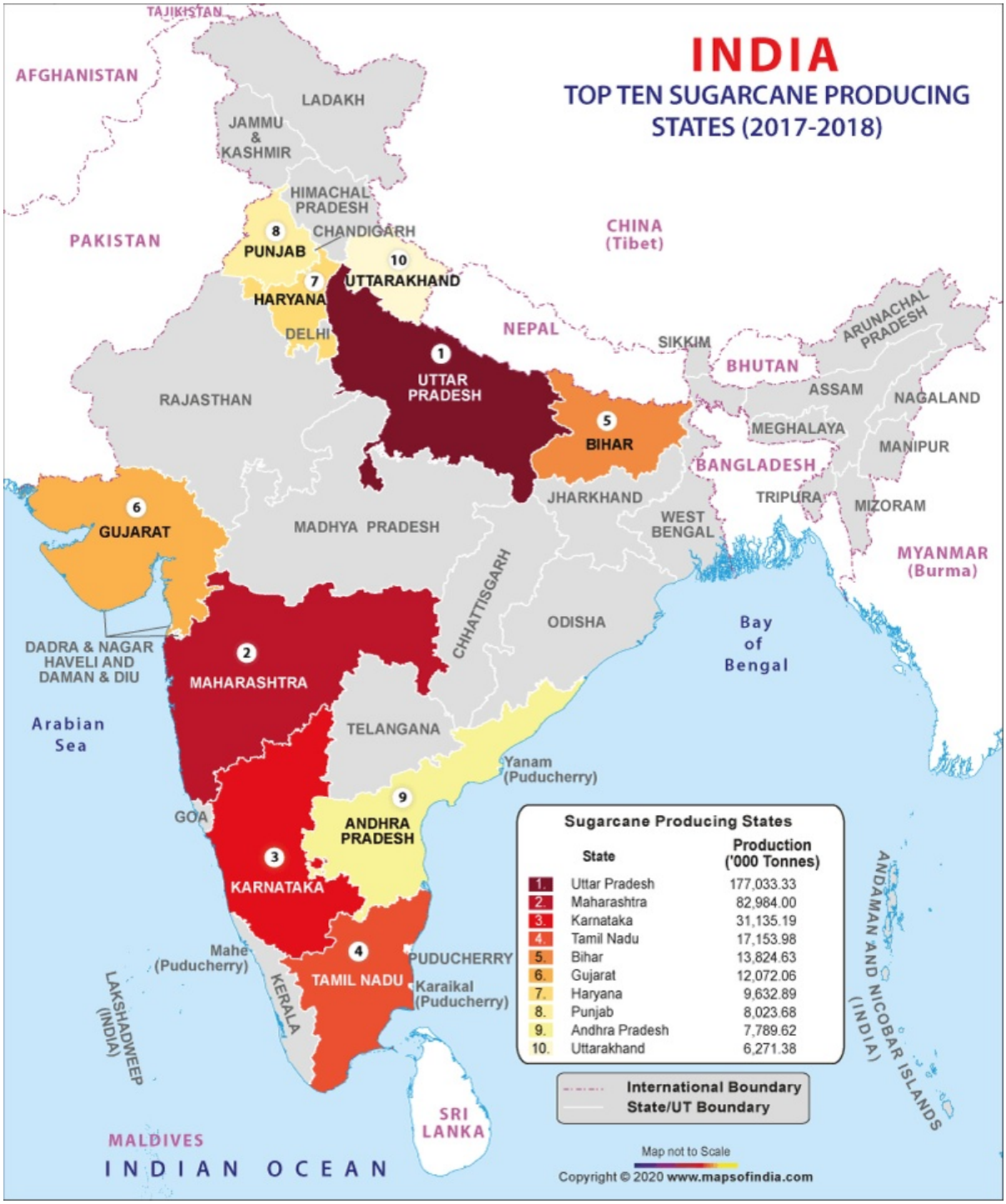
Uttar Pradesh is Ganna Pradesh

Why in news?

The next government in Lucknow should work at making sugarcane part of a ‘circular economy’, realising its full potential.

What about the status of sugarcane production?

- **Brazil** is the largest producer of sugarcane in the world followed by India.
- **Uttar Pradesh** is India’s top sugar producer in the last five seasons (October-September) from 2016-17.
- It has also become the largest ethanol producer in the country.
- Uttar Pradesh is the only state to achieve 10% blending in petrol in 2020-21, one year ahead of the target for all-India.
- Sugarcane is cultivated on about 2.5 million hectares in UP and the whole of northern UP is a Ganna Pradesh (Sugarcane State).



How did the state accomplish in sugarcane production?

- Till 2003-04, UP's sugar mills put together could crush barely 4 lakh tonnes of cane per day (tcd).
- **Sugar Industry Promotion Policy** introduced in 2004 induced large investments, both in new mills and brownfield expansions.
- By 2006-07, aggregate crushing capacity had crossed 7 lakh tcd.
- From 2007-12, the government cumulatively hiked cane prices by Rs 120 per quintal and also ensured timely payment to farmers.
- Between 2016-17 and 2020-21, the government ensured to double the UP's ethanol output with increase in number of distilleries from 44 to 75.
- **Co-0238**, the blockbuster cane variety bred by Bakshi Ram, boosted both average yields and sugar-to-cane recovery in the state.

- In sum, UP's sugarcane success story is a product of the "tripartisan effort" of all three ruling regimes.

How is FRP related to sugarcane?

- With the amendment of the **Sugarcane (Control) Order, 1966** in 2009, the concept of **Statutory Minimum Price** (SMP) of sugarcane was replaced with the Fair and Remunerative Price (FRP) of sugarcane.
- FRP is the minimum price that mills have to pay to sugarcane growers.
- The cane price announced by the central government is decided on the basis of the recommendations of the Commission for Agricultural Costs and Prices **(CACP)** in consultation with state governments and feedback from associations of sugar industry.
- The **Cabinet Committee on Economic Affairs** approves the Fair and Remunerative Price (FRP) of sugarcane as like MSP.
- The order provides for fixation of FRP of sugarcane having regard to the following factors:
    - Cost of production of sugarcane
    - Return to the growers from alternative crops and the general trend of prices of agricultural commodities
    - Availability of sugar to consumers at a fair price
    - Price at which sugar produced from sugarcane is sold by sugar producers
    - Recovery of sugar from sugarcane
    - Realization made from sale of byproducts — molasses, bagasse and press mud or their imputed value
    - Reasonable margins for the growers of sugarcane on account of risk and profits

What is the significance of sugarcane in the state of UP?

- **Revenue**- Taking an average one-hectare landholding, UP would have 2.5 million cane farmer families.
- **Employment**- Some 4.5 million families in UP are directly dependent on sugarcane in harvesting, mills, distilleries, indigenous sugar units and transportation.
- **Water requirement-** Athough sugarcane's water requirement is roughly twice that of paddy and four times of wheat, it consumes less water for every unit of biomass produced.
- **Fodder-** Its green top leaves, moreover, supply the fodder needs of animals through the winter and spring months.
- **Energy -** Sugar mills require no supply of external power or water since baggase fibre is used as boiler fuel and the water that is heated to produce steam are both present in the cane itself.
- **Exportable power-** A fifth of the water in cane is rendered surplus, even after use for steam generation, crushing, juice extraction and concentration/evaporation loss.
- **Carbon sequestration**- Sugarcane is highly efficient at carbon sequestration and a prolific biomass producer.
- **Use of press mud**- Press mud is the residual cake after clarification and filtration of cane juice.
- It is used as compost fertiliser, feedstock for producing bio-CNG and for recovery of potash from distillery effluent after burning in incineration boilers.

What scope does it hold in the future?

- **Circular economy-** The next government in Lucknow should work at making sugarcane part of a 'circular economy' and realising the full potential of this champion crop.

- **Reduction of imports-** For a country importing the bulk of its natural gas and potassic fertiliser requirements, it is very essential.
- **Ethanol blending**- The state can take the lead in enforcing 12% and 15% ethanol blending in petrol, for which mass emission standards have already been notified.
- **Timely payment**- Mills should be paid better and in time for the renewable electricity that they are supplying to the UP Power Corporation. Such dues currently stand at over Rs 300 crore.
- **Transparent pricing-** There is a need for transparent cane pricing which should be formula-based, linked to mills' realisations from sugar and all by products, and any price above that paid from the state budget.

The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In practice, it implies reducing waste to a minimum.

References

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Quick facts

Sugarcane

- Scientific name- *Saccharum officinarum*
- Family- Gramineae (Poaceae)- Grass family
- Origin- New Guinea
- Climate- tropical and subtropical climate
- Optimum temperature for cane growth- 27° to 33°c
- Water requirement- 2,000 to 2,300 mm
- Sunshine- About 7-9 hours of bright sunshine
- Propagation- setts (cutting), bud chips, ratooning
- Duration- 11-12 months
- Composition- 70 %water, 15 % sugar and 15 % fibre