1. What challenges did urban India face during COVID-19? Discuss. What has been the overall efficacy of the response? Critically examine.

Approach Student can discuss the issues urban population faced during the lockdown, with the help of some examples efficacy of response can be stated. In the conclusion way forward can be given to avoid such crisis in future.

Introduction

The state of our cities has been a matter of concern for decades. Be it air quality and unsafe drinking water, or now, the virus, the precarious nature of urban living has never been more pronounced. Covid pandemic has compelled us to think of new policy formulations our urban spaces.

Body

What challenges urban India faced during the pandemic?

- The growth of large cities can be attributed to their role as economic engines in a rapidly globalising world. Urban development programmes such as the Jawaharlal Nehru National Urban Renewal Mission (2005-2014) allocated the bulk of funds to large cities (70 per cent to large cities and 30 per cent to smaller towns).
- One of the most important problem we encountered is that the overburdened cities and containment. The congestion that plagues large cities has turned out to be their worst enemy during this crisis.
- This congestion is most evident in slums in large cities and poses a grave health and environmental challenge. The risk of contagious diseases is more potent in these areas as residents also suffer from a lack of basic services such as safe drinking water and sanitation.
- To ask them to navigate congestion and practise social distancing seems most ironic. It is no surprise then that many slums in Mumbai and Delhi have become COVID-19 containment zones.
- The health systems in megacities like Delhi and Mumbai are also overburdened and face a shortage of hospital staff and beds. Class I cities (more than a lakh population) have 1.4 beds per 1,000 people. Delhi has 1.5 beds per 1,000 people whereas Mumbai has one bed per 1,000 people.
- However, the urban support under the National Health Mission is just three per cent of the total allocation, while 97 per cent of the funds are set aside for rural areas.
- While the Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) provides employment opportunities to rural households, there is no equivalent scheme for the poor in urban areas.
- The state of our cities has been a matter of concern for decades. Be it air quality and unsafe drinking water, or now, the virus, the precarious nature of urban living has never been more pronounced.

 Small towns that are urban in nature but rural in character are the most neglected in the current policy environment. They are forced to exist with poorer services and policy neglect while having to meet the demands of a large population.

What has been the response to this challenge?

- India focused on saving lives and livelihoods by its willingness to take shortterm pain for long-term gain, at the onset of the COVID-19 pandemic.
- Response stemmed from the humane principle that: Human lives lost cannot be brought back GDP growth will recover from the temporary shock caused by the pandemic
- An early, intense lockdown provided a win-win strategy to save lives, and preserve livelihoods via economic recovery in the medium to long-term.
- But the health infrastructure of the urban spaces, which was already abysmal was upgraded to face the challenge of increasing cases. Lockdown created a massive unemployment crisis in urban areas, which was poorly handled.
- The labour migration and their struggles to reach their hometown will haunt our memory in years to come. The migrant crisis could have been handled in more sophisticated manner with more number of trains and mode of transportation available instantly.
- Testing and isolation infrastructure was ramped up with an effective pace, but the testing facility could achieve its potential only after the four months after the lockdown.
- Containment of infections in some areas like Dharavi in Mumbai presents us an example of what efficient surveillance and strict social distancing can achieve. After 3 weeks on intense lockdown, zero case was reported from dharavi.
- Healthcare infrastructure from ventilators to extra beds were made available with an average speed in urban areas. Pandemic exposed the fragile condition of our urban healthcare facilities.
- Response to the pandemic has affected millions of people being exposed to unemployment, chronic poverty, malnutrition and crisis of food security. Urban areas failed to take the adequate measures in this aspect.

Conclusion

Covid-19 pandemic worsened already deteriorating unemployment situation in urban areas. Absence of employment guarantee schemes left daily wage labourers helpless and were compelled to migrate. Policy response was ill prepared but the resilient economy has started to show some good signs of v shaped recovery. Economic incentives will make an impact but we need to ramp up our healthcare system with lightning speed to avoid such a suffering of vulnerable.

2. Discuss the merits of mass rapid transit (MRT) systems? How is the current status of development of MRTs in Indian urban centres? Comment.

Approach:

Question is asking you to comment therefore it is important to pick out the main points/core and give one's opinion based on the information or the arguments originated from the reading.

Introduction:

MASS rapid transit (MRT) system is a rail system which is used for transporting passengers in urban areas. It is known by various other names such as mass transit, subway, underground railway or metro. The main characteristic of an MRT system is the ability to carry large numbers of people efficiently and forms the backbone of a city's public transport system together with other rail-based modes such as the light rail transit (LRT) systems, trams, monorails and commuter trains.

Body:

THE MERITS OF MASS RAPID TRANSIT (MRT) SYSTEMS

- Mass transit may be based on fixed route system such as subway trains, metros or non-fixed route system such as buses. It is potentially more economical, eco-friendly and less time consuming.
- In addition, it is the most competent way of reducing the ever-growing traffic congestion of the developing city.
- Mass transit also has the advantage of smaller rights of way and developing lesser amount of infrastructure required for highways and roads.
- Mass transit system is believed to be more environmentally friendly than other public transport facilities. Private vehicles emit about twice as much carbon monoxide and other volatile organic compounds than public vehicles.
- Mass Rapid Transit plays an important role in alleviating poverty or increasing the standard of living of the poor. It is the poorest people who most depend upon public transit for access to jobs and services.
- Mass transit development can both improve the usefulness and efficiency of the public transit system as well as result in increased business for commercial developments and thus serves to improve the economy of the country.
- Transit systems also have an indirect positive effect on other businesses. Mass transit systems offer considerable savings in labour, materials, and energy over private transit systems.
- Also, mass transit allows a higher amount of load to be transported to far away destinations in lesser time because of its reasonable capacity than private vehicles. Because of their larger capacity offering them to carry highly efficient engines they also help in saving fuels.

• The main idea behind mass transit is to reduce the number of vehicles on the road by providing a larger facility which carries higher number of passengers thus eliminating congestion.

THE CURRENT STATUS OF DEVELOPMENT OF MRTS IN INDIAN URBAN CENTRES

- An efficient urban transport is also critical for raising economic productivity and consequently making Indian enterprise competitive. Admittedly, Mass Rapid Transportation systems (MRTS) is one of the modes of urban mobility, its importance, especially when cities are seen as a growth node of an economic region rises significantly as inclusive growth is determined not only by the state of transport system within a city limit, but its connectivity to its periphery, rather is entire zone of influence. A clear appreciation of the urban context in India at this stage of her development has the potential to inform our decision on prioritizing investment towards MRTS, a sector which is underinvested.
- For inclusive and environmentally sustainable growth process, an efficient urban transport system including Mass Rapid Transportation System (MRTS) is vital. By and large, MRTS segment, like the entire urban transport sector remains hopelessly under-invested which is imposing a huge social cost on this country. However, such basic realizations are often lost in nitty-gritty of project details, apparent lack of finances and consequently, inability to roll out project. This is all the more ironic as India's Public-Private Partnership (PPP) regime, anchored by Department of Economic Affairs, especially its arrangement to offer up to 40 per cent of viability Grant Funding is perhaps one of the most nuanced regulatory and enabling frameworks to attract private investment in the world.
- The private sector on its part needs to show its willingness to invest. While there can be many innovative methods of raising finances, public authorities in India, especially in larger cities have a unique opportunity to generate revenue for infrastructure through land-based instruments, especially by commercially utilizing inefficiently used or vacant land in the heart of city. Value capture where the laying down of a trunk infrastructure has given rise to an enhancement of value of real estate around it is another important channel for getting finances.

The deteriorating environmental condition in larger Indian cities is another concern which needs to be brought centre stage. While much attention has been devoted to emerging technologies like hyperloop, pods etc., it is raising the share of electric mobility exponentially which is of great relevance. While one increasingly speaks of electric mobility, however, the attention generally remains confined to either hybrid or electric car and with occasional reference to electric buses. Rail based MRTS systems, including sub-urban rails, like elsewhere in the worlds should be accorded focus in the emerging agenda of electric mobility.

Conclusion:

With rapid urbanization, the pressure is mounting on the public transport system from the people living in cities and towns across the country. Mass Rapid Transport System, MRTS has emerged as one of the most effective means of mobility for the citizens in tier-1 and tier-2 cities and Metro has been a major player. Metro Projects have not only added to connectivity, it has reduced the travel time and hence enhanced the ease of living substantially in the urban areas. It has also led to creation of direct and indirect employment opportunities. It is expected that with the expansion of Metros in the cities, local and intercity travel will be easier, mobility and connectivity will be enhanced giving a fillip to local business as well.



3. Examine the severity of the issue of urban solid waste disposal in India. What strategies would you suggest to address it? Discuss.

Approach

The student is expected to write the impact of social structure and social hierarchy on the poverty. It is a very simple forward question and the student is expected to give examples in Indian context.

Introduction:

Waste management rules in India are based on the principles of "sustainable development", "precaution" and "polluter pays". These principles mandate municipalities and commercial establishments to act in an environmentally accountable and responsible manner—restoring balance, if their actions disrupt it. With rapid urbanisation, the country is facing massive waste management challenge. Over 377 million urban people live in 7,935 towns and cities and generate 62 million tonnes of municipal solid waste per annum. Only 43 million tonnes (MT) of the waste is collected, 11.9 MT is treated and 31 MT is dumped in landfill sites. Solid Waste Management (SWM) is one among the basic essential services provided by municipal authorities in the country to keep urban centres clean. However, almost all municipal authorities deposit solid waste at a dumpyard within or outside the city haphazardly. India is following a flawed system of waste disposal and management.

Body:

- The key to efficient waste management is to ensure proper segregation of waste at source and to ensure that the waste goes through different streams of recycling and resource recovery. Then reduced final residue is then deposited scientifically in sanitary landfills. Sanitary landfills are the ultimate means of disposal for unutilised municipal solid waste from waste processing facilities and other types of inorganic waste that cannot be reused or recycled. Major limitation of this method is the costly transportation of MSW to far away landfill sites.
- More than three-fourth of solid waste management budget is allotted to collection and transportation, leaving leaves very little for processing or resource recovery and disposal.
- In some urban centres, people working in the informal sector collect solid waste for each doorstep to get a collection fee and derive additional income from sale of recyclables. The informal recycling industry plays a major role in waste management. It also ensures that less waste reaches landfills.
- There has been technological advancement for processing, treatment and disposal
 of solid waste. Energy-from-waste is a crucial element of SWM because it reduces
 the volume of waste from disposal also helps in converting the waste into
 renewable energy and organic manure. Ideally, it falls in the flow chart after
 segregation, collection, recycling and before getting to the land fill. But many
 waste to energy plants in India are not operating to their full potential.

Bio-medical waste (management and handling) rules, 1998 prescribe that there should be a Common Biomedical Waste Treatment Facility (CBWTF) at every 150 kms in the country. CBWTFs have been set up and are functioning in cities and towns. However, establishment of functional CBWTF throughout the country must be ensured. Integrated common hazardous waste management facilities combine secured landfill facility, solidification/stabilisation and incineration to treat hazardous wastes generated by various industrial units. They contribute about 97.8 per cent of total landfill waste and 88 per cent of total incinerable hazardous waste generated in the country, as per an environment ministry report.

Strategies to resolve the issues:

- Bio-methanation is a solution for processing biodegradable waste which is also remains underexploited. It is believed that if we segregate biodegradable waste from the rest, it could reduce the challenges by half. E-waste components contain toxic materials and are non-biodegradable which present both occupational and environmental health threats including toxic smoke from recycling processes and leaching from e-waste in landfill into local water tables.
- Installation of waste-to-compost and bio-methanation plants would reduce the load of landfill sites. The biodegradable component of India's solid waste is currently estimated at a little over 50 per cent.
- Characterization of waste at collection and also at disposal point should be made and be available in public domain. Government should take initiative to encourage Universities, technical Institution to take up waste management in its curriculum. Assistance of academic institutions should be solicited in characterization of waste in their vicinity. Thereby most part of India would be covered and location-specific appropriate solutions for waste management can be developed. It can also help to select suitable waste-to-energy technologies for particular regions.
- The waste should be treated as resource and formal recycling sector/industries be developed to recycle non-biodegradable recyclable component from the waste thereby providing employment to rag-pickers and absorb them in mainstream. Also a policy, fiscal intensive and development of quality standard for reuse and recycle of C&D waste be developed and notified so that producers dispose/reuse it as per guidelines, thereby reducing burden on landfill.
- Manufacturing of non-recyclable polyethylene bags should be banned or research should be initiated to develop biodegradable polyethylene.
- In most parts of India, sweeper and rag-pickers are still considered inferior class of citizens despite several laws in place to bring dignity to their profession. To change people's views and perspective, awareness regarding this important service to community should be initiated and manpower engaged in such activities should be named as Green brigade/Crew, and so on.
- Though, in India, prevailing MSWR does not permit leachate/water/liquid addition in landfill, biodegradable waste gets mixed again during transportation and finally disposed in landfill. Therefore, practices of leachate/liquid recirculation in landfill should be encouraged to enhance waste stabilization and gas recovery as

practiced in developed countries. Modification and provision for it should be made in MSWR accordingly.

 The community should pay to augment inadequate resources for MSWM of municipal bodies. Community participation in SWM is the key to sustain a project related to management of solid waste. Till date no such tax has been levied for SWM.

Conclusion:

Around 100 cities are set to be developed as smart cities. Civic bodies have to redraw long term vision in solid waste management and rework their strategies as per changing lifestyles. They should reinvent garbage management in cities so that we can process waste and not landfill it (with adequate provisioning in processing and recycling). To do this, households and institutions must segregate their waste at source so that it could be managed as a resource. The Centre aims to do away with landfill sites in 20 major cities. There is no spare land for dumping garbage, the existing ones are in a critical state. It is reported that almost 80 per cent of the waste at Delhi landfill sites could be recycled provided civic bodies start allowing ragpickers to segregate waste at source and recycle it. Compost pits should be constructed in every locality to process organic waste. Community participation has a direct bearing on efficient waste management. Recovery of e-waste is abysmally low, we need to encourage recycling of e-waste on a very large scale level so that problem of e-waste disposal is contained.

4. What are your views on the problem of housing in urban India? What are the government measures for affordable housing? Examine.

Approach

The candidate needs to address the question in two parts where the first part should give your views with regards to problem of housing in urban India while the second part should examine the government's measures for affordable housing.

Introduction

By 2050, 900 million people will be added to Indian cities. The rapid pace of urbanisation owing to the rural–urban migration is putting a strain on the urban infrastructure in these cities. As urban development takes place, a growing concern for India's urban planners is the massive urban housing shortage plaguing the country.

Body

- Housing remains the biggest driver of economic growth in urban areas, with strong forward and backward linkages where increasing the supply and quality of housing has a multiplier effect on the economy by boosting the primary sector, manufacturing sector and the service sector.
- Adequate shelter and housing amenities are crucial to ensure a dignified life with physical, psychological, social and economic security for the people of a country and to raise their standard of living.
- The importance of housing and basic amenities has been internationally recognized by the United Nations, since the Universal Declaration of Human Rights in 1948, and in Sustainable Development Goals (MDGs). In this regard, the problem of housing in India can be understood from following points –
- 1. According to recent research, India's urban housing shortage has risen 54 per cent to 29 million in 2018 from 18.78 million in 2012, based on the number of physically inadequately housed households. Growing concentration of people in urban areas has resulted in an increase in the number of people living in slums and squatter settlements.
- 2. Scarcity of land: The high population density, rapid urbanization, and poorly conceived regulations have created shortage in land parcels capable of development. This is exacerbated by excessive controls over central districts of cities and difficulties in land recycling, which results in a push toward the periphery.
- 3. Income based shortage: There is 40.6 per cent urban household shortage in below poverty line (BPL) households, 56.8 per cent in non-BPL EWS households whose monthly income is Rs 25,000 or less. This clearly shows the disproportionate impact of housing shortage on vulnerable sections of urban population.

- 4. Titling issues: As of now, India lacks a robust system to protect land rights. There are two aspects to land title: first, a formal recognition of property rights by the state through a system of titles; and second, facilitation by the state, of efficient trade in rights, through a process of registration. Both of these elements exist in India, but in incomplete form.
- 5. Banks and traditional housing finance companies are averse to providing credit to low-income customers who do not possess reliable income documentation. Such customers are deemed to be high-risk and poor-quality credit assets. Slum dwellers, mostly being informally employed, find it hard to obtain housing loans from such financial institutions.
- 6. Further, high land costs, archaic building bye laws, stringent licensing norms, delay in project approval and unfavourable banking policies made low cost housing projects uneconomical for private developers. This has aggravated the housing crisis in urban areas.
- 7. Urban India has a severe shortage of housing, yet Indian cities have many vacant houses. According to the census of India 2011, out of the 90 million residential census units, 11 million units are vacant; that is about 12% of the total urban housing stock consists of vacant houses.
- 8. Furthermore, only 10 Indian States contribute to three-fourths of the urban housing shortage. By providing affordable housing, the real estate sector can play a pivotal role in urban development of these states as well as the country.

Considering these factors, 'Affordable Housing' can be said to be an idea whose time has come, where affordable housing refers to housing units that are affordable for those with income below the average household income. In India, affordable housing is provided for low income people, middle income people and economically weaker sections. Here, governmental measures for affordable housing include –

- As a beginning, the National Urban Housing and Habitat Policy (NUHHP), 2007 has set the objective of Affordable Housing for All as a key focus. Later, the government has set 2022 as the target year to realize this objective by making specific initiatives for the promotion of housing.
- Two components under Pradhan Mantri Awas Yojana the PMAY (Urban) and PMAY (Rural) were launched by the government for achieving housing for all by 2022. For the urban poor, the government target is to construct 20 million houses by March 31, 2022 under Pradhan Mantri Awas Yojana-Urban that was launched in June 2015.
- The scheme gives financial assistance to States/Union Territories (UTs) in to support housing requirements of three identified income categories: Economically Weaker Sections (EWS), Lower Income Group (LIG) and Middle-Income Group (MIG) in urban areas.
- Affordable Housing in Partnership (AHP): Under this, the Government of India will provide central assistance of rupees 1.5 lakh per EWS house in those projects where, at least, 35% of the houses are for the economically weaker section category, and a single project consists of at least 250 houses.
- Other measures:

- 1. Recent Budget has proposed tax exemption for notified affordable housing for migrant workers.
- 2. Revised the qualifying criteria for affordable housing from saleable area to the carpet area.
- 3. Granted infrastructure status to affordable housing- Infrastructural status will help affordable housing developers to avail funds from different channels, like external commercial borrowings (ECB), foreign venture capital investors (FVCI) and foreign portfolio investors (FPIs).
- 4. Increased the time for project completion to affordable housing promoters from earlier three years to five years.
- 5. Enhanced the refinancing facility by National Housing Bank (NHB) for individual loans for the affordable housing segment.

Conclusion

In creating a strong, sustainable and vibrant urban space in 'New India' where every household has a well-sheltered existence, concentrated efforts in the identified areas will definitely catalyse the housing situation in India. This transition will also contribute towards achieving the Sustainable Development Goals (SDGs) as laid out by the United Nations (UN), the New Urban Agenda and the Paris Climate Accord to which India is a signatory and other such international commitments.



5. Should a city like New Delhi bid for hosting the Olympics? Discuss the pros and cons.

Approach

Candidates are expected to write about whether New Delhi should host Olympic. Then discuss about it's pros and cons.

Introduction

India has hosted several multi-sports events, including the Asian Games (1951, 1982) and the Commonwealth Games (2010), but the Olympics has been a pipe dream. The Indian Olympic Association (IOA), from time to time, explained how the country is keen to bring the 2032 or post 2032 Olympics to India.

Body

New Delhi a candidate for hosting Olympics games:

- Hosting the Olympic Games offers manifold benefits and opportunities to a Candidate City and the host region and country. Many years of careful and precise planning around NewDelhi is required to host successful Olympic Games, with all of the relevant organisations, authorities and stakeholders working together as one united team, to ensure that the Games leave a positive, longterm and sustainable legacy.
- Recently Delhi government in Budget 2021-22 proposed to host the 2048 Olympic Games to mark 100 years of India's independence. To achieve that goal it will build adequate infrastructure and create an atmosphere where sports flourishes.

Hosting the Olympics and bidding for it is a huge task that needs so much preparation let us explore the advantages of hosting Olympics:

- There are many reasons why hosting the Olympic Games is attractive to a city or country. The expectations that the event will have a positive impact, both tangible and intangible, on local communities is alive and well.
- From developing an underserved part of a New Delhi and expanding muchneeded infrastructure to boosting the local economy and increasing tourism, hosting such a large-scale event can bring about great opportunities.
- Delhi government should make the most of this opportunity to tackle issues of the environment, pollution and waste management.
- Drastic strategies must be adopted to control air pollution around Delhi, environmental obliteration, augmenting water, food and sustainability. It can be a stepping stone for tackling public health and sanitation issues, eventually ensuring clean and safe facilities in New Delhi for the Olympic athletes.
- It's not just the infrastructure of New Delhi that will get a boost. The Rio Olympics took place in 4 other Brazilian cities and all of them got business too. Cities surrounding New Delhi that is Noida, Gurgaon, Ghaziabad can be natural magnet for a plethora of investors, experts and global stakeholders.

- Expect a huge boost in the medals tally if India hosts the Olympics. Sports wise vibrant states Punjab and Haryana in close proximity to New Delhi can get enhanced world class sporting culture and infrastructure. That's always the case with any home country. Brazil came out with its best ever performance of 7 golds and 19 total medals at Rio.
- There is too much focus on cricket in India. It is time we broadened the horizon. The Olympics cover a huge number of sporting events and it will give a fillip to all of them.

With serious corruption and delays in finishing off construction work in the venues along with compromising on the quality of the infrastructure, the mishandling of the CWG 2010 and COVID 2019 Pandemic led to raise questions over organising the event.

- However, cost overruns, questions over resource use and perceived corruption among other challenges have left some populations hesitant about their Delhi city's bid to host the Olympic Games.
- Bidding for the 2020 Olympics alone cost Tokyo \$75 million in fees, with the hosting cost is over \$26 billion more than the \$7.3 billion that was originally set aside for the Games. London paid around \$16.6 billion for the 2012 event, while Beijing spent a mammoth \$42 billion to host the 2008 Olympics.
- In most cases, the infrastructure and stadiums that have been built for the CWG are not used as planned. Further, certain sports like rowing have their own requirements which, when, combined, can lead to great stress on a New Delhi city's resources.
- Beyond monetary impacts, the Olympic Games can have variety of collaterals from the demolishing of historic buildings in NewDelhi to the wiping out of acres of forests, or the displacement of under-privileged neighbourhoods, threats to indigenous communities, human rights infringements, etc.

Conclusion

The call of the hour, thus, is to encourage, train and systematically scout talent without political bias or corruption, which will help create world-class facilities in India. Creating top infrastructure to hone athletes and then bidding for the Olympics should be the way forward rather than bidding for it first and then preparing the sportsmen to make a mark.