A U.S. hydroponic farmer has said he believes the farming method is going to take off throughout the country over the next few years as a result of water shortages, rising fuel prices, and the benefits finally shining through to growers.

Dr. Val Eylands has been growing produce in water for around 15 years, and nine months ago started Ozark All Seasons farm in Arkansas. He now produces, among other things, some 900 heads of lettuce a week for the local market.

Eylands told *www.freshfruitportal.com* many key aspects of hydroponics are far better than traditional methods.

"We're only using about 5% of the water that heads of lettuce outside use, about 10% of the fertilizer, about a third of the labor, we're just efficient, efficient, and efficient in everything we do and we're right next to the market," Eylands said.

Eylands said chefs and retails stores in his local area were greatly enjoying being able to purchase fresh local produce that could be grown all year round.

"We're finding that the local communities are just really accepting of a product grown right in their back yard that keeps money in the community and can be grown 12 months a year," he said.

"That's how we've gotten our foot in the market here."

Eylands went on to explain how much of the taste in fruit is only developed in the last few days of the fruiting process, which is why vine-ripened tomatoes taste better than those picked early and shipped across the country.

"So actually the closer to the market the tomato is grown and the later it's picked, the better the taste. And it's the same in greens; the greens start losing their taste and their nutrition as soon as they're cut," he said.

"It's not that a hydroponic tomato tastes any better or any worse than a conventionally grown tomato, but hydroponics lets you grow right next to the market so that your vine crops are ripened on the vine, and the greens are picked the day or the day before people actually consume them."

Hydroponic farming also uses far less water than conventional methods as the water is recirculated untill it's needed.

"It just keeps going around and round until the plant decides to use it for its photosynthetic activity, so nothing's wasted," Eylands said.

"Nothing goes into the groundwater, nothing evaporates, nothing is used by weeds, it just keeps going round and round until we've used it up in the only way that we want it to be used - and that's making more lettuce.

"That's why we're so efficient; water doesn't get lost like it does in the field."

The method also allows for a considerably greater crop yield from the same amount of space as traditional methods.

While in fields the seeds must be planted sufficiently far apart to allow for the fully-grown size of the produce, with hydroponics seeds are initially grown extremely close together in the propagation stage and are then moved up to the nursery and finishing stages.

Eylands says he is able to produce about 15 to 20 times more using hydroponics than he would grow in a field of the same area.

He also said he believed the U.S. would follow in the footsteps of other developed economies in the world where hydroponic farming has really taken off in recent decades.

"In the mature markets like Europe, Australia and New Zealand where they have lots of years of experience and expensive fossil fuels, that's what's already dominating vegetable production," Eylands said.

"In the U.S. fossil fuels are too cheap - we can still afford to truck lettuce all the way across the country from California to the East Coast but, that's going away quickly. For one thing California's running out of water, and another thing is fuel prices are going up.

"So pretty soon people are not going to be able to buy lettuce in California, they're going to have to grow it locally, not just lettuce, but cucumbers, peppers, herbs, and everything you can grow locally.

"I think this next decade will be huge for the hydroponic industry in the U.S."

Photos: Ozark All Seasons

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