence of public policies.

Setting up an effective and representative local government system.

Preparation of a representative Master Plan / Zoning plan for Karachi city and effective implementation of the same.

Observance of basic human rights in society.

### HOW IS SHEHRI RUN?

A volunteer Managing Committee, duly elected by the General Body for a term of two years, thereby functioning in an open and democratic manner. Membership is open to all who subscribe to its objectives and memorandum.

### SHEHRI needs Volunteers

to work in the following areas:

- Legal Affair
- Media and Outreach
- Million Trees Campaign
- Conservation and Heritage
- Fund Raising
- Gun Free Society

Name: \_\_\_\_\_

Occupation: \_\_\_\_\_

Address: \_\_\_\_\_

Contact No.: \_\_\_\_\_

E-mail: \_\_\_\_\_

### JOIN SHEHRI

#### To Create a Better Environment

Submit A Cross Cheque of PKR 2000/= in favor of Shehri-CBE Along with 2 passport size photos to become a member

Address: 88-R, Block-2, P.E.C.H.S., Karachi-75400.  
Tel / Fax : 021-3453-0646

### SHEHRI MEMBERSHIP

Don't forget to renew your membership for 2018 (Rs. 2000/=)

Join Shehri and play your role as a good citizen to make this city a clean, healthy and environmentally friendly place to live in!