



Eucalyptus plantations in Andhra Pradesh sway between economy and ecology

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Driving across coastal villages of the Vizianagaram district in Andhra Pradesh, it is difficult to miss the vast swathes of swaying trees on either side of the road. Eucalyptus – not coconut, as is the typical image that conjures up at the mention of ‘coast’- stands tall, in plantation after plantation.

In contrast to the popular view that these evergreen trees are ‘water guzzlers’, farmers here say that they are increasingly opting for eucalyptus as water scarcity and water salinity have posed major challenges to their traditional crops in terms of productivity. While economics tip the scale in favour of eucalyptus for them, environmentalists are sceptical about its impact on the environment.

In Reddikancheru village, for instance, 55-year-old Erkonda Appanna said that over the last two year he has been facing water problems and a decrease in the productivity of his crops. As an adaptive measure, he has grown eucalyptus on one portion of his land.

“In the last two years, I have harvested five bags of groundnut per acre; there was a time when I used to get almost 30 bags,” Appanna told Mongabay-India. Depleting water level in the farm well and less rainfall, he said, are to be blamed for this. A lowered yield has affected the family’s income forcing both him and his son to go for daily wage work.

Appanna, however, has not given up on farming and, as an adaptive measure, grows crops that don’t require as much water such as ragi, which is also a traditionally grown crop in the region. “I have also seen people get success growing eucalyptus. It doesn’t need as much irrigation as other crops and the wood can be sold to the industries. So I have planted saplings in 50 cents (0.2 hectares) of my land,” he said.

In another nearby village called Chodipalli Peta, groundwater salinity is a major problem, in addition to water scarcity. In the government-installed taps, water comes only every alternate day.

C.H. Garagaiyya, a resident of the village, said that tired of the continuing water problems, he decided to get a borewell dug, but at the place where it was drilled, no water was found till 250 feet. “I lost Rs. 60,000 in the process,” he said.

The spill-over effect of scarce water has been on agriculture. Where the family once grew traditional crops like groundnut, green gram and ragi on their 1.5 acre (0.6 hectares) land, Garagaiyya said that they stopped farming altogether and he started working in the chemical industry instead. In the meantime, they noticed a few farmers in the area growing eucalyptus and decided to give it a try.

“Eucalyptus doesn’t have any issue with saline water, and grows well even with minimal irrigation,” Garagaiyya said. The first yield takes five years, and they sell the wood to vendors and industries both within the state and to the nearby state of Odisha.

Economical vs ecological concerns

While this does spell good news to farmers who are struggling with water scarcity, environmentalists are concerned about the ‘trend’ of increasing eucalyptus plantations. For one, the compensation of

traditional crop variety and the slow erosion of genetic diversity with eucalyptus is a point to ponder in itself.

K. Samson, division manager (retired) of Andhra Pradesh Forest Development Corporation (APFDC) [recently said](#) that eucalyptus farming was more profitable than traditional crops. The APFDC has, since 1975, raised eucalyptus plantations for the purpose of extraction and selling of pulpwood to wood-based industries.

While the plantations were originally raised through seedlings, they switched to clonal plantations in 1994 for higher yield. As of March 31, 2020, the APFDC had raised eucalyptus clonal plantations in 33,437 hectares [across the state](#), including 681 ha in the Vishakapatnam region.

“About 200,000 metric tonnes of pulpwood is extracted annually from these plantations and sold to wood-based industries. These plantations fetch on average gross revenue of Rs. 5800 lakhs (Rs. 580 million) per annum.,” the APFDC [claims](#).



Farmers are increasingly favouring eucalyptus in the Vizianagaram district. Photo by Anil Kumar.

The Vizianagaram district forest department, however, made it clear that no land has been allotted to the APFDC till date to grow eucalyptus and all such plantations in the district are on private land.

“APFDC has submitted a request on March 25, 2021, for allotment of degraded forest land for eucalyptus plantation. That request is under process,” Sachin Gupta, the divisional forest officer (territorial), told Mongabay-India.

Stressing on the fact that land allotted to the APFDC has to be ‘degraded’, Gupta added that they have a procedure in place, which includes mapping, to determine such land. “But from what I have gathered from my field staff, as of now, we don’t have any such land,” he added.

To add to this, B. Janaki Rao, divisional forest officer (social forestry) of Vizianagaram forest department said that the forest department “does not encourage” eucalyptus plantation and it is a prerogative of the APFDC because for them it is a matter of “business”, or earning revenue.

Eucalyptus is a controversial crop

Although these plantations are only on private land in Vizianagaram as of now, environmental concerns loom large anyway.

Ruchika Singh, director, Sustainable Landscapes and Restoration at World Resources Institute (WRI), for instance, pointed out the ecological impact of monocropping.

Centre for Science and Environment’s (CSE) 2017 report, [Puzzle of Forest Productivity](#), says: “Several research studies have proven that monoculture plantations cause change in native forest ecosystems through replacement of natural habitat, changes in the water regime in the catchment, soil erosion, loss of biodiversity, chemical contamination etc.”

Eucalyptus is also probably one of the most ‘controversial’ crops, with studies both for and against its impact on the groundwater table.

Singh, for instance, said, “If an area is already known to have water scarcity (and low groundwater level), I am not sure if eucalyptus is the right plant to grow since it is known to be water-intensive.”

In 2017, Karnataka banned any new eucalyptus plantation, citing four research papers. One of these papers, titled, *Impact of eucalyptus plantations on groundwater availability in south Karnataka*, states that “As a fast-growing, remunerative and consistently demanded industrial wood, eucalyptus has witnessed an unfettered support in most countries . . . But negative impacts of growing eucalyptus outweigh all these benefits . . . It can successfully grow under water scarcity, when its water requirement comes down to 40-50 litres per plant, per day. It is able to draw water from a large area in the vicinity of the root system. In stress situation, its roots can grow even up to 6-9 m and extract more water.”

A stay order was however put on the Karnataka high court ruling in 2019, upholding the petitioners’ plea, saying that there are numerous studies stating that eucalyptus is not a water-intensive species.

“The biomass produced by eucalyptus is more than the water it extracts,” Rao said, “However, the soil around the tree, because of the leaves that fall, has an acidic pH and this makes growing other crops or plants near eucalyptus difficult.”

Most farmers are however more concerned about the economic benefit of growing eucalyptus – or casuarina, also widely grown – over its ecological effect. “Our family land was lying barren because of water problems. I had two options: either sell the land or grow eucalyptus,” Garagaiyya said.

A number of farmers have, in fact, sold their barren land to real estate companies and opted for daily wage-earning or migrated to Vishakapatnam for other work. “At present, being able to save our land is the best option,” he added.

Source: <https://india.mongabay.com/2021/04/eucalyptus-plantations-in-andhra-pradesh-sway-between-economy-and-ecology/>