

DATE:01.12.2014

THE HINDU

High-level panel counsels caution on GM food crops

Suggests setting up of special environment courts

The government-appointed High Level Committee (HLC) to review environmental laws, while proposing a near complete overhaul of the regulatory system, has sounded a note of caution on genetically modified (GM) food crops.

In a report submitted recently on its review of six laws, the HLC headed by former Cabinet Secretary T.S.R. Subramanian, said the potential consequences of mindless use of science and technology could possibly be illustrated by referring to the potential for medium/ long-term adverse affects through unprepared introduction of GM food crops. While other Ministries naturally would aggressively push for early field trials and induction, the HLC said the role of the Environment Ministry may have to be one of being a Devil's Advocate to advise due caution. It said that Europe does not permit field trials, and that the average Indian farm is of very small size (which could lead to severe adverse impact on biodiversity through gene-flow) and also noted that there are no independent expert agencies in the country, and perhaps the Ministry of Environment may ask for greater assurance in respect of potential adverse effects in the medium and long run. The HLC takes this aspect of assurance and good faith further in its new proposed law, the Environment Laws (Management) Act (ELMA). The new law prescribes new offences, as also for establishing special environment courts presided over by a session's judge and higher penalties.

The proposed new law will have an overriding effect on all other relevant laws. However, the proposed legislation prescribes that the application for environmental clearances expects the applicant to be honest and truthful — the concept of 'utmost good faith' is statutorily introduced, and the consequences of breach are also set out.

The Committee which was criticized for inadequate consultation and its brief time frame of three months, however, felt that most pending issues

were addressed constructively, and equally a roadmap has been suggested for continuous monitoring of the legal, legislative and management framework in this field. It noted that among the most important gaps in the present regime, the issue of enforcement of conditions of approval remains nearly totally unattended and needs to be addressed effectively. It called for the setting up of a new All India Service called the Indian Environment Service. The present monitoring regime is heavily dependent on field verification through 'inspectors'. It also noted that the cause of environment preservation is not adequately met by the present monitoring methods.

The HLC has said forest areas with 70 per cent or more canopy cover and protected areas should be notified as 'no go' areas and suggested a slew of other measures for forest protection. However, it said that where there are considerations of national interest and issues relating to safeguarding the territorial integrity of the country, activities may be permitted in such areas subject to the prior and specific approval of the Union Cabinet.

In keeping with the Centre's desire to dilute the Forest Rights act (FRA), the HLC has said that for linear projects, it is recommended that FRA needs amendment to consider removal of the condition of Gram Sabha approval. However, there is already an order from the Environment Ministry to this effect. It said that forest and environmental clearances should be time bound and streamlined.

While environmentalists have fought for increased regulation in wildlife areas during festivals, the HLC says India has a varied and glorious cultural tradition. While there are many national festivals, there are also localised festivals which are of great local importance in different States. Nature and animal worship has been part of the national culture. Thus, for example Nag Panchami in many States is celebrated and snakes worshipped during five days in Shraavan month, as a "thousands years-old" tradition. It is to be noted that the snakes are never harmed — indeed are worshipped during this period. A dispensation in the various Schedules should be permitted to take into account such local practices, and reflect them in their approved schedules, through gazette notification, the HLC said.

It called for Wildlife Management plans to be made mandatory, the demarcation of eco sensitive zones to be enforced around all protected

areas and proposed the banning of polythene bags and plastic bottles into Protected areas. It has proposed to create new agencies, the National Environment Management Authority (NEMA) at the national level and the State Environment Management Authority (SEMA) for each State as the pivotal authorities to process applications for a one-window composite environmental clearance. The NEMA and SEMA will replace the Central Pollution Control Board and State Pollution Control Boards.

On the question of public hearing, the HLC recommends that the method of public consultation prescribed in the existing notification should continue with the modification that only environmental, rehabilitation and resettlement issues are captured in the public hearing. A mechanism should be put in place to ensure that “only genuine local participation” is permitted. The extant provision of dispensing with public hearing should be continued only in respect of situations when it is reported that local conditions are not conducive to the conduct of hearing, or in the matters of projects of strategic importance and national importance. There is no necessity for public hearing in locations where settlements are located away from the project sites.

It also takes away the role of the National Green Tribunal (NGT) which under the proposed ELMA, will only be able to judicially review the decision of Appellate Boards. The Special Environment Courts shall dispose of cases expeditiously and normally within six months. Aggrieved parties may approach an appellate board presided over by a retired high court judge. The HLC also called for streamlining of the assessment process, preparation a perspective coal plan from a sustainable point of view, creating an Environment Reconstruction Fund for facilitating research, standard setting, education and related matters, and putting in place systems for managing solid waste.

India needs to take a firm stand on climate issue

The United Nations climate summit in Lima, which begins on December 1, is the last before the Paris meeting in 2015, and while there is the usual scepticism, countries have to indicate their contributions and also discuss the draft negotiating text for next year.

Union Minister of State for Environment Prakash Javadekar has been reiterating India’s stand at international forums and emphasising on

common but differentiated responsibilities (CBDR) and operationalising the Green Climate Fund (GCF) which has been injected with 9.7 billion for four years recently.

Developed countries agreed to mobilise \$100 billion per year till 2020, and the crisis of funding and technology transfer continues to plague the negotiations.

At Paris, countries have to agree on a deal with new goals which will take the world post the 2020 era. The Lima meeting, coming soon after the climate deal between the U.S. and China, seeks to set the tone for the “Paris Protocol” and countries will be wrangling over their “Intended Nationally Determined Contributions(INDC)s which they have to finalise by March next year.

The Synthesis report of the Intergovernmental Panel on Climate Change(IPCC) has made it clear that adaptation alone will not prevent the world from hurtling into a climate calamity. Countries have to focus on mitigation and their national emission cuts should reflect this aspect.

While the U.S.-China deal is low on ambition, there is nothing preventing India from taking on ambitious cuts and opting for a low carbon path. The key issues at Lima will centre around emission cuts, finance and according to activist groups, this will include finance for forests, land use and near-term mitigation potential.

Indian experts have been saying that India should set the ground for tighter emissions cuts and ambitious national action plans and there is no need to be bound by the U.S.-China deal. The UNFCCC has underscored the need to act urgently and says that while there has been some success in climate change mitigation, global emissions of greenhouse gases continue to rise.

Agriculture Department sets target of 1,425 hectare seed farm registration



Joint Director of Seed Certification, R. Palanisamy inspecting a seed farm in Salem district.

The State Agriculture Department has set a target of 1,425 hectare seed farm registration and 1,673 metric tonnes of quality seeds production during the current year, for ensuring production of adequate quality seeds.

The Department of Seed Certification has taken effective steps for the production of quality seeds for achieving the target.

To ensure quality of certified seeds, R. Palanisamy, Joint Director of Seed Certification, Coimbatore, conducted surprise inspection at the seed farms in Salem district recently.

He inspected the cow gram (Thattai Payiru) seed farm set up on two acre belonging to Rangasamy, a progressive farmer of Kandarkulamanikkam village in Magudanchavadi block.

In Kannantheri village, Mr. Palanisamy inspected the sprouted green gram (Paasi Payiru) Vamban No. 3 seed farm on one acre owned by farmer K. Periasamy.

He underlined the importance of production of high germination capacity quality seeds free from any cross breed variety for augmenting food production in the State.

The farmers should adopt the right quality seed production techniques at the right time.

He inspected the stock of certified seeds in the office of the Assistant Director of Agriculture in Magudanchavadi block.

Mr. Palanisamy also inspected the seed farm registration, stock of certified seeds, various registers at the office of the Assistant Director of seed certification in Salem city.

He urged the seed certification officials to take steps to achieve the target in quality seeds production.

V. Rajadurai, Assistant Director of Seed Certification, explained the seed quality techniques adopted at the Salem Seed Testing Station.

A press release of the Department of Seed Certification said that the Joint Director of Seed Certification too conducted similar inspection in the seed farms in the district recently.

The Department of Seed Certification has taken effective steps for the production of quality seeds for achieving the target

Farmers eye millets as ponds brim with water

Area under cultivation of millets, pulses to double from 500 ha



Back to old ways: ‘Kudhiraivali’ crop raised using water lifted from a farm pond at Arockiyapuram in Ilayankudi block in Sivaganga district.

Farmers who had lost their crops to severe droughts in the last two years are expecting a good harvest this year as over 1,500 farm ponds in the district are brimming with water and the District Watershed Development Agency (DWDA) has launched an ambitious project to increase the area under cultivation of millets and pulses.

The DWDA, which was implementing Integrated Watershed Management Programme (IWMP) in eight blocks in the district, has encouraged the farmers to shift from the traditional paddy cultivation to cultivation of millets and pulses, especially red gram, to earn additional income. “We proposed to double the area under cultivation of millets and

pulses from the existing 500 hectares,” R. Ganesan, Joint Director of Agriculture and Project Officer, DWDA, told reporters during a recent press tour. The DWDA had also introduced fish farming in farm ponds to help the farmers to augment their income, he said.

As the department supplied about 3,000 fingerlings of ‘rohu’ and ‘catla’ per farm pond free of cost, the farmers could earn Rs.30,000 to Rs.40,000 in six months. Farmers in Sivaganga and Tirupuvanam blocks had already harvested the fish, he said. “We have introduced fish farming in about 400 farm ponds and initiated steps to cover all the 1,522 farm ponds in the coming months,” Mr. Ganesan said.

As Collector V. Rajaraman was keen on diversifying the cropping pattern, the DWDA was encouraging farmers to take up cultivation of ‘kudhiraivali’, red gram and black gram, he said.

The farmers were encouraged to cultivate fruit-bearing trees on the bunds of farm ponds. The DWDA was supplying saplings of mango, papaya, guava and sappotta to the farmers for free, he said.

The agency cleaned up supply channels to enable free flow of water to waterbodies and desilted the waterbodies. “We have cleaned supply channels up to a length of 110 km in the catchment areas,” he noted.

The agency also distributed revolving fund for women self-help groups in the district. The groups were making candles, incense sticks, phenol and ‘Agal villakku’, he added.

Farmers’ dependence on urea puts pressure on its demand

The farmers’ excessive dependence on urea “mostly as cheaper source of nitrogen” for the growth of crops, is putting enormous pressure on the demand-supply chain of urea in the district as well as affecting the crop productivity.

Agriculture experts pointed out that major chunk of farmers tend to use urea during the “top dressing” period, ie, the application of fertilizers after sowing, since it contains 46 per cent nitrogen even though other sources/options of nitrogen too are available to farmers.

“Why farmers prefer urea is that its prices are controlled and so is less expensive than the fertilizer mixtures like NPK (nitrogen, phosphorus, potassium), ammonium sulphate and di-ammonium phosphate which too provide not only nitrogen but also other nutrients required for plant growth,” they said.

However, farmers defend the large usage of urea stating that it alone could provide the maximum percentage of nitrogen needed for quick growth of the plants at its early stage.

Cost

“Of course, cost is one of the factors for using urea more. But it should also be noted that though ammonium sulphate and di-ammonium phosphate contain nitrogen, the percentage is low and the other nutrients available in the mixtures would be required only at the later stages of growth not during the “top dressing” period.

“Moreover, the NPK mixtures are more useful for basal dressing, ie application of nutrients before sowing,”, pointed out K.C.M. Balasubramaniam, a retired agriculture economist and now a farmer himself.

Joint Director of Agriculture P. Santhanakrishnan termed the concept of using fertilizer mixtures other than urea, primarily for basal dressing as 'outdated theory'.

He pointed out that usage of urea could be brought down if the farmers give attention to basal applications and maintained the soil health in advance, instead of going for quick solutions after sowing.

Productivity

Agriculture officials further added that productivity of many crops in the district have been lower than desired levels only because many farmers were not using varied nutrients/fertilizers other than urea as a cost cutting method.

Mr. Santhanakrishnan said the department had now started creating awareness among the farmers these days to use all nutrients in a balanced way.

“Farmers should ensure plants get adequate potassium and other micro nutrients like boron and calcium apart from nitrogen,” he added.

Govt. forms committee to study groundwater resources

The State government has constituted a high-level 11-member committee headed by the Secretary of Water Resources Department (Minor Irrigation).

Official sources told *The Hindu* in Kalaburagi on Sunday that the committee had been constituted as per the directions of the Union Water Resources Department to all the State government to re-estimate the groundwater resources and estimate annual replenishable groundwater

resources. Sources said that the last State-wise assessment of annual replenishable groundwater resources for the entire country was carried out in 2011, based on the methodology adopted by the Groundwater Resources Estimation Committee, 1997. Recommendations

Sources said that the National Water Policy, 2002 had also recommended that groundwater resources in the country should be reassessed periodically.

Other members of the State-level committee included Chief Engineers of Minor Irrigation Department South and North Zones, Director of Mines and Geology, Chief Engineer of the Karnataka Urban Water Supply and Drainage Board, Director of the Agriculture Department, Chief Engineers of the Water Resources Development Organisation, Rural Development Engineering Department, Commissioner or the Director of Department of Industries General Manager of NABARD and the Regional Director of the Central Groundwater Board.

The committee has been asked to submit its finding in the form of a report at the earliest.

Action initiated as per the instructions of Union Water Resources Department to all States

Panel has been told to submit a report based on its findings

National agri fiesta at Ambalavayal in January



The Regional Agriculture Research Station at Ambalavayal in the district is gearing up to host the third edition of the National Agriculture Fiesta and the second edition of Poopoly, a State-level flower show.

The programme, organised by Kerala Agricultural University (KAU) in association with National Rose Society and various Union government organisations, will be held at the research station from January 20 to 31.

It is aimed at imparting the latest agriculture technologies to the grass-roots level.

“We have arranged the 12-day programme to sensitise the farmers to the vast commercial potential of horticulture and floriculture in the district,” P. Rajendran, Associate Director of Research, RARS, Ambalavayal, told *The Hindu* . Classes and seminars on agriculture and allied subjects would be held in connection with the programme. All India Radio, a programme partner, would air the programmes through 30 radio stations in the country, he said.

A rose garden with more than 1,800 varieties of rose plants, including plants imported from Holland and France, set up on 2.5 acres of land, would be the highlight of the flower show.

A 10-acre permanent garden would be set up on the RARS premises for the show. As part of it, nearly 10,000 varieties of Dahlia plants on three acres of land and 30 varieties of Gladiolus plants on 1.5 acres had been planted, he said.

A ‘Moon’ garden, a two-acre garden only for white flowers, would be another attraction, he said.

Various exotic flowering plants, including 150 varieties of Gerbera, many varieties of Alstroemeria, 136 varieties of orchids, and ornamental melons, would also be on display.

3,200 ha of coffee plantations in State hit by white stem borer

This is owing to dry spell from November 2013 to May 2014



<p>Incidence of WSB lower in other major Arabica coffee producing areas of Tamil Nadu, Kerala and non-traditional areas</p>	<p>Government approves two-year action plan (2014-15 and 2015-16) for combating WSB in affected areas</p>	<p>STEPS TAKEN TO ELIMINATE DISEASE</p> <ul style="list-style-type: none"> ■ Raising coffee seedlings by growers' self-help groups ■ Supply of pheromone traps at subsidised rates ■ Mission mode approach for enhanced education, training and demonstration on stem borer control measures
---	---	--

The Arabica variety of coffee plantations spread over 3,200 hectares in Karnataka have been affected by white stem borer (WSB).

The plantations have been affected by the pest attack owing to a long dry spell from November 2013 to May 2014 and resultant high day temperatures, according to Minister of State for Commerce and Industry Nirmala Sitharaman.

In a written reply in Lok Sabha last week, she said the incidence of WSB was lower in other major Arabica coffee producing areas of Tamil Nadu, Kerala and non-traditional areas.

Karnataka Planters' Association deliberated on the WSB issue during the 56th annual general meeting held here a few days ago, pegging coffee bean production at three lakh tonnes for 2014–15 (post-blossom estimates), projecting lesser crop due to WSB against the Coffee Board's projections of 3,44,750 tonnes. To avoid the spread of pests, many planters have resorted to uprooting plants infected by WSB in estates.

Measures

Several steps have been initiated to address the problem of pests in coffee cultivation. The government has approved a two-year action plan (2014–15 and 2015–16) for combating the WSB in affected areas. Various steps have been taken to eliminate the disease, including support for gap filling, raising coffee seedlings by growers' self-help groups, supply of pheromone traps at subsidised rates, and a Mission Mode approach for enhanced education, training and demonstration on stem borer control measures.

The combined effects of higher temperatures, reduction of shade for increasing the yield of pepper grown as intercrop and lack of timely control measures by the growers have led to increase in the incidence of pest attack.

The Indian Council of Agricultural Research has included WSB as one of the components in its mega project — 'Consortium Research Programme on Insect Borers' — for implementation during the 12th Five year Plan.

The Coffee Board has supported a collaborative research project titled 'Studies on Female Pheromone plant Kairomone on coffee WSB' with a view to improve the efficiency of trapping adult beetles, said a PIB note quoting the Minister.

Department of Biotechnology has been implementing a project through the Central Coffee Research Institute, University of Agricultural Sciences, Dharwad, and a private laboratory on bio-technological approaches to identify potential Bt toxins against WSB, Ms. Sitharaman said.

INDIAN CITIES

INTERNATIONAL CITIES

Chennai - INDIA

Today's Weather



Cloudy

Rain: 0
Humidity: 74
Wind: normal

Tomorrow's Forecast

Monday, Dec 1



Max 30°
Min 25°
Cloudy

Sunrise: 06:15
Sunset: 05:40
Barometer: 1012

Tuesday, Dec 2

Max 29°
Min 24°

Extended Forecast for a week

Wednesday
Dec 3



28° | 23°
Cloudy

Thursday
Dec 4



33° | 26°
Sunny

Friday
Dec 5



33° | 26°
Partly Cloudy

Saturday
Dec 6



32° | 26°
Partly Cloudy

Sunday
Dec 7

33° | 26°
Partly Cloudy



FOOD RECIPE

Tomato chicken with brown rice



Tomato chicken with brown rice is a delightful blend of spices and tangy tomatoes. It is essentially chicken pieces coated with many fragrant spices like turmeric, cardamom and cloves, then simmered in a tomato sauce.

A perfect family meal, and wonderful to serve to guests too, this complete dinner meal will also complete the day's health quotient for any family interested in fitness.

Original recipe yield: 6 servings

- Prep time - 15 mins
- Cooking time - 2 hours

Ingredients

- 1 large onion, chopped
- 4 cloves garlic, chopped

- 1 slice fresh ginger root
- 1 tablespoon olive oil
- 2 teaspoons ground cumin
- 1 teaspoon ground turmeric
- 1 teaspoon salt
- 1 teaspoon ground black pepper
- 1/2 teaspoon ground cardamom
- 1 (1 inch) piece cinnamon stick, chopped
- 1/4 teaspoon ground cloves
- 2 bay leaves
- 1/4 teaspoon ground nutmeg
- 6 skinless chicken thighs
- 1 (14.5 ounce) can whole peeled tomatoes, crushed

Directions

- Place onion, garlic and ginger in a food processor and process into a paste. Heat oil in a large skillet over medium heat, add onion paste and saute, stirring continuously, for about 10 minutes.
- Stir in the cumin, turmeric, salt, pepper, cardamom, cinnamon, cloves, bay leaves and nutmeg. Saute, stirring, for 1 to 2 minutes. Place chicken pieces in skillet and stir them around with the spice mixture until they are well coated.
- Saute for another 4 minutes, then pour in the tomatoes with liquid and stir. Reduce heat to low and simmer for 1 to 2 hours, or until the oil has separated from the liquid. Stir occasionally. (Note: If you simmer uncovered, the sauce will thicken; add water, or keep covered while simmering.)

Egg bhurji curry

Bhurji, onion It is one of the easiest dishes to whip up.

Ingredients: One finely chopped big onion, one tomato cut into big

pieces, two eggs, ginger garlic paste, turmeric powder, chilly powder, garam masala, oil, salt to taste.

Preparation: Saute the onion in a kadai with oil. Now add ginger garlic paste, add tomato, turmeric powder, chilly powder, garam masala and salt. Saute it for some time, then keep the mix aside. In another vessel, break the eggs and prepare bhurji (scrambled eggs). Add this bhurji to the mix that has been kept aside. You can add coriander leaves if you want.

Thai style pork fried rice



Whip up this tasty and satisfying dish in a matter of minutes

Ingredients:

300g pork stir-fry strips
6-7 cups steamed medium grain rice
2 tbsp peanut oil
2 eggs, beaten
3 cloves garlic, crushed
1 onion chopped
2 ripe tomatoes, diced
3 spring onions, chopped
12 coriander leaves

Sauce:

3 tbsp fish sauce
1 tbsp soy sauce
2 tsp brown sugar
1/3 cup chicken stock

Method:

- Wash and steam rice and then fluff up with a fork. Mix all sauce ingredients together.
- Heat wok or frying pan until hot. Add a drizzle of oil and cook 2 thin omlettes, remove and roughly chop, set aside.
- Stir-fry garlic until fragrant. Stir-fry pork in 1-2 batches for about 1-2 mins and remove.
- Add a little oil, stir-fry onion for 30 secs. Add rice and stir-fry until hot. Return pork.
- Mix and add sauce mixture. Add egg and heat through. Sprinkle or mix through tomatoes, spring onions and coriander. Serve immediately.

Tasty tip:

Serve with cucumber, lime or lemon wedges and chilli sauce. Toss through some steamed green peas.

Recipe: Palak daal



Green vegetables are good especially when they are made with some amazing combinations. Here's a recipe of a palak daal that's not only healthy but also delicious.

Ingredients

- 185 g white urad daal - picked over and rinsed
- 6 cups of water or more if needed
- 1kg spinach - washed and finely chopped
- 1 tablespoon ginger - peeled and finely chopped
- 2 tomatoes - finely chopped
- 2 green chillis - finely chopped
- 4-5 garlic pods - peeled and finely chopped
- 1/2 teaspoon turmeric powder
- 2 tablespoons butter
- 1/2 teaspoon cumin seeds
- 1 teaspoon red chilli powder
- A pinch of asafetida (Hing)
- Salt to taste
- Juice of 1/2 a lemon

Method

-In a large pot over medium-high heat, combine the daal and water. Bring the mixture to a boil.

-Once the water is boiling, add the spinach, ginger, turmeric, 3/4 of the green chillis, and all of the tomatoes. Reduce the heat and let it simmer for about 1 1/2 to 2 hours until the lentils are extremely soft (You may need to add a bit more water during the cooking process to keep the lentils soupy).

-After an hour and a half, stir in the salt and in a separate pan, heat the butter and add the cumin seeds and asafetida. Fry until the cumin seeds start to pop and then add red chilli powder and the garlic and let it fry for another 30 seconds.

-Then add the butter mixture to the lentils and allow it to cook for another 5 - 10 minutes.

-Once the mixture is blended together and the butter comes on the sides taste and season if something is missing. Add a dash of lemon juice and serve topped with the remaining green chillis.

DECCAN Chronicle

NASA to develop 700-calorie breakfast bars for astronauts



Representational image. (Photo: visualphotos.com)

Washington: NASA has been working on developing breakfast bars that will replace typical 700- to 800-calorie meal that an astronaut requires. The average crewmember aboard the International Space Station eats 3,000 calories a day, a level needed to support two hours of daily exercise required for bone and cardiovascular health in microgravity, Discovery News reported.

With cargo ships regularly making supply runs to the station, keeping the pantry stocked with food is not a problem. But NASA is laying the groundwork for missions that will take astronauts far beyond the station's 260-mile high orbit, making food deliveries few and far between.

Space aboard cargo ships also will be severely limited, prompting scientists to come up with ways to reduce the mass of food. For now, the focus is on breakfast, which now might entail six separate packages of foods, such as eggs, sausage, bread and drinks.

Maya Cooper, with NASA contractor Wyle Laboratories at the Johnson Space Center in Houston, said that this takes up a lot of space and lot of trash gets collected, so if just one meal replacement bar could be made available, which would be dense, but it would save a ton in terms of mass and packaging volume.

Here's a new WiFi-enabled cooker

Philips will shortly launch in India, the Connected Home Cooker, that it unveiled earlier this year at the IFA consumer electronics show in Berlin. Developed at the Philips Innovation Centre in Bangalore, the cooker is a Wireless-enabled combination of a pot, blender, and electric cooker all rolled into one. You can sync it with smart phone or tablet to your home WiFi network, using an app that provides inspiration and guidance throughout the entire cooking process, showing pictures of all the ingredients with step-by-step instructions on how to cook and combine them for a homemade meal.

The AutoStir technology will also time the cooking process for you, giving the meal the necessary stirs intermittently. The India team is currently compiling an Indian cookbook before launching the product here. Price not yet announced.