

29.05.2020

THE RURAL TREND AND THE CITY

Hagar Abiri, and The City Project

Beginning of March 2020, the World Health Organization declared the COVID19 pandemic. By then, some countries in Asia already closed their borders and some declared quarantine with time, other countries adopted the social remoteness method to slow the spread of the virus, which seems to be the only act that prevents the virus from spreading with no vaccine or a cure in the horizon.

Meanwhile, the discussion on the qualities of the rural vs the density of the city gain momentum.

People living in the country side posted photos of themselves enjoying the sun while millions were quarantined in their mid- city apartment. Developers and architects are hunting for plots outside the city in order to be ready to answer the demand of rural migration.

Now, let's have our facts straight first. As for today, May 11th 2020, there are about 283,520 death cases from the COVID 19¹ at the same time, the number of people suffering from ecological related issue may indicate that the main problem still lies with environmental changes and inadequate response from humanity that still proves to be the worst virus exist in this world. Viruses are only a symptom, it is an alarm we are trying to hit the snooze on.

Starting January 1st 2020 until end of May 2020²:

About 4,578,900 people died of hunger and about 843,350,000 are undernourished.

About 344,775 people died by water related diseases and about 800,764,250 has no access to safe drinking water source.

About 3,362,520 people died from cancer.

Only this year, we lost about 2,130,000 forests hectares and created about 14,802,200,000 tons (grows by the second!) of CO² emissions.

On December 2015, 195 countries agreed to set a goal of limiting warming to 2 °C, increase in global average temperatures, with ambitions of a stricter limit of 1.5°C of warming in order to avoid hitting a devastating expected pic in 2030 if we continue with the world's present routine.

For those who are still convinced that going rural is an answer, let's go through some more numbers and imagine how it might look like if there were no cities: The total land surface of earth is about 149,000,000 km². Only 71% is habitable, which leaves us with 104,000,000 km². Currently there are about 7,800,000,000 people on the planet. Take into account that 50% of the habitable land today is used for agriculture (77% livestock, 23% crops) and keep in mind the public areas such as hospital, shops and sports facilities. Now imaging that not

¹ Morgen Post

² www.worldometers.info

only you are left with very little piece of land but you are also surrounded by private lands so really nowhere to go. Doesn't make much sense, right?

Simply put, the biggest challenge and goals are still the same and the COVID 19 is here to remind us that time is up and that we must reduce significantly the human foot print in a productive, lifestyle- changing, healthy manner.

IMPACT

Cities, due to their size and economic value has greater impact. Cities has long tradition of generation and leading progressive social changes. If you live in the city, you have greater chances to find more people who share your political/ social views and gather them together to act, rather than in rural area where you have less people, less diversity, less random meetings and ideas exchange. Random meetings much as diversity is a fundamental element on which creativity and innovation rely on.

According to the McKinsey foundation³, top 100 cities will contribute over 35% of GDP by 2025 and 600 top cities will generate 60%. A city due to its big scale however not too complicated bureaucracy as on a government scale has the ability to effectively promote new reality.

Rural life has its advantages. However, it is not outweighing the benefits of living in the densified city on the private as well as social and environmental aspects. Better way to go will be to bring the qualities of rural life- into the city.

Researches shows that physical and mental health issues associated with depression are much more common in the rural areas⁴ than in the city. Obesity, consumption of psychiatric drugs in children, alcoholism, painkiller addiction and crimes within the family. Jane Jacobs also explains⁵ that in city street life, the people you meet during your daily routine keeps you uplifted and make you feel safe. Therefore, claims Professor Kevin M. Leyden- happier.

A study conducted in 2016 in the Netherlands⁶, examined the antidepressant prescription rates in the city and in the rural corresponding to variant green environment density. The research shows that rural areas with low and mid-level prescription rates have significantly more green space than urban areas as well as more antidepressant prescription.

A study conducted in 2017 by researches from Oxford and the university of Hong Kong⁷ studding the health of 419,562 people from 22 cities in England, relates happiness to higher-

³ Urban world: Mapping the economic power of cities

⁴ Professor Kevin M. Leyden in an interview to Glocs 13.12.2015

⁵ The Death and Life of Great American Cities

⁶ "More green space is related to less antidepressant prescription rates in the Netherlands: A Bayesian geoadditive quantile regression approach" Marco Helbich, Nadja Klein, Hannah Roberts, Paulien Hagedoorn, Peter P. Groenewegen

⁷ "Association between adiposity outcomes and residential density: a full-data, cross-sectional analysis of 419 562 UK Biobank adult participants" Dr.Chinmoy Sarkar PhD, Prof.Chris Webster DSc, Prof.John Gallacher PhD

density areas and the fact that people who live in dense- urban areas are often kept busier with wide range of leisure activities that are more available in the city.

MAKING THE CITY GREAT

So, what should we focus on? Improving the city. Adjusting it to the present and preparing it to the future.

If there is something we learned from the COVID 19 is that nature does not need us and maybe even had enough of us. More and more people understands that the livestock industry is not only immoral but very dangerous. Bird flu, swine flu, HIV, Corona and others, are all the result of extreme human intervention. Growing vegetables and fruits also damages the soil that is cultivated until the loss of all its biological qualities another disturbing fact is that 50% of the vegetables growing in Europe do not make it to the plate. 20% do not even make it to the market's shelf⁸. However, crops provide more global calories and protein while using less habitable land and not yet caused any pandemic. 50% of habitable land is being used for agriculture⁹ and only 23% of it is crops but provides about 82% of global calories and supply more than 60% of the protein. The point is- investing more in clever crop growth and less in livestock will be more effective and healthy. The main problems we are dealing with when it comes to crop are soil (biological) damage, distribution process from the field all the way to the plate which adds up to pollution and waste originated in packaging.

The idea of integrating greenery in buildings is not new and there is ancient evidence describing the mythical Babylon as a palace inlaid with vegetation. However today, we have the technology to deal with the technical challenges it takes to grow urban vertical gardens, urban farms and as well as gardens on top of building's roof tops and facades.

On the financial side, modifying existing buildings can reach high costs but other than sharing the costs with other shareholders in the building, there are also benefits that translate into costs saving while improving life quality.

Thermal energy saving. In both, summer and winter a green roof/ façade adds a protection layer that translate into heating/ cooling costs saving. In winter, the green layer traps air against the façade and so, reducing heat loss up to 30%¹⁰. In summer, green wall shading the façade could reduce up to 10 Celsius degrees!

Well shaded green roof translates into 3- 7-degree temperature drop leading to cost saving of up to 42%¹¹.

⁸ Forbs article: UN Says Europe Wastes 50% Of Fruit And Vegetables -- And America Isn't Much Better

⁹ EU Food & Agriculture Organization (FAO)

¹⁰ *The Effect of Green Facades in Landscape Ecology*. Ebtasam M.Elgezawy, Ph.D Faculty of Fine Arts, HELWAN University Cairo.

¹¹ *Greenroofs benefits outweigh costs, even in desert environment*. Steve Clemens/ United Business Institutes

Better air quality indoor. Green facades can filter the indoor air by capturing dust and pollen from the outdoors as well as filter noxious gases and volatile organic compounds from furniture.

Better air quality outdoor. Green façade can capture airborne pollutants and filter noxious gases and particulate matter. study shows that about 1 square feet of vegetated wall can filter the air of about 100 square feet office. One average tree, is estimated to absorb about 48 pounds of CO² per year and release just about enough oxygen to support two people.

Noise protection (when installed on the facade). Green walls provide noise reduction of up to 40 decibels.

Greenery attracts and nurture birds and insects and not less important- we see more green and biological diversity in the city. Green roofs can assist with water management, reduce the erosion and filter the pollutants and toxic metals.

Going back the public benefits, city- human- environment. Roofs are about 40-50% of the city's surface. Between 60-70% of greenhouse gas emission originated in indoor energy consumption therefor, the city and the environment will benefit from having green roofs and green facades as described above.

Another rural element we could migrate widely into the city now that we see all the unused- full of potential spaces, is vertical/urban food farms. Buildings facades will be covered with vegetation and greenhouses will populate the private and public roof tops inside the city and so, the journey that food travel before it ends up on your plate will be shorten. No logistics and no packages needed. The best part in having urban farms in public or semipublic spaces is that it creates and nurture healthy community life.

So, let's stick to the city, focuses on making the city even greater to the benefit of our health and lifestyle as individuals and as society because the answer can't be weakening rural's nature habitat with human toxic presence. The answer should be wider and beneficial for the environment in which we are part of.

///// The article was written as part of an ongoing open-source research project **and the city** @andthecityproject