

EDITORIAL

Strengthening Fibres

The emerging "green" economy is based on energy efficiency, industrial processes that reduce carbon emissions and recyclable materials. This has created a need to go for eco-friendly natural fibres. Natural fibres are of major economic importance to many developing countries and vital to the livelihoods and food security of millions of small-scale farmers.

Natural fibres are elongated substances produced by plants and animals that can be woven, knitted, matted or bonded to form fabrics that are essential to society. Millions of people around the world, some among them are in the poorest countries, depend on the production and processing of natural fibres for their livelihood. Natural fibres are important not only to producers and industry, but to consumers and the environment also. The Food and Agriculture Organisation has declared year 2009 as the International Year of Natural Fibres in a bid to emphasise the value of fibres while helping to sustain the incomes of farmers.

Fibres such as jute and coir have been cultivated since olden days. Ropes, made out of coconut fibre have been in use from ancient times. Among plant fibres, coir, the golden fibre is hard and strong, resistant to rot, moulds and moisture. Geotextiles are another promising new outlet for coir producers.

Coir geotextiles owe their existence to the ecofriendly and biodegradable characteristics of coir. They are being effectively used for improving soil behaviour, for preventing soil erosion and in consolidating soil fertility. Kerala Government had declared the year 2000-2001 as Coir Geotextiles Year (Coir Bhoovasthra Varsha) and a host of different projects had been launched in the year under the Coir Geotextiles Development Programme to propagate the use of Coir Geotextiles.

Geotextiles made of coir are ideally suited for low-cost applications as the coir is available in our country in abundance at very low prices. Moreover, they are easier to be installed. These geotextiles can be applied in the construction of unpaved roads where they can effectively serve the purposes of reinforcement, separation, filtration and drainage.

Efforts of the Government to increase the demand for coir geotextiles, in place of synthetic geotextiles, will enhance livelihoods of millions of people who depend on coir production and processing. The International Year of Natural Fibres is a unique opportunity to expand the use, and promote more innovative uses of natural fibres and to emphasise their value to consumers while helping to sustain the incomes of the farmers.

By choosing natural fibres we can also support and contribute to the growth of these economic sectors and their struggle with hunger and poverty. Thus, let us begin our ecological footprint by adopting sustainable, earth-friendly fibres at home.

Editor-in-Chief: M. Nandakumar IAS Director, I&PRD Co-ordinating Editor: P.K. Lal Additional Director Deputy Editor-in-Chief: P.S. Suresh Deputy Director Editor: K.C. Anil Kumar Assistant Editor: Sunil Hassan Sub Editor: S.R. Raveendran Nair

Copy Assistant: B. Harikumar Designer: Ratheesh Kumar R Artist: V.S. Prakash

Circulation Officer: V. Salin

Representatives: New Delhi E. Sajeev | Thiruvananthapuram T.A. Shine | Kollam S. Nasar | Pathanamthitta Radhakrishna Pillai | Idukki Unnikrishnan | Alappuzha N. Sunil Kumar | Ernakulam P. Vinod | Kottayam A. Abdul Hakkim | Thrissur V. K. Sharafudeen | Palakkad T.C. Joseph | Malappuram M.A. Vincent | Kozhikode P. Kunhabdullah | Wayanad P. Shyamkumar | Kannur P. P. Chandran | Kasaragod K. Abdul Rahman

Subscription
Payment for subscription can be made by Money Order addressed to the Director, Information and Public Relations Department, First Floor, Secretariat Annexe, Thivurananthapuram, PIN- 695 001.
The subscription amount in cash is received at Information and Public Relations Department, First Floor, Secretariat Annexe, Thiruvananthapuram, PH: 2518647
State Information Centre, Press Club Building, Thiruvananthapuram, Ph: 2518471 • District Information Office, Opp. Collectorate, Vanchiyoor, Thiruvananthapuram, Ph: 2473267
District Information Office, I Floor, Civil Station, Kollam, Ph: 2794911 • District Information Office, Ground Floor, Civil Station, Pathanamthitta, Ph: 2223657 • District Information Office, Ground Floor, Civil Station, Malayuzha, Ph: 251491 • District Information Office, Pirst Floor, Civil Station, Kotayam, Ph: 2562558
District Information Office, Park Avenue, Kochi, Ph: 2354208 • District Information Office, Civil Station, Ayanthole, Thrissur, Ph: 2360644 • District Information Office, Ground Floor, Civil Station, Malappuram, Ph: 2734387 • District Information Office, Civil Station, Malappuram, Ph: 2702231 • District Information Office, Civil Station, Vidyanagar, Kasaragod, Ph: 255145 • Information Office, Civil Station, Malapatta North, Wayanad, Ph: 6202529 • District Information Office, Ground Floor, Civil Station, Kannur, Ph: 23344244





The German Chancellor Angela Merkel has won a second term in the recent elections. She has stepped up efforts to form a Coalition to run the Government with full co-operation from all quarters. Angela Merkel celebrated her victory with support of her Christian Democratic Party. The right wing coalition won 332 of the 622 seats.

Angela Merkel says she wants to have a new centre-right Government in place before the 20th anniversary of the fall of the Berlin Wall on Nov.9 The first four years of Merkel's time in office might well prove to be a trial run. In her next term, she has the opportunity to be what she promised four years

Tension increases

Iran has fired long-range missiles including a solid fuelled weapon, raising the stakes ahead of crucial talks with the US and other world powers. An improved version of Shahab-3 and the two stages Sajjil, powered by solid fuel, were fired. They have sufficient range to target Israel, bases of the United States in the Gulf as well as parts of southern Europe.

The US called the missile test firings 'Provocative, Pre- planned military exercises' while Russia termed it.



55th national film awards

ago.

Kanchivaram wins 55th national award for best feature film. Usually Malayalam bagged many prestigious awards.

Priyadarshan-directed Kanchivaram, a Tamil film on the silk weaver community of Kancheepuram in Tamil Nadu, has bagged the top honours at the 55th National Film Awards for 2007, winning the awards

for Best Feature Film and Best Actor for main protagonist Prakash Raj. Veteran filmmaker Adoor



Gopalakrishnan won the Best Director award for Malayalam film

> Naalu Pennungal. Adoor Gopalakrishnan's Naalu Pennungal has won him his fifth national award for Best Director. Recently, he won

the State award for Best Director for his latest film Oru Pennum Randaanum. Ore Kadal of SyamaPrasad adjudged the Best Feature Film in Malayalam. Ouseppachan scored best music award for his excellence in Ore Kadal also. Pattanam Rasheed was honoured with the

best make up artist award for his works in Paradesi.

Malayalam was honoured by picking up other awards- for editing (B Ajith umar-Nalupennungal) best writing on cinema(V K Joseph), For nonfeature film(Javaraj-Vellappokkathil) and a special jury award (Vipin Vijay)



'worrisome'. Russia is usually cautious in criticising Iran. Although the missile has a range of 2000 km, theoretically putting both Israel and US bases in the Gulf within reach, Iranian officials said the missile's launch was meant to be 'defensive and preemptive' and was not intended to threaten

neighbours.

Manage the Waste

Kerala is sitting over a time bomb of pollution, environmental degradation and water contamination. Things which would directly affect and undermine the health of the people of the State. And we are yet to wake up to the reality of how such pollution would affect us.

One of the biggest threats faced by all cities and towns in the state is disposal of waste. The Corporation of Thiruvananthapuram has employed Kudumbashree to collect and send waste to a waste treatment plant at Vilappilsala. Even though it had introduced the concept of segregation of waste at source, the people of the city has refused to do it, even after they were supplied with two baskets to keep their vegetable waste and other reusable waste separately. But it has been left to the Kudumbashree workers to do the job.

Instead of collecting waste from all across the city and bringing it to one waste dump, the solution is to create small bio degradable waste recycling units in the backyard of every house and bigger ones in apartment complexes.

If panchayats in Ernakulam district could make biogas plants mandatory in each house, why can't the same plan be implemented across the state?

All that is needed to set up a biogas plant is a sq metre of land. It is not a small amount. Agreed. But if one compares it to the huge expenditure a community would incur to dispose waste and keep a clean and

safe environment in the future, this would be a small amount.

The waste inside the market at Sreekariyam, near the state capital has been utilised to light up the entire market at night. A similar project has been implemented in Kadakkal market too.

Kozhikode is finding it tough to get a dumpyard as people living near the area where the corporation had acquired land have protested against setting up a dumpyard.

For a state that has been a model for cent per cent literacy through a literacy movement, it is actually a cake walk to create awareness on the need to utilise the waste that the people generate to create cooking gas, which is in short supply in the State. The State needs a movement on the lines of the literacy movement to instill in Malayalis the need to recycle the waste they generate. For a small state such as Kerala land to dispose waste will come only at a premium one that they will have to pay with their health and wealth!

- Kavitha Martin

Was it genocide?

- Ravi

Channel 4- a leading British channel recently aired the shocking stories of genocide in Sri Lankan war along with the videos depicting the judicial execution. Films claim the victims of SriLanka's war suffering the worst in UN funded camps. The SriLankan armed forces, in the guise of fighting terrorism, slaughtered Tamil captives in the

The UN and powerful countries failed to support the victims of state terrorism other than issuing statements. The SriLankan state tortured civilians by keeping them in the Nazi-style camps tightly

guarded by the armed forces without providing any basic facilities. The videos are the evidence to prove and to bring the SriLankan state to justice for unleashing the ethnic cleansing on the Tamils. The Sinhala soldiers

the victims.

did everything possible as vultures on the children, women and even the dead bodies of

Although the SriLankan government described the images as 'horrendous' some countries like Norway has suggested that the global community will investigate the war crimes committed by SriLanka.





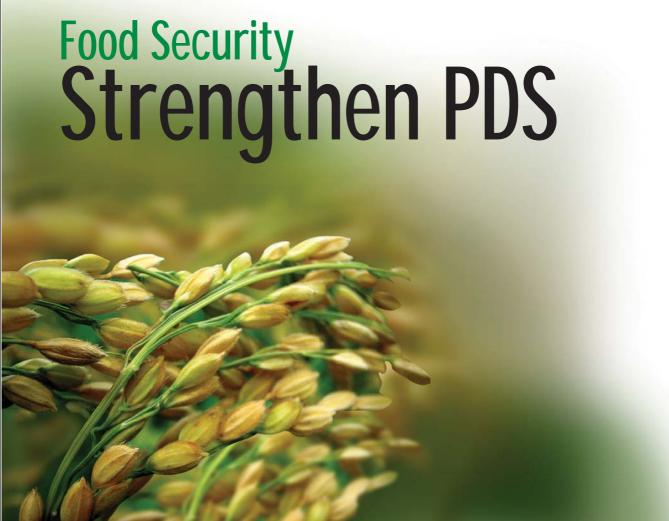


Inaugural Speech by the Chief Minister, V.S. Achuthanandan at the National Seminar on the National Food Security Act held in Thiruvananthapuram.

espected Ministers from various States, my colleagues in the Cabinet, Joint Secretary, Government of India, Secretaries from various States and Experts and other dignitaries who have come to attend the National Seminar on the proposed National Food Security Act.

First of all I welcome all of you to Kerala which is known for effective implementation of the Universal Public Distribution System in the country. Her Excellency the President of

India has announced in the joint session of the Parliament that, National Food Security Act to provide statutory basis for a frame work which assures food security for all will be introduced in the Parliament. A concept note on the proposed National Food Security Act has been circulated by Government of India to all the states and the comments of the state governments have already been sent to Government of India. If the proposed National





Food Security Act, as envisaged in the concept note is implemented it will have serious implications on availability, pricing and equitable distribution of essential commodities in the country. Further there are major deviations from the announcement made by Her Excellency in the joint session of the Parliament and what is there in the concept note.

Public Distribution of essential commodities had been in existence in India during the inter-war period. PDS, with its focus on distribution of food grains in urban scarcity areas, had emanated from the critical food shortages 1960s. PDS had substantially contributed to the containment of rise of prices of food grains and ensured access of food to the consumers. As the national agricultural production had grown in the aftermath of Green Revolution, the outreach of PDS was extended to tribal blocks and areas of high incidence of poverty in the 1970s and 1980s. PDS, till 1992, was a general entitlement scheme for all consumers without any specific Revamped Public Distribution System (RPDS) was launched in June 1992 in 1775 blocks throughout the country.

In June 1997, the Government of India launched the Targeted Public Distribution System (TPDS) with focus on the poor. Under the TPDS, States are required to formulate and implement foolproof arrangements for identification of the poor for delivery of food grains and for its distribution in transparent a accountable manner at the Fair Price Shop (FPS) level. The scheme, when introduced, was intended to benefit about six crores poor families for whom a quantity of about 72 lakh tones of grains was earmarked annually. The identification of the poor under the scheme is done by the States as per State -wise poverty estimates of the Planning Commission for 1993-94 based on the methodology of the "Expert Group on estimation of proportion and number of poor" chaired by Late Prof. Lakdawala. The allocation of food grains to the States/UTs was made on the basis of average consumption in the past i.e. average annual off-take of food grains under the PDS during the past ten years at the time of introduction of TPDS.

Guidelines for implementing the TPDS were issued by Government of India in which the State Governments had been If the proposed National Food Security Act, as envisaged in the concept note is implemented it will have serious implications on availability, pricing and equitable distribution of essential commodities in the country.





No estimation can be more rational, scientific and logical than a household survey being conducted by states like Kerala based on a normative criterion for identification of BPL families.



advised to identify the BPL families by involving the Grama Panchayats and Nagara Palikas. The total number of BPL families in India is 652.03 lakh as against 596.23 lakh families originally estimated when TPDS was introduced in June 1997. This is in no match to the actual number of families who are below poverty line and cannot afford to have a square meal a day.

Allocation of food grains under the Targeted Public Distribution System (TPDS) is made for BPL, AAY and APL families on the basis of 1993-94 poverty estimates of the Planning Commission projected on the population estimates of Registrar General of India as on 1.3.2000 or the number of families actually identified and ration cards issued by State Government, whichever is less. The scale of issue under APL, BPL and AAY has been revised to 35 kg per family per month with effect from 1.4.2002 with a view to the food security at the household level and liquidating surplus stocks of food grains in the Central Pool.

In the present age of climate change and world food crisis, the concept of food security which involves food as well as nutritional security along with food safety security assumes heightened salience. In the concept note on National Food Security Act, it is proposed to limit the coverage of food security act to BPL families alone. This goes against the letter and spirit of the announcement by Her Excellency, the President of India in the joint session of the Parliament. Further the number of BPL families is proposed to be reduced from 6.52 crores to 5.91 crores based on 2004-05 poverty estimates and March 2009 population estimates.

Even the norms for estimation of poverty and the resultant estimates of poverty are likely to under go substantial change as the Planning Commission has already set up an expert task force under Prof. Suresh Tendulkar to review the methodology. No estimation can be more rational, scientific and logical than a household survey being conducted by States like Kerala based on a normative criterion for identification of BPL families. This is very much evident from 11.03 crores BPL cards issued by various State Governments against Planning a Commission estimate of 5.91 crores. Hence the identification of beneficiaries may be entrusted with the State Governments concerned based on a normative criteria which may be finalised by Government of India in consultation with Governments. As per the proposed Act, there is no guarantee for allocation of food grains from the Central Pool for the APL category. Food deficit consumer States like Kerala which are growing basically horticulture and plantation crops and contributing substantially to the foreign exchange earnings of the country by way of export of spices, rubber, tea, coffee etc and the special category States identified by Government of India needs to be considered on a different platform with respect to allotment of APL quota is concerned.

The drastic reduction in the allocation of food grains to the APL category needs to be restored to what was prevailing in 2006. The allocation for BPL families is also proposed to be reduced from 35 kg to 25 kg in the Act which is against the concept of ensuring food security at household level. The farmers and the farming community who are the back bone of this great country should be given all support by way of increased minimum support price, technologies for increasing productivity, low interest loans and infrastructure for post harvest handling and processing for ensuring food security in the country.

The primary responsibility of ensuring food security should be that Central Government. identification of BPL families and distribution of food grains through ration shops alone should be the responsibility of State Governments concerned. The number of BPL families need not be fixed arbitrarily by the Planning Commission. Only the norms for identifying BPL families may be formulated by Planning Commission and State Governments should be given responsibility for identifying BPL families without any restriction on the number provided it in the country. Further the State Government who are supposed to set up food security allowances fund will not be having enough financial resources for the same. The concept of money for food is not a welcome step especially for food deficit States in the country. For ensuring an efficient and effective Public Distribution System, Government of India should strengthen the PDS by helping implementation of modernisation and e-Governance through bio-metric based e-PDS as proposed by Kerala State. The basket of commodities under PDS should include pulses, spices and sugar (for APL families) for ensuring nutritional



is within the parameters fixed for identifying the BPL families.

There is a mention of penal provision to deal with the violations by States/Union Territories in the proposed Act. This may require a constitution amendment. Further these provisions are against the concept of Government subsidising food items to control the price as well as ensuring its availability and accessibility at affordable price to the targeted population which is essential for ensuring food security. The concept of food security allowances is seen as a withdrawal of Central Government from primary responsibility for ensuring food security security of the people which will help in building a strong new India, as effective PDS is the first line of defence for the country which poised for a major economic growth path.

I am sure all Hon'ble Ministers from various States and the dignitaries from Government of India, Secretaries from various States and Experts in the field will be able to come out with concrete suggestions which will help Government of India in drafting foolproof National Food Security Act which will be one of the greatest social security legislations made in the country. I wish all the best for the National Seminar.





A curious success story

The global financial crisis has highlighted a curious success story: A bank that doles out loans to some of the world's poorest, least-creditworthy people continues to have a payback rate of nearly 100 percent. Nobel Peace Prize winner Muhammad Yunus, known as the "banker to the poor," quips that the Grameen Bank he founded owes its success to "sub-sub-sub prime borrowers" who also own nearly all the bank's equity.

When Yunus approached traditional banks over 30 years ago about lending to the poor in Bangladesh to start small businesses, he was told it could not be done. But since 1983, the bank has lent more than \$8 billion to nearly 8 million people in Bangladesh who have had a 98 percent repayment rate. About 4 million more have been similarly helped through partner organizations in 38 other countries - with an average repayment rate of 95 percent.

Yunus thinks his model could teach big commercial banks some lessons." We have now shown that the poorest of the poor can be creditworthy," he said in Bangkok. "Our loan repayments are as high as ever." But the success of microfinance "shows that successful banking operation on whatever scale is about understanding the risk and managing it well and not overreaching,". Such overreaching, as well as lax oversight, contributed to the U.S. credit crisis.





Site identified for Malaysian temple

After facing opposition from Muslim residents over relocation of a 150-year-old Hindu temple to their area, a state government official in Malaysia said that the local authority has identified a "more suitable site" for building the Sri Maha Mariamman Shrine.

The Selangor State government said the new site was also in Section 23 in Shah Alam neighbourhood but was more strategic and located 100 metres from the original relocation site and 400 metres from the residential area.

Sweet smelling sweat keeps mosquitoes at bay

It has been a puzzling fact that biting insects seem to prefer some people more than others, but the reason why has proved difficult to unravel. Now scientists have discovered key differences in the body odours produced by people who are more prone to insect bites compared to those who seem resistant – they have lower levels of fruity smelling compounds in their sweat.

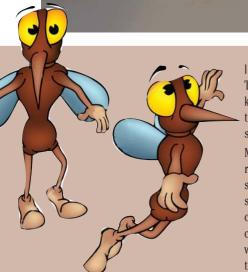
The researchers found that these compounds, known as ketones, repel mosquitoes. People who produce high





Does your man drives a little too fast and doesn't care much about traffic rules? Well, and then take a close look at his ring finger. A new study says men with long ring fingers are more likely to drive too fast, overtake on dangerous roads and park illegally. The study indicates that bad driving may be programmed from birth because finger length is directly linked with exposure to the hormone testosterone in the womb.

Many studies have shown that a long wedding ring finger compared to the index finger can have a powerful effect on behaviours. According to researchers, it is linked with increased male aggression and risk-taking. It also means that they are better at sports and may even be more fertile than those with shorter ring fingers. In the new study, researchers at the University of Mainz, Germany, recruited 77 male drivers at an average age of 38, and found that men with longer ring fingers were more likely to have been booked for offences.



levels are less likely to be bitten. They are now developing a new kind of insect repellent to help those whose bodies do not smell so fruity.

Mosquitoes can detect a wide range of different chemicals and signals to help them identify something as a human being. It could be that these chemicals carry a message about the people who produce them that makes them unattractive to mosquitoes.

Active social life, key to good health

If you are part of a social group, you are more likely to stay away from conditions like stroke, dementia and even the common cold. New research by researchers at the Universities of Exeter and Queensland, Australia, suggests that membership of social groups has a positive impact on health and wellbeing.

The researchers highlights the importance of belonging to a range of social groups, of hanging onto social groups, and of building new social groups in dealing with life changes such as having a stroke and being diagnosed with dementia.

The researchers reviewed a number of previous studies, which identified a link between group membership, and physical and mental health..

Membership of groups, from football teams to book clubs and voluntary societies, gives us a sense of social identity. This is an indispensable part of who we are and what we need to be in order to lead rich and fulfilling lives. For this reason groups are central to mental functioning, health and well-being.

A study showed that being able to maintain valued group memberships played as important a role in positive recovery as an ability to overcome cognitive difficulties. Another study found that a strong sense of identity associated with perceived membership of social groups, was a much better predictor of residents well-being than their level of dementia.

- K.C.







he word 'Coir'- which represents the livelihood of 3.75 lakhs of Kerlaites - is having a history of centuries. The Sangha Era writings have the references of Coir in its greater writings like "Puranannoor' "Pathittupathe' etc. The writings of Marco Polo who visited Kerala during 13th century contain the references of coir from Kerala. Two British-Irish investors established first organised manufacturing factory in Coir sector in 1860 at Alappuzha.Hence Coir is the lone traditional industry which can claim the glory of "National Industry of Kerala".

The Coir Industry is also having the privilege of highest gender representation -about 3.75 lakh workers of which 80 per cent are women. It supports the rural economy of the state. The industry is going through a crisis due to several factors including those arising out of globalisation and free market economy. The absence of result oriented product diversification efforts, lack of directions and focus in R & D, absence of a healthy private- public partnership in growth strategy etc., have added to the stalement in the Industry. The Industry like any other traditional industry such as



handlooms, jute etc., need Government support for the growth and development of the industry in such a way as to generate better results.

The major task of the LDF Government was to draw comprehensive roadmap for the integrated and sustained

development of this sector. It began from the scheme for establishing new defibering mills to alleviate the raw material scarcity to the development of new market fronts and research and development activities both market oriented and product oriented.

The Government conducted a census in coir sector to identify the

The Government conducted a census in coir sector to identify the status of the industry and on the basis of that a Coir Commission was appointed to study and render appropriate suggestions to modernise and reorganise the Industry in a phased manner.

status of the industry and on the basis of that a Coir Commission was appointed to study and render appropriate suggestions to modernise and reorganise the Industry in a phased manner.

The major activities include establishment of new defibering mills to produce maximum raw material

within our State; the existing defunct defibering mills are also reviving by extending financial and technical support.

The removal of minimum purchase price of semi-finished coir products introduced as per Purchase Price Enforcement Scheme and the Minimum Export Price have led to

unhealthy trends in the Industry resulting in over exploitation of workers. The middleman turned as Depot Agents, broken the ties between the real small manufacturers and exporters and in this process poor manufactures could not gain any benefits out of his hard labour and investment and the workers were denied fair wages. This led to anarchism in the industry and frequent industry wide strikes made the foreign importers feel unsafe in procuring finished products and gradually compel them to look for alternatives. That was the situation three years back. Now the entire scene is changed harmoniously due to the intervention by LDF Government. The Government

The Government of kerala evolved a purchase price stabilisation scheme ensuring fair price to small-scale producers and timely delivery to exporters with a subsidised price. The system works well with the financial support of the state Government.



of kerala evolved a purchase price stabilisation scheme ensuring fair price to small-scale producers and timely delivery to exporters with a subsidised price. The system works well with the financial support of the state Government.

To address non-tariff barriers in international trade, like certification for environment friendliness and social friendliness to improve the perceived price and quality, to enable market segmentation and facilitate market immunity to market volatiles, the

products are positioned through USP, preferably geographical and socio-economic indicators. The eco friendly value of coir needs to be persecuted in a convincing manner to create market segments and to sustain the growth. An umbrella coir brand like "Kerala Coir" have been created and promoted in a stand lone version. The Government of Kerala decided for a brand building campaign and a brand logo was conceived as "Kerala Coirgolden Yarn of God's own country".

The coir yarn and coir products that are manufactured by the primary coir societies and small-scale producers are marketed through out the Country. As these products are to be transported to the far-flung markets, one of the main components of cost is the transportation cost. In order to compete with the products from other natural fibres like jute, the price of coir yarn and coir products is to be competitive. Synthetic products, especially in North India, where coir yarn had a good market previously, replace most of the coir yarn usages. overwhelming cost transportation made it costlier. The other natural products like jute, etc already enjoy the privilege of this facility through Mill Gate system. This traditional industry can be made



vibrant by penetrating the market for which cost should be competitive by way of providing transportation subsidy. The Government have evolved a scheme for this and Rs.10 crores is provided towards price fluctuation fund.

The major recommendation of the commission is time bound modernisation of the industry to recapture its lost hegemony. It needs of a full-fledged establishment for engineering factory the development and manufacturing of all machinery required in coir sector. It also recommends replacing outdated machines with modern ones In addition to this, the fibre extraction The state Government have set up National Coir Research and Management Institute (NCRMI) to carry out commercially significant R&D projects like better technology for spinning,



fibre extraction, Geotextiles applications, development of value added and innovative products etc.

and spinning sector need immediate modernisation and sustained improvements in the areas of productivity, quality, wages, earning

National Coir Research and Management Institute (NCRMI) to carry out commercially significant Research and Development projects like better technology for spinning, fibre extraction. geotextiles applications, development of value added and innovative products etc. The Research and Development facilities elsewhere like CCRI and public sector undertaking etc will not be duplicated. This will be a centre of excellence in the R&D activities related to natural fibres across the world.

The major intervention of the Government is in establishing a strong base for domestic market while protecting and encouraging existing export segment. More than 600 new outlets are opened in the rural areas of the State with the help of Service Co-operative Banks. Government organised a campaign in the State with a slogan 'oru veettil oru coirulpannam (One coir product in each home). The result is encouraging. Co-operative outlets, Kudumbasree movement. public sector undertakings etc.were involved with the campaign. The Coir PSUs made a remarkable achievement and it exceeded 300 per cent high to previous years' corresponding period. Inspiring from this boom now the Coir Department is planning to establish 10000 outlets all over India.

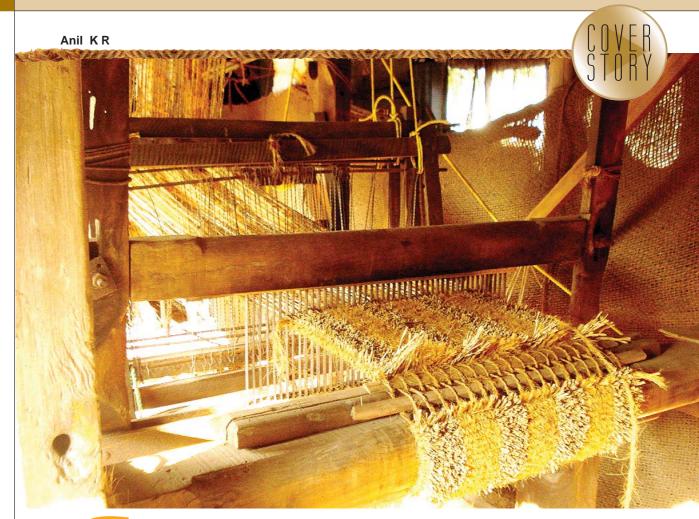
The traditional coir industry is passing through a metamorphosis of modernisation and pro labour innovations during the tenure of LDF Government.



capacity of workers etc. No private investment is forthcoming in the case of value added products such as coir composites and products made with jute-coir blends, due to the factors such as heavy investment, uncertain market response etc. This requires intervention of the State and realising the situation the government provided funds for creating manufacturing facilities for the above with Central assistance. The iute-coir blend in the appropriate ratio provides characteristics that can find unlimited applications quality in handlooms, power looms etc.

The coir composites are excellent building materials and compete well with bamboo ply etc and if .it is promoted well large-scale consumption of Coir Matting can be ensured. It is also a wood substitute and helps reduce deforestation. It is proposed to create manufacturing facilities Alappuzha for at production of jute-coir blended yarn coir composites. and the Government have taken steps for establishing coir machine manufacturing factory at Alappuzha

The state Government have set up



Geotex Care of Coir

he earliest of civilization used natural materials to improve soil behaviour. For instance, Chinese used wood, bamboo and straw to strengthen soil for thousand years. A part of the "Great Wall of China" was built using the native technology. In waterfront areas of Kerala, it has been an age old custom to spread coconut leaves on the ground before gravel or aggregate

is laid over a road formation. Nature itself excercises control on erosion through vegetation.

The concept of Geotextiles is not a new one. Historically early civilizations had used the natural materials to improve soil behaviour wherein woven matting was used. Any material used for improving the soil behaviour, preventing soil erosion and help

consolidation of the soil can be termed as geotextiles. Geotextile is a woven/non woven knitted structure of natural/synthetic textile fibres used in various geotechnical, civil engineering and soil conservation applications.

The term geotextiles cover a total range of woven and non-woven materials used in civil engineering applications. Apart from polypropylene and polyethylene, geojute and coir nets are the commonly used biodegradable natural geotextiles. Coir geotextiles was first promoted by M/s. Dekowe of Germany in 1985.

As a consequence of a wide range of functions, there are many possibilities for the application of geotextiles. In general they can be used in hydraulic constructions to protect banks and bed to waterways against soil erosion, as soil reinforcement of slopes, in constructions connected with landscaping as drainage material, in road construction as reinforcement of asphalt surfaces or as a separating layer in road constructions and water reservoirs.

The purpose of a natural geotextile is to protect and support the natural environment for a limited time span. The task is complete when nature, through soil and vegetation, eventually provides adequate protection. The natural geotextile, therefore, provides temporary aid for the establishment of natural vegetation used as long term erosion control. Thus it acts as a bioengineering or engineered agronomic system for erosion control i.e.

Spurs constructed with coir geotextiles

(Cocologs)

In India and other developing countries, use of natural geotextiles may be preferred as they are less expensive and are environmental friendly due to their biodegradability.

engineering and vegetative measures used in conjunction with each other to fulfill the ultimate goal of erosion control.

There is a good potential for natural geomats for protection of vast areas under erosion from water and wind by re-vegetating them, such as cut slopes along roads, railways and runways, mine spoils, barren hills, terrace riser slopes, forest wastelands and sand dunes, river bank etc. In India and other developing countries, use of natural geotextiles may be preferred as they are less expensive and are environmental friendly due to their biodegradability.

The selection of geotextile for applications varies depending upon its purpose. The decorticated fibre/bristle fibre spun on machines can also be woven as Geotextiles. Since colour of the varn is not a criteria for geotextile applications, the brown fibre yarn can be better utilised to produce coir geotextiles at a cheaper rate. This will pave way for the manufacture of value added coir products from brown fibre and will open up new vistas in the coir product sector. The effective use of brown fibre in the coir sector will lead to new employment generation and also will reduce the cost of coir geotextiles more cheaper. The spinning should be made possible using brown fibre adopting suitable cost effective technologies. The cost effectiveness of coir geotextiles will definitely enhance

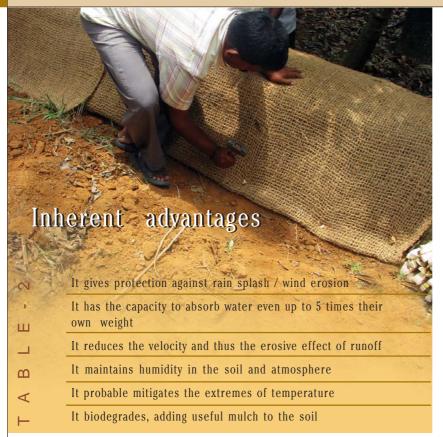


The geotextile is secured on the surface by means of staples

Inecessary a second seeding

at specified intervals.

takes place.



use of coir geotextiles in India.

annual consumption geotextiles including natural synthetic in world over is estimated to be around 1000 million square metres. The supply of even five per cent of these requirements from India by way of coir geotextiles can solve all problems related to this industry from employment, production to marketing. The researchers and policy makers should evolve suitable technologies and policies in this regard. The propagation of application of this technology will ensure that the environmental degradation due to unscientific over exploitation natural resources like construction materials. The technology need to be highlighted as a renewable natural resource

Method of laying Coir geotextile

The method of application depends on the design of the construction. However, there are some

steps that many constructions have in common. When constructing a bank, wind erosion control measures or slope where natural vegetation will grow, afew steps should be taken.(see table 1)

There are different types of coir geotextiles and for every type there are numerous specifications. The two main coir product types on the geotextile market are:

- woven mats and
- non woven mattings

The choice between these product types depends on the requirements of a construction. Several types of non woven geotextiles exit. Most non-woven mats are made from loose fibres, which are interlocked by needling or rubberising. Non-woven mats are available in several dimensions. They have a minimum thickness of two mm.

For the effective soil and water conservation along the slope land, different types and mesh sizes of coir

geotextiles can be used. This would further enable reduction in the number of risers while contouring / terracing such lands, thereby increasing the cultivable area and reducing labour costs.

The ability of coir fibres to absorb water and to degrade with time are its prime properties which give it an edge over synthetic geotextiles for erosion control purposes. The "drappability" factor of coir geotextiles (due to their flexibility) allows them to conform closely to the terrain, i.e. the ability to follow the contours of the slope and staying in intimate contact with the soil.

Coir geotextiles can be used where vegetation is considered to be the long term answer to slope protection and erosion control. (see Table 2)

Coir mesh mattings of different mesh sizes are most established coir



geotextiles. Mesh mattings having different specifications are available under quality code numbers H2M1 to H2M10 ie 400 gsm to 1200 gsm which are the most types of coir geotextiles used in the industry. These qualities represent coir geotextiles of different mesh sizes ranging from 1/8" to 1". The selection of geotextile for a particular slope depends upon the type of slope, soil condition and vegetation. If the slope is steep, the mesh size will be closer. The decorticated fibre/bristle fibre spun on machines can also be woven as Geotextiles. Since colour of

the yarn is not a criteria for geotextile applications, the brown fibre yarn can be better utilised to produce coir geotextiles at a cheaper rate. This will pave way for the manufacture of value added products from brown fibre.

The establishment of vegetation while using different types of coir geotextiles for soil conservation will be uniform throughout the slope land. This also will be contributed significantly towards the reduction of erosion in varying slopes.

Different types of coir geotextiles with respect to slope can be effectively employed to check the erosion in newly constructed earthen slopes, bringing about considerable savings compared to traditional method of stone pitching. In tropical condition, though there is a considerable reduction in the tensile strength of the coir geotextiles when exposed to

sunlight can very well retain its functions of erosion control.

In a predominantly agricultural country like India, heavy rainfall enables luxuriant growth of weeds which may later compete with crops for light nutrients and moisture. One among the most important factors that interferes with the production potential of soil is the cropping system that leave the soil surface exposed periodically. This encourages weed growth thereby reducing crop yield. Though the

introduction herbicides of revolutionalised the world agriculture, the residual effects of these herbicides on the succeeding crop or the possible interactions of their residues with other pesticides / cultural practices pose problems in crop production. Coir geotextiles can employed effectively as environment friendly mulching material for various vegetables as well as perennial crops.

The coir geotextiles / cocologs can be very effectively used for river bank



or pond protection. The coconut logs were piled deeper into the riverbed using water jet. Spurs were constructed such that the top of the spur was at the same level of the bank.

The coconut logs were piled into the riverbed such that the length of the log above and below the riverbed was same. Cocologs were stacked tightly in between the coconut logs. They were secured tightly to the coconut logs using coir rope. The cocologs were stacked one above the other, from the riverbed upwards. The woven coir geotextiles also can be effectively used



Pineapple cultivation using coir geotextiles as a soil mulch

for this purpose.

The coir geotextiles can also be used to rehabilitate and rejuvenate the degraded upland soils as well as the rock patches. The coir geotextiles along with coir pith and turf grass can be effectively used to rejuvenate the exposed rock patches. The turf grass should comprise of locally grown species of grasses and sedges. The technology will help in re vegetating and rejuvenating the eroded and degraded lands.

Cocologs were used to reduce runoff velocity. The cocologs were placed along the contour to reduce the runoff velocity. They were fixed to the rock patch using I-clips inserted in the drilled holes. Turf grass from the nearby area was cut and placed over the coir pith.

Coir geotextiles can be effectively used to re-vegetate the rock patches upto a slope of 80 per cent where the degeneration is already initiated with a combination of coir pith.

Coir geo-textiles can be used to stabilise the soil temporarily when construction of roads or banks. In the Netherlands one of the most important application areas for geotextiles is vertical drainage in road construction.

The writer is Director, National Coir Research & Management Institute



he global agro-industry has been facing a serious crisis due to steady built up of biological resistance resulting from an over application of chemical fertilizers and pesticides. It is here that organic amendments become useful. While synthetic fertilizers are generally more available, less expensive, and have quicker results, they have played havoc with our ecosystem.

Soil quality has a key role in the making of Home gardens, Terrace gardens, Lawns, Nurseries as well as in Horticulture and Floriculture. Factors like salinity and less water holding capacity make soil unsuitable for cultivation. Coir pith is an ideal soil reconditioner, soil structure improver and soil substrate with excellent water holding capacity.

India annually produces about 280,000 metric tons of coir fibre. By weight, coir fibres account for about one-third of the coconut pulp and the other two-thirds is the coir pith. Coir pith is also known as Coco peat or Coir dust. This by-product of the coir industry can be converted into organic manure using biotechnology, making it ideal for gardening and horticulture. The opportunities of this by-product in coir industry sectors of Kerala are yet to be utilised in full swing.

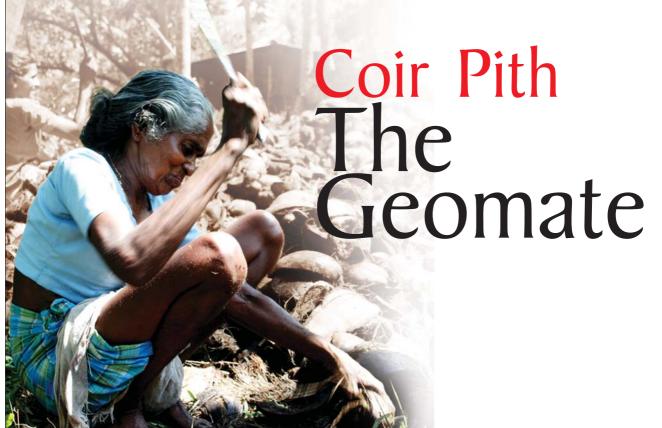
A wide variety of Coir pith products such as Coir pith grow bag, Coir pith bale, Coir pith Briquettes, Coir pith Discs, and Coco chips are ideal for gardening and horticultural needs.

Why Coir pith?

If the soil is fertile and contain components like micro and

micronutrients, many gardening problems can be nullified. Much attention must be paid to keeping it in good condition. The ideal vegetable garden soil is deep, friable, well drained, and has high organic matter content. Proper soil preparation provides the basis for good seed germination and subsequent growth of garden crops. of various Careful use amendments can improve the physical and biological condition of soil and provide the best possible starting ground for your crops. Coir Pith is widely used for growing tissue house cultured plants, green cultivation, developing grow bags and allied products for the European market.

Coir pith not only revitalises plants, but induces uniformity in growth by



The Coir Board has come into an agreement with the C-pom for manufacture and supply of coir pith organic manure to the Rubbermark for use in rubber plantations. Moves were also on to manufacture tufted door mats using a mixture of rubber and coir pith in place of PVC.



of coal.

supplements in crop fields floriculture. This horticulture and natural spongy coir industry byproduct is a perfect organic growing medium for fruits such as strawberry, vegetables such as pepper, cucumber, tomatoe, and flowers such as gerbera, gladiol, lily, anthurium and rose. It is also used as an alternative for 'Peat Moss.' Coconut Peat has a calorific value of 3975 k cal/kg, close to 4200 k cal/kg of coal. It is also used as fuel briquettes with the ash content 1/10th

"Cocolawn" a readymade lawn consisting of coir pith and grass that is being produced and marketed by "Sevashram" non-government organisation at Angamaly. The environment-friendly product is being at various units made of the organisation. The technology was developed by the Central Coir Research Institute, Alappuzha. The transfer of technology is being facilitated by the National Research Development Corporation. The Coir Board has come into an agreement with the Kerala Co-operative Marketing Federation for manufacture supply of coir pith organic manure (Cpom) to the Rubber Marketing Federation (Rubbermark) for use in rubber plantations. Moves were also on to manufacture tufted door mats using a mixture of rubber and coir pith in place of PVC. Export of pith is expected to go up in the coming years. Coir Industries of Kerala started exporting coir pith and pith based products recently in a big way.

The writer is Research Scholar, IMK, Kerala University



Potassium

holding capacity

Eco-Friendly and

Enhances strong heap root system

production of Ideal pH level - 5.6 to 6.4

enhancing water retention and microbial activity also. Coir pith contains high quality of nutrients that keep the soil healthy in a natural way. It acts as a top dressing that helps maintain moisture and reconditions the soil. Coir pith enhances the nutrient carrying capacity of plants. Sustainable agriculture practices such as this creates a healthy perfect loop from table to earth. Pure natural. this and organic biodegradable matter is an economical and natural alternate for rockwool slabs, peat moss and perlite. Coir pith has a high lignin (31 per cent) and cellulose (27 per cent) content and a carbon-nitrogen (C/ N) ratio of 104:1. It also has a very high water holding capacity of five to six times its weight. It should be noted that Coconut Peat is very stable because of the presence of high percentage of lignin. Thus, the peat left to itself takes decades to decompose. Composted peat is used along with organic

SERBITATION STERBITATION OF THE RESERVE OF THE RESE



Need Cure Comprehensive

oir industry is a major traditional industry which gives employment to about four lakh of people belonging to the coastal area of the State. Eighty per cent of the coir workers are employed in the coir spinning sector and the remaining in the product manufacturing sector. The coir workers are from the lower strata of the society especially socially and economically backward communities. In the coir spinning sector, overwhelming majority are women workers.

Coir industry occupies a very important position in the economy of the state and is much labour oriented. Employers in this sector include

exporters, large and small scale producers, self entrepreneurs and cooperative societies engaged in fibre extraction, coir spinning and product manufacturing sectors.

As the scientific and technological inventions improves, many sophisticated products which can act as substitute to coir products are being manufactured and marketed. This leads to a major threat to the coir products.

Absence of proper research and development, failure in



technology mechanisation and upgradation, lack of value addition, diversification and inefficiency of organisation marketing accelerated the crisis of the coir industry.

The industry was flourished in the past because of the availability in abundance of the raw material i.e. coconut husk. But now the state is depending on Tamil Nadu, the neighbouring state for coconut fibre. But a new trend is observed that certain countries like China procure all natural fibre especially coconut fibre from our country. This trend created a set back in industry. Using these raw materials, they are many attractive manufacturing products and are marketing them here also. The organisational flaw in procurement and distribution of raw material is the root cause of the failure of the industry.

In each year, the State is producing coir yarn and coir products worth about Rs.2000 crore. One third of which is exported and the rest is sold in domestic market. Due to the present financial crisis arisen out of recession, the export and domestic marketing of the coir products have come down.

As it is a major livelihood of our coastal villages, the present crisis creates a direct impact of the status of living of the coir workers and their family members. It affected the cash flow and economy of the coastal villages. Hence they have to be protected and assisted by providing

adequate safety net.

In the last year, the Coir Commission headed by myself, analysed almost all challenges faced by the industry and resolved its firm recommendations on each and every aspect. Though the members of the Commission represented various segments of the industry with different interests, consensus on all issues were reached and recommendations were made unanimously.

The most serious problem in coir industry is non availability of husk at economic rates in adequate quantities. The Coir Commission analysed the problem and stressed the need for a

district device for the procurement, storage, distribution and extraction of husk.

As the cooperative societies have a vital role in their area, they have to be reorganised. Various schemes were incorporated in the report to provide sustainability to these cooperatives. In order to avoid middlemen and ensure fair wages to the workers, commission was of the firm opinion that they should be strengthened.

One of the major drawback of the industry is the failure of mechanisation and modernisation. As the productivity is too low, it has to be enhanced at a considerable rate. The enhancement of productivity is essential for ensuring fair wages to the workers. Adequate recommendations are provided in

the Commission Report with regard to mechanisation and technology upgradation for the enhancement of productivity.

There seems to be remarkable lacunae in the research development activities in this sector. On analysing the development of other industries based on other natural fibre in India. It was observed that research and development in those industries had attributed much to the comprehensive extensive and development of that respective industries. This fact was recognised by the Commission. A novel and practical approach has to be initiated to industry the research and



development activities in this sector. priorities have been identified and adequate fund is required to undertake the research and development activities on a priority basis.

Owing to the recession and financial crisis, a considerable decline had happened in the export front. To tackle this situation, the domestic market should be exploited to its full. Coir marketing Consortium, a new organisation recommended by the Commission is to be set up at the earliest. The public sector units in this sector have also to be strengthened and reorganised.

Without a comprehensive reorganisation the crisis faced by the coir industry could not be solved. A three phase

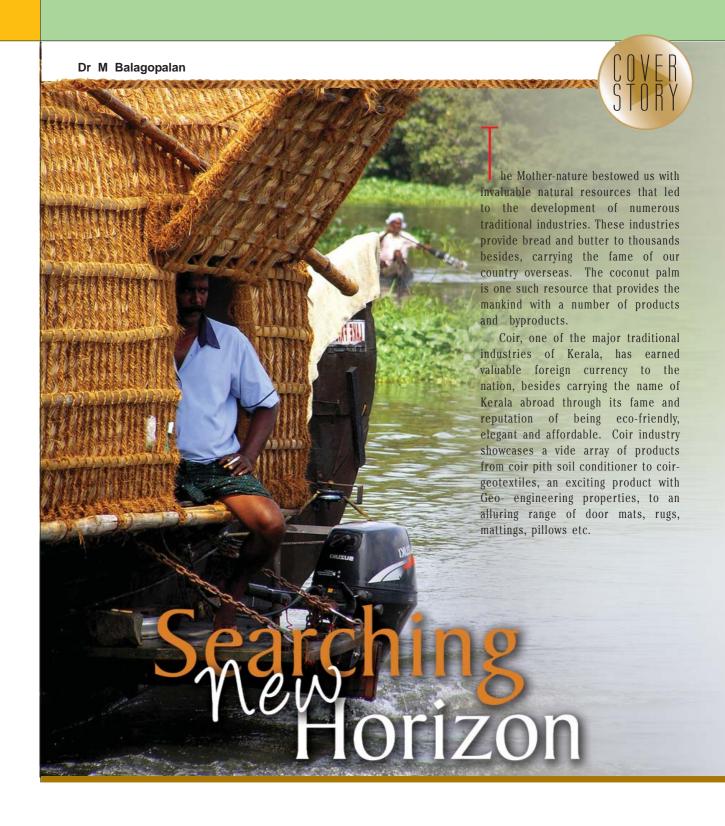
project is recommended by the Commission for this reorganisation. At least 450 crore is required for the implementation of the entire schemes. A considerable portion from it is for the development of infrastructure. Even though the entire schemes recommended Commission were approved by the State Government, no adequate amount has been provided in the current year's budget. As the piece meal implementation would not ensure optimum result, the schemes formulated by the Commission should be carried out as a package.

The State Government is taking all efforts to protect the industry. The Government is focusing its attention on all segments of the sector. Its main objective is to get maximum benefits to the workers.

Owing to the lack of reorganisation, the target is not achieved yet.

About four lakh workers are engaged in this industry. Most of them are women workers belonging to below poverty line. No alternate jobs are available in the coastal area in which coir industry is running. The debacle in the industry would adversely affect the status of living of the coir workers. Hence the workers have to be protected by providing a special package. NREG scheme may be clubbed with coir sector. As fishermen community, coir workers family may be included in the BPL list so as to enable them to get all benefits.

The writer is Chairman, Coir Commission



Coir yarn, a major element of this wide range of coir related products has always contributed to the major chunk of turnover achieved by the industry in the yester years. Around 80 different types/runnages of coir yarn are produced in the 10 different coir projects stretching along the coastal belt of the State. Fully hand twisted, ratt-spun and motorised-ratt-spun coir varn are produced in various areas. Traditionally, yarn produced in a particular region is known by the and low quality materials from the neighbouring States as well as synthetic materials has posed severe threat to coir yarn in the low quality varn segment. Coir varn is also confronting severe competition from other natural fibers like sisal, jute as well as synthetic products. industry requires repositioning and its constituent products require redesign.

Coirfed, the Apex Federation of 600 odd Co-operative societies of serving its member societies.

Coir yarn, being a low value product that provides sustenance to more than four lakh coir workers and their dependents, on many occasions, is not an economically viable product. But, the invaluable service that this industry renders to the society will brush aside all such defects. In the past, Coirfed and the industry received tremendous support from Governments, both State and Central in pursuing the noble cause in the

Coir yarn, that provides sustenance to more than four lakh coir workers and their dependents, on many occasions, is not an economically viable product. But, the invaluable service that this industry renders to the society will brush aside all such defects.

locality in which it is produced and is used for a particular application based on its fundamental properties.

Coir yarn is mostly used as a basic raw material in the production of mats, matting etc. It is also used as an end product in applications like scaffolding, bundling etc. These numerous applications have fetched very high demand for coir yarn in the past. But, with the advent of cheaper operating in the State has played a pivotal role in the industry by procuring the entire produce of the coir Co-operatives and distributing it through a wide array of showrooms and agencies throughout the length and breadth of the country. Thus, it was successful in catering to the needs of its customers inside and outside the State and abroad alike in the past, besides meeting its primary obligation

form of rebate, subsidies, grants etc. But during the past few years, many such Government supports like rebate were discontinued due to one reason or the other. This had a catalytic effect on the problems confronted by the coir industry, in general, and the yarn segment, in particular.

Coirfed, with an of array showrooms and agencies inside as well as outside the State, has played a



very crucial role in the coir product segment by successfully finding market for coir products manufactured by the member societies. Coirfed uses the production and marketing of coir products as a powerful tool for intervening in coir yarn market by converting yarn without demand into coir products. The sale of coir products also has registered an unprecedented decline in the past few years.

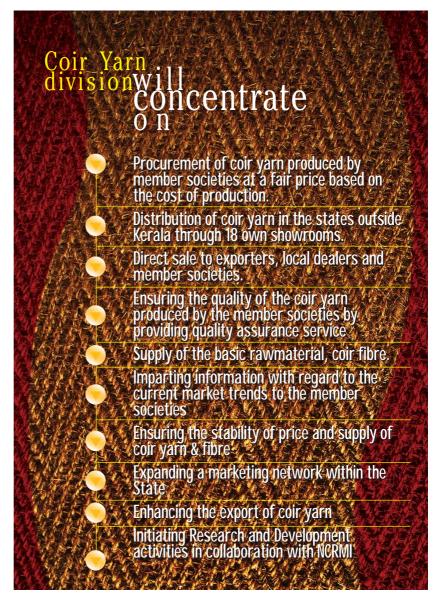
Coirfed has also set up factories for producing value added products like Rubberised coir mattresses Rubber backed coir products. Coirfed has been successful in profitably marketing the value added products manufactured in these units. The Coir industry and the major player, Coirfed has always received patronage and support in the past based on the invaluable service this industry has been rendering to the State. A trace back to the glorious past of this industry will reveal the fact that the assistance and patronage of the Governments in the form of Rebate, Fluctuation Price Fund Working Capital assistance etc are the major reason for its golden days.

Now, the situation has changed. The Government assistance has registered a decline till recent past whereas the threat from neighbouring states and competing products registered all time In these circumstances, the assistance and help of the Government is inevitable.

Coirfed as well as industry is preparing itself to brush aside the problems that it confronts and to meet the challenges posed by other fibres and synthetic products. The industry is aiming for leap ahead with the renewed vigour that the State Government has pumped into veins through numerous schemes projects.

A major policy decision on the part of the Government is to set up a coir Yarn Division under Coirfed to focus on the marketing of coir yarn.

The Coir Yarn Division is expected to procure the entire yarn produced



by the member societies by placing order with them for the items that are demand. According to Coir Commission Report, Coirfed should purchase a minimum of one lakh Quintals of coir yarn annually. Coirfed will pay fair prices to the member societies based on the realistic costing conducted with the support of the Coir Department and the representatives of all concerned.

The Coir Yarn Division will establish tie-ups with the exporters, mats and mattings societies and small-scale producers for the supply of coir yarn at a subsidised and stabilised rate. This will enable the Coir Yarn Division to establish itself as the primary source for coir varn.

A quality assurance team will be setup under the Coir Yarn Division with a Quality Control Officer as the head and five Quality Control Inspectors to The Coir Yarn Division will also ensure the ready availability of raw materials required by the member societies like fibre, yarn etc. at stable and fair price. The most important threat to the coir industry in the State is the declining trend in the availability of coir fibre. The only certain areas like Chirayinkil, Kozhikode etc are using the traditional retted fibre. All other areas have already turned to the white fibre

sourced either from inside or from outside the State. The Coir Yarn Division will take care of the entire coir fibre requirement of the coir industry in the State by arranging the direct supply of fibre from the mills at stabilised price fixed by the appropriate authority and will take care of any hike in the purchase price through Government assistance. Defibering units also will be setup under Coir Yarn Division.

The Coir Yarn Division will impart the necessary information required by the member societies about the changing market trends by gathering information from its sale depots and disseminating the same. A Data Management Centre will be set up for this purpose.

The Coir Yarn Division will ensure that the stability of the price of coir yarn and coir fibre over a reasonable period of time as the division will provide the basic raw material at a stabilised price on credit with the support of the Government. This will help the societies and exporters alike.

At present the sale of coir yarn inside the State is confined to the wholesaling through the three Regional Offices. Coir Yarn Division will enter the retailing of coir yarn by establishing a wide network of sales outlets through co-operative banks and Kudumbasree units, in the agriculture belt of the State.

Coir Yarn Division will take steps for

the development of export market for coir yarn.

Coir Yarn Division will take steps for taking up research and development work in improving the quality of coir yarn in collaboration with NCRMI.

Three Regional Offices and 10 Sales depots outside the State will be put under the Coir Yarn Division and manufacturing units and showrooms will be put under the Coir Product Division. The various functional Divisions of the Head Office like Marketing, Personnel, Finance, Projects etc. also will be bifurcated and assigned to the two Divisions. Both the Divisions will act as separate profit The accounting of the centres. Divisions also will be done separately.

the setting up of Coir Yarn Division and the rest will be arranged on contract/ piece rate basis.

Coirfed has already passed orders bifurcating the organisation. It will construct a new building at Alappuzha to house the Head Quarters of the Coir Yarn Division. A new godown also will be constructed at the same location. Existing godowns one each in all Regional Offices will be refurbished to stock the materials purchased from the member societies. The existing godowns of Coirfed will also be made available for the purpose. The sanction for the Government assistance in this regard is expected within fortnight.

This new policey of G.Sudhakaran, Minister for Co-operation and Coir is





The Coir Yarn Division will concentrate on the procurement and distribution of the coir products yarn and manufactured bv the member societies. It will also take care of the supply of raw materials to the member societies in need at fair price. The existing staff of Coirfed will be trained and relocated as much as possible fill the vacancies arising out of

expected to help coir yarn produced in the State to re-establish its monopoly in the coir yarn markets, both inside and outside the State. It will also help Coirfed to control the market of coir and coir products to a great extent and to procure the products of the member societies at fair price leading to more employment generation and elevation of standard of living of the poor coir workers.

The implementation of the above will be an impetus to the initiative of the Government in developing markets both internal and external.

The writer is Managing Director, Coirfed



Occonut palm and coir have been an integral and essential part of Malayalis and they play an important role in the socio-cultural- economic activities of Kerala. Coir is the only natural fibre that does not get cultivated solely to extract the coir whereas jute and sisal used in the industry are grown only to produce the fibres which in turn are used to make woven products. Coir is a versatile natural fibre extracted from mesocap tissue, or husk of the coconut fruit. The husk contains 20 per cent to 30 per cent fibre of varying length. After grinding the husk, the long fibres are

removed and used for various industrial purposes such as rope and mat manufacturing. The remaining material composed of short and medium length fibres as well as pith tissue, is commonly referred to as waste grade coir, may be screened to remove part or all of the fibre, and the remaining product is referred to as coir pith. Coir is an important product in the industrial, construction and agricultural sectors. The lush green swaying coconut palms and its splendid backwaters favours Kerala to produce the golden fibre and gives a remarkable position of the major

producers of coir products in the world. The Coir industry of Kerala has its own indigenous tradition and history. Coir products are eco-friendly, biodegradable and after all 100 per cent natural.

The Coir Sector in Kerala has been facing stagnation in advancement. The synthetic products which could be used as substitute for coir products were produced at a cheaper rate employing the latest technology posed greater threat and challenge to the coir industry. To top it all, shrinking coconut production led to the scarcity of husk and fibre, the main raw material. The

Strengthen Strategy against Stagnation



the nature and availability of husk and end-use. The fibre is used for making coir yarn and coir products including geotextiles and for agricultural purposes.

The future success of the industry depends on various factors. Improving quality and productivity, developing value added products, breaking into new markets including strong penetration in domestic markets in addition to export market, are the broad areas for which mechanisation and strong reserach and development intervention can play major role. Scientific and practical approaches raw procurement and production are very crucial. Transformation of the process involved in the industry from the traditional methods to modern

Strategic ways to increase coconut production is essential. But the availability of coconut alone does not ensure the growth of coir industry. We have small land holdings and the homestead farming system, which make procurement or collection of husks difficult.

fibre production in Kerala retreated very much which forced the industries in Kerala to procure fibre from neighbouring state. It is a paradox that any drop in production of coirfibre in Tamilnadu will have its adverse repercussions on the volume of production of coir and coir products in Kerala. The increased utilisation of coconut husk as a fuel by brick and other manufacturing industries in Tamilnadu and the recent phenomena of exporting large quantities of coir fibre from Pollachi to countries like China has aggravated the situation further. The recession has added to the



woes, declining down exports of coir products from Kerala to Europe and the US.

The manufacturing of coir and coir products involve a series of steps. Coir fibre, the basic raw material in coir industry, is extracted from husk by natural retting process or by mechanical process. As environmental issues are involved in natural retting process, the mechanical process of fibre extraction has got acceptance for extraction. As different mechanisms are adopted in the mechanical extraction process, the selection of exact process depends on

techniques also to be accelerated.

A comprehensive, focused and concerted efforts are required for the revitalisation of the industry as such.

Strategic ways to increase coconut production is essential. But the availability of coconut alone does not ensure the growth of coir industry. Unlike in other states, in Kerala we have small land holdings and homestead farming system, which make procurement or collection of husks difficult. So the utmost priority is to evolve a suitable mechanism for

Contd. on page37

Contd. from page29

...Strategy aganist Stagnation

the collection and transportation of husks to centres of coir production.

In the mechanical defibering system combing process, crushing and beating process. Busting and Beating process are adopted for fibre extraction. Each process has got its own merit and demerits. The system can be improved by adopting conveyor systems and by including provision to process the pith also in the same unit. In Kerala, agencies like Coirfed can start most modern defibering mills. Starting as much as defibering mills and bringing husks in such centres and reviving the existing defunct defibering mills is the need of the hour in Kerala to tackle the fibre shortage to some extent. Setting up of Defibering mills and selection of right process shall be decided, keeping in view the end-use and nature and availability of husk.

The spinning of Coir fibre into yarn is done either by the hand or by the use of spinning wheels or ratt or charka, motorised traditional ratts, motorised ratt or automatic spinning machine. Automatic spinning machine is only getting popularised. The average production of yarn from a traditional ratt will be about 10 to 16 kgs per day depending on the variety of yarn and skill of the worker. In order to overcome this low production in ratts, automatic spinning machines are to be used so that the average production can be increased to 3-4 times than that of a ratt. Introduction of automatic spinning machines can be made in a phased manner. Concentrated research work is still required to enhance the performance automatic spinning machines further.

In the Production sector, modernisation of existing looms is necessary. Development of efficient automatic and semiautomatic looms is the need of the hour. The product range also needs to be diversified. The possibility of starting coir composite boards, blended yarn etc. has to be explored.

The coir sector is relying mostly on the export market. The potential of the

domestic market is not explored properly. Scientific and focused strategies need to be worked out to tap the domestic market. The recent development of opening outlets in Co operative institutions, linkage with traders and trading houses, Kudumbashree, selling through commission agents etc. is yielding result. This is to be strengthened. Formation of marketing consortia, adopting cluster approach etc. can help the coir industry to penetrate further into the market, in accordance with the customer aspirations and without any compromise on quality.

The Research and Development activities are still on infancy and to be strengthened for the sustainable development of Coir Industry. Research should definitely be focused on the basic raw material of the industry, viz; coir fibre and yarn.

The sustainability of coir industry in Kerala depends on various other factors as well. Need for setting up of a Machinery Manufacturing Factory with sufficient after service personnel to attend the defects then and there, reorganisation and restructuring the Government level agencies in the coir sector, adopting the home concept of working etc will contribute to the above. The State Government provided funds in the budget to implement the above programmes in accordance with the recommendation of the Coir Commission constituted Government for making the effective utilisation of Kerala Coir popularly known as "The Golden yarn of God's Own Country" and thereby ensuring sustainable growth development of coir industry as a whole in all respects .

The writer is Director of Coir Development

P V Saseendran



Coir Exports Chances High



olden yarn of Gods Own country" have to survive the time of economic slowdown. Coir is not only a material having monetary value but is an embodiment of Kerala culture. Early days, intermediates were milking the earnings of primary workers and Small Scale Producers in coir industry. Now-a-days, Government policies and involvements of certain organisations give a new spirit to this industry.

Many of experts in coir industry think that the booming era of coir industry is over. But we do not think so. Because, good market research, marketing research and new product development with this golden yarn may bring back our glittering expectations about coir. During this period, nature loving and antipolluting behaviour of human being increased a lot, eco-friendly material feeling might get an enhancement in these mind set. So we have to penetrate the market and entertain these sentimental feelings.

Aggressive publicity and propaganda on the diversified uses and advantages of coir products have to be undertaken to capture market. Technology Advanced Engineering side should apply in new product development for giving some momentum.

For gaining old glory of coir, we have to project alternative application of coir and coir products. Coir Yarn, Coir Pith, Coir Geo-textiles are the area which we should concentrate on these Exporting chances of these products are developing day-by-day. Probability of its market has yet not identified properly. But if we target upon this market, coir industry can really make a boom.

The wide application of coir pith based products as soil conditioner, soil less media for agricultural and horticulture might get more popularity. We have to highlight the importance of coir pith in stabilising ecological system of a country.

Coir geotextile has variety of applications like soil engineering, erosion control, soil reinforcement, embankment sea erosion etc. Its chances are not really digged out yet.

It is the fact that day-by-day coir industry shows some diminishing nature. Considering to the Export Market, domestic market can do only a little help to coir industry. We can not neglect local market but for a real change we have to rely upon foreign market.

In 2007-08, total coir products export was for Rs.592 crore. Despite a slow down in global economy coir exports from our country reached Rs.640 crores for the last financial year i.e. 2008-09. We are expecting a business of Rs.700-750 crore in the current financial year.

Around 35,553 tonnes of handloom mats valued Rs.235.37 crores were exported last year, which is 13 per cent less in quantity and 3 per cent less in value over the previous year. Tufted mats shows a decrease of 0.77 per cent in quantity terms but 13.5

per cent increase in monitory aspects.

Coir pith occupied almost 51 per cent of the total coir exports. 96,996 tones of coir pith exported which valued 64.62 crores. It shows 16 per cent increase in volume of export and

Indian participation in International Erosion Control Association conference will make a change in our coir exports as it can be used most effectively in erosion control, storm water management, natural resource protection, cycle path creation, restoration of vegetation etc.

32.44 per cent rise in value.

Our export side is mainly based on US and European market. In current financial year export to US dropped from 40 per cent to 31 per cent. Behaviour of the US consumers is that,

they changed their carpets and rugs frequently. But now their behaviour changed due to recession.

European market remains steady at 38 per cent in which without considerable changes. New markets identified were not enough to cover the shortages of US market.

In export side, we should watch carefully to one point i.e. 19,443 tones of coir fibre was exported, having value of Rs.23.90 crores, ie. 75 per cent increase in volume and 95 per cent increase in value. Most of coir fibre was exported to China. We can not think this will help us. Because this fibre used by them to manufacture carpets and mattresses. We have to promote our exports to Latin America, Australia and other countries. Handloom and tufted mats will score same export achievements as in the last year and the export of coir pith, coir Geotextiles, curled coir etc. are expected to increase considerably than that of the previous years.

Indian participation in International Erosion Control Association (IECA) conference will make a chance of change in our coir exports. Coir geotextile can make a boom in US market. Coir geotextile can be used most effectively in erosion

Coir Products Export Summary

Product Name	April 2007 to March 2008		April 2008 to March 2009	
	Quantity	Value	Quantity	Value
Curled Coir	1279.99	152.06	1438.38	223.85
Coir Fibre	11101.64	1224.14	19443.54	2390.89
Coir Rugs	178.14	134.4	63.83	67.63
Coir Pith	83613.24	6384.77	96996.32	8462.3
Coir Rope	372.26	139.99	370.28	164.6
Coir Other Sorts	57.02	57.83	50.5	19.03
Coir Yarn	8407.09	2666.9	5335.09	1925.92
Geo-textiles	3364.72	1444.65	3251.52	1591.05
Handloom Mats	40917.35	24299.85	35553.43	23537.53
 Handloom Mattings 	3013.71	1879.33	2368.45	1716.56
Powerloom Mats	75.06	52.69	54.21	40.06
Powerloom Mattings	115.82	88.3	87.52	85.09
Rubberised Coir	1120.35	852.19	1222.59	1174.77
Tufted Mats	33950.35	19910.98	33689.27	22598.15
Total	187566.74	59288.08	199924.93	63997.43
Quantity in Tonnes			Value in Rs.Lakhs	

control, storm water management, natural resource protection, cycle path creation, restoration of vegetation etc. In case of geotextile itself can expect 5 to 10 per cent increase in exports i.e. more than 1500 million squire metres of Geotextiles in coming financial year. We are facing competition mainly from Philippines, Vietnam, Korea, Sreelanka and China.

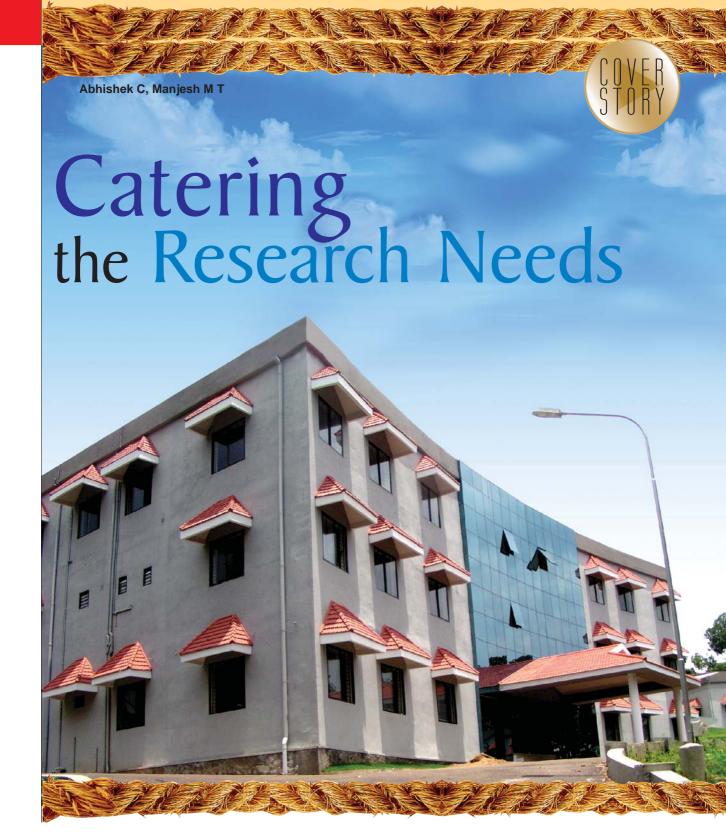
In the starting time of 2008-09 financial year i.e. in April, 2009, our export was two per cent lesser than that of April, 2008, but after that we are moving and getting back to the original momentum. Coir fibre worth Rs.1.85 crore was exported to China during 2008-09 financial year instead of 39 lakhs in 2007-08.

This will result scarcity of raw materials in India and also thereby raw material price will increase uncontrollably. This will adversely affect our industry.

So for enhancing this industry, Central Government has to give some liberal help which is a necessity. It will provide some stability to exporters where struggling to beat the global downturn. Foreign trade policy also should be framed to help this thrust area. Thereby we can expect a huge change in this traditional industry.

As mentioned earlier, coir is a culture, of people having distinguished craft, skill, innocence, hard work and dedication. So we can not allow this traditional industry to set in darkness. This sun must be there in the middle of the sky, shining for ever.

The writer is Managing Director, Kerala State Coir Corporation Ltd., Alappuzha



Coir Research ational Management Institute (formerly C-DOCT) is a non-profit making research organisation established bv Government of Kerala in the year 1994 with an idea to cater the research and development needs of the Coir sector. It is registered under the Travancore-Cochin Literary Scientific Charitable Societies Act 1956. The mission of NCRMI is to ensure an appropriate place for the golden fibre and the stakeholders of the sector in all walks of life, and to constantly pursue innovations and improvements in coconut fibre and coconut fiber related products through continuous research, education, training and extensive application. Whereas its vision is to act as a nodal agency for coordinating the technological, commercial academic developments in the entire gamut of activities related to the coconut fiber sector in Kerala and emerge as a Center of Excellence, for consulting R&D. Industrial Knowledge dissemination, Globally

National Coir Research and Management Institute is controlled by a Governing body consisting of 21 members who are personalities with proven track record in relevant field of Research and Development, Industry, Academic etc. G. Sudhakaran, Minister for Co-operation and Coir is the Chairman of NCRMI. An Executive Committee of Governing body of NCRMI consisting of members is constituted along with the

State Level Research and Development Advisory Committee of NCRMI to conceive, formulate and monitor different projects from various fields of coir industry. The State Level Research and Development Advisory Committee has successfully implemented a

number of projects eventually benefiting this traditional sector. The Research and Development activities constantly monitored by the State Level Research and Development Advisory Committee. Besides engaging with R &D and Geotextiles projects, NCRMI is being engaged with the Brand Building

activities of Kerala Coir and released the Brand Coir Logo on 26th January, 2007. NCRMI is also acting as the Quality Certifying agency for coir products. The institute also organised Workshops, Seminars, short term training courses etc. and published a Comprehensive Reference book on Coir Geotextiles.

High-Tech Coir Park at Kollam established as ancillary unit of NCRMI in 2001. Right from the inception it is actively involved in skill development of the workers especially women folk. NCRMI is engaged with training programme on coir spinning of different

varieties of coir yarn to women coir workers across Kerala. In the product sector, NCRMI has also provided training on manufacturing of Mats, manufacturing of extinct varieties of Coir Products, weaving of Coir Geotextiles. The centre is also liasioning



with Grama Panchayat, Municipalities and other Govt. institutions for entrepreneurship Development Programmes as well as inclusion of Coir Geotextiles component in the NREGP implemented by the Local Self Govt. Institutions.

To diversify in-house research activities, NCRMI is in the process of augmenting the infrastructural facilities. NCRMI administrative block, laboratories, workshop etc at Kudappanakkunnu campus is nearing completion and shall be inaugurated in October, 2009.







Inefficient water bureaucracy, wasting habits of society combined with exploitation by industries has made water one of the scarcest resources even in a water rich state like Kerala. here is no more drop of fresh water on earth today than there was a million years ago. Yet today six billion people share it. Global consumption of water is doubling every 20 years, which is more than twice the rate of population growth. The increase in water utilisation levels register a rise, which is more than 2.5 times the increase in population growth. Since 1950, the world population has doubled but water use has tripled. The UN declared 2003 as the international year for freshwater so as to focus on the role of

water as a precious and finite resource to be used wisely. Unlike petroleum, no technological innovation can ever replace water.

Although there is an abundance of water on the planet, 97.4 per cent of it is salt water and not useable. Of the remaining two per cent is locked up in the form if ice and glaciers. Only 0.6 per cent of the total volume of water on earth is fresh water in the liquid state and this is mainly underground water.



The total volume of water on earth is constant. But there is uneven distribution of water on earth. The hydrologic cycle acts as a pump, cycling water through evaporation and precipitation. The demand for water is growing worldwide increasing with industrial and population growth. About 46 countries are identified where climate change and water related crises create a high risk of violent conflict. Water stress affects one-third of USA and one fifth of Spain, China with its vast rural-urban

migrations has as much water as Canada, but 40 times more people. Population growth has not followed the location of water resources. The most obvious example is China, which has more than 20 per cent of world population but only 6-7 per cent of its water. India is no better off. India, which has 17 per cent of world population, has only four per cent of world's freshwater resources. The World Bank's recent report on India warned, "Unless dramatic changes are made and made soon, India will not have the cash to maintain and build infrastructure nor the water

India is the largest consumer of water in the world. India faces a turbulent water future because of the rapidly rising population and the plunging water levels. In 50 years a water rich nation has been reduced to water insecure one. By 2025, the per capita availability of water is likely to slip below the mark of 1000 cubic metres. UN estimates that two out of three people will not have access to enough water by 2025, putting millions of lives at risk.

required for the economy and its

people".

Demographic studies show that population growth in India will be followed by urbanisation and by 2050, 48 per cent to 61 per cent of India's population will be in urban areas. Population shift leads to additional demand on already shrinking urban water resources.

Kerala, which constitutes about 1.18 per cent of total area of Indian Union accounts for 3.44 per cent of total Indian population. A water-rich state with it's 44 rivers, above 50 lakh wells, about one lakh ponds and over 3000 small streams accounts for 22 per cent of the bio-diversity of the nation. It is the state with the highest density of wells in the world. The average annual rainfall in Kerala is 3125 mm,



which is quite high compared to the national average of 1170 mm. 85 per cent of the rainfall is received in only four months and during remaining eight months rainfall received is only 15 per cent. This is a major reason for water scarcity during the other periods Rapidly of time. progressing deforestation in Kerala reduces the water retention -capacity of the soil, which further leads to warming up of atmosphere and reduces water-flow in rivers. The combined discharge of four major rivers in Kerala is less than half of that of river Krishna.

In Kerala, groundwater has been the major source of meeting the domestic needs of more than 80 per cent of rural households and 50 per cent of urban population besides

fulfilling the irrigation needs of around 50 per cent of irrigated agriculture. The groundwater potential of Kerala is very much low compared to the rest of the nation. Estimated groundwater balance is 5590 mm3, Palakkad has the highest potential for groundwater recharge (12%) followed by Thrissur (11%), Ernakulam (9%), Kottayam (7%), Thiruvananthapuram (4%). The Kerala groundwater control and Regulation Act 2002 regulates the use of groundwater in Kerala.

The rapid pace of urbanisation in

Kerala has led to the filling of wells and withdrawal of water table to deeper levels as a result of industrialisation and exploitation of groundwater. The state is subject to problems like declining water-table, contamination due to use of pesticides, industrialisation and seawater intrusion.

The pattern of demand for water in the state is undergoing continuous change towards increasing pressure for drinking and other household and commercial needs relative to demand for irrigation. Inefficient water bureaucracy,

wasting habits of society combined with exploitation by industries has made water one of the scarcest resources even in a water rich state like Kerala.

In view of the fact that this precious resource is the basis of all life on earth, it is highly imperative that appropriate steps should be taken to conserve it and avoid pollution of water bodies to sustain this blue gold. There is need for a water policy at the international level so as to make it sustainable for the future generations. Water should be considered as a part of the ecosystem for the benefit of all and not as a commodity for the profit of a few.

The writer is lecturer Department of Economics, NSS College, Vazhoor, Kottayam



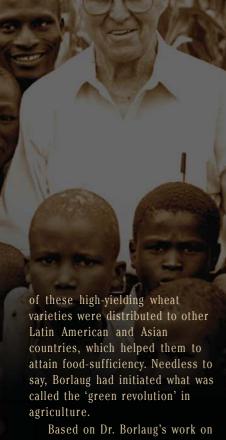
Norman Borlaug Revolutionary in Agriculture

CR Elsy, S Arun

orman E. Borlaug (1914 – 2009), widely related to as the 'father of the green revolution' died late on September 12, Saturday evening at Dallas (USA). Borlaug, a great agriculturist, is also remembered as a philosopher, humanitarian and teacher. Even though these words qualify the lofty personality of Borlaug, they cannot capture his impressive accomplishment of averting mass famines in Asia and Latin America that were widely predicted in 1960s; the work that awarded him international acclaim and the Nobel Peace Prize in 1970.

Borlaug did his doctoral studies in Plant Pathology and Genetics from the University of Minnesota. As a part of his work with the Rockefeller Foundation between 1944 and 1960, Dr. Borlaug dedicated himself to increasing Mexico's wheat production by developing new wheat varieties. In 1963, Dr. Borlaug became the head of the newly formed International Maize and Wheat Improvement Center (CIMMYT) in Mexico, where he concentrated on developing new high yielding wheat varieties suited for Latin American and tropical Asian countries. In 1970, he received the Nobel Prize for Peace, which was awarded to him "in recognition of his contributions to world peace through increasing food supply". He retired as head of the Centre in 1979 and turned to university teaching. He is a recipient of several international awards, including the Padma Vibhushan of the Indian Government.

In Mexico, he was appalled to see the situation of wheat crop, despoiled with rust disease leading to dismally low yields. Moreover, traditional Mexican varieties tended to lodge under heavy fertilizer application causing crop loss. Borlaug countered this problem by crossing Mexican wheat with the dwarf Japanese variety having Norin-10 gene. The progeny of these crosses resulted in short, stumpy, non lodging wheat plants producing 10 times as much grain as the traditional Mexican variety. Cultivation of these varieties made Mexico self-sufficient in food production. The seeds



Based on Dr. Borlaug's work on wheat, Dr. M. S. Swaminathan and his team of scientists developed the high-yielding dwarf variety of rice drawing genes from the Taiwanese variety, Taichung Native -1 and high-yielding dwarf wheat varieties using the Norin -10 gene, both adapted to the Indian climate. This sparked off the Green Revolution in South Asia.

Many scientists and environmentalists blamed the 'green-revolution' for many ills of environmental degradation. Later in his life, Borlaug concurred to some of the ill-effects of using excessive fertilizers and plant protection chemicals, and began to advocate judicious use of these chemicals.

Dr. M. S. Swaminathan once opined that Dr. Borlaug 'is a living embodiment of the human quest for a hunger free world'. As the quest goes on, let us make his life a lesson for us to imbibe and strive to make this world hunger-free.

The writers are with Kerala Agricultural University



rganic agriculture is often perceived to be complicated and cumbersome cultivation practices whereas it is nothing but a natural and eco-friendly holistic production which management system, has relevance in conditions of tropical and subtropical regions such as Kerala where high temperature and relative humidity cause rapid

oxidation of plant and animal residues in the soil. It takes into account the critical fact that regional conditions require locally adapted systems. Moreover, it promotes and enhances health of ecosystem including biodiversity, biological cycles and soil microbiological activity and envisages and ensures more natural practices vis-à-vis the utilisation of off-farm

inputs. The thrust, therefore, is on sustaining the properties of the soil by maintaining the organic content in it. Organic Farming covers nearly 19.8 million hectares globally that constitute around 2.2 per cent of the produce harvested from 'conventional' or chemical agriculture. But the expected medium term growth of the organic sector is pegged at 15 per cent annually. The organic production may offer a viable and commercially successful agricultural alternative as a niche market production system for Kerala because of its unique strengths and competencies. Educationally and technically equipped farming community, significant traditional know-how and proven capabilities in spice and herbal farming openness innovation experimentation are but some of the strengths of the farmers of our traditionally State. agricultural Moreover, Kerala already has a situation where environmental objectives, landscape preservation, viability of rural economies and their cultural heritage, food safety and quality standards have become prominent issues. At the same time, concern over the cost of the State's

nutritional security along with food security. It is conducive to humans, ecosystem, health and helps biodiversity conservation. Besides, it is 'organically' linked to food industry that help overcome the problem of perishable nature of the produce, provides an assured market and is one of the fastest growing sectors.

The primary requirements of this system are identification of the market potential and markets, appropriate selection of crop mix and development of traditional credible labels for domestic market and

e selection of crop mix and rice(
development of traditional credible alrea
es labels for domestic market and

coiffeurs supporting farmers mean that Kerala may not be able to offer sizeable subsidies on the criteria, pattern and scale as in the past. In this context, venturing into new opportunity areas will provide farmers obtain premium prices and hikes in their net income.

Organic surveys conducted by KSHPDC - a State Government PSU at Thiruvananthapuram in 2006 also confirm the need and support of the consumer in terms of Organic produce/ product supply. Organic farming, apart from providing an additional income and employment generation opportunity, ensures

certification for exports of high value crops.

and marginal farmers Small dominate the agricultural scenario in Kerala. While many farmers outside the State of Kerala continue to be benefitted from the urban centric growth, this is not true in the context of our State. These marginal farmers that constitute the bulk of farming community in our State have unique set of needs that the input intensive agriculture paradigm has not been able to address. And it is for these subsistence farmers in rain-fed marginal land areas that organic agriculture looks tailor made to

improve their livelihoods.

A discernible trend of a marked shift in the cropping pattern towards less labour intensive crops has been observed in the agriculture scenario of the state since 70's. The area under cultivation of rice declined by over 40 per cent in the past 25 years. However, the generated income per unit area under cultivation can be sizeably enhanced through organic cultivation of traditional food crops such as rice(njavara, for example, for which already a paradigm exists), value

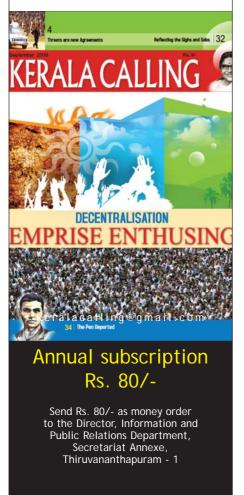
addition through labelling and/or certification. As marketing is perceived to be the main bottleneck that farmers face, they could be helped with the much needed market for their produce and products through coordination with State agencies such as KSCSC and KSHPDC outlets, farmers markets at Local Panchayats, private sector agents, firms and corporate companies.

There is a gradual awakening to the fact that the organic endeavour in agriculture can augment the earnings of a smallholder farmer in Kerala, because over 63 per cent of its small and marginal farmers are either using little or no chemicals. The cultivation of the latter is oft called 'organic by default', which means naturally organic and

chemical inputs have made little or no inroads into cultivation practices. Areas like Wayanad and parts of Idukki could be brought under this definition. What we see in Kerala now is an increasing number of certified organic farms, specifically producing cash crops for premium prices in the export market. There are also a few noncertified organic farms, which are engaged in fulfilling the need of their own households and accessing local markets only, if there is a surplus. They are not able to command premium prices except in rare instances such as the ones in Kanjikuzhi and Mararikkulam (where marketing was

Not every footstep

can lead you through the right path.



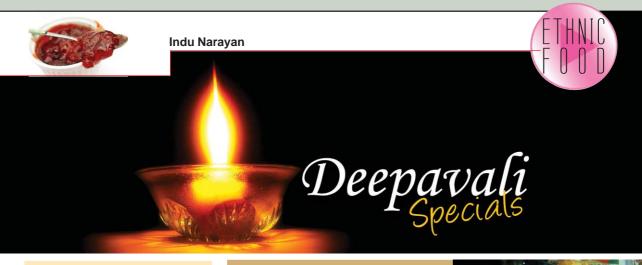
taken up successfully by KSHPDC-a State Government PSU) which are proven and replicable models for organic low value crops such as vegetables. These have high significance in agricultural scenario in Kerala and have the potential to develop into excellent revenue generating sources. It is perhaps the first time that farmers have taken a lead in adopting and spreading a technological alternative themselves. Besides these, there are home gardens produce exclusively for household purposes which are ubiquitous and which are a reflection of high awareness about organics in this small State. Noteworthy is the fact organic produce is yet to appear along with conventionally/ chemically produced fruits and vegetables under one roof. The prices of select organic produce are relatively high in the organised sector dealing in the perishables with neither the farmer nor the consumer significantly benefitting from it. Therefore, opportunity exists to level down price, and make available organic produce to several segments of the consumer market.

But, for that to happen, Kerala has define its path of organic agriculture in terms of its agri horti commodities, and global positioning in trade. A successful strategy for Organic Agriculture in Kerala requires a two pronged approach. One approach that is intended for marginal areas and small farming communities can focus on food security and health and environmental benefits that are intrinsic to the organic system. The aim of the second approach is to boost trade in agricultural products Kerala and capture significant share of the global market. The indications are that the Kerala has already made inroads, albeit marginally into the world organic market in certain key sectors such as tea, coffee, spices, fruits and vegetables. It is imperative Kerala develops organic products that give it a competitive edge in a global market, such as organic spices, essential oils and medicinal plants, uniquely exotic fresh fruits such as pineapple, mango, red banana and vegetables. Steps in this direction will not only revitalize the agri-scenario in the State but also improve and maintain ecological environment, promote sustainable farming and provide safe food to society.

There is also an urgent need to the farmers and consumers for use of organic labelling for domestic market. Certification (low cost Internal Control Systems) are already adopted for exports. But low value crops could be integrated and packaged into even cheaper 'labels'. Such labelling systems prevail for low value crops especially meant for domestic use (examples are labels of British Soil association meant for farmers' markets in the California in the US etc.). This could be used effectively to integrate elements of social justice and fair trade that are implicit in the principles of organic agricultural systems. Further more, labels are because needed these recognise local diversity of cropping patterns and practices and enhance the basic underlying principles of organic agriculture. They are cost effective and scale neutral.

Kerala, like many other States in India, has a long tradition of ecological agriculture in different forms. And the potential benefits of organic agriculture to the Kerala farmers are becoming clearer day by day. In due recognition of this trend, the State has already come forth with initiatives for the promotion of organic agriculture and is in the process of redefining its path in agriculture through the 'organic' way.■

The witer is with the KSHPDC and heads the Projects section



Churma Laddu

Ingredients: 3 cups wheat flour
1 ½ cup jaggery, grated
10-15 raisins
10 tbsp oil
2 tbsp khus khus
12 tbsp melted ghee
½ tsp each of cardamom powder and nutmeg powder one cup water

Sieve the wheat flour. Add oil and mix till it resembles bread crumbs. Make a hard dough by adding water. Form small balls, flatten each ball and roll into a thick chappathi. Heat tawa and roast chappathi on both sides till light brown. Remove from fire. Blend all the chappathis in a mixer to a fine powder. Add melted ghee, jaggery, raisins and cardamom powder. Form into balls and roll in khus khus.

Besan Puri

One cup besan
1 ¼ cup sugar
¾ cup ghee
half cup water
¼ tsp nutmeg powder

Heat ghee in a kadai, add besan and roast it till its colour changes to a light brown and on a nice smell emanates. Make a syrup with sugar and water, add the roasted besan and mix well. Cook on low fire till the water is all absorbed.



Add nutmeg powder and keep stirring till the sides of the kadai are dry. Spread it into a greased thali and cut into pieces when a little cooled.

Carrot and Date Halwa

One cup grated carrot, ¼ cup chopped dates, 200 gms paneer, ¼ cup jaggery, 5 cardamoms, 10 cashewnuts for decoration

Steam the carrots for 5 minutes. Remove, add paneer, jaggery and chopped dates. Put on the gas for 3-5 minutes or till everything is mixed well and dry. You should add one tsp ghee for flavour. Remove, pour into greased thali.

Sprinkle cardamoms and cashew nuts on top. Cut into pieces and serve.





Moongdal Sweet

One cup coarsely ground moongdal (after removing its husk), 2 cups ghee, half cup jaggery, ten cashewnuts

Heat milk, add jaggery. Heat ghee and fry moongdal in it till it becomes brown. Add the hot milk to the moongdal and cook till dry. Add cardamom and cashewnuts and serve hot.







rather than audience, celebrate movies these days. Electronic media surpasses print in promoting the films released and waiting for release. Location reports, interviews with the artistes and technicians are part of these promotional activities. We are given the impression that each and every film is extraordinary and when it reaches the audience the outcome is often reverse. Jayaraj's Loudspeaker is also released with the maximum boost up of the media, as Mammooty presents the lead role, and the acceptance of audience is yet to be ascertained.

Loudspeaker is centered round two characters, 'Mike' and Menon . Philipose known by the nickname 'Mike' is the protagonist of the film. A humble humanitarian from a hilly village of Thopramkudy, Mike is brought to the city by the kidney agents to get his kidney sold to retain his traditional dwelling from the financier. He happens to be the proposed donor to Menon, a former NRI and the rest of the story is set in and around the luxurious flat of Menon in the city.

The 'Mike' gets his nickname for his habit of talking loudly. He is the embodiment of love and compassion. will interfere into anything unethical or unjust. He has the pure

innocence of a typical villager. He cannot cop up with the sophistication of the busy and inhuman urban life. An old transistor radio is the only valuable possession of Mike. He loves the radio too much as it is inherited to him from his father. When the hooligan students take it away he is so much worried but the same people return the radio with a punch of repentance later.

Mike appears as a saviour to many of the inhabitants of the flat. He serves as an agent of transformation of their disturbed lives. The obdurate Menon is gradually transformed to a lovable bucolic by the magical presence of 'Mike'. The old man who filed cases against his sons withdraws them all with the influence of Mike. The naughty girl of the adjacent flat is surprisingly changed to a lovable kid by the love of Mike. The husband and wife on the verge of divorce are united again by the paranormal 'treatment' of Mike. The vanity and goondaism of the student group is shattered by the innocent intervention of Mike. Even the uncompromising Secretary of the flat is turned to a sober understanding man by the persevere Mike.

Menon's character could claim more authenticity and originality in the treatment. He is looking for a donor to replace his damaged kidney. When

Mike is chosen for the same, Menon is all the more concerned about him and wants him to stay in his flat. His noisy conversations, his old radio, his poking the nose in unnecessary affairs all Menon despise him. But gradually he develops a soft corner for Mike and the pastoral villager becomes the most intimate person for him on this earth. The presence of Mike gradually effects so many changes in his life. On the first day in the flat, when Menon observes Mike enjoying his food with a rustic chilly recipe, he feels like vomiting with nausea. But in a later sequence Menon himself enjoys the same recipe from Mike's dish. Menon is at times taken to the nostalgic past and Mike, eventually, takes him to his native village where the past and present dance before him. When Menon realises that Mike has not taken the assured sum from the hospital, he makes a trip to Thopramkudy only to regain his lost friend. The melancholic life of Menon is totally altered into a tranguil one by the endearing Mike.

The scriptwriter has added the stories of the inhabitants of the flat too. The old man who leads a lonely life in



the flat away from his own children, the fighting husband and wife. residents association secretary, the ruffian students, the mischievous girl stavs with grandma and grandfather all make the backdrop of life in the flat. Most of them have an inner world of frustration and loveless life.

Loudspeaker has a well-knit story penned by P.Y. Jose treated beautifully by Jayaraj, the scriptwriter. But it is unfortunate to note that the characters like that of the secretary and counselor are only excesses. At least secretary's life has a pathetic side. But what is the contribution of Mr. Counsellor? Both Jagathy Sreekumar and Suraj Venjaramoodu have an overdosed presentation of their characters, which are quite appalling. There is subtle humour in each and every shot of the protagonist. Then why should we tolerate these silly comedies?

Though Mike is a fresh character conceived, it resembles many of the roles Mammootty himself has enacted earlier. So his mannerisms and dialogue delivery lack originality. Still the veteran artiste has made Mike unforgettable. The blessing of Loudspeaker is the appropriate casting of Menon. Loneliness, sentiments and nostalgia linger in the finest expressions of the newcomer Sasikumar. His composed and balanced performance is the brilliance of Loudspeaker. The character undoubtedly, Menon. implants unexplained soreness in the minds of the spectator. Gracy Sing who plays Annie has nothing much to do in the film. Thanks to the scriptwriter not to develop a full-fledged love affair between Mike and Annie.

Loudspeaker aptly recreates a nostalgic song of yester years-'Allivambal Kadaviliannarackuvellam...'; and the picturisation of the

song is also exquisite. Other songs are quite a waste; neither the lyrics nor the music could be cherished. cinematography by Gunasekhar the editing by Vijayasankar bring out the visual beauty and silent rhythm of the shots.

Jayaraj is the spokesman of good and bad cinema both. It is not easy to comprehend that the filmmaker who made films like Karunam and Santham has given us 'For the People' and 'By People'. But Loudspeaker, produced by New Generation Cinema, doesn't have the fate of his so called popular films. It has an original treatment embedded with humanism. If the unwanted characters and illogical situations were avoided, definitely it would have been a unique creation in Malayalam Cinema. Still we love Loudspeaker for its simplicity, humor and the depiction of life in its core.■

Suresh Muthukulam



A non-stop bounty

I he evergreen vine with brilliant, hot pink trumpet-shaped flowers appearing, in summer it is 'Mandevilla - Spenders', named after the English diplomat Henri Mandeville. It is also known as 'Brazilian Jasmine', scarlet pimpernel, red riding hood etc... This twining vine is a native to south America but it is enjoyed as a garden plant in mild climate areas around the world. The very showy flowers have white and gold throats and are upto 10 cm across and arranged in clusters. Mandevilla blooms heaviest in summer and sporadically throughout the rest of the year. The handsome leathery leaves are dark

For a balanced development it is best to position Mandevilla in a partially shaded place where it can enjoy direct sunlight. Choose a spot with sun in the morning and protective shade in the afternoon. It needs adequate moisture, but can survive droughts. Water the plant always leaving the soil dry for a few days between one watering and the other.

Mandevilla is propagated from hardwood

cuttings. Sprinkle the single node cuttings with a rooting hormone and growth commences within a month in a potting mix of equal parts of sand, soil and leaf manure. Use a fertilizer rich with nitrogen and potassium to favour the development of even vegetation. Fertilization is done by adding fertilizer to the irrigating water every 15-20 days. Here fertilizer mixtures like 17:17:17 or 18:18:18 can be used. After four weeks, add organic fertilizer like dried cow dung powder or liquid fish emulsion to the medium.

Select a support structure like trethis, wires, strings or existing stometares before actual planting is done. Place the plant in the spot chose near or on the trellis to ensure that the plant will be prepared to crawl once it sprouts and grows.

The main varieties are fair lady, summer snow, yellow etc. Mandevilla can be paired with plumbago, libiseus etc. And here is a final bonus - it attracts humming birds and butterflies. Pinch young plants to induce bushiness. Also prune old, crowded stems. depot the plant every 2-3 years changing the soil.



Unveiled: The Surprisingly Small Precursor of T. Rex



The discovery of the Raptorex, a tiny precursor to the gigantic Tyrannosaurus rex, raises the question of whether other jumbo dinosaurs had budget-sized versions

Tyrannosaurus rex - the most fearsome predator ever to have trod the Earth - had a pint-sized precursor, remarkably similar in appearance but no heavier than a human being, according to a new report from a team of scientists. The new animal, based on a single fossil smuggled out of China and eventually sold to a private collector, has been named raptorex. It lived 125 million years ago in a lake-dotted region of northern China.

Raptorex had a big head, tiny forelimbs, and a body built for sprinting, just like T. rex. But this fossil is of a young adult dinosaur, nearly fullgrown, that at maturity would have been only about 9 feet long, compared with about 40 feet for an adult T. rex, according to a paper published in the online edition of the journal Science. It would have weighed only 150 pounds. An adult T. rex could reach 13,000 pounds.

Linking obesity with leukemia relapses

In leukemia patients, excess fatty tissue allows cancerous cells to avoid destruction by chemotherapy drugs, a study in mice suggests.

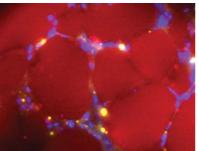
The findings, combined with tests on human leukemia cell lines, may explain why previous studies have shown that obese children and

adults with leukemia are more apt to relapse than their leaner counterparts, scientists report in the Oct. 1 Cancer Research.

Other research has hinted that obesity may play a role in other cancers as well, says Steven Mittelman, an endocrinologist at the

University of Southern California and Childrens Hospital Los Angeles.

Too much fat may offer a safe haven for leukemia cells during chemotherapy,



Fat cells (in red) from an obese mouse with leukemia. The bright spots are cancerous cells nestled into a layer of fat cells. The blue areas are connective tissues.

says David Hockenbery, a physician at the University of Washington and the Fred **Hutchinson Cancer** Research Center in Seattle. "This study provides striking experimental support for the clinical observation that obesity is associated with a poor prognosis in multiple cancers."



Scientists are surprised at how extensively coastal ice in Antarctica and Greenland is thinning, according to a study that could help predict rising sea levels linked to climate change.

Analysis of millions of NASA satellite laser images showed the biggest loss of ice was caused by glaciers speeding up when they flowed into the sea, according to scientists at the British Antarctic Survey and Bristol University.

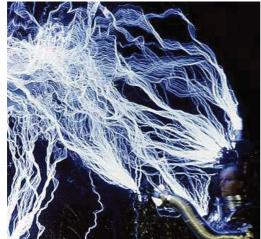
"We were surprised to see such a strong pattern of thinning glaciers across such large areas of coastline," said Hamish Pritchard of the British

Antarctic Survey, who led the study. Rising seas caused by a thaw of vast stores of ice on Antarctica and Greenland could threaten Pacific islands, coasts from China to the United States, and cities from London to Buenos Aires.

NASA finds ice on the moon and on

International space missions have found ice on the moon and more evidence of ice on Mars -- good news for future settlements and also for scientists looking for extraterrestrial life.





First Ever Magnetic Gas

For decades, scientists have debated whether or not gasses could display the same magnetic properties as solids. Now, thanks to some MIT scientists, they know the answer is a freezing cold yes.

MIT researchers have observed magnetism in an atomic gas of lithium cooled down to 150 millionths of a degree above absolute zero. This experiment represents a point of unification between condensed matter research and the field of atomic science and lasers, and could influence areas such as data storage and medical diagnostics.

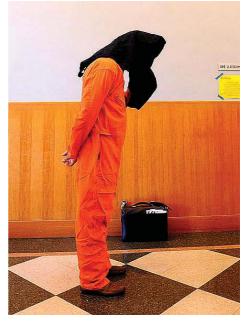
To get the lithium gas so cold, the researchers trained an infrared laser beam on the gaseous cloud. Laser cooling is the primary method physicists use to lower gas temperatures to near absolute zero. The laser essentially stun the atoms, slowing them down, and thus

lowering the temperature.

After initially growing, the cloud began to shrink. That shrinkage, combined with the speed of expansion after the laser turned off, indicated that the lithium atoms had become magnetic.

"It's very important from an overall theoretical point of view because it gives us an understanding of magnetism at its smallest possible scale," Scott Pritchard, an MIT professor, and one of the experiment leaders.

He added that the theoretical breakthroughs this experiment hints at, rather than the technical achievement, would have the most practical impact. This is especially true in data storage, where the tiny magnetic grains that make up computer memory follow many of the physical laws better explicated by this discovery.



To protest Professor John Yoo's return to teaching at the University of California, Berkeley, Curt Wechsler wears an orange jumpsuit and black hood over his head as he demonstrates outside a law school classroom on Monday, Aug. 17, 2009. Wechsler and about 75 protesters greeted Yoo on his first day teaching at the university since serving as a former Bush administration attorney who, according to critics, wrote legal memos used to support torture.

Torture damages brain, leading to misinformation

Torture of terrorism suspects likely leads to misinformation due to stress hormones damaging the brain, reports a neuroscientist. Shane O'Mara of the Trinity College Institute of Neuroscience in Dublin, examined the legal memos released in April detailing U.S. "enhanced" interrogation techniques from 2002 to 2005. O'Mara says, "they seem based on the idea that repeatedly inducing shock, stress, anxiety, disorientation and lack of control is more effective than standard interrogatory techniques in making suspects reveal information."

However, studies of stress hormones in similar situations suggest such techniques will damage the parts of the brain where memories reside, and lead to "confabulation" of reality with fantasy, O'Mara concludes.

Four reports published in the latest issue of the journal Science show clear evidence of water, likely frozen, on the desert surfaces of both the Moon and Mars.

The U.S. space agency NASA said its Moon Mineralogy Mapper, or M3, found water molecules all over the moon's surface. The M3 instrument was carried there last October by the Indian Space Research Organization's Chandrayaan-1

spacecraft -- India's first space mission.



Permanent trade centres for Shopping Festival

Tourism and Industries Departments are planning to establish permanent trade centres across the State under the Grand Kerala

'Hello Kerala

'HELLO! Kerala Police,' a novel scheme that provides mobile phone SIM cards to thousands of police personnel across the State was launched. Chief Minister V.S. Achuthanandan inaugurated the novel scheme. He has urged the police to be close to people to ensure better service. "The responsibility of the police will now increase with distribution of the SIM cards, Achuthanandan said referring to the need to be vigilant round-the-clock to respond to any exigency calls from the public.

Under the scheme, launched in association with the Bharat Sanchar Nigam Limited, a total of 15,222 SIM cards will be issued, right from a constable to the Director General of Police, in the first phase. At present the department has around 900 mobile phone connections.

Home Minister Kodiyeri Balakrishnan, who presided over the function, said the personnel who received mobile phone connections would be dutybound tobe on call 24 hours. The Government is now planning to conduct narco analysis test in the State with the support of the Health department, he said. DGP Jacob Punnose, Mayor C Jayan Babu, MLA V Sivankutty attended the function.

House and job to all

CHIEF MINISTER V.S. Achuthanandan inaugurated the launching of the campaign-mode programme to achieve "house for all and employment for all" in the State within the next two years in Thiruvananthapuram. Chief Minister said that it would be an integrated programme, routing resources from all corners, to achieve the objective of providing houses to all poor families in the State, besides empowering them economically. The local bodies will implement the programme, mobilising support from all corners, as was the case with the People's Plan Campaign of the previous years.

They will be given subsidies ranging between Rs.75,000 and Rs. 1.25 lakh each to build new houses. There was an assistance component for providing land also to those without land to build houses. The housing component of the programme will require an investment of Rs. 2,500 crore. The local bodies will take loans from cooperative banks to supplement their Plan resources earmarked for housing to raise the amount, with the State

government bearing the interest on the loans. Funds from the Central schemes for housing for poor too will go into the project, as also contributions from the public. The local bodies will repay the principal of the loan amounts in 10 yearly installments by utilising a portion of their Plan funds. An account under the title 'EMS Housing Fund' would be opened by the government to receive the contributions. A mechanism to provide technical support for building houses too would be put in place at various levels in each district.

Minister for Local Self-Government, Paloli Mohammed Kutty, Water Resources Minister N.K. Premachandran, Devaswom Minister Kadannappally Ramachandran and Thiruvananthapuram Mayor C. Jayan Babu were among those who attended the function. S.M. Vijayanand, Principal Secretary for Local Self-Government, who presented a report on the programme said that nearly two lakh families had been provided new houses during the last two years.



Shopping Festival initiative. Tourism Minister Kodiyeri Balakrishnan announced this after inaugurating a district-level registration of Grand Kerala Shopping Festival Season 3 in Thiruvananthapuram. The Minister said that of the total Rs.20-crore outlay for the GKSF this year, the government is setting apart Rs.5 crore for the development of trade centres across the State.

The Government is planning to establish a permanent trade centre near the Kanakakunnu Palace premises in Thiruvananthapuram. There are also plans to modernise old trade centres in Thiruvananthapuram, Kochi and Kozhikode in association with the respective city corporations under the Jawaharlal Nehru National Urban Renewal Mission. This year's festival will focus on promoting and finding market for ethnic products like spices, handloom and coir products.



The festival this year has also increased the number of prizes. There will be six winners for the bumper prize who will each win one kg gold.

In order to increase participation of traders and enable small-scale traders also to participate in the festival the Government have reduced the registration fees to Rs. 1,000 this time. The 45-day shopping festival held yearly from December 1 to January 15 helps in increasing the business of shops that have registered for the festival through unique prize schemes. The festival is an initiative on the part of the State government to support and encourage traders who had set up commercial establishments in the State.



Chief Minister V.S. Achuthanandan and Leader of the Opposition Oommen Chandy, Ministers C. Divakaran, M.A. Baby, M. Vijayakumar and other dignitaries, after the unveiling of the relocated bust of Swadeshabhimani Ramakrishna Pillai at Palayam in Thiruvananthapuram

Journalists told to emulate Swadeshabhimani

Chief Minister V.S. Achuthanandan urged journalists to emulate Swadeshabhimani Ramakrishna Pillai in carrying out their professional responsibilities fearlessly for the good of the people and the country. He was speaking after unveiling the bust of Swadeshabhimani Ramakrishna Pillai, newspaper editor and political activist, who was exiled from Travancore in 1910 for wielding the pen fearlessly against the Dewan and the Maharaja of the erstwhile princely State. He also posed the question that whether all modernday media managements would allow their journalists to do so.

The Chief Minister also inaugurated a yearlong programme being organised by the Information and Public Relations Department, in association with the Kerala Union of Working Journalists, to commemorate Swadeshabhimani Ramakrishna Pillai, whose name is synonymous with the freedom of the press in Kerala. The bust of the journalist had earlier stood in front of the AG's Office, near the Secretariat, in the city. It was installed there in 1957. Roadwidening had necessitated its shifting from its original position and the government selected a point close to the Martyrs' Column at Palayam, to relocate it.

Leader of the Opposition Commen Chandy and Ministers M.A. Baby and C. Divakaran also joined the Chief Minister in paying glowing tributes to the memory of Swadeshabhimani Ramakrishna Pillai. Marxist ideologue P. Govinda Pillai delivered a commemorative lecture. The function, held at the VJT Hall in Thiruvananthapuram, also marked the release of two books, 'Ente Nadukadathal' (My Exile) and 'Swadeshabhimaniyude Mukhaprasangangal' (Swadeshabhimani's Editorials) and a special issu of Janapatham magazine. Minister for Education, M.A. Baby, performed the switch-on ceremony of a documentary, the Department would bring out in connection with the centenary of Swadeshabhimani Ramakrishna Pillai's exile from Travancore.

Earlier, the Kerala Union of Working Journalists and the Department of Information and Public Relations led a march heralding the centenary of the exile of Swadeshabhimani Ramakrishna Pillai from Nevyatinkara concluded before the Martyrs' Column in the Thiruvananthapuram city. Minister for Water Resources N.K. Premachandran flagged-off the march from the premises of Ramakrishna Pillai's house at Neyyattinkara. A tableau by artist Jinan in connection with the centenary attracted large masses.





State servants at finger tip

All these days red tape has been considered as an unavoidable part of the functioning of a Government. But not any more. As part of the efforts to improve administrative efficiency and speed up service delivery, State Government will provide e-mail facility to all government employees in the State. Chief Minister

V.S. Achuthanandan inaugurated the project for providing e-mails to the employees.

Nearly 4,000 employees, including top police officers and all those working in the government secretariat, received official e-mail addresses with the launch of the project. All government employees will be given the facility in a phased



manner, the Chief Minister said. "The Government of Kerala Webmail Edition," as the facility is called, is a Free and Open Source Software platform developed by the Open Source Technology Team at the CDit. Users can organise messages, both sent and received by them, on two web-mail interfaces and can manage and share calendars,

contacts, tasks and notes.

Chief Secretary Neela Gangadharan who presided over the function, said that this was the first step to introducing electronic filing system in the government. The Kerala State IT Mission has already shifted to totally electronic filing system. It will facilitate accurate monitoring of the plan

implementation also.

Information Secretary Sheela Thomas, IT Secretary Ajay Kumar, Inspector-General of Police A. Hemachandran, C-DIT Registrar K.T. Balabhaskaran, KSITM Director Rathan U. Kelkar attended the function.

- Hari

Crowning Glory





Minister M Vijayakumar being greeted by a folk artiste in a function conducted by Nehru Yuvak Kendra as part of national integration programme