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DAILY CURRENT AFFAIRS 24-07-2024

GS-1

1. Saraswati River

GS-2

2. The International Centre for Audit of Local Governance (iCAL)
3. Cyprus

GS-3

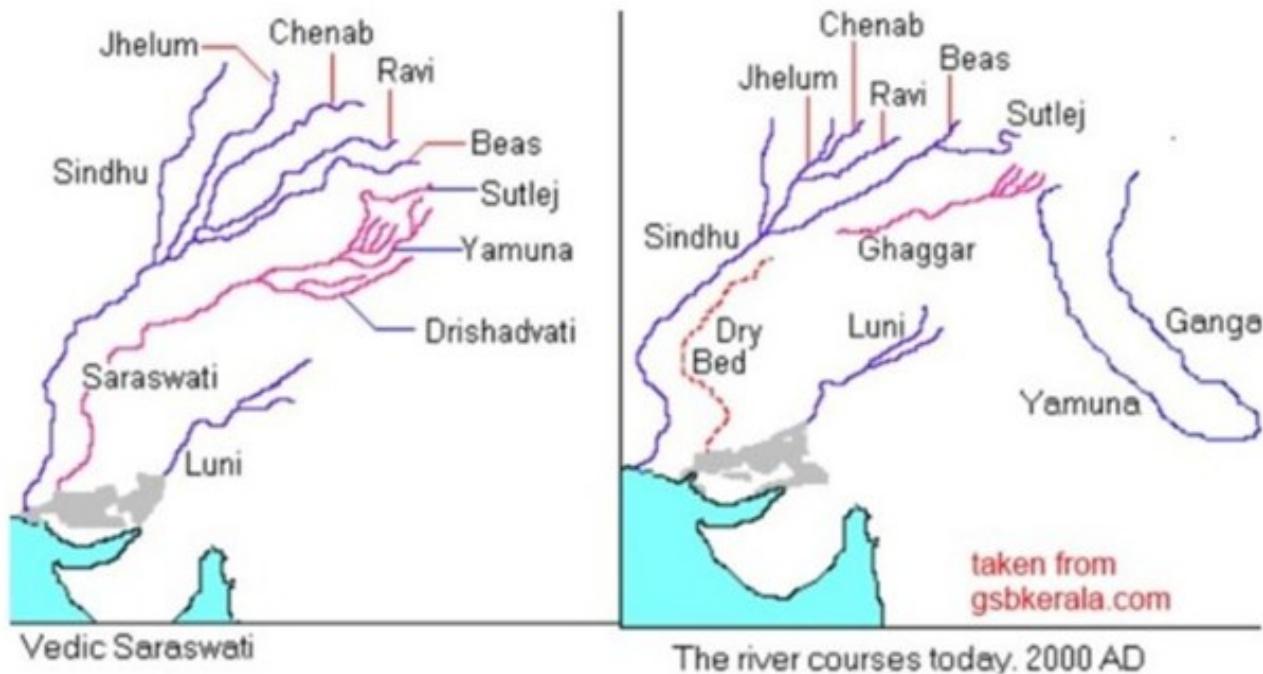
4. Shigella infection
5. Salvinia molesta

Saraswati River

Syllabus: GS-1; Geography- Rivers of India

Context

- 1) Haryana seeks to recreate the Saraswati
- 2) NCERT has made some changes in the new social science textbook for Class 6.
The term 'Sindhu-Saraswati Civilization' or 'Indus-Saraswati Civilization' has been used instead of the Harappan Civilization.



About

- The Saraswati River holds a significant place in Indian history, culture, and mythology.
- Revered as a sacred river in Vedic texts, it is often associated with the Rigveda.

Mythological and Historical Significance

Vedic References:

- The Rigveda describes Saraswati as a mighty and life-sustaining river, often referred to as a goddess.
- Mentioned as the central river among the seven rivers (**Sapta Sindhu**) of Vedic geography.

Cultural Importance:

- Saraswati is revered as a goddess of wisdom, learning, and arts in Hindu mythology.
- Many ancient Indian texts, including the **Mahabharata**, cite the river, enhancing its cultural significance.

Indus Valley Civilization:

- Believed to have played a crucial role in sustaining the Harappan civilization.
- Many archaeologists propose that numerous Harappan sites lie along the course of the ancient Saraswati.

Geological and Hydrological Studies

Paleo-channel Studies:

- Satellite imagery and sediment analysis have traced ancient riverbeds that align with descriptions of Saraswati.
- Studies suggest that the river once flowed from the **Himalayas to the Arabian Sea**.

Disappearance:

- Several theories explain the river's disappearance, including tectonic shifts, climate change, and river capture by other rivers like the **Yamuna and Sutlej**.
- Geological evidence suggests the river dried up around 2000 BCE, contributing to the decline of the Harappan civilization.

Modern Identifications and Theories

Ghaggar-Hakra River:

- Many scholars and geologists identify the Ghaggar-Hakra river system with the ancient Saraswati.
- This river system currently flows through parts of India and Pakistan, primarily as seasonal streams.

Reconstruction Efforts:

- There have been several proposals and efforts to rejuvenate the Saraswati by linking it with other river systems.
- The Haryana Saraswati Heritage Development Board (HSHDB) has been active in conducting excavations and research to validate the river's ancient course.

Archaeological Findings

Excavation Sites:

- *Sites like Kalibangan, Banawali, and Rakhigarhi provide substantial evidence of a flourishing civilization along the river's supposed course.*
- *Artifacts and structural remains indicate advanced urban planning and trade practices influenced by the river's presence.*

Significance of Findings:

- *These findings offer insights into the social, economic, and cultural aspects of the Harappan civilization.*
- *They also highlight the importance of river systems in sustaining ancient civilizations.*
- *Saraswati in Indian Epigraphy*

Inscriptions and Coins:

- *Various inscriptions from different historical periods reference the Saraswati, indicating its continued cultural and religious importance.*
- *Coins and seals from the region also provide indirect evidence of the river's influence.*

Modern Perspectives and Challenges

Scientific Validation:

- *Modern technology, including satellite imagery and isotope analysis, has provided substantial support for the existence of the Saraswati.*
- *However, conclusive evidence is still a topic of academic debate.*

Cultural Relevance:

- *The river remains an important symbol in contemporary Indian culture, reflecting the enduring legacy of Vedic traditions.*
- *Efforts to revive the river also tie into broader discussions about water resource management and environmental conservation.*

Major Changes in the NCERT Textbook

- 1) **Unified Textbook for Social Science:** *Previously, there were separate textbooks for history, political science, and geography. Now, there is a single textbook for social science. The book explains that social science comprises many sub-disciplines, but students need not be intimidated by these terms. The textbook is divided into five sections: 'India and the World: Land and People,' 'The Fabric of the Past,' 'Our Cultural Heritage and Knowledge Traditions,' 'Governance and Democracy,' and 'Economic Life Around Us.'*

2) **Increased Mention of the Saraswati River:** *In the old history textbook, the Saraswati River was mentioned only once in a Rigveda section, where it was included among the rivers described in the Vedas.*
In the new textbook, the Saraswati River is mentioned several times in the chapter related to the origins of Indian civilization.
This chapter uses the term 'Indus-Saraswati Civilization' instead of the Harappan Civilization and highlights major cities in the Saraswati basin like Rakhigarhi and Ganweriwala, as well as smaller towns and villages.

3) **Causes of the Decline of the Harappan Civilization:** *The new textbook attributes the decline of the Harappan Civilization to the drying up of the Saraswati River.*
It states that there are two agreed-upon reasons for the civilization's decline: climate change leading to reduced rainfall and the drying up of the Saraswati River in its central basin, causing cities to be abandoned.
The old textbook did not mention the drying up of the Saraswati River as a reason for the Harappan Civilization's decline.

4) **Geography Section Additions:** *The new textbook's geography section includes Kalidasa's poem 'Kumarasambhava' in reference to the Himalayas.*
It also mentions the Tamil Sangam poetry and its connection with the landscape.

5) **Prime Meridian:** *The book explains that the Greenwich Meridian was not the first prime meridian.*
Centuries before Europe, India had its own prime meridian, which passed through Ujjain in Madhya Pradesh.

6) **Caste and Discrimination:** *Like the old political science textbook, the new book has a chapter on diversity.*
However, it does not mention caste-based discrimination and inequality.
The word 'caste' appears only once in the new book.
The old book had an entire section on B.R. Ambedkar, his fight for Dalit rights, and his experiences with caste-based discrimination.

The International Centre for Audit of Local Governance (iCAL)

Syllabus: GS-2; Governance

Context:

- **Comptroller and Auditor General (CAG) of India Girish Chandra Murmu inaugurated the International Centre for Audit of Local Governance (iCAL) in Rajkot on Thursday (July 18, 2024).**

Purpose and Objectives of iCAL

- **Setting Global Standards:** Aim to set global standards for auditing local governance bodies.
- **Collaborative Platform:** iCAL will be a platform for policymakers, administrators, and auditors linked with local governments.
- **Enhancing Independence:** It will enhance the local government auditors' independence to ensure improved financial performance assessment, service delivery, and data reporting.
- **Centre of Excellence:** iCAL will serve as a centre of excellence for capacity building of local government auditors.

Primary Functions

- **Empowerment Through Training:** Empower auditors, executives, and elected representatives of local governments through training and leadership development initiatives.
- **Knowledge Centre:** Act as a knowledge centre and thinktank for addressing governance issues at grassroots levels.
- **Interactive Workshops:** Conduct interactive workshops, knowledge-sharing sessions, peer exchanges, etc.
- **Leadership:** Dinesh Patil, Principal Accountant General (Audit-I), Gujarat, will serve as the director general of iCAL.

Responsibilities and Existing Auditing Framework

- **Local Body Accounts:** Responsibility of concerned local bodies.
- **State-Level Audit Bodies:** Examiner of Local Fund Accounts (ELFA) or Director of Local Fund Accounts (DLFA).
- **CAG's Role:**
 - Conducts audits of all funds (state and Central governments).
 - Supervises proper maintenance of accounts and auditing for all levels of PRIs/ULBs.

- *Advises and supports ELFA or DLFA under its technical guidance and support initiative.*

Need for iCAL

- **Number of Local Bodies:** *Around 2.5 lakh panchayats and 8,000 urban local bodies in India.*
- **Global Practices:** *40 countries have supreme audit institutions (SAIs) conducting audits of local bodies.*
- **Funding Concerns:** *Need for proper auditing due to increased funds flowing to local bodies and concerns over fund utilisation.*
- **RBI Report (2022):** *Highlighted inefficiencies in financial management practices of municipalities.*
- **International Collaboration:** *Emphasized the need for collaboration among SAIs and international audit organisations to share best practices and knowledge.*

Goals and Vision

- **Building Capacity:** *Enhance understanding of financial management practices and internal controls among auditors and local government employees.*
- **Facilitating Audit Process:** *Open communication channels with local government officials to improve data accessibility and cooperation in addressing audit findings.*

Practice Question

Q. Critically examine the challenges and importance of auditing local bodies in India, and evaluate the potential impact of the International Centre for Audit of Local Governance (iCAL) on these processes. (10 marks, 150 words)

Cyprus

Syllabus: GS-2; International Relations

Context

- President Recep Tayyip Erdogan says Turkey is ready to build a naval base in Cyprus, half a century after its forces invaded the now-divided island.



About

- Cyprus, an island country in the **Eastern Mediterranean**, is known for its rich history, strategic location, and ongoing political conflict. It is the third largest and third most populous island in the Mediterranean.
- Cyprus has a unique cultural blend influenced by its **Greek and Turkish heritage**.

Geography

- **Location:** Eastern Mediterranean Sea, south of Turkey, west of Syria and Lebanon, northwest of Israel, north of Egypt, and southeast of Greece.
- **Area:** Approximately 9,251 square kilometers.
- **Terrain:** Coastal plains with central mountains, the Troodos Mountains in the south and the Kyrenia Range in the north.
- **Climate:** Mediterranean climate with hot, dry summers and mild, wet winters.

History

- **Ancient History:** Settled by Mycenaean Greeks in the 2nd millennium BC. Important trade center due to its copper resources.
- **Medieval Period:** Conquered by Assyrians, Egyptians, and Persians. Became part of the Roman Empire and later the Byzantine Empire.
- **Crusader Period:** Conquered by Richard the Lionheart in 1191 and sold to the Knights Templar, then became a kingdom under the Lusignans.
- **Ottoman Rule:** Ottoman Empire ruled from 1571 to 1878.
- **British Rule:** Cyprus was leased to the British Empire in 1878 and formally annexed in 1914.

Political Context

- **Independence:** Gained independence from Britain in 1960.
- **Cyprus Conflict:** Inter-ethnic violence between Greek Cypriots and Turkish Cypriots led to a *de facto* partition in 1974 following a Greek-led coup and subsequent Turkish invasion. The island remains divided into the Republic of Cyprus (internationally recognized) and the Turkish Republic of Northern Cyprus (recognized only by Turkey).
- **UN Involvement:** The United Nations has maintained a peacekeeping force (UNFICYP) on the island since 1964.

Economy

- **Economic Sectors:** Services (including tourism and financial services), industry (including light manufacturing and construction), and agriculture.
- **Natural Resources:** Copper, pyrites, asbestos, gypsum, timber, salt, marble, and clay earth pigment.

- **Tourism:** Major contributor to the economy due to its beaches, archaeological sites, and warm climate.

Demographics

- **Population:** Approximately 1.2 million people.
- **Ethnic Composition:** Predominantly Greek Cypriots (about 77%), Turkish Cypriots (about 18%), and other ethnic groups.
- **Languages:** Greek and Turkish are the official languages. English is widely spoken.

Culture

- **Heritage:** A blend of Greek and Turkish cultures with influences from British colonial rule.
- **Religion:** Predominantly Greek Orthodox Christianity and Islam (among Turkish Cypriots).

Foreign Relations

- **EU Membership:** Joined the European Union in 2004.
- **Relations with Turkey:** Complicated due to the Cyprus conflict. No diplomatic relations with Turkey.
- **Relations with Greece:** Strong cultural and political ties.
- **UN and International Role:** Active participant in the United Nations and other international organizations.

Strategic Importance

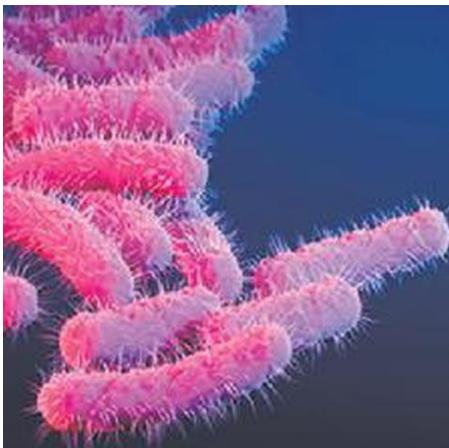
- **Geopolitical Location:** Strategic location at the crossroads of Europe, Asia, and Africa.
- **Military Bases:** Hosts British military bases, significant for NATO operations.

Shigella infection

Syllabus: GS-3; General Science

Context

- Four students in a school were affected by *Shigella* infection in this north Kerala.



Shigella

CAUSES

Infection occurs when you accidentally swallow shigella bacteria. This can happen when you:

- Touch your mouth
- Eat contaminated food
- Swallow contaminated water

SYMPTOMS

Signs and symptoms of shigella infection usually begin a day or two after contact with shigella. But it may take up to a week to develop.

- Diarrhoea (often containing blood or mucus)
- Stomach pain or cramps
- Fever
- Nausea or vomiting

Preventive steps

- Carefully washing your hands with soap and water during key times
- Avoid swallowing water from ponds, lakes, or untreated swimming pools.
- When traveling, follow safe food and water guidelines
- Avoid sexual activity with those who recently (several weeks) recovered from shigellosis.

About

- *Shigella infection (shigellosis) is an intestinal infection caused by a family of bacteria known as shigella.*
- *The main sign of shigella infection is diarrhea, which often is bloody.*
- *Shigella is very contagious.*
- *People get infected with shigella when they come in contact with and swallow small amounts of bacteria from the stool of a person who is infected with shigella.*

Symptoms

- *Diarrhea (often containing blood or mucus)*

- *Stomach pain or cramps*
- *Fever*
- *Nausea or vomiting*
- *Symptoms generally last for about five to seven days. In some cases, symptoms may last longer.*
- *Some people have no symptoms after they've been infected with shigella. However, their feces may still be contagious up to a few weeks.*

Causes

➤ **Eat contaminated food**

Infected people who handle food can spread the bacteria to people who eat the food. Food can also become infected with shigella bacteria if it grows in a field that contains sewage.

➤ **Swallow contaminated water**

Water may become infected with shigella bacteria either from sewage or from a person with shigella infection swimming in it.

Risk factors

- **Being a child:** *Children under age 5 are most likely to get shigella infection. But shigella can infect people of any age.*
- **Living in group housing or participating in group activities:** *Close contact with other people spreads the bacteria from person to person. Shigella outbreaks are more common in child care centers, community wading pools, nursing homes, jails and military barracks.*
- **Living or traveling in areas that lack sanitation:** *People who live or travel in developing countries are more likely to get shigella infection.*
- **Being a man who has sex with men:** *Men who have sex with men are at higher risk of shigella infection because of direct or indirect oral-anal contact during sexual activity.*

Complications

➤ **Dehydration:** *Constant diarrhea can cause dehydration.*

Signs and symptoms include lightheadedness, dizziness, lack of tears in children, sunken eyes and dry diapers.

Severe dehydration can lead to shock and death.

➤ **Seizures:** *Some children with a shigella infection have seizures.*

Seizures are more common in children who run a high fever, but can occur in children who do not have a high fever.

It's not known whether the seizures are a result of the fever or the shigella infection itself.

If your child has a seizure, contact your doctor immediately.

- **Rectal prolapsed:** *In this condition, straining during bowel movements or inflammation of the large intestine may cause the mucous membrane or lining of the rectum to move out through the anus.*
- **Hemolytic uremic syndrome:** *This rare complication of shigella, more commonly caused by a type of E. coli bacteria than by shigella bacteria, can lead to a low red blood cell count (hemolytic anemia), low platelet count (thrombocytopenia) and acute kidney failure.*
- **Toxic megacolon:** *This rare complication occurs when your colon becomes paralyzed, preventing you from having a bowel movement or passing gas.*
Signs and symptoms include stomach pain and swelling, fever and weakness.
If you don't receive treatment for toxic megacolon, your colon may break open (rupture), causing peritonitis, a life-threatening infection requiring emergency surgery.
- **Reactive arthritis:** *Reactive arthritis develops in response to an infection.*
Signs and symptoms include joint pain and inflammation, usually in the ankles, knees, feet and hips; redness, itching and discharge in one or both eyes (conjunctivitis); and painful urination (urethritis).
- **Bloodstream infections (bacteremia):** *Shigella infection can damage the lining of the intestines.*
In rare cases, shigella bacteria can enter the bloodstream through the damaged intestinal lining and cause a bloodstream infection.

Salvinia molesta

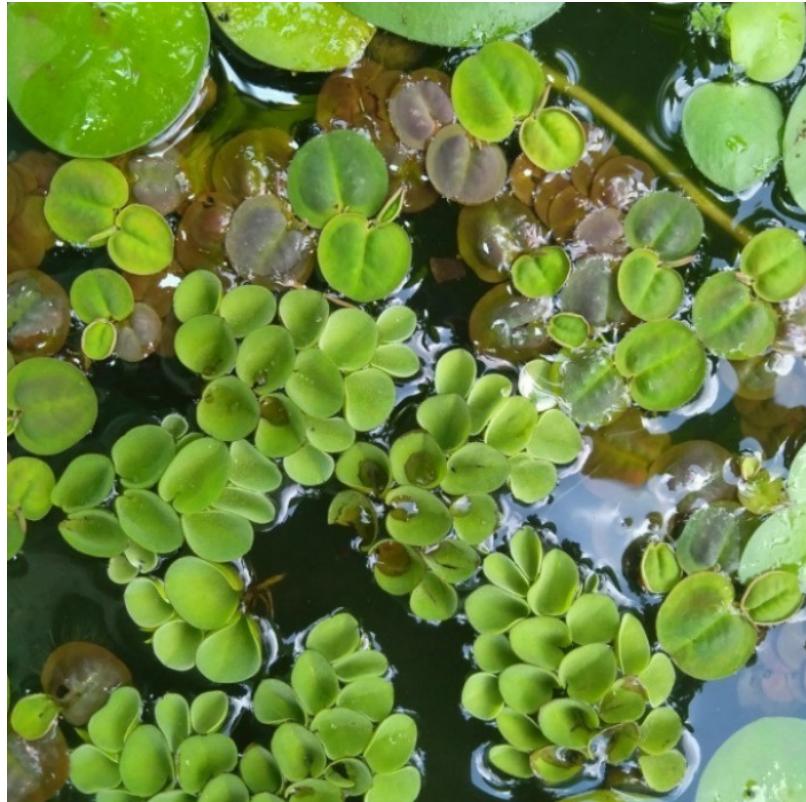
Syllabus: GS-3; Environment and Ecology

Context

- **The invasive aquatic weed, Water fern (Salvinia molesta), is significantly disrupting the use of crucial water resources in India.**

About

- **Salvinia molesta is a free-floating aquatic fern native to South America.**
- **It is commonly known as giant salvinia or kariba weed. This plant is notorious for being an invasive species in many parts of the world, causing significant ecological and economic impacts.**



About

- *Salvinia molesta is a free-floating aquatic fern native to South America.*
- *It is commonly known as giant salvinia or kariba weed. This plant is notorious for being an invasive species in many parts of the world, causing significant ecological and economic impacts.*

Characteristics

- **Appearance:** *Salvinia molesta has small, floating leaves that form dense mats on the water's surface. The leaves are oval-shaped, covered with water-repellent hairs, and can vary in color from green to brown as they age.*
- **Reproduction:** *This plant reproduces vegetatively, meaning it can spread rapidly by fragmentation. Even small pieces of the plant can grow into new individuals, making it difficult to control.*
- **Growth:** *It thrives in warm, slow-moving or still waters such as lakes, ponds, rivers, and canals. Under optimal conditions, it can double its biomass in just a few days.*

Invasive Impact

- **Environmental:** *Dense mats of Salvinia molesta block sunlight from reaching underwater plants, depleting oxygen levels and harming aquatic life. This can lead to a decline in biodiversity and disruption of ecosystems.*

- **Economic:** *The plant can interfere with water-based activities such as fishing, boating, and irrigation. It can clog water intakes, pumps, and hydroelectric systems, leading to costly maintenance and repairs.*
- **Control Measures:** *Various methods are used to control *Salvinia molesta*, including mechanical removal, chemical herbicides, and biological control. One successful biological control agent is the salvinia weevil (*Cyrtobagous salviniae*), which feeds on the plant and helps reduce its spread.*

Interesting Facts

- **Rapid Spread:** **Salvinia molesta* is one of the fastest-growing aquatic plants and can cover large water bodies quickly, outcompeting native vegetation.*
- **Regulation:** *Due to its invasive nature, many countries have regulations in place to prevent the spread of *Salvinia molesta*. It is often illegal to transport or sell this plant.*