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By Our Staff Reporter

`Pakistan needs to focus on biogas and biomass gasification`

KARACHI: Highlighting global trends towards developing sustainable biofuels from non-edible resources and renewable bio-energy production to reduce the impacts of climate change, speakers at a seminar held at the NED University of Engineering and Technology discussed how Pakistan could shift towards environment-friendly locally produced fuels.

They underscored the need to change Pakistan from `consumer to designer in technology` and start work specially in the biogas and biomass gasification sector.

Titled `Prospects of biofuels and bioenergy in Pakistan`, the seminar was organised by environmental engineering department of NED and supported by Pakistan State Oil.

The programme started with a welcome address by Prof Asif Ahmed Shaikh, chairman of the environment engineering department, who spoke about the importance of biofuels and bioenergy for Pakistan`s sustainable development.

Associate professor Dr Mehmood Ali shared details of various research projects conducted at the department on biodiesel produced from non-edibleresourcesin Pakistan.

`Sustainable development in the renewable energy sector is necessary to reduce dependence on imported fossil fuels in Pakistan,` he said, adding that biodiesel was an eco-friendly fuel having vast future prospects.

Findings of studies on conversion of nonedible oils (such as castor, neem and jatropha) and used cooking oilinto biodiesel and its characterisation was also highlighted during the event and it was pointed out that non-edible seed crops could be cultivated on marginal land in the country to produce biodiesel fuel.

`The total consumption of diesel in Pakistan is approximately 13 million tonnes, of which 88 per cent is used in transportation sector. The consumption of mineral diesel can be reduced by using 10pc blended biodiesel fuel, which would help save a lot of foreign exchange,` said Dr Ali.

Engineer Muhammad Babar Siddiqui representing PSO said that `There is gradual introduction of biodiesel blend with petro diesel to achieve 10pc of total volume reduction. The process to acquire biodiesel from cultivated jatropha has also been done and a van was tested using biodiesel, he said.

Dr Syed Asim Rehan Kazmi, the directorgeneral of the Agricultural Research Centre (southern zone) Pakistan Agricultural Research Council Karachi traced the history of jatropha cultivation and called for coordinated efforts by all stakeholders to evaluate this crop as a means to produce biofuel.

He also talked about the problems associated with jatropha and shared that the crop started showing problems in the third year of its cultivation and required as much attention as other plants to yieldfruits that could be usedforenergy.

`Moreover, jatropha is only cultivable in the southern parts of Pakistan. These areas, however, lacks freshwater supply, he said, adding that jatropha didn`t yield fruit in saline water.

Prof Nasim Ahmed Khan, former secretary, Alternative Energy Development Board Pakistan (AEDB), emphasised the need to work in the biogas and biomass gasification sector to produce bioenergy from agricultural waste.

He suggested that extra feedstock could be used for bioenergy instead of exporting them.

There were many types of bio-masses which could be converted into bioenergy and, at the same time, benefit the environment, he said.