Welcome

Initiative on development of Water Hyacinth Based Handicraft

-a Joint initiative of NEDFi & NEC, Ministry of DoNER

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Water Hyacinth local names

- *Panimeteka* in Assamese
- Water Hyacinth (*Eichhornia crassipes*) in English
- *Jal Kumbhi* in Hindi
- *Kobokong* in Manipuri
- *Pak-tob-java, Pakkto Chawa* in Thai
- *Hoteiaoi* in Japanese
- *Japan Jabra* in Sinhali
- *Kachuripana* in Bengali
- *Ecang gondok* in Indonesia
- *Keladi bunting* in Malaysia
- *Beda Bin* in Myanmar etc
Water Hyacinth  *(Eichhornia crassipes)*

- An aquatic plant which can live and reproduce floating freely on the surface of water or can be anchored in mud.
- The plant is a perennial aquatic herb belongs to Liliaceae (Lily family)
- Plant size from few inches to a meter in height.
- The plant originate from Amazon basin and was introduced into many parts of the world as an ornamental garden pond plant due its beauty.
- Suited to tropical and subtropical climate.
- Known as problem plant or worst plant in USA, South America, Africa, Australia etc.
Water Hyacinth: PROBLEMS

- Hindrance to water transport
- Reduction of Bio-diversity: other aquatic plants have difficulty in surviving. This cause imbalance in the aquatic micro-ecosystem. Diversity of fish stocks is often effected from proliferation of water hyacinth.
- Sediment levels increases with increase of water hyacinth.
- Mosquitoes and other disease-carrying organism breed in the water hyacinth
Possible uses : Water Hyacinth

- **Paper** : Water hyacinth fibre alone does not make a good quality of paper. To make a good paper blending of waste paper or jute is necessary.

- **Fibre Board** : Physical properties of water hyacinth based fibre board are sufficiently good for partition wall and ceiling.

- **Yarn & rope** : The fibre from the stems can be used to make ropes.

- **Charcoal briquetting** : For a plant to produce 40 tonnes per day briquetting an area of 12 hectares would be required for drying of water hyacinth, daily requirement 1300 tonnes of wet water hyacinth, relatively high temperature with low humidity.

- **Bio-Gas** : Testing is going on for producing bio-gas from water hyacinth. There is still no firm consensus on the design of an appropriate water hyacinth biogas digester.
NEDFi Initiative to popularize Water Hyacinth based Craft

- NEDFi took the initiative to popularize the use of Water Hyacinth for making eco-friendly handicraft products in August, 2008 mainly for the following reasons:
  - Abundance of raw material
  - It can replace jute, cane and bamboo
  - Artisans experienced with braiding and weaving work can easily pick up the trade once provided the training
Water Hyacinth: Craft
Harvesting, Splitting and Processing

- To identify a region with mature plants about 15-30 inches long, with a thick diameter 0.5-1.2 inch.

- To chop off the leaves and roots using a sharp knife (cut as close to the leaves and roots as possible.)

- To spread the split stems to dry in direct sunlight for 5-6 days.

- To use the tarpaulin sheet to dry the stems and to be collected back at the time of sunset everyday to avoid absorption of moisture.

- Well dried stems will turn brown making crackling sound when crumpled.
A NEDFi-NEC joint initiative

Preparation of Braids

Preparation of Frames

Cane Frames

Steel Frames

Use of whole of the stem, without braiding, for making Products like Mats, Gift Box, Baskets etc.

Preparation Of The Product
Products without frames:

1. **Less** Cost of Production
2. **Less** Cost of Transportation
3. **More** Local Demand
The Promotion of Water Hyacinth Based Craft is now a 3 Year Project, 2010-11 to 2012-13, supported by the North Eastern Council, Ministry of DoNER

- For Capacity Development of 1000 artisans
- For Facilitating Micro-Credit linkage
- For Facilitating Market Linkage
Capacity Building:

- Awareness Programme - 1 day
- Skill Development Programme - 10 days
- Micro Credit Management Programme - 1 day

In addition, Need Based Skill Upgradation programmes are conducted to continuously upgrade the skill of the artisans.
Strategic Design Inputs:

- Design inputs from National Institute of Design, Ahmedabad (NID) which included following steps:
  - Pre visit of Faculties of NID to the villages in the first week of November, 2010.
  - Strategic Design Input Training Programme at NID: from 2nd Dec, 2010 to 22nd December, 2010
  - Post visit of the Designer: 26th Feb to 3rd March, 2011
  - An immediate outcome of the intervention is in process improvement leading to increase in productivity and reduction in cost.
10 Reasons: Why the NEDFi & NEC Project on Water Hyacinth is Different
1. Open to New ideas:-

Result :3 New Ideas :
• Jewelry
• Bedroom Slippers
• Packaging of sweets

• We have developed the Jewelry which has got good response from the market

• Bedroom Slippers will also come to the market shortly

And the Search Goes on.....The Water Hyacinth Demonstration Centre at NEDFi Haat will facilitate a platform to experiment with new ideas.
2. One Stop solution:

**Water Hyacinth Craft Gallery-cum-Demonstration Centre**

- **Permanent Marketing Platform:**
  - The exclusive Craft Gallery for Water hyacinth based products in the heart of the city
  - The price mentioned by the artisan is paid by the customers- a system to ensure Fair Trade Practice.

- **Demonstration Centre:**
  - Equipped with Raw Material Bank, Equipments, Flattening Machine, Stitching Machine, Looms, Moulds, Coloring Dyes etc.
    - To guide artisans
    - To educate customers

Mr. U. K. Sangma, IAS, Secretary, NEC inaugurating the Water Hyacinth Craft Gallery-cum-Demonstration Centre at NEDFi-Haat Guwahati on 7th March, 2011 in presence of CMD, NEDFi & MD, NEHHDC
3. Infusion of Technology

Consistency in quality and improvement in productivity has now been facilitated through introduction of:

- Standard moulds
- Flattening machine
- Stitching Machine
- Looms etc.

We are open to suggestions / inputs which will help

- in increasing product value
- or reduction in the cost of production
4. Branding:

- NEDFi has coined the Aqua Hyacinth Products under the Brand name “Aqua Weaves”
- The tag is provided free of cost to the artisans.
- It creates Awareness among the customers also.
- The Artisan can mention the details about his product in the same tag.

"Fabulously eco-friendly, grab the finest blend of nature and human innovation this season and find out the transformation of an aquatic weed - the water hyacinth into elegant crafts.

And don’t forget that everytime you buy one of these beautiful products, you are giving the gifted rural artisans a reason to cheer and help them go a step ahead towards empowerment."
5. Promote Special Skill:

- **Capacity Building:**
  - Special Faculty at NID, Ahmedabad for making of varieties of Braids
  - Exposure to specific need: Artisans involved in making Jewelry was sent to a Workshop on making Jewelry from Natural Fibre, organised by World Craft Council and attended by International Designers at New Delhi in January, 2011

- **Process Standardization:**
  - Moulds are prepared by a select group of artisans to maintain its size and specification
  - Groups are developed for preparation of semi-finished raw material with different dyes
6. Reach the market near your home

- To promote marketing we encourage our artisans in participation of exhibitions organized in the small towns near their home.
- Associate with other promoting agencies like DRDAs. DRDAs of Nagaon, Goalpara, Dhuburi & Darrang are promoting the product in SARAS Melas / District Exhibitions.
- Showrooms are opened at Dhubri and Nagaon, many more will come-up.
- The Craft Gallery at NEDFi Haat is a permanent showroom located in Ambari, Guwahati where customers go for shopping of handicraft products.
7. Go for outside market in the next stage:

- We are in the process of development, we need to build our production strength to meet the demands of outside market in terms of quantity and quality.

- Hence we will come out with the CATALOGUE in 2011-12 & WEBSITE in 2012-13 to reach the bigger domestic market.

- With the experience of the Domestic Market we will go for export with specialized eco-friendly natural products.
8. The continuous handholding support

- Apart from the normal Capacity Building Programmes we organise several follow-up skill up gradation programmes to continuously guide & motivate the artisans.

- The Master Craftsman who conducts the Initial Skill Development Programme acts as the mentor for the group.

- The Mentor not only updates them with skills and techniques, but also facilitates linkage to market.
9. We are proud of our Artisans.

*They are not just the artisans,…
…they are our Brand Ambassadors too…*
10. A sustainable livelihood support through production of eco-friendly product:

- Thus, the water hyacinth, which is free and abundant is now bringing additional income to the family.
- Women in villages can work on it after attending their daily household activities.
- In handicraft products, customers pay for design and quality and hence artisans can increase their income as per their skill.
- Above all, it is eco-friendly, made of natural fibre - a suitable product for the modern market.
Showroom for water hyacinth products

A STAFF REPORTER

March 7: Can't blame you if you have turned your nose at the stink emanating from water hyacinth in the pond in your locality. Can't blame you either if you can't believe that the same stinking weed can be turned into lovely handbags and even jewellery.

But if you walk into the showroom opened by the North Eastern Development Finance Corporation Limited at NEDFi Haat, you will be perplexed for choice.

The showcase was especially set up to display the products made from water hyacinth, commonly known as pistol sticks in Assam. It would also provide a platform to the artisans.

"The aim of this craft project is to add value to the fibre, which is considered an aquatic plant of little or no use. We have provided financial assistance of Rs. 11.67 crores for the project. We would like to give more such training to the artisans so that they can make quality products to reach a wider market. Besides, this showroom will give a platform to the artisans to exhibit and sell their crafts," said the secretary of North Eastern Council, C.K. Basumatary, during the inauguration of water hyacinth craft gallery-cum-demonstration centre at NEDFi Haat.

The chief executive officer of NEDFi, B. Paul Mukutah, said the raw material was extensively used in Thailand and Malaysia for making various products. "A few years back, people of this region were totally ignorant about the use of this raw material. But today, this eco-friendly raw material has acquired great value because if can be used to make craft-based products," he said.

Creating awareness about its use, capacity building and market linkage were some of the objectives of the project, he added.

Mukutah said the target was to train 1,000 artisans within three years to foster the craft of making various craft items. "We would also take the initiative to export the products made of water hyacinth," he added.

The centre, equipped with the latest technology and standardised models, setting machines, stitching machines and looms, aims to provide market linkage to the artisans to popularise a range of contemporary products that includes decorative items, bags, handbags and jewellery trays.

We are planning to market these products through our counterparts in North Eastern Handicrafts and Fashion Development Corporation Limited named Parmarthini in Guwahati and others," he added.

It is easily available and an affable natural fibre compared to jute. Many are ignorant that jute can be made from water hyacinth," said Prabodh Goswami, an artisan.

Rahel Niyek, an artisan from Gauhati, said the centre would be a great help to the artisans. "It is a problem to look after the water hyacinth is easily available so we do not have to pay to procure the raw material," she added.
Would you like to promote the movement?
- As a Producer
- As a Customer
- As a Member creating awareness about the eco-friendly product
- Let us create wealth from the menace

Thank You

Kindly mail your suggestions and feedback to: akdas@nedfi.com.