

Skyscraper greenhouses to sprout in crowded cities: expert

June 5 2009



This computer-generated image released by Plantagon shows the design of a vertical greenhouse project. Vertical greenhouses that grow organic fruit and vegetables smack in the middle of crowded cities where land is scarce may soon be a reality, a Swedish company developing the project said Friday.

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"A tomato seed is planted on the ground floor on a rotating spiral and when it arrives at the top, 30 days later, you pick the fruit," the vice president of Plantagon, Hans Hassle, told AFP.

In a few decades, 80 percent of the global population will live in cities,

increasing the need "to grow fruits and vegetables in an urban environment due to the lack of land," he said.

With a vertical [greenhouse](#), "we could have fresh organic produce every day and sell it directly to consumers in the city," Hassle said.

That way, "we would save 70 percent on the cost of fresh produce because right now 70 percent of the price is transport and storage costs," he said.

Fresh and healthy produce would thereby also become more readily available to those with slim budgets, he added.

No vertical greenhouse exists yet, but "several cities in Scandinavia and in China have expressed an interest," Hassle said.

Each installation would cost around 30 million dollars (21 million euros), much more than a regular greenhouse. But the investment would rapidly turn a profit, he insisted.

"With ground space of 10,000 square metres (107, 640 square feet), a vertical greenhouse represents the equivalent of 100,000 square metres of cultivated land" thanks to the rotating spiral that allows continual planting.

"An inventor came up with the idea 20 years ago but none of the people he presented it to believed in it. He presented it to me 10 years ago and it seemed like a good idea, so I talked to Sweco, a Swedish engineering firm, and they agreed to build these vertical greenhouses," Hassle explained.

A virtual image of what one of the greenhouses could look like resembles a large glass sphere with a pillar in the middle, around which

the seedlings rotate on a platform.

"It looks fantastic like that, but the technology is simple," Hassle said.

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Citation: Skyscraper greenhouses to sprout in crowded cities: expert (2009, June 5) retrieved 25 April 2024 from

<https://phys.org/news/2009-06-skyscraper-greenhouses-crowded-cities-expert.html>

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