

## **Prelim Bits 04-09-2017**

### **International Law Meet**

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- The International Institute of Law was founded in 1873 in Belgium by international lawyers.

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- The institute selects 132 lawyers from different countries to act independently towards international legal measures.

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- Recently, its 78<sup>th</sup> session of global level meeting was held in India.

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- It's the first time that India is hosting this global legal meeting.

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- Some of the topics discussed at the session were judicial review of the decisions of the U.N. Security Council, the legal issues concerning international migration and international investment disputes.

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- The institute was awarded the Nobel Peace Prize in 1904 for its efforts to promote settlement of disputes among States through peaceful means.

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### **International Solar Alliance Framework Pact**

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- The ISA was instituted to connect 121 solar-resource-rich nations for research, low-cost financing and rapid deployment of clean energy.

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- ISA needs ratification of its framework agreement by 15 member countries to be recognised as inter-governmental and multilateral agency under the United Nations charter.

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- Recently, Seychelles became the 9<sup>th</sup> member to ratify the framework agreement.

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- Till now India, France, Nauru, Niger, Fiji, Mauritius, Tuvalu and Bangladesh have ratified the agreement.  
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- The first 15 countries who ratified the agreement would then be founding members of ISA.  
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- Costa Rica became the 39th signatory to the framework agreement and it is expected that these countries will also ratify the agreement.  
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- Some of the countries which are signatory but yet to ratify includes Australia, Brazil, Cambodia, Peru, Benin, Burkina Faso, Democratic Republic of Congo, Comoros, Djibouti, Dominican Republic and Ethiopia.  
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- Click [here](#) to know more about ISA.  
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## **Bio film**

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- Bio films are communities of microorganisms that attach to each other and to surfaces.  
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- They are able to act as barriers to antibiotics.  
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- During times of hostile conditions, such as increased temperature and presence of antibiotics, bacteria tend to come together and form a bio film to protect them.  
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- The stress response pathway is crucial for bacteria to survive during hostile conditions.  
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- Scientists have recently found two new molecules capable of destroying bio film forming bacteria.  
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- When the molecules combined with antibiotics, it showed efficacy in treating infections caused by multi-drug resistant pathogens.  
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## **Genetic Diversity in Tiger Population**

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- Genetic diversity is defined as the variation in the amount of genetic information within and among individuals of a population, a species, an assemblage, or a community.
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- It is crucial for evolution and low genetic diversity can threaten the survival of populations.
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- 60% of the world's wild tigers are found in India but the genetic variation among the tigers is dwindling due to fragmentation.
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- Fragmentation causes tiger population to cut off from each other. Thus smaller, isolated populations are less genetically diverse due to lesser intermixing of different populations than larger connected ones.
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- India's tigers comprise 3 distinct populations such as northwest cluster, south cluster and central cluster.
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- Northwest cluster consists only of tigers from Rathambore and it had least genetic diversity due to its isolation from other tiger population.
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- Whereas, Central cluster comprising tigers from Terai, North East and central India shows more genetic diversity due to its interconnected nature.
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- Thus tiger population from Rathambore could be at risk in future and tiger corridors are crucial in maintaining the genetic diversity.
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## **Open Skies Agreement**

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- The national civil aviation policy of 2016 allows countries covered under such agreements an unlimited number of flights to the six metro airports in Delhi, Mumbai, Hyderabad, Kolkata, Bengaluru and Chennai.
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- Recently, India has finalised an Open Skies Agreement with Japan, allowing designated airlines of both signatory countries to operate freely.
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- In 2003, India had signed an open skies agreement with the 10-member ASEAN.
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- India had signed the agreement with US (2005), Jamaica, Guyana, Czech

Republic, Finland, Spain, Sri Lanka (2016) and with Greece (2017).

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## **Solar Power Generation in India**

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- Jawaharlal Nehru National Solar Mission aims to add 100GW of Solar Power by 2022.

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- New Research has found that the smog and dust sapping solar power generation by more than 25%.

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- Scientists have found that man made particles floating in the air and deposited on solar panels seriously impact conversion of sunlight to energy.

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- The interference causes steep drops in power generation and huge losses will compound affecting India's solar ambitions.

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**Source: The Hindu, Business Line**

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