

Section - A.

If agriculture goes wrong, ^{nothing} else will go right.

In the ruins of Harappa, we find pottery, and vessels with trace quantity of grains like wheat, barely, rice etc.

This shows the prevalence and importance of agriculture in India since ancient times. It has often been called that agriculture is the only main culture of India.

In the neolithic period, as man began to settle down he started domesticating animals along side farming practices. The revolution from agriculture was sizeable and hence gave man ~~with~~ a surplus.

This surplus became the means for starting a society, gaining wealth,

influence, position etc. Thus,
the origins of modern social life
that lie in ancient social life
ultimately trace their roots from
the profits of agriculture itself.

Problems in Indian Agriculture:

For long now, Indian agriculture has
been reeling under stress and sobbing
for help. It all began in the later
half of Mughal period when agricultural
productivities began to decline and
the state for the first time started
feeling a stress in its revenues.

Yet, these problems were
small and could have been resolved
easily, had not the British come in
along with their exploitative tendencies.

The so called agricultural reforms that the British started like the Zamindari system, Ryotwari system, Mohalwari system etc. were ultimately aimed at squeezing the surplus out of the farmers into the British hands. The continuous over ex tr a c t i o n and under in v e s t m e n t in agriculture prolonged for centuries has left a legacy impact, the impacts of which can still be felt today.

Nevertheless, farming continued, India remained ruralised and life went on as for the Raj didn't provide much opportunities for the youth to move into town. But when the major darkness came it came, after a brief light of

Independence. During the 1950's and 60's India suffered from a series of famines forcing it to import wheat from US under the PL 480 programme.

The situation at one point became so dire that it was pitiously termed as "ship to mouth existence".

Shastri started Jai Jawan

Jai Kisan movement in 1965 to raise agricultural production. It later came to be known as the beginning of green revolution in India. It is hard to imagine in today's India that at one point of time the Prime Minister asked his countrymen to go hungry one night a week as there was not enough food for everyone.

Present Problems :

Even though, green revolution resolved some of our immediate problems, it has thrown up new challenges in front of us today. The growing population & the increasing size of agricultural families has ~~put~~ increased the pressure on land.

More than 85% of farmers today qualify as small and marginal farmers with land holdings less than 5 acres in size. Land fragmentation is further dampening the prospects of agriculture.

The production of water intensive crops like rice and sugarcane coupled with outdated government policies like subsidies on electricity etc. have led to an acute water

Scarcity in the country. According to (CWC) data most water stressed districts in the country are in Punjab, Haryana and western UP, the areas which benefited from green revolution. Further, the flawed MSP support from the government prevents crop diversification as well as equitable sharing of its benefits. According to FY data, 94% of MSP is covered by these 3 areas only.

The APMC's are another challenged wherein the small and marginalised farmers are exploited at the hands of middlemen who indulge in unfair trade practices. Improper remuneration coupled with lack of proper storage facilities, transport facilities and under investment

in food processing industries leads to an overall downfall of the agricultural sector.

The situation is further more dire for women farmers as they are not considered as typical farmers in major policies supports. Only 14% of women farmers have land holding in their name. Thus, they remain excluded from government cash transfer under schemes like PMKISAN and access to institutional credit. Following, the patriarchal norms they are subjected to lower positions and jobs as well as wages as compare to men. A

Another key problem thrown up as after effects of green revolution remains the environmental exploitation.

and land degradation caused due to excessive deforestation, unscientific use of fertilizers, over use of pesticides etc. They have not just polluted our lands, water streams that flow through our lands and the air above our lands but has also lead to low productivity in the longer run. The burning of stubble residue in Punjab, Haryana during winter causes deep air pollution and associated issues in Delhi NCR.

Impact of Agricultural Failures

Agriculture is like the beating heart of this country, if it fails there is no point saving the other parts of it. The impact of failure of agriculture would first and foremost be felt upon our economy which drives 17% of its GDP from this

sector. Dropping agricultural productivity would demand greater budgetary support from the government thus increasing stress upon fiscal resources of the country.

Furthermore, the unemployment situation created by this problem in the country can lead to large scale unrest and government interventions through transfer payments, policy support etc. Thus a sector which historically generated surplus to sustain the society would be relegated to a sector where it needs constant support to sustain itself. Poverty would increase many folds and thus wash away the gains made in previous decades.

Women would be adversely affected due to loss in agricultural productivity as it would lead to their further marginalisation, over exploitation

and lower remuneration; It can also impair upon their chances to move out and socialise in the society as patriarchal norms prevent them from taking up any other jobs.

Low agricultural outputs drive rural demands and hence failure of agriculture can see ripple effects across various sectors of economy like FMCG, Automobiles etc.

It can also dampened India's exports of agricultural commodities which form a major portion of our over-all exports thus impacting India's forex reserves.

Perhaps the biggest impact would fall upon the food and nutritional security of the nation. India already stands at 10th position in Global Hunger Index, Threats to food security

and nutritional supplies. could further push India into poverty. It is difficult to imagine a safe and secure future for a country whose children go hungry every night. All of this would ultimately impact India's national security and self-reliance as it would eventually be more dependent on foreign countries for meeting its essential needs. The bygone era of 1950's + 60's could see a comeback.

As said earlier, agriculture is the main culture of this land. Many of our festivals like Holi, Diwali, Baisakhi, Pongal etc. lie around important periods in agricultural cycles.

It can be that a failure in agriculture does not have a spill over over these celebrations. Culture is the binding thread of our civilisation. Any threat to it can lead to the destruction of very base upon which our society stands.

Solutions to Agricultural Issues

Many problems often require large, long-term, sustainable and comprehensive solutions. Moreover, any sector that directly or indirectly employs around 65% of our workforce cannot be managed single handedly from a top down approach. Hence, there are no easy quick fixes to this menace.

Any reform to be implemented successfully must take ^{off} along all its stakeholders with it. There must be felt a strong need at the grass-roots for reforms. Therefore, it becomes imperative for any government or authority to begin with creating awareness, public debates and discussions along with expert inputs upon improving the present agricultural situation.

In terms of long term strategies, redesigning the stems upon land by pulling people out of agriculture into industry, controlling population and implementing land ceiling laws effectively remains the most potent tool in the hands of policy makers.

From modernization and mechanization, creation of post harvest infrastructure and improving rural connectivities are some steps that require critical focus and high capital investments. The government through schemes like AIIF etc. seeks to achieve this goal. This coupled with schemes like PM KRISHI Sinchai Yojana, e-NAM, Fasal Bima Yojana etc. can bring in the long term public and private investments into agriculture which have been

neglected since the colonial times.

The budget 2021 targets the creation of over 1000 FPO's in the country. This step if successful will start a co-operative movement in the country which will seek to emulate the success of cooperatives like Amul in the agricultural sector.

Becoming more water efficient through innovation of technologies such as micro irrigation, drop irrigation, sprinkler irrigation etc. through schemes like per drop more crop is not only wise but is also an imperative need of these hours. Crop diversification and shifting to flower cultures, horticulture etc. cannot only prove to be highly remunerative for the farmer but has also a great export potential with cinet.

Environmentally sustainable practices, like organic farming, conservation farming, zero tillage and zero budget farming must be promoted for achieving sustainable development goals. The government under the National Mission for Sustainable Agriculture (NMSA)'s submission of NAPCC has launched the Pradhanmantri Krishi Vikas Yojana.

to promote certify and export organic products from India. It is therefore, a reassuring fact that India has the second highest land area under organic cultivation with the highest no. of organic farmers in the world.

Moving forward in order to save agriculture and hence our nation a community lead, community owned and bottom up approach that circulates local traditional practices inside it self are required. The fertile

Land possessed by mother India can
indeed be reaped into being a
fertile land to lay the foundations
of the New India.

Section-B

Global politics of Infrastructure and Connectivity

"The roads in America are not good because America is rich but America is rich because roads in America are good." - John F. Kennedy

Since time immemorial or since at least man has realized the need to live in communities, the importance of trade, the development of culture and the flourishment of civilization, he has felt the need to create infrastructure which can sustain his lifestyle. From the ruins of Harappa to the old city of Rome or from Egypt to Macedonia we find remnants of men trying to built, re-built and built back better.

The need for connectivity between civilizations, nations and their

markets were also felt during the ancient period. This fact is supplemented by the existence of old trade routes such as the Silk route weaving Asia to Europe and beyond. In the maritime domain as well connectivity played a crucial role in the development of civilisations through trade, commerce, cultural exchanges etc. The discovery of a dock at Johar in Ujjain with probable links to Laotian and civilisations of Egypt such as the Mesopotamian civilisation etc. prove this point.

During the ^{medieval} ~~middle~~ period as well, the need for connectivity to India for better trade brought Vasco-da-gama to the shores of Calicut. This heralded a new age of exploration leading to discovery of ^{entire} continents such as the American plate.

It would not be hence an overstatement that the ones who controlled these see routes for better connectivity become colonizers of the countries who did not possess these. It would however, be difficult to determine ~~who~~ then it was this improved connectivity that brought rich dividends from colonization or whether it was the exploitation of these colonies that provided the means to sustain and improve upon these global connectivities.

Present Day Context

The need for infrastructure and global connectivity is present more today than ever before.

The complex interdependence woven into the world through the policies of neo-liberalisation

Globalization have nudged countries to connect better faster and smoother with the world.

The fast changing global climate due to global warming and other associated anthropogenic activities also ~~require~~ necessitates the development of such infrastructure which is not only resilient to climate change but is inherently whole, inclusive and sustainable for the day to day progress and development of the individual, the society and the nation.

The burgeoning population, the changing life styles, the rising incomes and income inequalities all demand solutions through the development of all round infrastructure ranging from housing, transport, energy,

water supply, industry, employment, retirement and above all social infrastructure through education and health. These require the construction of large heavy projects railways, roads, metros, schools, colleges, universities, hospitals, clams etc. All of which need large capital investments apart from land and skilled labour.

Colonization has had a deep impact of uneven development of infrastructure throughout the world. One can find well developed cities, towns and country sides at the core of the colonizers while the periphery consisting of developing countries contains very little or no tangible infrastructural assets.

It is in this impact of colonization itself that most of these developing

Countries possess neither the capital required nor the skills, capabilities and raw materials needed for its development. Hence, they remain perpetually dependant upon the west for their support.

In order to supply these nations with infrastructural needs the Bretton Woods Institutions of World Bank and IMF were created by the core countries to supply capital as well as the expertise required.

It is often said that there are no free lunches in life and hence the support provided through these institutions comes with altered conditions. Politics is often deemed to be dirty and yes, it must be indeed a dirty politics which not only loots the perception of its raw materials but also denies it the fruits of development or even

the basic essential needs to sustain
itself. The beauty of it lies in the
fact that it manages to do all of
this while maintaining the price of
being democratic, liberal and pro
development. If indeed these policies
were aimed at eradicating poverty
through constructions of meaning full
infrastructure both civil and political
alongside development of two way fair
connectivity of globalization then
poverty, war, militarism, refugee
crises, underdevelopment and civil
unrest would have become events
of the past.

It is important to under-
stand that it is through the exploits-
ation of ^{their} colonies, that the Western
countries have built up their infra-
structure and it is with the needs of
sustaining this present life style that
forces them to exploit the periphery

frustrate. It manifests not only in denying them developmental opportunities by the denial of capital, transfer of technology etc. but also through the new tool of climate injustice through by forcing and inequitable net zero by 2050 for all.

The world has changed a lot in the past half a century and the economic centre has shifted from the west to the east. China is one such country that has risen up the ladder and is now threatening to overturn the global world order. The Chinese premier ~~Xi~~ Xi Jinping launched the Belt and Road Initiative (BRI) in 2013. It is also similarly aimed at providing and fulfilling the needs of infrastructure of the underdeveloped countries. Yet, it is much more vicious than the policies of the west as it

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Seeks to emulate the same model but much more aggressively and exploitatively. Further, the non-democratic and dictatorial credentials of China raise even more fears about the impact of BR1.

It would be imperative here to understand the reasons behind the high acceptance of BR1 by other countries; China unlike IMF or the World Bank does not impose much direct conditionalities and further its agendas throw an unsustainable credit for these smaller countries. Corruption prevalent at higher orders of politics in these countries may also have a role to play in its acceptance.

The world has already seen the chipping away of sovereignty and the beginning of new colonialism

Through the capture of Humbanto Port in Sri Lanka and the construction of String of Pearls around India. More recently the only airport of Uganda has been take over by China on re-payment of debt. Similar fears are also rising in Asian countries such as Laos, Myanmar, Pakistan, Afghanistan etc. alongside various African and even European countries.

India too in the view of this has taken up several projects in its neighbourhood - not only to counter the Chinese influence but also to increase its own soft power in the region. These projects range from hydro electric Power projects in Nepal and Butan, Solar projects and port development in Sri Lanka, development of Chabahar port in Iran with railway

line connectivity till Zakadon in Afghanistan. Maitry-Setu for railway connectivity with Bangladesh.

India is also constructing the IMT trilateral highway from Mizoram to Thailand via Myanmar along side the construction of The Kaladan Multi-Modal project and the Sittoung Port in Myanmar aimed at not only attracting Chinese investments in Myanmar but also improving its connectivity to its own northern parts.

The US has also recently launched the 'Built Back Better' world (B3W) initiative at the G-7 summit. This shows that the world politics has moved away from simply exploitation through colonization of the

global south to ~~oppose~~ a point at
which there are conflicting and multi-
polar powers that are seeking to
actively engage with these countries.

This is also confirmed by the
fact that the European Union has
also recently announced its own
plans for global infrastructure
development with a fund of over
300 billion euros. Whether there
are any true fruitful opportunities
for the developing world in these
competing ~~world~~ interests of global
powers ~~is~~ still remains to be seen.
One thing is clear that the indepen-
dence of these countries is facing
newer challenges which need better
vigilantism and enhanced south-
south cooperation to counter it.

The coronavirus pandemic has thrown up the needs for newer type of infrastructure and connectivity that is not only resilient to traditional but is also resilient to non-traditional threats. It demands the development of supply chains and means of its connectivity. That is highly diversified and does not depend upon a single country like China for its sustenance. Traditional infrastructure such as large hospitals, quarantine centres, vaccine production facilities, storage facilities, warehouses etc. are also needed to evade the future threats emanating from bio-terrorism and bio-logical warfare.

Moreover, it is imperative to develop global rating systems

Such as the Blue dot Network that allow countries to objectively and transparently assess the various financial, economical, environmental, social and political impacts of foreign aided development in their country. The development of truly equitable systems and institutions for sustainable ~~growth~~ and wholistic growth however, is of utmost importance which cannot be ~~sub~~stituted but still remain allusive.