

# Moorhen yoga mat

May 7, 2021

**In news:** A biodegradable and compostable yoga mat has been developed from water hyacinth by six young girls from the fishing community near Deepor Beel lake in Assam.

## **About Moorhen yoga mat-**

- The 'Moorhen Yoga mat' is named after **Kam Sorai (Purple moorhen, a resident bird** of Deepor Beel Wildlife sanctuary).
- The mat comes in a cotton canvas cloth bag where no zip or metal closures are used.
- The bag has an adjustable strap and closures effectively designed to be in sync with biodegradability.
- It is **a hand-woven 100% biodegradable and 100 % compostable** mat developed through **fiber processing and technological interventions** which could improve the aquatic ecosystem of the wetland through the removal of water hyacinth.
- It has resulted in the engagement of 38 women from 3 fringe villages (Keotpara, Notun Basti and Borbori).
- The intervention was triggered through an initiative by **North East Centre For Technology Application and Reach (NECTAR)**, an autonomous body under the Department of Science & Technology (DST).
- It involved the entire women community associated with a collective called '**Simang**' meaning dream, led by the 6 girls to create wealth from water hyacinth plants.
- "7WEAVES", (a sister concern of the Simang Collectives) team provided expertise on natural dyeing from locally available natural materials like lac, onion skins, iron and jaggery, in various patterns for the mat.

## **Water hyacinth-**

- Water hyacinth is a free-floating perennial aquatic

plant (or hydrophyte) native to tropical and subtropical South America.

- It is the fastest-growing plant known, which reproduces primarily by way of runners or stolons.
- In their native range, these flowers are pollinated by long-tongued bees and they can reproduce both sexually and clonally.
- The invasiveness of the hyacinth is related to its ability to clone itself.
- Its habitat ranges from tropical desert to subtropical or warm temperate desert to rainforest zones.
- Water hyacinths do not grow where the average salinity is greater than 15‰ that of sea water.

#### Uses-

- Since the plant has abundant nitrogen content, it can be used as a substrate for biogas production and the sludge obtained from the biogas.
- Water hyacinth removes arsenic from arsenic-contaminated drinking water.
- It is observed to enhance nitrification in wastewater treatment cells of living technology.
- Their root zones are superb micro-sites for bacterial communities.
- Water hyacinth is a common fodder plant in Africa though excessive use can be toxic.
- Water hyacinths can be cultivated for waste water treatment (especially dairy waste water).
- It is used internationally for fertilizer and as animal feed.
- It is used for making furniture, handbags and other woven products and for paper production on a small scale.
- The flowers are used for medicating the skin of horses.