

Q. What is a free trade agreement?

Discuss the Trade and Economic Partnership agreement signed recently between India and European Free Trade Association

Free trade agreement are treatment among member countries to promote the trade without any disruption. It involve lowering tariffs on goods so that easily movement of goods take place among member parties.

India and Japan have Free Trade agreement recently India have signed Trade and Economic Partner with European Free Trade Association

Member of EFTA: Switzerland, Norway, Lichten, Iceland.

Mutual cooperation: Promote the cooperation among members and easily movement of goods become possible.

Technology Transfer: Switzerland and Norway are way advance in Technology.

and this lead the flow of technology to India.

Green Development: Switzerland which targets to become carbon neutral will help India through green technology transfer.

Trade Promotion: Except Switzerland the trade with other countries in less than 2 billion dollars. Boost in trade with Norway, Lichten, Iceland

Research and development: Norway already help India in promotion of research in Switzerland establishing Himalayan Research station in Arctic region

Trade in Gold: Switzerland is also one of the biggest players in Gold trade while India is the biggest consumer of Gold.

FTA with EU: India is continuously working to sign free Trade agreement with EU. This may helpful to sign with EU.

Problem in signing of TAEA with EFTA

High Standard: These countries have highest standard and quality of goods which create problem.

Zero Tariff Policy: Switzerland had adopted zero tariff policy on all goods entering to his territory. ^{for all}

Imbalance in Trade: Only Switzerland ~~have~~ is largest trading partner of India while other members have almost less than \$2 billion trade.

Intellectual Property Rights: This countries strictly follow intellectual property right while India wavers in some circumstances
Such as Generic Medicine

Trade Deficit: ~~Trade is in~~ Trade deficit with all countries this going to be increased if there is large flow of gold from India Switzerland to India

Carbon Border Adjustment Agreement: To impose carbon tax on goods imported in territories of member state. India have signed Trade and Economic Partnership but India should continuously focus on trade surplus while signing these agreement which could promote foreign inflow of currency in India

2) The recent successful loading of India's 1st Indigenous Prototype Fast Breeder Reactor marks a historic milestone in India's nuclear power programme. In this context critically examine the challenge associated with nuclear waste management in India?

Recently India have established its first Fast Breeder Reactor in Kundilam in Tamil Nadu which utilize Uranium and Plutonium to produce electricity and generate

As countries are moving towards carbon neutrality, they are focusing to produce nuclear energy through fission reaction to achieve the target because carbon emission in nuclear reaction is almost nil.

Although carbon emission is nil but nuclear waste produce through nuclear power plant still concern about it India which is focusing to its nuclear power have face following challenges about nuclear waste.

Problem of Nuclear waste management

Contamination: Nuclear waste can leach through soil to groundwater can contaminate the groundwater which is source of agricultural in Northern India e.g. concentration of Uranium in Uttar Pradesh groundwater is ~~five~~ five times as prescribed by WHO

Radiactivity: Used radioactive after dispose continuously emit radiation aft many decades.

Radiation and radium: These are highly reactive and accumulate in bones and tissue of body. ~~ca~~ ca of Radon absorbed in bones and lead to weakening of bones

Environment: Mining of fissile material such as Uranium and Thorium lead to large number of carbon emission into the atmosphere.

Cooling Water: Water used in nuclear power plant used contain Sodium to keep temperature under control. If it release in water bodies lead to death of hydrophate and zooplankton

Spent Fuel: Handling of spent fuel and not to be used for creating nuclear weapon raise concern.

Highest cost: cost of handling nuclear waste is high which may raise the cost of a nuclear power plant and neutralize the efficiency and cheap availability of nuclear power.

Health Issue: Coming in contact with radioactive waste can cause many diseases such as skin cancer, brain disorders.

Nuclear Disaster: Chernobyl nuclear disaster and Fukushima nuclear disaster which spread Radon contaminated water.

As India's target to become carbon neutral by 2070, Nuclear Energy could play an important role but we should also need to work on proper management of nuclear waste.

U.P.S.C.

③ After Cape Town, Bengaluru is marching towards day zero. In this context examine the causes for Bengaluru's water crisis and suggest measures to overcome the situation.

Ans

Day zero is situation in a city where the water in tap dries out and people have to stand in long queues to wait for quota of water. This term is Day zero become quite popular in many cities of the world.

Bengaluru now is one such cities
Cause of Day zero in Bengaluru

Natural Reason:

Climate change is the main reason which lead to change in water cycle. On the other hand side, presence of Bengaluru not to have enough rain in monsoon season.



Human Made Research

Rapid urban Expansion! Largely famous for Information Technology also known as Silicon Valley of India attraction IT youth which leads to unplanned expansion

Encroachment of 'Water Sinks' once a time Bengaluru is known for it lakes and called as lake cities but now this cities have more than hundred lakes

Wetland Encroachment: Wetland serve as Water sponges and act as filterate and recharge of groundwater but absence of wetland lead to fall in groundwater

Recycle of Waste Water: Waste water recycled can be used for various purpose but Bengaluru have no proper facility to recycled and use this water again.

Measure to overcome such situation we can't do anything about natural resources but we can do many things for man made resource

Planned Urbanisation: Large influx of population should be controlled. Carrying capacity of

city should be taken as focal point
while planning development project
Regeneration of Lake: City of Lakes
should be made again so that lake
can help in solving water crisis
Floating cities: This concept is quite
popular in China and Netherlands to
use cities as absorbers of water to
store groundwater by ~~can~~ interlinking
various water bodies

Recycling of waste water: This is not only
issue in Bengaluru but all water stressed
cities that are having proper recycling
of waste water. Policy makers should
work upon it

River Management: River seen as fresh
water source should be maintained properly
Smart City Mission: We should rather focusing

only on making Bengaluru as IT Hub we
can take other problems such as water management
waste management into consideration

In future, there are going to be increased
Zero Discharge in cities like Delhi, ~~and~~ Jaipur
Lucknow. The best solution is to conserve
and proper utilization of water bodies