CAPACITY BUILDING
IN NORTH EASTERN STATES

By

Atanu Saha, Director Science & Technology

Email- atanuicfre@gmail.com

NORTH EASTERN COUNCIL SECRETARIAT,SHILLONG

KOHIMA, NAGALAND

10th – 11th October, 2018

"If the western region of the country can develop, if other regions of the country can develop, I see no reason why the North East region of the country cannot develop. I am also convinced that India can move forward if all the regions develop including the North East region. The North East region is also very important to us for strategic reasons. And it is my conviction that we have to bring this region at par with the other developed regions of the country."

Prime Minister Shri Narendra Modi while addressing the
65th Plenary Council meeting, May 2016

THE COUNCIL

- The North Eastern Council (NEC) was set up in 1972 as a Statutory body under NEC Act, 1971 for rapid socio-economic development of NER and functioned as an Advisory body till 2002.

- The NEC (Amendment) Act, 2002 mandated NEC to function now as the Regional Planning Body for NER. While planning Regional projects, the Act mandated that schemes and projects that benefit two or more states would be given priority.

- The Annual Plan allocation for NEC currently stood at Rs. 1075.00 crore (2017-18) including Rs. 150.00 crore for Upgradation/ Rehabilitation of Inter State Roads under NERSDS. BE for 2018-19 is Rs. 1486 crore (incl of NLCPR-Central).

Composition Of NEC

NEC set up in 1972 as a Statutory body under an Act of Parliament	
Chairman **Vice Chairman**	Honourable Home Minister of India nominated by the President of India. Minister-in-charge of DoNER nominated as Vice Chairman by the President of India
Ex-officio members (16 nos.)	Governors and Chief Ministers of the States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura
Nominated members (3 nos.)	1. Two full time Members Nominated by President of India stationed in Shillong. 2. Secretary, DoNER in place of the Member, i/c of NER in the erstwhile Planning Commission (proposed).
NEC Act provides for a Secretariat consisting of a Secretary, a Planning Adviser, a Financial Adviser and a Security Adviser and such other officers and employees sanctioned by GOI.	

Vision, Objectives and Goals of the NEC

- The NEC shall be a state-of-the-art resource centre for North Eastern Region with the necessary resources, knowledge and skills.
- The NEC shall enable the states and the implementing agencies to properly plan and execute projects, promote research and innovation and provide strategic policy vision for the region.
- The NEC shall develop specialized domain expertise either by itself or through an agency model to assist states and central ministries in their development planning.
- NEC shall focus on issues in emerging areas of livelihood entrepreneurship, venture funds, start-up and skill development enabling in generating jobs.
- NEC would focus on interstate projects having wide ranging impact and on selected areas of critical nature.

Achievements of NEC – Regional Institutes

NEPA - North East Police Academy, Shillong (1978)

NEEPCO - North Eastern Electrical Power Corporation Ltd. Shillong (1976)

NERAMAC – North Eastern Region Agriculture Marketing Corporation Guwahati (1982)

NERIST – North Eastern Regional Institute of Science & Technology, Itanagar, (1986)

RIPAN – Regional Institute of Paramedical & Nursing Sciences, Aizawl (1995)

NERIWALM - North Eastern Regional Institute of Water and Land Management in Tezpur, (1989)

RIMS - Regional Institute of Medical Sciences Imphal (1972)

LGBRIMH - Lokpriya Gopinath Bordoloi Regional Institute of Mental Health Tezpur, (1876)

NESAC – North Eastern Space Application Centre, Shillong (1983)

BBCI - Bhubaneswar Borooah Cancer Institute (1974)

RDC – Regional Dental College, Guwahati (1985)

RNC – Regional Nursing College, Guwahati (1977)

RIPSAT - Regional Institute of Pharmaceutical Science & Technology, Agartala, (1979).

CBTC – Cane & Bamboo Technology Centre in Guwahati (2004)

Building capacity in the institutions:

(extract from the NER VISION 2020)

- Building capacity in the institutions is important for maximizing self-governance, to design and implement planning at the grass root level and ensuring efficient delivery of public services. Creating institutions of self-governance right from the village level and activating them to ensure maximum participation of the people, particularly women and vulnerable sections, is necessary to maximize self governance.
- Planning will require capacity building at all levels beginning with villages and municipalities, at the block, district, State and even at the level of the NEC.
- Capacity development is not confined to government departments alone. There is considerable need to educate the public on their rights and responsibilities and how to demand accountability from government departments. Similarly, there is a need to build capacity in various non-governmental organizations.

Building capacity in the institutions:

Contnd/-

(extract from the NER VISION 2020)

- This calls for capacity building at the level of government right from the village level and including the line departments of various ministries of the State Governments. Responsive administration requires competent personnel and special efforts will have to be put in place to ensure this. Given that many of the States are small and there are considerable gains to be had by States working in coordination, the institutions for capacity-building could be created through joint initiatives by States in the region.
- Capacity development is not confined to government departments alone. There is considerable need to educate the public on their rights and responsibilities and how to demand accountability from government departments. Similarly, there is a need to build capacity in various non-governmental organizations.

Contnd/-

Building capacity in the institutions:

(extract from the NER VISION 2020)

- The NEC has the responsibility of coordinating the policies of different States, promote cooperation among them and undertake planning for the region. It is important to have people with sector specialisation in the various departments of the NEC.
- The Council should develop capacity not only in coordinating policies and programmes among States but also in preparing and coordinating plans drawn up by different States through the grassroot process.
- NEC also draws up plans for creating infrastructures spilling over to more than one State. Building capacity to design and implement plans, and undertake the task of monitoring and control is necessary to make it an effective institution in fostering the developmental process in the region.

Raising Resources for Development

(extract from the NER VISION 2020)

- In creating the enabling environment, therefore, public expenditure has to play an important role and State Governments will have to significantly enhance the level of spending on development and also improve the efficiency of delivery systems.
- Meeting basic needs such as elementary and secondary education, primary healthcare, water supply and sanitation, anti-poverty interventions, and housing, and ensuring law and order, are important for this process. State Governments will have to allocate the required resources for the purpose.

Strategy for Service Sector:

(extract from the NER VISION 2020)

- The IT industry however, requires significant capacity building, a larger emphasis within the education system towards mathematics and science, and creating the environment to induce information technology companies to operate in the region.
- Some information technology companies have found significant potential for sourcing employees in the region and it is important to create favourable conditions for their operation.
- Creation of education and training facilities for the youth of the region in Information Technology (IT) and Information Technology Enabling Services (ITES) could provide a great impetus in generating a pool of personnel increasing employment opportunities for the youth.
- Initially, support should be given to private initiatives to start restaurants, petrol bunks, repair stations, banks, cyber cafes, convenience stores and repair stations.

Strategy for Service Sector:

(extract from the NER VISION 2020)

- The Local communities to be motivated and involved in effort to introduced appropriate technology to help raise both production and productivity, improve quality and cut costs. A few important initiatives are cited as below:

i. New Technologies developed by CSIR-NEIST, Jorhat in various sectors relevant to NER may be transferred from lab to land.
ii. Setting up of NE Regional Association of Technological and economic Cooperation (NERATEC) to bring prospective 'Growth drivers' together.
iii. Support IT training Centres in all the states to facilitate citizen interface over IT network.

Contnd/-

Strategy for Service Sector:

(extract from the NER VISION 2020)

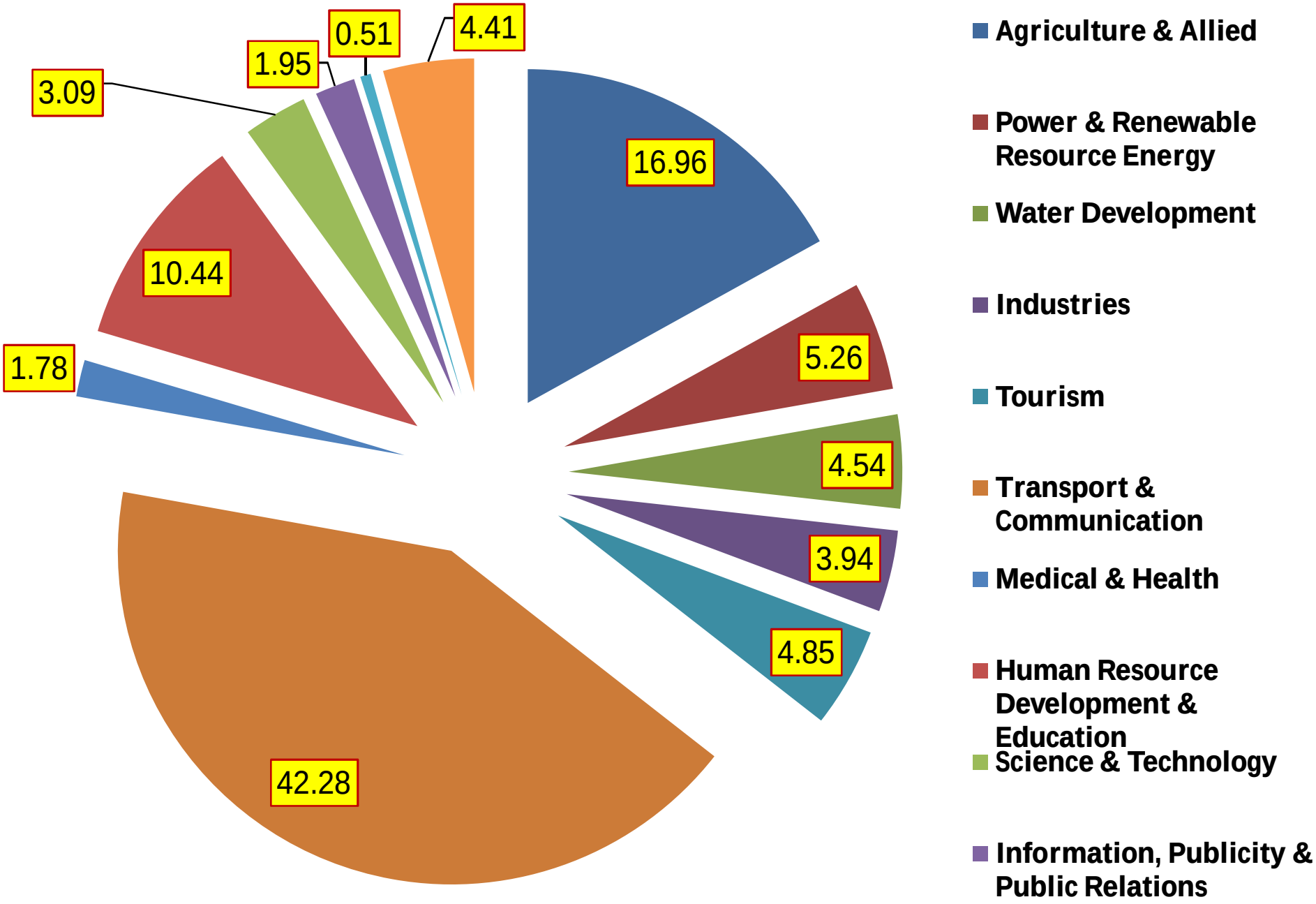
iv. Disaster management information system with weather Forecasting data to cover entire NER.

v. Create computer infrastructure in educational institutions in stages up to primary school level entire region to be covered by 2020.

vi. Training / Orientation of teachers to make proper use computer infrastructure in educational institutions.

vii. Introduction of computer education in all colleges and schools. Identification and promotion of centers of excellence in the field of engineering, IT, biodiversity, capacity building, sustainable development.

Sectoral Allocation for FY 2018-19 (%)



Capacity Building by

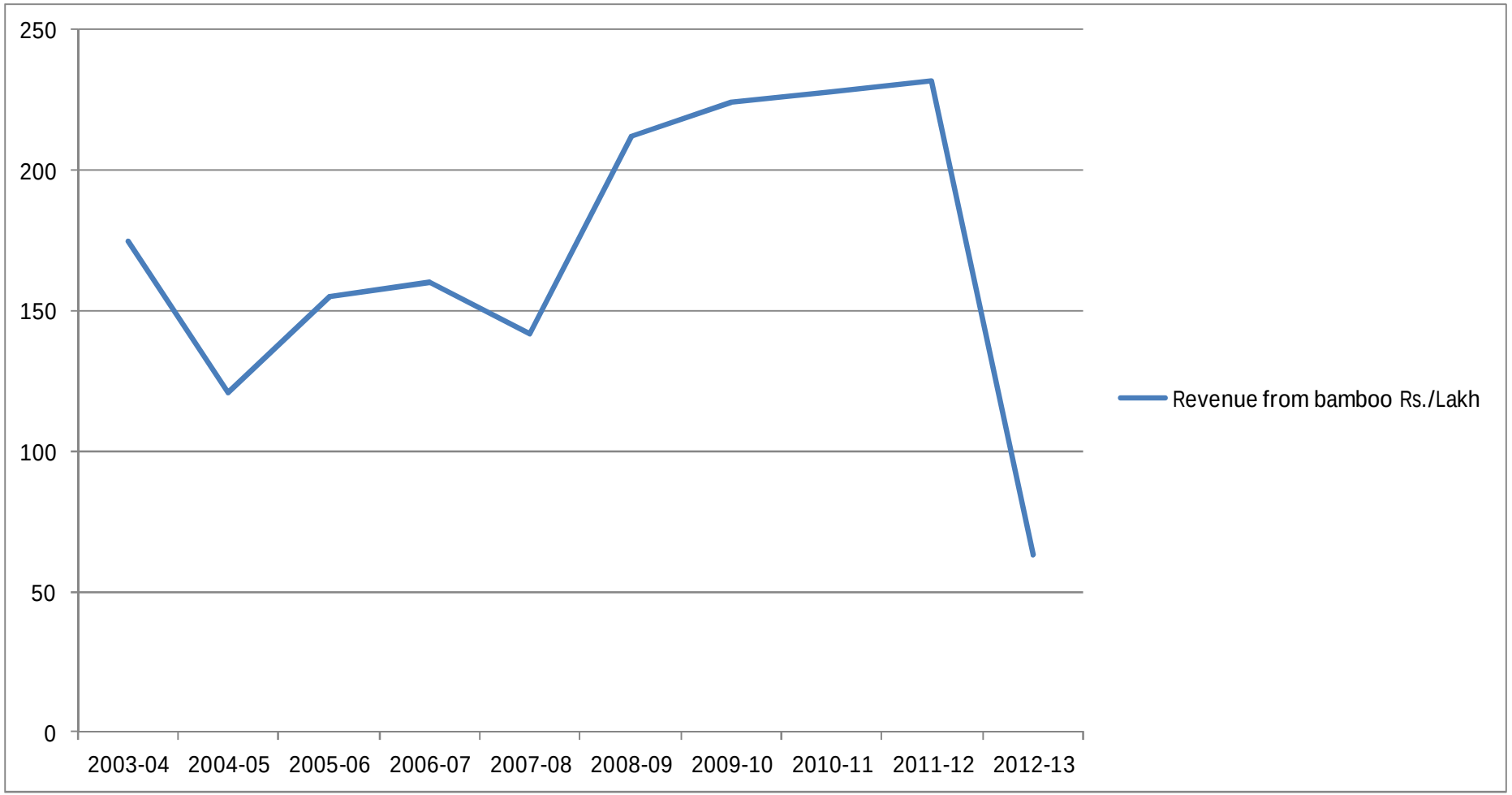
Forest-based Livelihoods In North Easern Region

Seven Agroforestry models developed:

Model	Main crop	Inter crop
1	Bamboo& Jackfruit	Maize & Pineapple
2	*Gmelina* & Lemon	Arahar & Ginger
3	Areca Nut & Bamboo	Black pepper, Maize & Sesame
4	Acacia, Litchi & Lemon	Maize & Turmeric
5	Teak & Jackfruit	Maize & Ginger
6	Mango & Bamboo	Maize & Pineapple
7	Agar, Arecanut	Black Pepper and Turmeric

Soil & Water Conservation Works

Steep fall in revenue from bamboo in 2012-13



Sharp Decline in Bamboo Stick Production for Agarbatti sticks in Tripura

Year	Bamboo stick production in MT
2009-10	28589
2010-11	23178
2011-12	21393
2012-13	17490

Bamboo Incense Stick Making

Agarbatti-Hand Rolling

Sugandh-mantri cultivation

Collection of Rhizomes

SL.	Particulars/ha	Quantity & Value
1	Yield of dry rhizomes.	38 qtl.
2	Oil yield kg @ 1%.	38 kg
3	Total cost of cultivation & processing	Rs. 65,000
4	Gross return @ Rs. 7500/qtl of dry rhizomes (7500*38)	Rs. 2,85,500
5	Net return from dry rhizomes	Rs. 2,20,000
6	Gross return @ Rs. 10,000/kg of oil (38 kg).	Rs. 3,80,000
7	Net return (Gross return-cost of cultivation and distillation) from oil (65,000+22,800=87,800)	Rs. 2,92,200

Steam Distilled Essential oil

Collected Rhizomes

Fresh Rhizome

Drying - Rhizomes by smoke kiln

Sun dried Rhizomes

Muli bamboo

Market price in Rupees of one Muli at Nalchhar

2008: 5-8

2009: 10-15

2010: 20-25

2011: 20-30

2012: 25-40; and

2013: 30-50

Collection and Multiplication

Bamboos	Other LGPs
Bambusa tulda (Mirtinga)	***Homalomena aromatica (Gandhaki)***
Schizostachyum dullooa (Dolu)	***Cajanus cajan (L) Mill (Arhar)***
Dendrocalamus longispathus (Rupai)	***Flemingia macrophylla (Flemingia)***
Bambusa pallida (Makal)	*Terminalia bellirica Roxb. (Bahera)*
Bambusa nutan (Kai)	***Dillenia indica Linn. (Chalta)***
Bambusa straita (Tiger)	*Clittoria ternatea, Linn. (Aparajita)*
Bambusa wamin (Buddha Balley)	***Abelmoscus moschatus (Kasturi bhindi)***
Guadua angustifolia (Guadua)	***Canes (6 species)***
Bambusa vulgaris (Bari)	*A. marmelos (Bael)*
Dandrocalamus hamiltoni (Pecha)	*Oroxylum indicum (Kanaidinga)*
Thyrsostachys oliveri (Kanakaich)	***Clinogyne dichotoma (Mutrak)***
Bambusa multiplex (Nana)	*Melia dubia (baken)*
Bambusa japonica	***Mucuna pruriens***
Bambusa balcooa (Barak)	***Capsicum chinensis (King Chili)***

Melocana baccifera (Muli)	***Thysanolaena maxima (Broom grass)***
Bambusa polymorpha (Paura)	***Citronella***
Bambusa cacharensis (Bom)	***Sarraca asoka***
Dendrocalamus sikkimensis (Rawmi)	***Toko palm***
D. giganteus (Giant Bamboo)	***Acorus calamus (Bach)***

A participatory appraisal on Economics, reveals –

Rs. 1.95 lakhs/ha net income

Within 10 months &

which may increase next year to Rs. 2.95 lakhs/ha

HARVESTING

Brooms (inflorescences) are harvested on maturity during winter season from January to March.

Progressive Development

Regulatory Mechanism

No Check & control

Mahal auction by Forest Deptt

Intervention of State Co-operatives

JFMC, StateBB involvement

Forest Department involvement in regeneration

Marketing linkages

Medicinal Plants for marketting

Neem. *Azadiracta indica*.

Calotropis gigantea, Arka. Akanda

Tamarind. *Tamarindus indica*

Tulsi. *Ocimum sanctum*,

Cont..

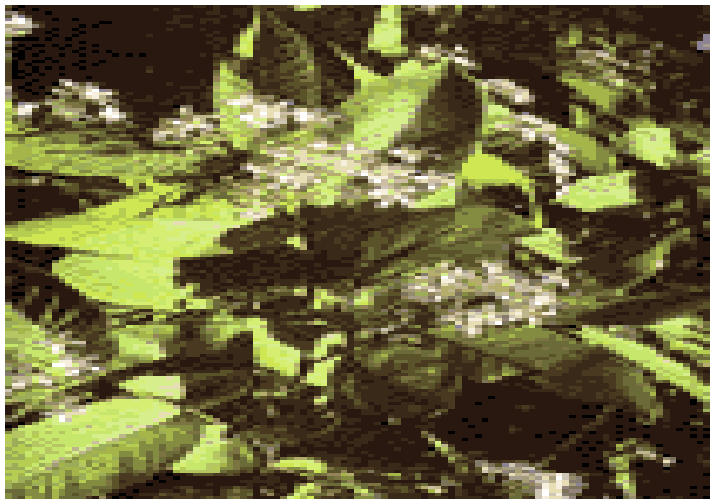
Eranda. *Ricinus communis*.

Ginger. *Zingiber officinale*.

Ashwagandha. *Withania somnifera*.

Nirgundi. *Vitex negundo*.

Giloy. *Tinospora cordifolia*.



Holarrhena antidysenterica Kutaj (S)

Moringa oleifera Drum stick

Aloe vera Ghrit Kumari, Ghrit

Capacity building
Bamboo Treatment Technique

Bamboo Treatment Tank

Durability can be increased by 3 to 5 times.

After 2 years

After 4 years

Padma SHG Noagaon
(Bamutia Cluster, Tripura)

North Taibandal (Anandpur Cluster)
Tripura


22 03 2013


Product Code: CFLE/Artisan
22 03 2013
Product Name
Earing (3 nos.)

Capacity building by Rubber Plantation in North Eastern States

Rubber Plantations Replacing Forests

Juvenile Teak Plantation Replaced by Rubber

Good Planting Materials

Good planting materials of suitable clones

Morning Shows the day

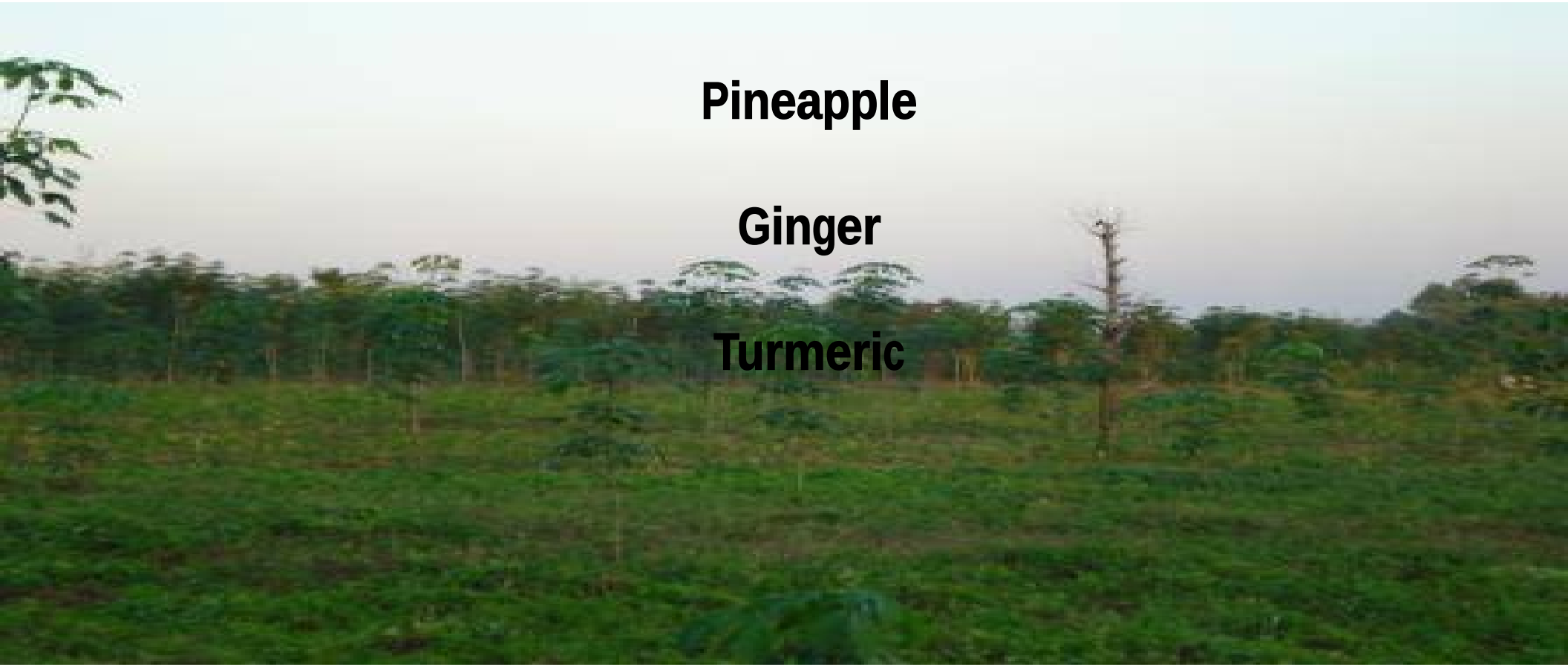
Roads/Footpaths

Cover crop

Conventional Intercrops

Seedling Nursery

Banana



Pineapple

Ginger

Turmeric

White washing

Soil moisture conservation

by terrace cultivation

Soil & Water Conservation

By terrace cultivation

Soil moisture conservation

by silt pits

Soil moisture conservation

by silt pits

Silt Pit

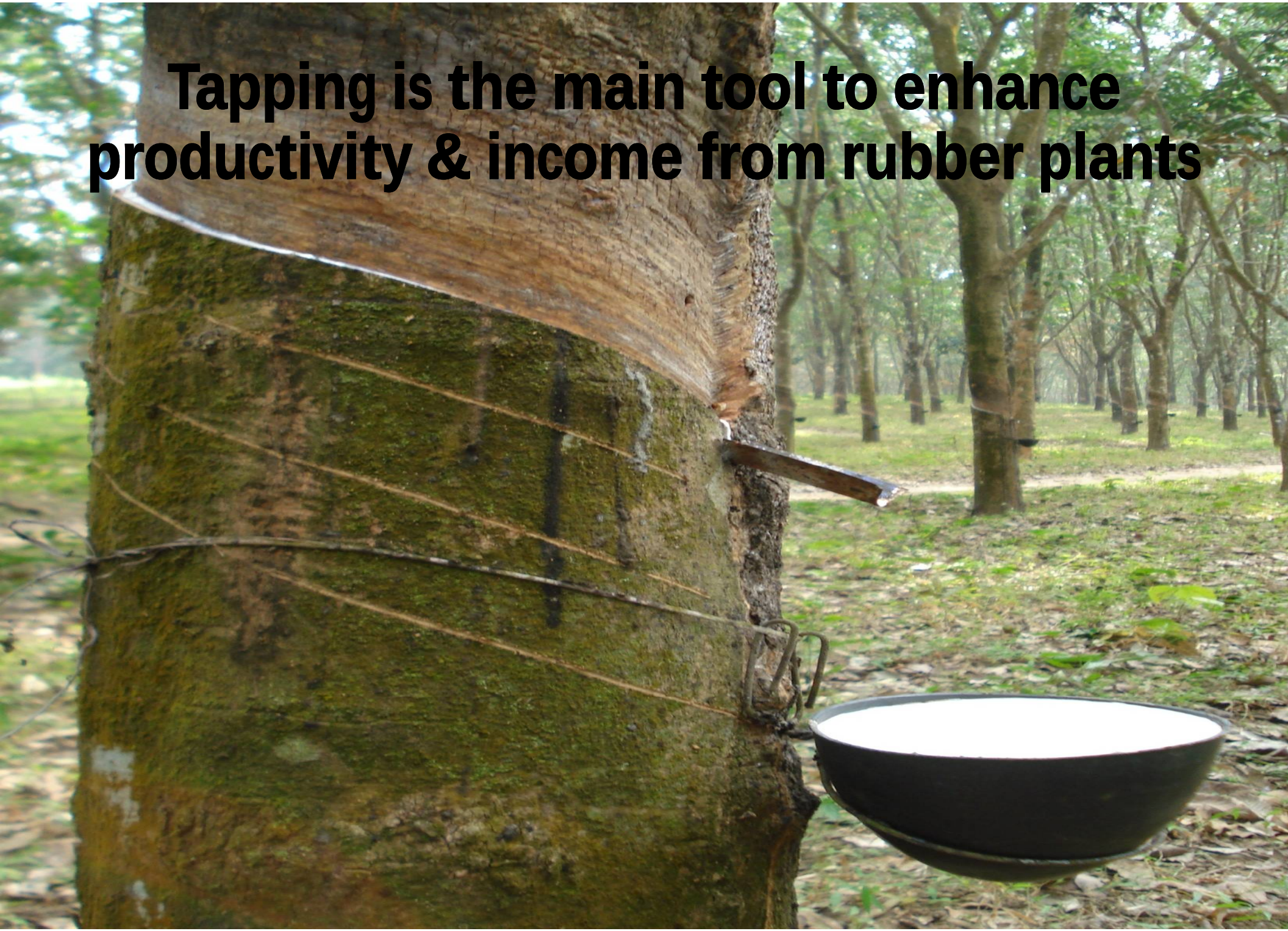
4 Ft X 1.5 Ft X 2.5 Ft

Wind belt

Measures for Income Generation from Rubber Plantation


Income Generating Techniques

Productivity Enhancement


Tapping is the main tool to enhance
productivity & income from rubber plants

Rain Guarding

More Tapping-More Production

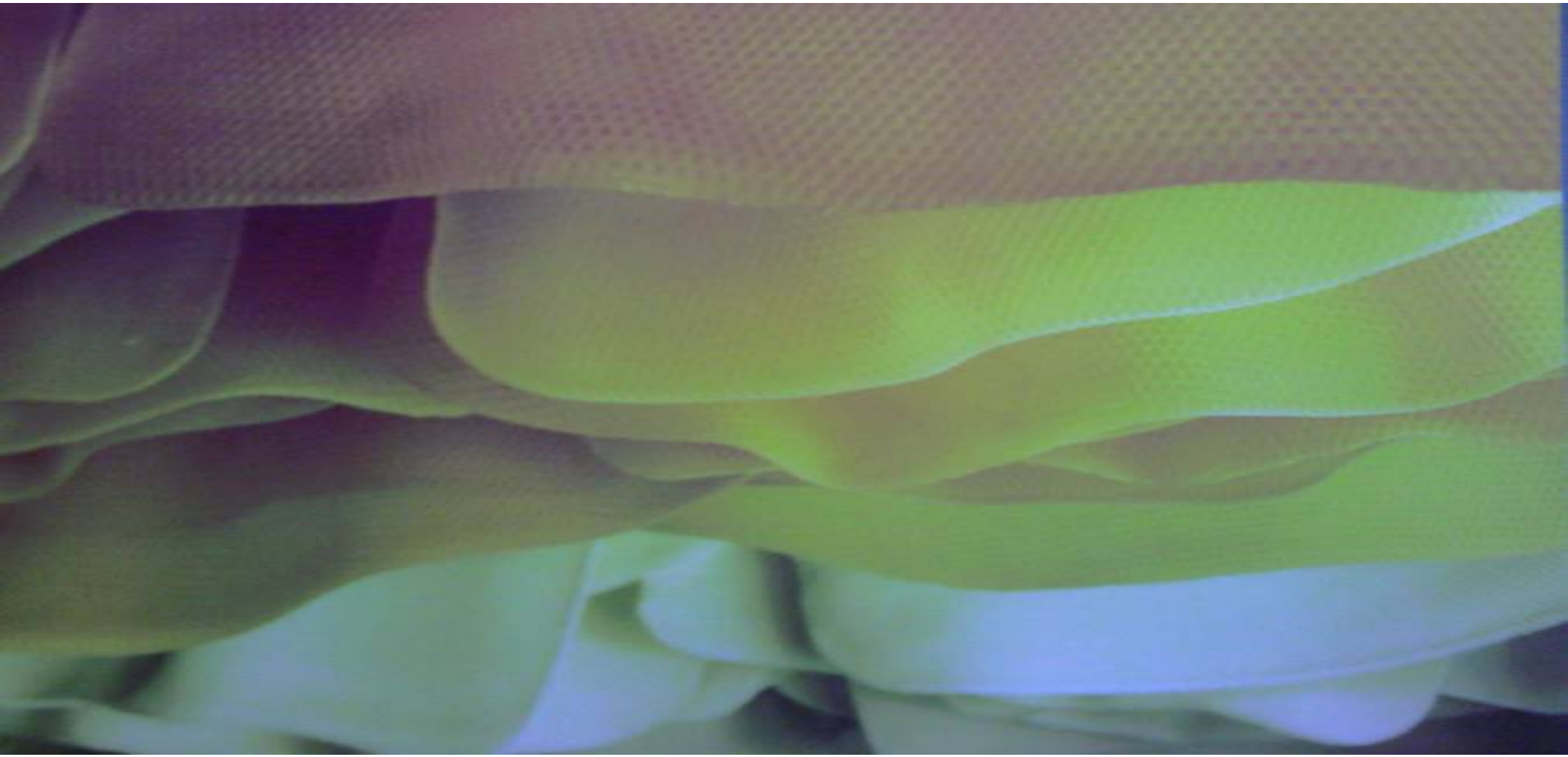
Proper Dose of Acids

More Sheet-Less Scrap

Proper Dose of Acids

More Sheet-Less Scrap

Good Sheet



Good Price

Good Sheet

Good Price

Bee-keeping

Bee-keeping

Production of Rubber Honey

Bee-keeping

Max. Productivity 182 Kg/Hectare

Bee-keeping

Ancillary Income

Intercropping

Ancillary Income

THANKS