Green Initiatives

(Waste Management)

Dyeing & Printing Laboratory

Textile Section, Silpa-Sadana

Rabindranath Tagore envisioned an institution on the principles of ancient hermitage (*tapovana*/asrama), integrating nature and traditional Indian values into the educational process to create a modern and advanced holistic approach to teaching. He founded Visva-Bharati, where students learn and grow in and around nature, tuned with immediate cultural heritage. He introduced several festivities (*Barshamangal*, *Vasantyotsav*, *Briksharopon*, and *Halakarshan*) to celebrate and honour nature in different seasons. The attire, jewellery, and banners used to decorate the festival reflect the ethos of modernism, keeping the traditional essence alive. He created an example of an educational institute where interconnection with the surrounding nature is indispensable in building sustainable living by maintaining ecological balance. The concept of a self-sufficient and independent society culminated in the development of the Institute of Rural Reconstruction at Sriniketan in 1922, encouraging the local underprivileged society in the villages nearby. Following this vision, the students of Silpa-Sadana continue the practice of craft and design, using local, renewable materials, thus preserving the ecological balance with nature.

Green initiatives are different actions to promote environmental awareness and save Mother Earth. The department of Silpa-Sadana has taken significant steps toward becoming a more environmentally responsible entity. Effective waste management is another priority for our department, and the Dyeing & Printing Laboratory focuses on reducing, reusing, and recycling waste wherever possible. In the ever-changing industry, sustainability is not just a craze but an absolute need. Consumers are now looking for eco-friendly packaging solutions to reduce the environmental impact of synthetic polymeric materials. Biodegradable materials, recycled fibres, fabrics, papers, cardboard, etc., are utilised to package products for delivery, highlighting the organisation's commitment towards sustainability.

The rapidly growing aquatic weeds, water hyacinths, and clogged streams limit activities like fishing and boating, affect marine life, native plants, and animal communities, and cause significant economic loss. This can be converted into valuable products to reduce natural resource consumption. Algae, often considered a waste due to their rapid and uncontrollable growth in water bodies, are typically seen as a nuisance rather than a resource. With the growing environmental concerns and the urgent need for sustainable alternatives, we have tried to use algae as a valuable raw material, thus turning 'waste into wealth.' The eco-friendly and biodegradable nature of jute has created a new domain in applying non-traditional, diversified products such as handmade paper for packaging and fashionable packaging items. The potential of jute, particularly waste slivers and caddies, is explored in handmade paper to be used as an alternate packaging material, which certainly improves the livelihood of those engaged in the jute business.

Keywords: Algae, Green, Handmade paper, Jute, Packaging, Water hyacinth,

Woven Mats from Water Hyacinth

Bobin winding

Warping

Weaving

Process of Making Woven Mats

Product

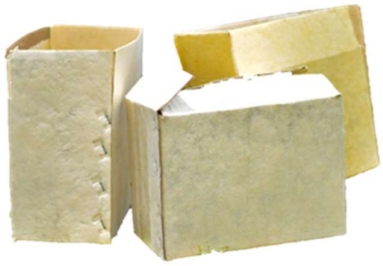
Student Project: Soumili Pal
Supervisor: Sankar Roy Maulik

Handmade Paper

Nowadays, consumers are looking for eco-friendly packaging to reduce the environmental impact of synthetic polymeric materials. The eco-friendly and biodegradable nature of jute, and rapidly growing aquatic weed water hyacinth, known as 'Terror of Bengal' may create a new domain in handmade paper for traditional and fashionable packaging items.

Jute Slivers

Water Hyacinth

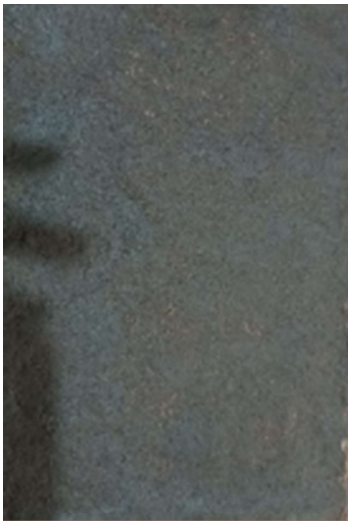


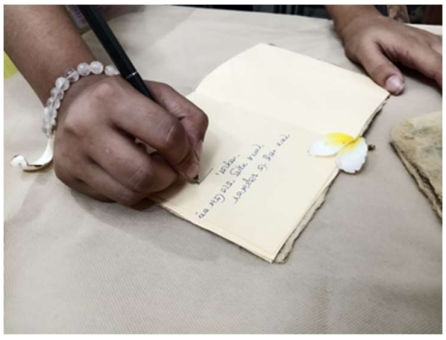
Raw Material
Jute Sliver & Caddies

Raw Material
Water Hyacinth

Student Project: Soumili Pal & Komal Shaw
Supervisor: Sankar Roy Maulik

Handmade Paper from Fallen Leaves, Jute Sliver Waste, Rice Straw, Corn Husk, etc





NEP 4th Semester Textile Design-Major
Subject Teacher: Sankar Roy Maulik

Handmade Paper from Algae and other Agro Waste

Student Project: Rakhi Roy
Supervisor: Sankar Roy Maulik