



WTO's Appellate Body

For Prelims: World Trade Organization, WTO's Appellate Body, Anti-dumping Duties

For Mains: Issues with the WTO's appellate Body and Implications

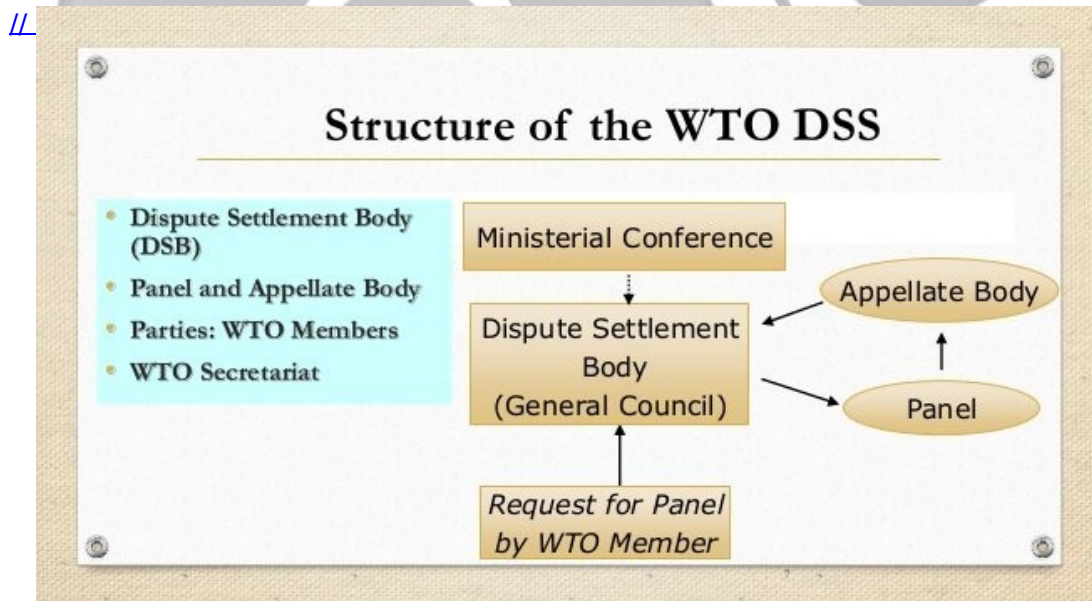
Why in News?

There was no discussion to revive the [World Trade Organization's \(WTO\) Appellate Body \(AB\)](#), which has been **redundant since 2019**, at the recently concluded **12th ministerial conference**.

What is WTO's Appellate Body?

▪ About:

- WTO was established **to provide a platform for negotiations for liberating trade and creating rules**, as well as to monitor and administer multilateral trades.
- One of the key **objectives was also to address the grievances between its members by acting as a court for global trade**.
- The Appellate Body, set up in 1995, is **a standing committee of seven members** with a limited **four-year term** that presides over appeals against judgments passed in trade-related disputes brought by WTO members.
- Disputes arise when **a member country observes that another member government is breaching a commitment, or a trade agreement** made at the WTO.



▪ Structure:

- The Appellate Body is composed of **seven Members** who are appointed by the **Dispute**

Settlement Body (DSB) to serve for four-year terms.

- The **DSB has authority to establish dispute settlement panels**, refer matters to arbitration, adopt panel, Appellate Body and arbitration reports, maintain surveillance over the implementation of recommendations and rulings contained in such reports, and authorize suspension of concessions in the event of non-compliance with those recommendations and rulings.
- Each person may be **reappointed for another four-year term**.
- **Appointment:**
 - Each member of the Appellate Body is required to be a person with demonstrated expertise in law, international trade and the subject-matter of the covered agreements generally.
 - They are also required to be **unaffiliated with any government and are to be broadly representative of the membership** of the WTO.
 - A Chairman is elected among the Members to serve a one-year term, which can be extended for an additional period of one year.
 - He is responsible for **the overall direction of Appellate Body business**.
 - The current Chairperson is Hong Zhao of China.
 - A Division of **three Members is selected to hear each appeal and each division elects a Presiding Member**.

What are the Issues?

- **Stopping of the Judges' Appointment:**
 - The United States stopped the process of reappointing judges, after their terms expired in 2017. In December 2019, the number of judges in the court fell below three — the minimum required.
 - It believes the WTO is biased against it, and has criticised it for being “unfair”.
 - At least three people are required to preside over an appeal, and **if new members are not appointed to replace** the two retiring ones, the body will cease to be relevant.
- **Very Less Efficient at Rulings:**
 - Over 600 cases reached the body since its formation in 1995 and rulings were issued in some 350.
 - It has even blamed that the AB has failed to issue rulings within the 90-day deadline.

What are the Implications?

- With the Appellate Body unable to review new applications, **there is already great uncertainty over the WTO's dispute settlement process**.
- If the body is declared non-functional, countries may be **compelled to implement rulings by the panel even if they feel that gross errors** have been committed.
- Countries **may refuse to comply with the order of the panel** on the ground that it has no avenue for appeal. It will run the risk of facing arbitration proceedings initiated by the other party in the dispute.
- This also does not bode well for India, which is facing a rising number of dispute cases, especially on agricultural products.
- In the backdrop of rising trade tension between the US and China, the overall weakening of the WTO framework **could have the effect of undoing over two decades of efforts to avoid protectionism in global trade**.

What are the Disputes Involving India at the WTO?

- The disputes where India is a **complaining party** are countervailing duty by the US on Indian steel products, measures by America concerning non-immigrant visas, renewable energy programmes of the US, and import duties imposed on steel and aluminium products by America.
- WTO disputes where **India is a responding party** include prohibition by India on import of poultry and poultry products filed by the US, and import duties on certain information and communication technology goods filed by the EU, Japan and Taiwan.
- In January 2022, India **appealed against a ruling of WTO** trade dispute settlement panel which ruled that the country's domestic support measures for **sugar and sugarcane** are inconsistent

with global trade norms.

Way Forward

- **Support Proposal to get New Members:**
 - Usually, new appointments to the Appellate Body are made by a consensus of WTO members, but there is also a provision for voting where a consensus is not possible.
 - The group of 17 least developed and developing countries, including India, that have committed to working together to end the impasse at the Appellate Body can submit or support a proposal to this effect, and try to get new members on the Appellate Body by a majority vote.
 - But, this may be an option of the last resort, as all countries fear unilateral measures by the US as a consequence of directly opposing its veto.
- **Suitable Punishment if Breaks Law:**
 - If a country has done something wrong, it should swiftly correct its fault. And if it continues to break an agreement, **it should offer compensation or face a suitable response that has some bite — although this is not actually a punishment:** it's a “remedy”, the ultimate goal being for the country to comply with the ruling.
- **Reformative Approach:**
 - The permanent long-term solutions based on **reformative approach include having a transitional rule for the outgoing members**, allowing them to completely dispose the pending appeals even after the expiry of their terms and limiting the Appellate body's interpretation to the meaning of consented national laws without stepping over the policy space, so as to preserve sovereignty of the nations.
- **Regular Meeting of the Members:**
 - The other long-term solutions include **regular meetings of the WTO members with the Appellate body** to ensure effective communication and immediate redressal mechanism.
 - Thus, **all the nations must come together to bring in a common ground to address the crisis** so as to not be faced with the worst-case scenario.

[Source: DTE](#)

14th BRICS Summit

For Prelims: BRICS, UNSC, Beijing Declaration

For Mains: Groupings and Agreements, BRICS Summit, UNSC

Why in News?

Recently, Prime Minister of India attended the 14th BRICS summit which was virtually hosted by China.

- **Theme of the 14th BRICS Summit:** Foster High-quality BRICS Partnership, Usher in a New Era for Global Development.
- BRICS Plus virtual conference was also held as part of the main meeting **with ministers from countries, including the UAE, Saudi Arabia, Egypt, Kazakhstan, Indonesia, Argentina, Nigeria, Senegal, and Thailand.**

What are the Key Highlights of the Summit?

- **Adopting the Beijing Declaration:**
 - It states that [BRICS](#) supports talks between Russia and Ukraine.
 - The grouping is willing to support the United Nations' and the [International Committee of the Red Cross's \(ICRC\)](#) efforts to deliver humanitarian aid to Ukraine.
 - Countries also expressed concerns about the situation in Taliban-held Afghanistan.
- **Discussions on the Issues:**
 - **Humanitarian Situation in Ukraine:**
 - Concerns over the humanitarian situation in and around Ukraine and expressed **their support to efforts of the UN Secretary-General, UN Agencies and International Committee of the Red Cross (ICRC) to provide humanitarian assistance** in accordance with the basic principles of humanity, neutrality and impartiality.
 - **Terrorism:**
 - While discussing terrorism and terror cooperation, the BRICS countries said that only the [UN Security Council](#) has the authority for imposing sanctions.
 - On Afghanistan, BRICS countries called for “**Afghanistan authorities to achieve national reconciliation** through dialogue and negotiation, and to establish a broad-based and inclusive and representative political structure”, adding that **Afghan territory must not be used to shelter terrorists or attack any other country.**
 - **Initiative on Denial of Safe Haven to Corruption:**
 - The BRICS Initiative on **Denial of Safe Haven to Corruption** aims to further **strengthen anti-corruption capacity building** through education and training programs and **enhance anti-corruption exchanges and cooperation within multilateral frameworks.**
 - **Framework for Consumer Protection in E-commerce:**
 - The declaration welcomed the establishment of the **Digital Economy Working Group** by upgrading the **E-commerce Working Group.**
 - And the BRICS nations have agreed to promote consumer protection in e-commerce by advancing the implementation of BRICS Framework for Consumer Protection in E-commerce.
 - **More Focus on Combating Transnational Drug Trafficking:**
 - The summit also expressed concern over the serious drug situation in the world. BRICS declaration appreciate **BRICS Anti-Drug Working Group's active role in combating transnational [drug trafficking](#) and promoting global drug governance** and will further strengthen drug control cooperation.

What is BRICS?

- **About:**
 - BRICS is an **acronym** for the grouping of the world's leading emerging economies, namely **Brazil, Russia, India, China, and South Africa.**
 - **In 2001**, the **British Economist Jim O'Neill** coined the term BRIC to describe the four emerging economies of Brazil, Russia, India, and China.
 - The grouping was **formalised** during the first meeting of BRIC Foreign Ministers' **in 2006.**
 - **South Africa was invited to join BRIC in December 2010**, after which the group adopted the acronym BRICS.
- **Share of BRICS:**
 - The BRICS brings together five of the largest developing countries of the world, representing 41% of the global population, 24% of the global GDP and 16% of the global trade.
- **Chairmanship:**
 - The **chairmanship of the forum is rotated annually** among the members, in accordance with the acronym B-R-I-C-S.
 - **India is the chair for 2021.**
- **Initiatives of the BRICS:**
 - [New Development Bank](#):
 - During the **Sixth BRICS Summit in Fortaleza (Brazil) in 2014**, the leaders signed the Agreement establishing the [New Development Bank \(NDB - Shanghai,](#)

- **China).**
- It has so far approved 70 infrastructure and sustainable development projects worth.
- **Contingent Reserve Arrangement:**
 - In 2014, the **BRICS governments had signed a treaty on the setting up** of the contingent reserve arrangement
 - The arrangement is **aimed at forestalling short-term balance of payments pressures**, provide mutual support and strengthen financial stability of the BRICS nations.
- **BRICS Payment System:**
 - **BRICS countries are trying to create a payment system as an alternative to the [SWIFT](#) payment system.**
 - This has taken on a new urgency as post Ukraine war, Russia has been frozen out of SWIFT.
- **Customs Agreements:**
 - Customs agreement were signed to **coordinate and ease trade transport** between BRICS countries
- **Launched of Remote Sensing Satellite:**
 - A **Remote Sensing constellation of satellites** has been launched - with 6 satellites including **2 from India, 2 from China, 1 from Russia, and 1 Brazil-China collaboration**

Way Forward

- It is imperative for **BRICS countries to strengthen coordination within the frameworks of the [G20](#), [World Trade Organisation \(WTO\)](#), [World Bank](#) and Important Institution [International Monetary Fund\(IMF\)](#).**
- BRICS should **strengthen coordination on macroeconomic policies and multilateral cooperation.**
- BRICS countries should make **full use of mechanisms including the internet for cultural and people-to-people exchanges and cooperation.**

UPSC Civil Services Examination, Previous Year Question (PYQ)

Q. Consider the following statements: (2016)

1. New Development Bank has been set up by APEC.
2. The headquarters of New Development Bank is in Shanghai.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (b)

Exp:

- The **New Development Bank (NDB)** was formed referred to as the **BRICS Development Bank**.
- It is a multilateral development bank established by the BRICS states (Brazil, Russia, India, China and South Africa). Hence, statement 1 is not correct.
- **The bank is headquartered in Shanghai, China.** Hence, statement 2 is correct.
- During the sixth BRICS Summit in Fortaleza (2014), the New Development Bank (NDB) was

established by the Fortaleza Declaration to strengthen cooperation among BRICS and supplement the efforts of multilateral and regional financial institutions for global development.

- It had an initial authorized capital of US\$ 100 billion, with an initial subscribed capital of US\$ 50 billion, equally shared among founding members.
- **Therefore, option (b) is the correct answer.**

[Source:TH](#)

Salt Sector Crisis

For Prelims: Rock Salt Mining, Rann Sarovar, Minimum Support Price

For Mains: Salt Sector Crisis, Role of Government in Development of Salt Industries

Why in News?

The Salt Industry is facing enormous challenges in meeting the demand and handling the crisis faced by salt farmers and workers.

- While **farmers are facing low prices due to the non-availability of [minimum support prices](#)**, workers are also in distress due to lack of proper arrangements for wages and social security.

What is the position of Salt Sector?

- **India:**
 - **India ranks third in the production of salt in the world** next to the USA and China.
 - **Sea salt** constitutes about **70% of the total salt production in the country.**
 - Salt manufacturing activities are carried out in the **coastal states** of Gujarat, Tamil Nadu, Andhra Pradesh, Maharashtra, Karnataka, Orissa, West Bengal Goa and hinterland State of Rajasthan.
 - **Gujarat produces about 28.5 million tonnes of salt per year**, which is more than **80% of the country's total production.**
- **Worldwide:**
 - The **worldwide salt production is currently 200 million tons** and exceeding the mark rapidly.
 - Worldwide industries manufacture this huge quantity of salt **not only for consumption but for non-edible and industrial purposes as well.**

What are the Methods of Production?

- **Solar Evaporation Method:**
 - Solar salt production is, typically, the capturing of salt water in shallow ponds where the sun evaporates most of the water.
- **Rock Salt Mining Method:**
 - Salt exists as deposits in ancient underground seabed, which became buried through tectonic changes over thousands of years. Many salt mines use the **"room and pillar"** system of mining.

- Shafts are sunk down to the floor of the mine, and rooms are carefully constructed by drilling, cutting and blasting between the shafts, creating a checkerboard pattern.
 - After the salt is removed and crushed, a conveyor belt hauls it to the surface. Most salt produced this way is used as [rock salt](#).
- **Vacuum Evaporation Method:**
 - It involves evaporation of salt brine by steam heat in large commercial evaporators, called **vacuum pans**.
 - This method yields a very high purity salt, fine in texture, and principally used in those applications requiring the highest quality salt.

What is the Salt Sector Crisis?

- **Minimum Support price:**
 - The **Indian Salt Manufacturers' Association (ISMA)** has demanded the classification of salt production as agricultural activity under the ministry of agriculture instead of its current status as an industry governed by the ministry of industries & mines.
 - **Mining produces hardly 0.5% salt.** 99.5% of salt is produced either from sea water or from sub soil water and the whole process is done by **seeding, farming and harvesting**.
 - Unseasonal rains and floods are resulting in demand for Minimum Support Price.
 - **Minimum Support Price (MSP)** is a form of market intervention by the Government of India to insure agricultural producers against any sharp fall in farm prices.
 - The major objectives are to **support the farmers from distress sales** and to **procure food grains for public distribution**.
- **Wages and Social Security:**
 - Companies have replaced cooperatives and they decide the wages of these workers and the production of farmers. Most of them are migrant labourers.
 - The cooperative sector is more or less passive. Workers are going through serious health issues and economic distress with no minimum wages or social security.
 - 12 workers died when the wall of a packing unit collapsed in Morbi.
 - Projects such as **Rann Sarovar**, a freshwater lake construction project in 5,000 square kilometers of this area, will render about 50,000 people jobless.

What is the Role of Government in Development of Salt Industries?

- Salt is a **central subject** listed as item number 58 of the Union List of the **7th Schedule of the Constitution**. It is listed as a **mining industry**.
 - The Government of India has **de-licensed the Salt Industry** by deleting provisions relating to Salt in the **Central Excise & Salt Act, 1944**.
- The **Salt Commissioner's Organization** plays a facilitating role in overall growth and development of the Salt Industry in the country.
- A separate **nodal agency with common rules and regulations** regarding salt production is required. Minimum wages and social security must be ensured with a **uniform policy for the entire country**.

UPSC Civil Services Examination, Previous Year Question (PYQs)

Q. Who of the following organized a march on the Tanjore coast to break the Salt Law in April 1930? (2015)

- (a) V.O. Chidambaram Pillai
- (b) C. Rajagopalachari
- (c) K. Kamaraj
- (d) Annie Besant

Ans: (b)

Exp:

- Modelled on the lines of Dandi March, the Vedaranyam Salt March was led by C. Rajagopalachari from Trichinopoly to coastal town of Vedaranyam.
- Rajagopalachari and over 150 volunteers collected salt directly, bypassing the Salt Law. Awareness on national issues such as caste discrimination and use of Khadi was part of this march.
- Therefore, option (b) is the correct answer.

[Source: TH](#)

Halving Pesticide Use Across Europe by 2030

Why in News?

The European Commission (EC), the European Union's executive arm, proposed a draft law for **halving pesticide use across Europe by 2030**.

- The [Intergovernmental Panel on Climate Change \(IPCC\) in its sixth assessment](#) has called for **urgent restoration of degraded ecosystems to mitigate climate change**.
- The [Glasgow climate pact](#) too had **underlined the significance of natural ecosystems for climate mitigation and adaptation**.
- The [European Union](#) has not been successful in **halting the loss of biodiversity between 2011 and 2020 according to the EU biodiversity strategy**, which had voluntary target to restore at least 15 % of degraded ecosystems by 2020.

What is the Draft law?

- The proposal sets **multiple binding restoration targets and obligations across a broad range of ecosystems**. It includes the overarching objective for area-based restoration measures on 20 % of the EU land and sea area by 2030.
- Natural and semi-natural biodiversity ecosystems — [wetlands, forests, grasslands, river and lakes](#) and even dunes — will be improved and re-established on a large scale.
- It seeks to dismantle big dams to make rivers free-flowing, among other things.
- The use and risk of **chemical pesticides will be reduced 50 % by 2030** to reverse the decline of bees, butterflies, bumblebees, hoverflies and other pollinator populations by 2030.
- The proposal aims **to reduce loss of green urban spaces**, so that there is no net loss of green urban spaces by 2030. In fact, the target is to ensure 5 % increase in these spaces by 2050.
- There must be an increase in at least 10 % of [tree canopy](#) cover in all cities and towns, the proposal says.
- The proposal has set **a target of restoring 25,000 km of rivers to a free-flowing state by 2030**. For this, the barriers that prevent or obstruct the connectivity of surface waters will be identified and removed.

What is Pesticide, its Usage and Issues?

- **About:**
 - Chemical compounds that are **employed to eliminate pest organisms are called pesticides**.
 - These are used to **kill or repel pests like rodents (rodenticides), insects (insecticides), weeds (herbicides)** and fungi (fungicides).

- They are **used in public health management to eliminate disease carrying vectors** like mosquitoes.
- They are used in **agriculture to eliminate pests that damage crop plants.**
- **Issues:**
 - **Harmful Effects on Farmers:** Experts believe that chronic low-level pesticide exposure is associated with a broad range of nervous system symptoms such as headache, fatigue, dizziness, tension, anger, depression, and impaired memory, [Parkinson's disease](#), and [Alzheimer's disease](#), among others.
 - **Harmful Effect on Consumers:** Pesticides go up the food chain by working their way through the environment and into the soil or the water systems after which they are eaten by aquatic animals or plants and ultimately humans. This process is called [Biomagnification](#).
 - **Harmful Effect on Agriculture:** Continued use of pesticides for decades has contributed significantly to the current ecological, economic and existential crisis of the Indian agriculture sector.
 - **Regulatory Issues:** Although agriculture is a state subject producing, education and research are governed under the Insecticides Act, 1968 which is a central Act, and hence state governments have no direct role in amending it.
 - It is due to this that an estimated 104 pesticides that are still produced/ used in India, that have been banned in two or more countries in the world.
- **Regulation for Pesticides in India:**
 - The Insecticides Act of 1968 covers the registration, manufacture and sale of pesticides in India.
 - The experience s in administering this Act over the last five decades has exposed certain gaps. In this context, the union cabinet has recently approved the [Pesticides Management Bill, 2020](#).
 - The Bill regulates the business of pesticides and compensate farmers in case of [losses from the use of agrochemicals](#).

UPSC Civil Services Examination, Previous Year Question (PYQ)

Q. In India, the use of carbofuran, methyl parathion, phorate and triazophos is viewed with apprehension. These chemicals are used as (2019)

- (a) pesticides in agriculture
- (b) preservatives in processed foods
- (c) fruit-ripening agents
- (d) moisturising agents in cosmetics

Ans: (a)

Exp:

- To promote organic farming, Department of Agriculture, Kerala, has ordered a ban on the use of around 17 pesticides since 2011.
- List of Banned Pesticides
 - **Insecticides:** Cabofuran, Methyl Demeton, Methyl Parathion, Monocrotophos, Phorate, Methymol, Prophenofos, Triazophos, Endosulfan
 - **Fungicides:** MEMC, Ediphenphos, Tricyclazole, Oxythioquinox
 - **Weedicides:** Anilophos, Paraquat, Thiobencarb, Atrazine
- Therefore, option (a) is the correct answer.

Rajasthan's Menar Bird Village to Become Wetland

For Prelims: Wetlands, Wetlands in India

For Mains: Significance of Wetlands, Importance of Ramsar Listing

Why in News?

Recognised as the “**bird village**” following community-driven conservation efforts, Menar in Udaipur district is set to be notified as **Rajasthan's new wetland**.

- This will pave the way for getting the **Ramsar site status for this rural heartland of the Mewar region**.

What is a Wetland and its Significance?

- **Wetlands:**
 - **Wetlands** are ecosystems saturated with water, either seasonally or permanently. They include **mangroves, marshes, rivers, lakes, deltas, floodplains and flooded forests, rice-fields, coral reefs, marine areas** no deeper than 6 meters at low tide, as well as human-made wetlands such as waste-water treatment ponds and reservoirs.
- **Significance:**
 - Wetlands are **a critical part of our natural environment**. They mitigate floods, protect coastlines and build **community resilience to disasters, reduce the impacts of floods, absorb pollutants** and improve water quality.
 - Wetlands are **critical to human and planet life**. More than 1 billion people depend on them for a living and 40% of the world's species live and breed in wetlands.
 - They are **a vital source for food, raw materials, genetic resources** for medicines, and hydropower.
 - **30% of land-based carbon** is stored in peatland.
 - They play **an important role in transport, tourism and the cultural and spiritual well-being** of people.
 - Many wetlands are **areas of natural beauty**, and many are **important to Aboriginal people**.

What are the Key Highlights of Menar Wetland?

- **About:**
 - The two lakes in the Menar village – **the Brahma and Dhandh** play host to a large number of **migratory birds** every year.
 - The Forest Department has initiated the process for notification of Menar as a wetland, which will recognise its role in the storage of sediment and nutrients and **enable the local authorities to maintain the respective lakes**.
 - With the status of wetlands, the two lakes will be strengthened for **increasing the vegetation of aquatic plants and protecting biodiversity**.
- **Observed Species:**

- More than **150 species of local and migratory birds** inhabit the two lakes in the winter season.
 - They include **Greater Flamingo, White-tailed Lapwing, Pelican, Marsh Harrier, Bar-headed Goose, Common Teal, Greenshank, Pintail, Wagtail, Green Sandpiper and Red-wattled Lapwing.**
 - Bird lovers and tourists flock to the village after the arrival of migratory birds from as far as **Central Asia, Europe and Mongolia.**
- **Other Ramsar Sites:**
 - At present, Rajasthan has **two wetlands recognised as Ramsar sites -**
 - **Keoladeo Ghana** in Bharatpur district
 - **Sambhar Salt Lake** in Jaipur district.

What is the Significance of Ramsar Listing?

- It is like an **International Organization for Standardization (ISO) certification.** They can take it off the list as well if it doesn't meet their standards continuously. It's **a feather in the cap** but there is a cost to it and that cost can be paid only if there is brand value.
- **Ramsar tag makes it incumbent upon authority to strengthen the protection regime** there and creates defenses against encroachment.
- A number of species of birds prefer to **avoid the Himalaya and instead choose the route passing through Afghanistan and Pakistan** to enter the Indian sub-continent via Gujarat and Rajasthan. Thus, **Gujarat becomes the first landing point of many international migratory species** of ducks, waders, plovers, terns, gulls etc and shorebirds as well as birds of prey.
- Wetlands in India **act as foraging and resting grounds for the migratory birds** during winter.
 - According to **Convention on the Conservation of Migratory Species of Wild Animals (CMS)**, CAF (Central Asian Flyway), which includes 30 countries, covers at least 279 populations of 182 migratory waterbird species, including 29 globally threatened and near-threatened species, which breed, migrate and winter within the region.

UPSC Civil Services Examination, Previous Year Question (PYQs)

Q. Consider the following statements: (2019)

1. Under Ramsar Convention, it is mandatory on the part of the Government of India to protect and conserve all the wetlands in the territory of India.
2. The Wetlands (Conservation and Management) Rules, 2010 were framed by the Government of India based on the recommendations of Ramsar Convention.
3. The Wetlands (Conservation and Management) Rules, 2010 also encompass the drainage area or catchment regions of the wetlands as determined by the authority.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 3 only
- D. 1, 2 and 3

Ans: C

Source: TH

Water Hyacinth

Why in News?

Recently, West Bengal has made an outstanding example by utilising Water Hyacinth, an obnoxious aquatic weed plant to develop small-scale cottage industry that is both financially rewarding as well as environmentally friendly in approach.



What are the Key Facts about Water Hyacinth?

▪ About:

- **Water hyacinth**, scientifically known as *Eichhornia crassipes Mart. (Pontederiaceae)*, is an **aquatic weed common in waterbodies across South Asia, including India**.
- This is **not an indigenous species** but was **introduced to India during the British colonial rule as an ornamental aquatic plant from South America**.
- The plant **produces beautiful purple flowers** that have **high aesthetic value**.

▪ Issues:

- This simple, floating aquatic plant, unfortunately, is also an **obnoxious weed** that has been **suffocating surface freshwater sources** like rivers, rivulets, streams, ponds, dams, lakes and bogs, **making the waterbodies unsuitable for commercial fishery, transportation and recreation**.
- The plant is a **prolific vegetable matter-producer** and has the ability to choke out any closed waterbody at an astonishing rate.
 - A plant that is **prolific produces a large number of young plants, or fruit**.
 - This **cuts off sunlight** as well as **reduces oxygen level in the water**, making it unfit for commercial use.
 - It is **an expensive and labour-intensive process to remove this weed from time to time**.
- This water hyacinth has **become a serious problem plant for the ecosystem**.

▪ Significance:

- The plant has been **used as a bio-fertiliser in some organic agriculture practises**.
- This plant is a **good phytoremediation species**, suggesting it has the **ability to trap and remove toxic metabolites and harmful heavy metals from water**.

Source: DTE

