

Moorhen yoga mat

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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.