

## Prelim Bits 28-04-2022 | UPSC Daily Current Affairs

### Digital India RISC-V

*India launches the Digital India RISC-V (DIR-V) program for next generation Microprocessors to achieve commercial silicon & Design wins by December, 2023.*

- Digital India RISC-V Microprocessor (DIR-V) Program aims to enable creation of Microprocessors for the future in India, for the world and achieve industry-grade silicon & Design wins by December'2023.
- DIR-V will see partnerships between Startups, Academia & Multinationals, to make India a
  1. RISC-V Talent Hub for the World,
  2. Supplier of RISC-V SoC (System on Chips) for Servers, Mobile devices, Automotive, IoT & Microcontrollers across the globe.
- **IIT Madras** director Professor V Kamakoti will be the Chief Architect of the DIRV-Programme while **C-DAC's** S Krishnakumar Rao will be the Programme Manager.
- The blueprint of the roadmap of design and implementation of the DIR-V Programme was unveiled with **SHAKTI Processor** by IIT Madras and **VEGA Processor** by C-DAC.
- Challenging the status quo, RISC-V Instruction Set Architecture (ISA) is witnessing a quantum leap and unprecedented levels of processor innovation.

#### Reference

1. <https://pib.gov.in/PressReleasePage.aspx?PRID=1820621>
2. <https://swarajyamag.com/tech/modi-govt-launches-digital-india-risc-v-programme-for-microprocessors-to-achieve-commercial-silicon-design-wins-by-2023-end>
3. <https://www.businesstoday.in/latest/story/digital-india-risc-v-microprocessor-dir-v-program-launched-331530-2022-04-27>

### Kwar Hydro Electric Project

*The Cabinet Committee on Economic Affairs chaired by the Prime Minister has approved the investment for 540 Megawatt (MW) Kwar Hydro Electric Project located on river Chenab of Union Territory of Jammu and Kashmir.*

- The project will be implemented by M/s. Chenab Valley Power Projects Private Limited (CVPPL).
- [CVPPL is a joint venture company between National Hydroelectric Power Corporation (NHPC) and Jammu & Kashmir State Power Development Corporation (JKSPDC) with equity contribution of 51% and 49% respectively.]
- The Power generated from the Kwar Hydro Electric Project will help in balancing of Grid and will improve the power supply position.

#### Chenab River

- The Chenab River in the northwestern India and northeastern and eastern Pakistan is also

known as **Chandrabhaga River**.

- It originates from Baralacha Pass in Himachal Pradesh.
- It is formed by the confluence of two streams, Chandra and Bhaga, in the western (Punjab) Himalayas in Himachal Pradesh.
- It flows west through Jammu and Kashmir between the steep cliffs of the Siwalik Range (south) and the Lesser Himalayas (north).
- Turning southwest, it continues into Pakistan, descending from the uplands into the broad alluvial lowlands of Punjab province.
- After receiving the Jhelum River near Trimmu, the Chenab **empties into the Sutlej River**, a tributary of the Indus River.

## Reference

1. <https://pib.gov.in/PressReleasePage.aspx?PRID=1820529>
2. <https://www.britannica.com/place/Chenab-River>

## Bhu Bhara

- 'Bhu Bhara' is a term used in the Devi Bhagavata Purana.
- It symbolises the burden borne by Goddess Earth.
- The 'Bhara,' burden, is not just any kind of physical heaviness; it is the subtle weight **arising from adharma and selfishness**.
- At the end of Dwapara Yuga when Kali Yuga is poised to take over, Mother Earth is unable to bear the tremendous pressure on her.
- Here it is shown that **earth derives the power to sustain only through dharma**.
- When dharma is overruled by adharma, the sustainability is lost.
- Goddess Earth meets Indra and explains how the asuras such as Jarasandha, Kamsa, and others are steeped in selfishness and have failed to protect the people and the earth. This has increased her burden.
- She is also terrified of her state as she foresees the advent of Kali in the near future when sin and adharma will thrive.
- She alludes to the time of early creation when the earth was not hard as it is today and was of a lighter consistency.

## Reference

<https://www.thehindu.com/todays-paper/tp-national/bhu-bhara-explained/article65361771.ece>

## iRAD

*Union Territory Adviser to the Administrator, has launched the Integrated Road Accident Database (iRAD) project in Chandigarh.*

- iRAD is an initiative of the Ministry of Road Transport and Highways (MoRTH) and is funded by World Bank.
- Proposed in 2019, the iRAD has an objective to **improve road safety** in the country.
- It is an initiative to capture relevant details about the accident prone areas throughout India.
- The details include causes of road accidents, road engineering defaults, negligences on the part of individuals, pattern in accidents and to form a strategy to reduce the number of accidents.
- The main idea behind it is to create a **Centralised Accident Database** to host and access all

accident related data by various departments/ stakeholders.

- **Working of iRAD** - iRAD is a feedback based system. Police, transport, road engineering/highway and health are stakeholders in this project.
- Every stakeholder and department has its defined work within the system.
  1. The police is responsible for visiting the spot, counting the number of accidents, etc., analysing the vehicle volume/pressure on a particular stretch is the task of the transport department.
  2. Road engineering wing will look after the engineering faults responsible for accidents.
  3. Health department will maintain a record of casualties including fatal, non-fatal in road accidents.
- With iRAD, any investigation officer visiting the spot of an accident will enter all details in the app.
- The data will further be used by all concerned departments to analyse cause of accidents and formulation of strategies.
- **Related links** - [e-DAR Portal](#)

## Reference

1. <https://indianexpress.com/article/explained/explained-what-is-the-irad-and-what-is-the-status-of-accidents-in-chandigarh-7890725/>
2. <https://kurukshetra.gov.in/irad/>

## Marketing Mix

- The marketing mix refers to the set of actions, or tactics, that a company uses to promote its brand or product in the market.
- A marketing mix includes multiple areas of focus as part of a **comprehensive marketing plan**.
- A marketing mix often refers to E. Jerome McCarthy's **four Ps** - Product, Price, Placement, and Promotion.
- However, nowadays, the marketing mix increasingly includes several other Ps like Packaging, Positioning, People and even Politics as vital mix elements.
- **Importance** - All the elements of the marketing mix influence each other.
- They make up the business plan for a company and handled right, can give it great success.
- But handled wrong and the business could take years to recover.
- Marketing mix needs a lot of understanding, market research and consultation with several people, from users to trade to manufacturing and several others.

## Reference

1. <https://economictimes.indiatimes.com/definition/marketing-mix>
2. <https://www.investopedia.com/terms/m/marketing-mix.asp>