

Climate expert R K Pachauri suggests growing eco-friendly coffee crop

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Bangalore: Increasing global warming and rising sea levels will lead to severe climate changes around the world and coffee growers and other plantation industry sectors should switch to more environment friendly cropping methods to reduce risks to their business, suggested globally known climate expert and Nobel laureate Dr R K Pachauri, in an interaction with coffee industry.

In his key note address at the 5th India International Coffee Festival , Dr Pachauri, who is the chair of 2007 Nobel prize winning International Panel of Climate Change(IPCC) and chairman of Delhi-based The Energy Research Institute (TERI), highlighted the findings of the 5th IPCC report released in 2013. Unprecedented changes in the earth's climate and extreme weather phenomenon will be common in the near future, he said.

The coffee industry's annual meeting is organized by the India Coffee Trust with the support of Coffee Board of India and MM Activ Sci-tech Communications, the publishers of BioSpectrum.

He talked about the major fungal attack by *Hemileia vastatrix*, which has devastated three-fourths of the Arabica coffee plants around the world. Dr Pachauri said about 150 of the 1500 endophytic fungi collections with TERI have shown excellent anti-fungal properties. With the plantation industry's support, good biopesticides could be developed by the organization to tackle this pest menace.

TERI is also working on developed bioactive compounds from natural plant materials and incorporate nanotechnology to control other major pests attacking coffee plants. Biotechnology could play a major role in identifying the reasons why the

other major coffee variety, Robusta is resistant to the white stem borer which has destroyed Arabica plants around the world, Dr Pachauri noted.

" The coffee plantation industry has to switch to eco-friendly coffee varieties and change cropping methods to reduce the negative impact on the environment, " Dr Pachauri said." Even though coffee is an eco-friendly plant, growers should plant more local fruit bearing trees to provide shade and resort to polycropping instead of monoculture of coffee plants."

At the macro-level, the climate change will impact the Indian monsoon in a big way in the near future. Heavy rain spells which occur once in 20 years are now occurring every two years. Farmers have to be aware of these major changes and adopt their cropping patterns to minimize damage to their crops, he said.

Increasingly, even top global companies are beginning to realize the importance of climate change and their negative impact on their businesses around the world. Climate change is no longer seen as esoteric concept and companies are realizing how reducing carbon footprints could actually save their business activities in the future.

One such effort is a study, "Risky Business" launched by some of the top policy makers and influential thinkers in the US recently. The study will attempt to research the impact of climate change across various regions and crops and industrial sector and enable industry to adopt to the changes to maintain business continuity.

In 2013, seven countries---UK, Indonesia, Norway, South Korea, Colombia, Sweden and Ethiopia-have set up a Global Commission to study the impact of climate change and economy. The Commission will formulate plans for governments and companies to mitigate the negative impacts of climate change.

Dr Pachauri too has suggested launching such studies in India at state levels to study the impact of climate change within many sub-regions of states. " Such studies are urgently required to do modelling at the micro level and advise people and farmers to guard against abrupt climate-induced changes," suggested the climate expert.