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# INDIA REJECTS CHINA'S RENAMING OF PLACES IN ARUNACHAL PRADESH

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS OF " INDIA REJECTS CHINA'S RENAMING OF PLACES IN ARUNACHAL PRADESH". THIS TOPIC IS RELEVANT IN THE "INTERNATIONAL RELATIONS" SECTION OF THE UPSC CSE EXAM.

#### WHY IN THE NEWS?

Lately, China has been renaming certain locations in Arunachal Pradesh. India has firmly opposed this action, asserting that the attribution of "invented" names does not change the established fact that the state remains an inseparable and enduring part of India.

#### METHODS EXECUTED BY CHINA FOR TERRITORIAL INFLUENCE AND HEGEMONY

- **Salami Slicing:** This tactic involves making a series of seemingly small territorial claims over time. Each individual claim may appear insignificant, but the cumulative effect is a gradual erosion of disputed territory. China has been accused of using salami slicing in the South China Sea, where it has built outposts on contested reefs and islets. These outposts, while seemingly small, allow China to establish a physical presence, potentially restrict freedom of navigation for other countries, and lay the groundwork for further territorial claims.
- Wolf Warrior Diplomacy: This aggressive diplomatic approach involves strong-armed rhetoric, public shaming of rivals, and a nationalistic stance. China's "Wolf Warrior" diplomats aim to project power and deflect criticism on the international stage. While intended to intimidate, it can also backfire and isolate China. This approach can damage relations with other countries, hinder opportunities for peaceful resolution of disputes, and create an atmosphere of tension in the region.
- Artificial Island Creation: China has been constructing and militarising artificial islands in disputed parts of the South China Sea. These islands serve a dual purpose: establishing a physical presence and potentially bolstering China's territorial claims. This strategy has been met with international condemnation as it disrupts the freedom of navigation in the region, raises concerns about potential militarisation, and sets a precedent for other countries to potentially follow suit.
- **Debt-Trap Diplomacy:** China extends substantial loans to developing countries for infrastructure projects. However, critics argue these loans come with hidden costs, potentially creating a situation where debtor nations become beholden to China. This economic leverage could then be used to pressure countries into territorial concessions or political alignment with China. Debt-trap diplomacy raises concerns about the exploitation of developing countries and the potential creation of a sphere of Chinese economic influence.

#### DISPUTE BETWEEN INDIA AND CHINA

- For decades, a complex territorial dispute has simmered along the 3,488-kilometre India-China border. Two key regions are at the heart of the disagreement:
- 1. Aksai Chin: This western territory is administered by China but claimed by India as part of Ladakh. Its strategic importance stems from its location near the China-Pakistan Economic Corridor (CPEC) and its potential use as a military route.
- 2. **Arunachal Pradesh:** China claims the entire northeastern state of Arunachal Pradesh, referring to it as "South Tibet." India, however, firmly governs this region and considers it an inseparable part of its territory.
- **Vague Demarcation:** The 3,488-kilometre border between India and China is a source of tension due to a lack of clear demarcation. There's no universally agreed upon "Line of Actual Control" (LAC) in some areas. This LAC emerged after the 1962 war between the two nations. The India-China border can be divided into three sectors:
- 1. Western Sector: This region encompasses Ladakh.
- 2. Middle Sector: This sector comprises Himachal Pradesh and Uttarakhand.
- 3. Eastern Sector: Arunachal Pradesh and Sikkim fall under this sector.



#### CHINA'S "STRING OF PEARLS" STRATEGY

- It denotes a geopolitical and strategic endeavour aimed at establishing a network of ports and maritime infrastructure facilities in key locations across the Indian Ocean.
- These facilities are either funded, owned, or controlled by China and serve to enhance its maritime presence and influence in the region.
- Prominent locations associated with China's String of Pearls include Gwadar Port in Pakistan, Hambantota Port in Sri Lanka, Chittagong Port in Bangladesh, and Djibouti in the Horn of Africa.
- These strategically positioned facilities enable China to exert greater influence over maritime trade routes and enhance its naval capabilities in the Indian Ocean.

#### **FIVE FINGERS OF TIBET**

China's strategic approach to Tibet extends beyond the region itself. The concept of "Five Fingers of Tibet" is a metaphor that depicts Tibet as a palm, with five surrounding areas acting as fingers that China seeks to control or influence. These "fingers" represent:

- Ladakh: Controlling Ladakh grants China a land bridge to Pakistan, strengthening their strategic partnership.
- **Nepal:** Influence over Nepal provides China with a strategic foothold near India's heartland.
- **Sikkim:** Dominating Sikkim would allow China to sever the Siliguri Corridor, a narrow strip of land connecting India's northeastern states to the mainland, effectively isolating them.
- **Bhutan:** Controlling Bhutan would bring China closer to Bangladesh, potentially opening a route to the Bay of Bengal and bolstering China's regional presence.
- **Arunachal Pradesh:** Gaining control over Arunachal Pradesh would enable China to dominate India's northeast, significantly expanding its military reach and strategic influence in the region.

#### STRING OF PEARLS STRATEGY

- The concept of China's "String of Pearls" pertains to a geopolitical and strategic strategy focused on establishing a network of ports and other maritime infrastructure facilities across strategic positions in the Indian Ocean. These facilities are financed, owned, or managed by China and serve to bolster its maritime presence and influence in the region.
- Key locations linked to China's String of Pearls include Gwadar Port in Pakistan, Hambantota Port in Sri Lanka, Chittagong Port in Bangladesh, and Djibouti in the Horn of Africa. These sites are strategically selected to enhance China's access to maritime trade routes and to strengthen its naval capabilities in the Indian Ocean.

## MEASURE TAKEN BY INDIA TO COUNTER CHINA'S STRATEGY

- **Global Alliances:** India is building partnerships with democratic nations like the QUAD and I2U2 to address China's influence in the Indian Ocean.
- Alternative Trade Routes: India is developing corridors like the IMEC and supporting the INSTC to offer alternatives to China's Belt and Road Initiative (BRI) and its strategic ports.
- **Countering China's Military Strategy:** India's "Necklace of Diamonds" strategy aims to counter China's "String of Pearls" by strengthening its naval presence and regional diplomatic ties.
- **Strengthening Border Infrastructure:** India is rapidly improving its border infrastructure through the Border Roads Organisation (BRO) to bolster its position along the disputed border. These projects focus on regions like Ladakh and Arunachal Pradesh.

#### PRELIMS PRACTISE QUESTION

#### Q1. Siachen Glacier is situated on the:

- (a) East of Aksai Chin
- (b) East of Leh
- (c) North of Gilgit
- (d) North of Nubra Valley

Answer: D

#### MAINS PRACTISE QUESTION

Q1. Can the "Golden Arches Theory" of infrastructure development, which advocates for economic integration as a means to foster peace and stability, be applied to the India-China context? Why or why not?

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# **GEROSCIENCE: THE SCIENCE RELATED TO AGING**

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS "GEROSCIENCE: THE SCIENCE RELATED TO AGING". THIS TOPIC IS RELEVANT IN THE "SCIENCE & TECHNOLOGY" SECTION OF GS3 IN THE UPSC CSE EXAM.

### WHY IN THE NEWS?

At Columbia University in New York, Dr. Daniel Belsky, an epidemiologist, has introduced the concept of "geroscience," focusing on the **study of aging and related factors**.

His innovative work includes the development of a **groundbreaking blood test** designed **to gauge the rate of aging in individuals**. This test, often referred to as "gerozyme," examines the **formation of methyl groups** within DNA, a process intricately linked to the aging process.

By analyzing methylation patterns, particularly in senior citizens, Dr. Belsky's research provides valuable insights into the dynamics of aging and offers potential avenues for personalized interventions aimed at promoting healthier aging trajectories.

## WHAT IS DNA METHYLATION?

DNA methylation is a mechanism that involves the addition of a methyl group in DNA molecule, specifically to cytosine bases within the DNA sequence.

DNA methylation is crucial for **regulating gene expression and various cellular processes** by influencing chromatin structure and accessibility to transcriptional machinery. However, the relationship between DNA methylation and gene expression can be **complex and context-dependent**.

DNA methylation an important **significant role in the aging process**. As individuals age, there are changes in DNA methylation patterns throughout the genome, which can affect gene expression and cellular function.

# **DRUGS RELATED TO ANTI AGING PROCESS**

**Metformin**– a medication primarily prescribed for managing type 2 diabetes, has attracted increasing attention for its potential beyond glycemic control. Studies indicate that metformin could potentially play a role in combating aging and regulating metabolism.

**TORC1-** Target Of Rapamycin Complex 1, is a **pivotal protein assembly fundamental to cell growth, metabolic functions, and the aging process**. It acts as a master controller, overseeing a multitude of cellular activities in reaction to external signals like nutrient levels, energy resources, and growth signals.

**Resveratrol**: It is found in red wine, grapes, and certain berries. It is for its potential anti-aging effects, including its ability to activate sirtuins, a family of proteins involved in cellular regulation and longevity.

Nicotinamide riboside (NR): NR is a form of vitamin B3 that has been investigated for its role in cellular energy metabolism and its potential to promote healthy aging. Senolytics: Senolytics are those drugs that target senescent cells, which are cells that have ceased to divide and accumulate with age. It aims to selectively eliminate senescent cells, thereby reducing inflammation and improving tissue function.

# LIFESTYLE FACTORS FOR ANTI AGING

**Regular Exercise**: Engaging in regular physical activity is one of the most effective ways to promote healthy aging. Exercise helps maintain muscle mass,enhance mobility, improve cardiovascular health, such as heart disease, diabetes, and osteoporosis.

**Balanced diet:** A balanced diet comprising fruits, whole grains,vegetables lean proteins gives essential nutrients and antioxidants which supports overall health and longevity. Nutrient-dense foods helps in maintaining a healthy weight, support immune system, and reduce the risk of age-related diseases.

**Adequate Sleep**: Good Quality sleep is essential for overall health and well-being, including cognitive function, immune function, and hormone regulation. Aim for 7-9 hours of sleep per night and practice good sleep and hygiene habits to promote restful sleep.

**Stress management**: Addressing chronic stress is crucial as it not only speeds up aging but also heightens susceptibility to age-related illnesses. Introducing stress-relieving practices like mindfulness meditation, deep breathing exercises, yoga, or reconnecting with nature can be beneficial in fostering a sense of calmness and improving emotional health.

**Social Connections**: Maintaining strong social connections and staying engaged with family, friends, and community leads to positive impact on mental or emotional health as well as cognitive function. Social interaction helps combat loneliness, reduces stress, and promotes a sense of purpose and belonging.

**Sun Protection**: Protecting skin from the sun's harmful UV rays by wearing sunscreen, protective clothing, and sunglasses, and seeking shade when outdoors. Sun exposure can increase skin aging and increase the risk of skin cancer.

**Avoidance of Harmful Habits**: Limit or avoid habits that can increase the pace ofaging and increase the risk of smoking, excessive alcohol consumption, and recreational drug use.

Yual Noah Harare, describes in the book 'Homo Deus' about humans overcoming the boundation of natural boundaries by the use of technology. Geroscience is part of that pursuit of Homsapiens which can lead to longevity and healthy lifestyle.

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