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Jatropha better suited to local communities, not biofuel markets

Ecologist

6th July, 2010

Study predicts the yields of jatropha will fall in the next decade and that it is better suited to community-level, rather than industrial-scale, production for the biofuel market

Jatropha, an oil-seed shrub [touted as a 'miracle crop' that can produce biofuel](#) on marginal land, is likely to produce smaller yields over the next decade because of reduced precipitation in its growing areas, according to a new study.

Investors have been claiming that the bushy shrub, which grows in Africa, Latin America and south-east Asia and has seeds that contain a non-edible, vegetable oil that can be used for biodiesel, could be grown on marginal or degraded land. Farmers have since discovered that it produces much higher yields on fertile soils previously used to grow food crops.

An [Ecologist investigation earlier this year](#) also discovered that a number of UK-based investment companies had been marketing the crop as an 'ethical investment' despite it being [linked to conflicts over land, food security and growing hunger in developing countries](#).

This [latest study](#), published in the journal *GCB Bioenergy* now says that jatropha requires higher amounts of water than previously thought. It says that climate changes over the next decade will lead to decreased yields in areas with reduced precipitation, casting further doubt on the crop's ability to benefit farmers in less industrialised countries.

No miracle crop

Study co-authors Bart Muys and Antonio Trabucco, from the University of Leuven in Belgium, said jatropha should not be condemned as a failure but was better suited to development in southern rural communities, rather than a 'market opportunity' for use as a biofuel in industrialised countries.

'As an alternative, we believe the global hype could be harnessed to increase rural development by considering small-scale, community-based jatropha initiatives for local use,' explained Muys in another study, ['Jatropha: From global hype to local opportunity'](#).

'In land-locked or very remote areas, where fuel wood is the main source of energy and where kerosene and diesel supply are erratic and very expensive, jatropha offers an improvement opportunity. The oil, easily extractable with simple and cheap technology, is a good fuel for stoves, lamps and even large static running engines, for example, pumps, mills, and generators.

'Communities using fossil fuels can reduce their dependency on them by substitution with jatropha oil and communities without access to fossil fuels acquire an asset for development,' he said.

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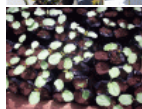
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