

16 NOV 2016

SUBJECT:	ESSAY			Test Code:	7	7	0
Name of Candidate	CHAHAT BAJPAI						
Medium Hindi/Eng.	Eng			Registration Number	2	2	8 4 2
Center	DRN			Date			

[illegible]

**1/8-B, 2nd Floor, Building- Apsara Arcade, Near Gate-7 Karol Bagh Metro Station, Pusa Road,
Karol Bagh, Delhi – 110005**

EVALUATION INDICATORS

1. Alignment Competence
2. Context Competence
3. Content Competence
4. Language Competence
5. Introduction Competence
6. Structure - Presentation Competence
7. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

THE SOLUTION TO GLOBAL CLIMATIC PROBLEM WILL COME FROM COOPERATION AND NOT FROM OBLIGATION

Climate change is the phenomenon of imbalances in the natural processes and cycles which maintain the optimum condition for survival of life on the planet Earth. Its most visible manifestation is in global warming which is expected to increase the temperature of Earth over 2°C in next few decades above pre industrial revolution.

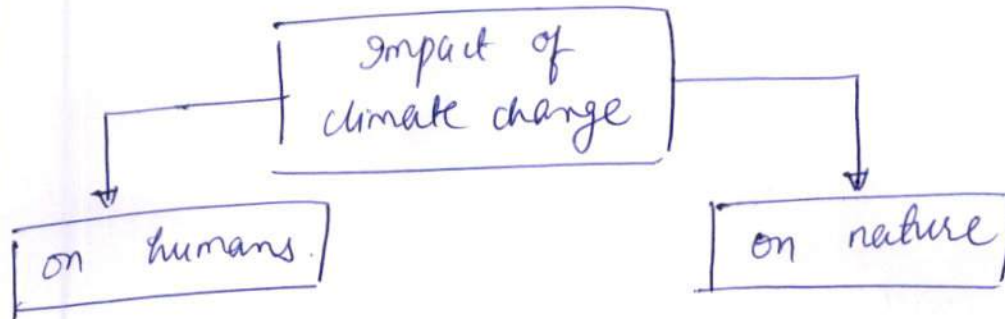
Despite several space missions, NASA and other space agencies have not succeeded in finding another inhabitable planet like ours. Thus it is crucial to take timely efforts to revert

any irreversible change.

Human lifespan is 60-80 years (almost) which is considerably less for impacts of climate change to become visible, yet it is our moral responsibility to make efforts as we have not inherited the earth from our ancestors rather we have borrowed it from our children.

Present Scenario

Climate of any place and its components — temperature, pressure, precipitation and others constitute a dynamic phenomenon and keep changing. But in last few centuries the rate of change is aggravated by human actions, which is further threatening our survival.



Impact on humans

The living styles, food, clothing of humans vary from region to region and climate of the place is an important determinant to it. Thus any change in climate will affect the livelihood of the people.

Like in India, agriculture seasons are decided as per monsoon arrival dates. But the erratic nature of the monsoon in recent years resulting in longer dry spells is threatening food security.

Climate change is also giving rise to new ailments. Today India share 25% burden of Tuberculosis in the world and pollution is a major cause for it. This lead to loss of significant proportion of GDP of the country.

Also at present rate of rising sea level, soon needs will arise to rehabilitate the people living in coastal areas and provide them source of livelihood

Climate change is also accelerating rate of natural disasters — visible from increased frequency of cyclones, floods, droughts etc. Disaster affect all, but weaker sections like old, pregnant women are most severely hit due to their limited

mobility.

Impact on nature

Nature presents the best example of maintaining a balance. Species population is maintained through food web which minerals constituents are maintained through biogeochemical cycles like Nitrogen or carbon cycle. Due to climate change all these processes are impacted.

The most visible outcome was 'ozone hole' leading to penetration of harmful UV rays into the earth's atmosphere. These rays not only hinder plant's photosynthesis but also cause skin diseases in humans.

In last year winters, the temperature in Arctic reached above freezing point almost 20°C above its average winter temperature. Some see it as an opportunity for navigation through northern passage or oil exploration but it is a sign of looming crises.

In India, as well, the Gangotri glacier is retreating at over 20 metres/year. With this rate soon the sacred Ganga river will turn seasonal.

Not only is the terrestrial ecosystem threatened but also the marine life. Coral reefs, also called rainforests of the oceans, which form the stage one of the aquatic food chain are affected.

with discoloration called bleaching.
Most importantly, the species
with which we share this planet
are becoming endangered and
extinct at much higher rates.
In past 50 years, the species
threatened are much more than
ever before.

Certainly, it is the human
actions behind such high rate
of change. Some scientists have
even proposed to name this age
as Anthropocene from Holocene.

It is clear that scale of
problems is so magnanimous that
efforts are need to control it.

What are some solutions?

Global climatic problem is not

a regional or national problem impacting people from only one religion or society, rather each and every creature on the planet will be affected. Thus concerted efforts at national, international and individual level are needed.

International efforts: cooperation or obligation?

Several governmental as well as non-governmental panels are making efforts to create awareness about possible damage of climate change. Ex - UN general secretary also emphasised this by saying 'Raise your voice, and not sea level'.

IPEC organises conference of parties every year to devise strategy for future course of action and review the progress

of past efforts.

Kyoto protocol was the most detailed plan of emphasising on carbon credits, clean energy mechanism and most importantly setting obligatory targets for climate change. But as the future showed, US, the largest overall greenhouse gas emitter, did not even ratify it and it failed to fulfil desired results.

On the other hand, other non-voluntary conventions like Montreal protocol was a huge success to control use of CFCs to heal the ozone hole.

Obligations under international efforts might even be discriminatory as they can assign targets regardless of national situation. Therefore,

the Intended Nationally Determined Contributions under COP 21 Paris summit are likely to be more acceptable to people as well as governments as they themselves decide their targets.

Thus the need of the hour is cooperation in terms of finance and technology. For this the developed nations need to transfer clean technologies to developing countries and also contribute for renewable energy projects.

National efforts

The constitution of India makes it a fundamental duty of every citizen to protect the natural environment. It is a responsibility incumbent in nature.

as the underlying idea is that people should themselves understand the need and act accordingly.

Also there are certain compulsory legal provisions to protect the climate. At national level we have National Action Plan on climate change, an umbrella program for all efforts. Then there are provision for compensatory afforestation, environment impact assessment, involvement of locals at forest rights act etc.

Unlike international level, within the country some sort of compulsory provisions are necessary. As international fund transfer, free provision of latest technology can sometimes meet opposition within developed countries but

there is no such fear in national efforts.

Are voluntary contributions sufficient?

Climate change is a problem in which actions of few can affect people worldwide. Though past has shown that only voluntary contributions can succeed, yet some sort of obligation is necessary.

This can be of the form of regular monitoring. the progress of intended contributions. If a country fail in achieving them, then it can be asked to scale up its efforts.

Then we can have some sort of carbon budgeting - assigning each country a carbon space as per their development needs.

Most importantly all countries should themselves survey and assess their targets in order to avoid any external meddling. But at the end of the day, it must be remembered that climate change is a problem without any borders.

Way ahead

Solution to climate change lies in sustainable consumption. As Brundtland commission of 1987 stated that our consumption should be such that it does not compromise need for future

generations.

Another major problem to be tackled is income disparity. On this planet there is enough for everyone's need but not for anyone's greed. We need to be considerate to requirements of fellow human beings.

Most importantly the population should be controlled so that we don't exceed the carrying capacity of earth which can cause havoc.

Conclusion:

Someone has rightly said Rome was not built in a day, which implies that behind every major task there ~~are~~ is culmination of

right intention, persistent hardwork and intelligent execution. Thus rather than locating climate change as 'their responsibility and not ours', we should all collectively make efforts as per our capabilities.

DOUBLING FARM INCOME : ISSUES, PROSPECTS AND CHALLENGES

Agriculture in India contributes 17% to overall GDP, while employing over 50% of country's population. Its wealth creation is not in proportion to the quantum of people employed.

Agriculture is most noble profession — providing base of human survival and also sustaining other sectors like textile industry. But as recent NCRB data show the farmers suicide have increased in 2015 by almost 300% over 2014. This is a shameful situation for the entire humanity as the farmer who through his/her toil feed us

and our children is in distress.

Thus recently, PM of India mooted the idea, earlier raised in 12th Plan, to ~~increase~~ ^{double} the farmer's income by 2020. In order to ensure that this does not remain a ^{mere} eye-catching slogan, we need to analyse the issues, prospects and challenges associated to Indian agriculture and then take efforts accordingly.

ISSUES AND CHALLENGES

Agriculture in India was practised under a patron-client mode since the ancient times. This model was transformed into discriminatory landlord-tenant model by the colonial ruler. The effects of this continue to haunt us even

till today. The land reforms carried out to abolish zamindari, impose land ceiling and ensure security of tenure of tenants were not completely successful. Thus landlessness is a major challenge and due to the structural nature of Indian society, dalits are its major victims.

Land, in India is closely associated to prestige of the family and is rarely treated as commercial property. It is divided equally among all sons in the family and this leads to fragmentation of land, and most farmers own plots less than 1 hectare.

small land sizes inhibit commercialization, thus subsistence farming is mostly practised. The non-application of modern technology and chemical inputs has lead to less productivity.

In most parts of the country farming is dependent on monsoon as only 45% of total cropped area has some irrigation facilities. They can be cropped only once in a season and that too with crops like millets which bring very less income.

Green Revolution from 1970s considerably increased the productivity and brought helped attain as self sufficiency. This was significant to transform the beggry bowl

image of India. Yet as future decades showed the benefits of ~~agri~~ Green revolution was limited to western and northern parts of the country creating a problem of regional disparity.

Also it brought to light problem of environmental sustainability as problems of ground water depletion, land degradation, salinization of soil came to surface.

Another major issue associated with agriculture is huge subsidies. Till 1947, it was sole largest source of revenue for the government but today ~~but~~ fertiliser subsidy, free electricity account for almost 1% of GDP.

Fertiliser subsidy is not only a burden on exchequer but also a major cause of soil degradation. Since there is no nutrient based subsidy in urea, it is often applied in much higher proportion than recommended 4:2:1 of N, P, K.

Electricity subsidy violate the principle of 'one product, one price' and hence lead to diversion.

Thus agriculture in India is victim of social structure, faulty policies and low awareness among the farmers. But scenario is not entirely pessimistic as the prospects of agriculture are wide ranging.

Prospects

India occupying 3.28% of total

land area is blessed with several perennial and seasonal rivers. The vast stretches of Northern plains are one of the most fertile in the world.

Eastern part of the country — Bengal, Bihar and Odisha — have productivity much below the national average. The fertile land in this region is either fragmented or not put to farming due to fear of losing ~~prop~~ ownership. Thus a model land leasing act, commercialization and land consolidation can increase yields from this half of the country.

Dairy farming has been very successful in India as results of Amul show. Thus involving

mixed farming, that is apiculture, silviculture, cattle rearing, pisciculture along with agriculture can increase farmers income.

Another silver lining is organic farming whose market is growing by over 20% every year. As example of Sikkim show, through ~~small~~ policy execution, a state can even completely turn organic.

Food processing is a another growing market with increasing urbanisation when working couples donot have time to cook food, thus providing appropriate forward and backward linkages to agriculture are crucial for raising income.

A major proportion of labour involved in agriculture are women. Thus increasing farmers income has additional benefit of women empowerment who traditionally have a inferior position in Indian society and family.

All successive governments have realised the need to transform Indian agriculture by filling various gaps. A recent report even, stated that increasing agricultural income can be fastest way of tackling poverty.

Efforts taken and way ahead

Government has taken several measures to boost farmers

income. Agriculture and its associated activities are included in Priority sector lending to enhance flow of formal sector lending and prevent farmers from falling into debt trap of money lenders.

To decrease dependence on monsoon, schemes like PMKSY and Accelerated Irrigation development program have envisaged to enhance canal water or tubewell irrigation to all farms.

Efforts are also made to increase insurance cover by PMFBY at minimal premium costs and to cover all possible damages.

Food processing is also being encouraged through mega food parks scheme. Also APMC act attempts to create a unify the agriculture market so that farmers can get maximum income.

Schemes like Paramparagat Krishi ~~scheme~~ yojana attempts to encourage organic farming. For this National Mission on Sustainable Agriculture is also launched.

Overall the schemes are many and cover all possible spheres of agriculture. ~~Even a~~ But most important is to create awareness among farmers about the benefits for these. For this a dedicated kisan channel and a mobile portal

m-kisan have been launched.
Also in order to reduce leakages
DBT to farmers can be given
in place of fertiliser and electricity
subsidy.

To unleash the potential of eastern
region, model land leasing act
of the NITI Aayog can be crucial.

Despite this long list of
government efforts, it does not
comprehend cover all efforts undertaken.
Thus it shows that we don't
need new schemes, what we
need is efficient implementation
of existing ones.

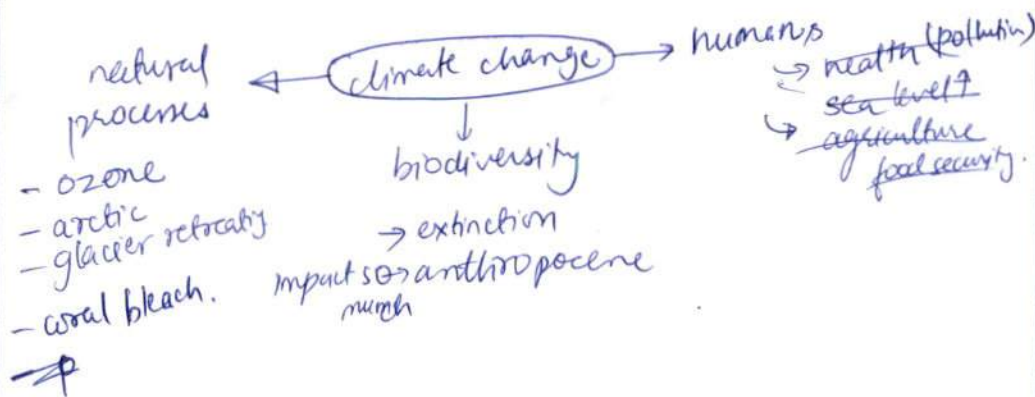
Government servants need to
be sensitised for the distress
of the agriculture sector.

Conclusion

Government can launch schemes, transfer money, provide subsidies, yet at the end of the day, farmers themselves should use these as a ladder to climb up to higher social status. After all, it is the farmers themselves who can transform agriculture and not government or bureaucrats.

We have ^{not inherited} ~~borrowed~~ the earth from our ancestors rather we have borrowed it from our children.

Present scenario →



Solutions

International collaboration → ^{Raise your voice} carbon credits, APCC

Kyoto → failed

Montreal most successful. AT

National → COP 21 INDC, EIA, CAMPA, FRA → involving locals NAPCC

Will voluntary contribution sufficient?

→ Actions of few → sufferers are small.
Way ahead → sustainable consumption, inequality, population control.

Concl. Rome not built in a day. Behind every big achievement, there are years of culmination of right intention, persistent hardwork and intelligent execution.