

## 27 February 2020: PIB Summary & Analysis

### 1. State Visit of President of Myanmar

#### Context:

MoUs exchanged during the State Visit of the President of Myanmar, U Win Myint.

#### Details:

Many MoUs were exchanged during the state visit:

1. MoU on Cooperation for Prevention of Trafficking in Persons; Rescue, Recovery, Repatriation and Re-Integration of Victims of Trafficking.
  2. Agreement regarding Indian Grant Assistance for Implementation of Quick Impact Projects (QIP).
  3. Several project agreements for development work in the Rakhine State of Myanmar.
  4. MoU for Cooperation on Combating Timber Trafficking, and Conservation of Tigers and other Wildlife.
  5. MoU for cooperation in the field of petroleum products.
  6. MoU on cooperation in the field of communication.
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### 2. Launching of Farmers Producer Organisations (FPOs)

#### Context:

The Prime Minister will be launching 10,000 Farmers Producer Organisations all over the country at Chitrakoot in a single day.

#### Background:

- Nearly 86% of farmers are small and marginal with average land holdings in the country being less than 1.1 hectares.
- These small, marginal and landless farmers face tremendous challenges during agriculture production phase such as for access to technology, quality seed, fertilizers and pesticides including requisite finances.
- They also face tremendous challenges in marketing their produce due to lack of economic strength.

#### FPOs:

- It is one type of Producer Organisation (PO) where the members are farmers. Small Farmers' Agribusiness Consortium (SFAC) is providing support for the promotion of FPOs. PO is a generic name for an organization of producers of any produce, e.g., agricultural, non-farm products, artisan products, etc.
- FPOs help in the collectivization of such small, marginal and landless farmers in order to give them the collective strength to deal with such issues.
- Members of the FPO will manage their activities together in the organization to get better access to technology, input, finance and market for faster enhancement of their income.
- Though the report of 'Doubling of Farmer's Income' (DFI) has recommended the formation of 7,000 FPOs by 2022 towards convergence of efforts for doubling the farmers' income, the Central

Government announced the creation of 10,000 new FPOs to ensure economies of scale for farmers over the next five years.

- In [Union Budget 2020-21](#), the Government also proposed adopting a cluster approach for horticulture produce through the strategy of “one district one product” for promoting value addition, marketing and export.
- The government has also launched a new dedicated Central Sector Scheme titled "**Formation and Promotion of Farmer Producer Organizations (FPOs)**" with a clear strategy and committed resources to form and promote 10,000 new FPOs.

For more on FPOs and their need, check [PIB dated July 16, 2019](#) under the headline ‘Setting up of Farmer Producer Organizations (FPOs)’.

Also read: [Farm Loan Waiver](#)

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### 3. ADIP Scheme

#### Context:

The PM will distribute assistive aids and devices to senior citizens (under the Rashtriya Vayoshri Yojana-RVY) and the physically challenged (Under ADIP Scheme) at a mega distribution camp at Prayagraj.

#### Details:

- This is said to be the biggest ever distribution camp being conducted in the country in terms of the number of beneficiaries covered, number of appliances distributed and value of aids and appliances distributed.
- In the mega camp, over 56,000 assistive aid and devices of different types will be distributed free of cost to over 26,000 beneficiaries. The cost of the aids and devices is over Rs 19 Crore.
- The objective is to provide assistance through these aids and devices to the daily living and socio-economic development of the Divyangjan (physically challenged) and Senior Citizens.

#### About the Rashtriya Vayoshri Yojana (RVY):

To know more about the RVY, check [PIB dated Dec 10, 2019](#).

#### About the ADIP Scheme:

- This is the Assistance to Disabled persons for purchasing/fitting of aids/appliances (ADIP) scheme, under the Ministry of Social Justice & Empowerment, GOI.
- The main objective of the scheme is to assist the needy disabled persons in procuring durable, sophisticated and scientifically manufactured, modern, standard aids and appliances that can promote their physical, social and psychological rehabilitation, by reducing the effects of disabilities and enhance their economic potential.
- The scheme is implemented through implementing agencies such as NGOs, National Institutes under the Ministry of Social Justice & Empowerment and ALIMCO (a PSU that manufactures artificial limbs).
- Assistive devices are given to PwDs with an aim to improve their independent functioning, and to arrest the extent of disability and occurrence of secondary disability.
- The aids and appliances that are given under the ADIP scheme will be BIS certified to the extent possible.

- Eligibility: A person satisfying all the following conditions are eligible:
    - Indian citizen of any age
    - Has 40% disability or more (must have the requisite certificate)
    - Monthly income, not more than Rs.20000.
    - In the case of dependents, income of parents/guardians should not exceed Rs.20000.
    - Must not have received assistance during the last 3 years for the same purpose from any source. However, for children below 12 years of age, this limit would be one year.
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#### 4. Indian Council of Agricultural Research (ICAR)

##### Context:

91<sup>st</sup> annual general meeting of the ICAR Society held.

##### About ICAR:

- It is an autonomous body under the Ministry of Agriculture and Farmers' Welfare.
  - ICAR functions under the Ministry's Department of Agricultural Research and Education (DARE).
  - It was established in 1929 as the Imperial Council of Agricultural Research.
  - Headquartered in New Delhi, ICAR is the apex body for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences in India.
  - With 101 ICAR institutes and 71 agricultural universities spread across the country, this is one of the largest national agricultural systems in the world.
  - ICAR has played a pioneering role in ushering [Green Revolution](#) and subsequent developments in agriculture in India through its research and technology development that has enabled the country to increase production in various agricultural domains.
  - The Union Minister of Agriculture is the ex-officio President of the ICAR Society.
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#### 5. Indian National Centre for Ocean Information Services (INCOIS)

##### Context:

INCOIS (Hyderabad) has launched a trio of products to better cater to its diverse users.

##### About INCOIS:

- INCOIS provides a number of free services for users in the marine realm.
- The institute is an autonomous organisation under the Ministry of Earth Sciences.
- Established in 1999, the Centre provides ocean information and advisory services to government agencies, society, industry and the scientific community through sustained ocean observations and constant improvements through systematic and focussed research.

##### Products launched:

- Small Vessel Advisory and Forecast Services System (SVAS): to improve operations on the numerous small marine vessels, particularly fishing vessels that ply the coastal waters of India.
- Swell Surge Forecast System: to provide forewarnings for the coastal population of India's vast

shoreline, which experiences a slew of damages caused by the swell waves that actually originate from the distant southern Indian Ocean.

- **Kallakkadal/Swell surge** are flash-flood events that take place without any noticeable advance change in local winds or any other apparent signature in the coastal environment. Hence the local population remains totally unaware of these flooding events until they actually occur. Such events are intermittent throughout the year.
  - Swell surges are called Kallakkadal by Kerala's fishermen. In 2012, the UNESCO formally accepted this term for scientific use.
  - During Kallakkadal events, the sea surges into the land and inundates vast areas. These events have attracted attention especially after the 2004 Tsunami in the Indian Ocean, since most people mistake Kallakkadal to be Tsunamis. Tsunami and Kallakkadal/Swell surges are two different types of waves with entirely separate causes or mechanisms.
  - Kallakkadal are caused by meteorological conditions in the Southern Ocean, south of 30°S.
  - **Algal Bloom Information Service (ABIS):** to provide timely information on harmful algal blooms, that are detrimental to coastal fisheries and also tend to induce respiratory problems within the coastal population from time to time.
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## 6. Pradhan Mantri Kisan Sampada Yojana (PMKSY)

### Context:

32 projects sanctioned under Pradhan Mantri Kisan Sampada Yojana (PMKSY).

### Details:

- A total of 32 projects were sanctioned under the 'Unit' scheme of PMKSY of the Ministry of Food Processing Industries.
- The projects are spread across almost 17 States, leveraging an investment worth 406 Crore rupees.
- These projects envisage the creation of direct and indirect employment for approximately fifteen thousand persons along with employment opportunities in rural areas to be the focus area.

### Background:

- The introduction of modern processing techniques for food results in improved shelf-life of the agricultural produce and ensures steady revenue to farmers.
- Food processing has an important role to play in linking Indian farmers to consumers in the domestic and international markets.
- The food processing industry can work as a link between farmers, government and the unemployed youth for a better contribution towards the economy.
- The food sector has emerged as a high-growth and high-profit sector due to its immense potential for value addition, particularly within the food processing industry as it is said to have a Compound Annual Growth Rate (CAGR) of approximately 8 percent over the last five years.

### About the Pradhan Mantri Kisan Sampada Yojana (PMKSY):

To read more about the [Pradhan Mantri Kisan Sampada Yojana](#), click on the linked article.

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**Context:**

The 24<sup>th</sup> meeting of the Eastern Zonal Council, comprising of the States of Bihar, Jharkhand, Odisha and West Bengal held at Bhubaneswar.

**Details:**

Currently, there are five zonal councils in India. They are:

Zonal Council	States/UTs
Northern Zonal Council	Haryana, Himachal Pradesh, Punjab, Rajasthan, NCT of Delhi, J&K, Chandigarh, Ladakh
Central Zonal Council	Chhattisgarh, Uttarakhand, Uttar Pradesh and Madhya Pradesh
Eastern Zonal Council	Bihar, Jharkhand, Odisha and West Bengal
Western Zonal Council	Goa, Gujarat, Maharashtra, Daman & Diu and Dadra & Nagar Haveli
Southern Zonal Council	Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana, Puducherry

The northeastern states are looked after by the [North Eastern Council](#), set up in 1972. It comprises Assam, Meghalaya, Sikkim, Arunachal Pradesh, Manipur, Tripura, Mizoram and Nagaland.

To know more about the **Zonal Councils**, check [PIB dated Aug 22, 2019](#) under the headline 'Meeting of Western Zonal Council'.

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## 8. Prime Minister's Employment Generation Programme (PMEGP)

**Context:**

80,000 micro-enterprises will be assisted in the current financial year under PMEGP.

**Details:**

To read more on the [Prime Minister's Employment Generation Programme](#), click on the linked article.

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## 9. National MSME Awards

**Context:**

National MSME Awards function held.

### About the National MSME Awards:

- The National MSME Awards were instituted in 1983 to felicitate the outstanding performers in the MSME sector in the areas of Entrepreneurship (Manufacturing & Services), Product Quality, Innovation, Exports and Lean Manufacturing Techniques.
  - The awards are also conferred to the Department of the States/UTs Government, dealing with the MSME sector, for their outstanding efforts for the promotion & development of the MSMEs in their jurisdiction.
  - So far, since 1983, 24 National MSME Award functions have been organized and awardees have been conferred awards.
  - The winners of the Award have the privilege of using the symbol of the Award in their respective letterheads and their employees can wear labels, pins, ties or other distinctive badges with Award symbol.
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## 10. Biofuel from microorganisms

### Context:

Researchers at the International Centre for Genetic Engineering and Biotechnology (ICGEB) are developing a method to improve the growth rate and sugar content of a marine microorganism called *Synechococcus* sp. PCC 7002.

### Details:

- Most biotechnological processes, including biofuel production, are dependent on the availability of low-cost and sustainable supply of sugars and a nitrogen source.
- The sugars typically come from plants. Plants utilize light energy through the process of photosynthesis to convert carbon dioxide in the atmosphere into biological components such as sugars, proteins and lipids.
- However, some bacteria, such as the **cyanobacteria** (also known as blue-green algae), too can perform photosynthesis and produce sugar by fixing the carbon dioxide in the atmosphere.

### Using cyanobacteria:

- The yield of sugars from cyanobacteria could potentially be much higher than that of land-based crops.
  - Further, unlike plant-based sugars, cyanobacterial biomass provides a nitrogen source in the form of proteins.
  - Cyanobacteria are found in both fresh and marine waters.
  - Using marine cyanobacteria could be better as freshwater is increasingly getting scarce.
  - However, there is a need to significantly improve their growth rates and sugar content in order to improve the economic feasibility of marine cyanobacteria-based sugar production.
  - A team from the International Centre for Genetic Engineering and Biotechnology has achieved this. This could give the biofuel sector a boost.
  - They have successfully engineered a marine cyanobacterium called *Synechococcus* sp. PCC 7002 which showed a higher growth rate and sugar (glycogen) content. When grown on air, the growth was doubled and the glycogen content of the cells increased by about 50%.
  - The Department of Biotechnology (DBT) sponsored the research.
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## 11. Pigmentary disorders

### Context:

A Rs. 3.6 crore grant has been given to promote research on pigmentary disorders.

### Details:

- The grant in the form of an Intermediate Fellowship Award was given to an Assistant Professor at Faridabad-based Regional Centre for Biotechnology by the Wellcome Trust/DBT India Alliance.
- The award consists of a grant of Rs 3.60 crore for a period of five years.

### Pigmentary disorders:

- Physiological pigmentation is a critical defense mechanism by which skin is protected against harmful UV radiations.
- Inefficient pigmentation predisposes to skin cancers, which are one of the leading causes of cancer-associated deaths worldwide.
- Further, pigmentary disorders (both hypo and hyper pigmentary) are considered a social stigma and therefore they impart long-term psychological trauma and tremendously hamper mental well-being of patients.
- The current therapeutic strategies are not efficient in alleviating pigmentary disorders.
- The research project to be taken up under the award would seek to identify novel targetable molecular players that critically regulate pigmentation process. Further, the researchers would try to repurpose commercially available drugs for the treatment of pigmentary disorders.
- In the long run, this project is expected to have a two-pronged benefits for society - protection from UV-induced skin cancers and potential treatment options for pigmentary disorders.
- So far, the focus in the pigmentation biology field has been to understand the enzymes regulating melanin synthesis and on the melanosome proteins involved in their biogenesis and maturation. However, melanosome biogenesis and melanin synthesis are complex phenomena and other cellular organelles could potentially regulate this process.

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## 12. Diagnostics for Asymptomatic Malaria

### Context:

A team of scientists from Bhubaneswar-based Institute of Life Sciences (ILS) and Bengaluru-based Jigsaw Bio Solutions have come up with a method that promises to overcome the problem of inadequate identification of asymptomatic carriers of the disease.

### Details:

- Light microscopy and protein immunoassay-based rapid diagnostic tests (RDTs) are used in the diagnosis of Malaria, in mass screening and treatment programs for the diseases, and in surveillance of malaria control measures.
- They, however, miss out about 30-50% of low-density infections, which typically have less than two parasites/microlitre and are frequently observed in asymptomatic carriers who serve as “silent” reservoirs of the infection **capable of transmitting the disease through mosquitoes.**

- An **asymptomatic carrier** (healthy carrier or just carrier) is a person or other organism that has become infected with a pathogen, but that displays no signs or symptoms. Although unaffected by the pathogen, carriers can transmit it to others or develop symptoms in later stages of the disease.
- **Identification of asymptomatic carriers in the endemic areas is recognized as a major hurdle in malaria eradication programmes.** New diagnostic methods with higher sensitivity are needed.
- The present team of scientists used a new concept of genome mining that identifies identical multi-repeat sequences (IMRS) distributed throughout the malaria parasite genome and successfully targeted them to develop what is called an “ultra-sensitive” qPCR assay for malaria diagnosis.
- Validation with clinical samples collected from malaria-endemic regions in India showed that those assays were highly sensitive - about 20-100 times more than the traditional methods. They could detect submicroscopic samples.
- They were four to eight times better than other high-sensitive methods.
- Further, they were extremely specific for *Plasmodium falciparum*, which is the deadliest species of malaria parasite and did not cross-react with *Plasmodium vivax* species, which is the most frequent and widely distributed cause of recurring malaria, but far less virulent.

### India's fight against Malaria:

India has developed a National Framework for eliminating malaria by 2030 and to achieve this goal, identifying the asymptomatic carriers in the endemic areas and clearing their infections are very much important. The new finding could help with this. DBT's Biotechnology Industry Research Assistance Council funded the project.

Also read: [National Strategic Plan for Elimination of Malaria](#)

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## 13. Mission Purvodaya

### Context:

The Union Minister of Steel, along with the Japanese Ambassador to India met the Chief Minister of Odisha to discuss avenues for Japan to become a partner country in Mission Purvodaya.

### About Mission Purvodaya:

- Mission Purvodaya in the steel sector envisions to create an integrated steel hub in Eastern India.
  - More than 75% of India's envisioned incremental steel capacity will come from eastern India, with Odisha alone crossing 100 MTPA.
  - There is immense scope for growth in high-grade steel, downstream sector, ancillaries, capital goods and cluster development.
    - Japanese technological expertise, investments will further strengthen the steel sector in Odisha and drive socio-economic growth.
  - It is expected that out of the 300 Million Tonne capacity by 2030-31, over 200 Million Tonne can come from this region alone.
  - The Mission is aimed at the accelerated development of eastern India through the establishment of integrated steel hub.
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## 14. Schemes for Tribal Communities

### Context:

The Union Tribal Affairs Minister launched the “Programme for Capacity Building of Scheduled Tribe Representatives in Local Self Governments” and also the “1000 Springs Initiative”.

### About the Programme for Capacity Building of Scheduled Tribe Representatives in Local Self Governments:

- This initiative is aimed at empowering tribal PRI (Panchayati Raj Institution) representatives by enhancing their decision-making capabilities at the local government level.
- Among other issues concerning tribal development, it also focusses on constitutional and legal provisions that protect and promote the rights and welfare of the tribal population.
- The programme will ensure greater participation of Scheduled Tribe PRIs representatives in planning, execution and monitoring of government policies and programmes.
- Their better participation in the development process would ensure better prioritization of the tribal development agenda.

### About the 1000 Springs Initiative:

- It is an online portal on **GIS-based Spring Atlas** with the hydrological and chemical properties of the springs mentioned.
- The initiative aims at improving access to safe and adequate water for the tribal communities living in difficult and inaccessible part of rural areas in the country.
- It is an integrated solution around natural springs.
- It includes the provision of infrastructure for piped water supply for drinking; provision of water for irrigation; community-led total sanitation initiatives; and provision for water for backyard nutrition gardens, generating sustainable livelihood opportunities for the tribal people.
- The online portal has been developed to make these data easily accessible from an online platform.
- Presently, data of more than 170 springs have been uploaded on the Spring Atlas.
- **Springs** are natural sources of groundwater discharge and have been used extensively in the mountainous regions across the world, including India.
- However, in the central and eastern Indian belt with more than 75% tribal population, it remains largely unrecognized and under-utilized.
- The initiative will help in harnessing the potential of perennial springs’ water to address the natural scarcity of water in tribal areas.
- Under this initiative, more than 70 young tribal youths from the rural belt of three districts of Odisha namely, Kalahandi, Khandamal and Gajapati have been trained as barefoot hydro geologists by combining traditional and scientific knowledge for identification and mapping of springs, and undertaking rejuvenation and protection measures in their habitations.

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## 15. Artificial Intelligence Modules in Indian schools

### Context:

Atal Innovation Mission (AIM), NITI Aayog join hands with NASSCOM to roll out Artificial Intelligence Modules in Indian schools.

**Details:**

- The AI-Base Module has been introduced with an objective for students to leverage the full potential of AIM's [Atal Tinkering Lab \(ATL\)](#) and further empowering them to innovate and create valuable solutions benefiting society.
- The module contains activities, videos and experiments that enable students to work through and learn the various concepts of AI.
- The hands-on AI module has been designed considering academic, co-scholastic and other ATL programs at school and is formulated to encourage young students to contribute to the journey of nation-building.
- The module will be a catalyst for the youth to explore, ideate and learn the latest technologies and build a generation of innovators at the grassroots level.