

Urban farming yields small climate gains

October 11 2010, by Roelof Kleis

Farming in and around cities is sustainable, but the gains in terms of climate are limited. To really make a difference we must change our eating habits. This conclusion was reached by Wageningen University researchers (The Netherlands) from PPO, who calculated for Almere council the likely climate gains from large-scale urban farming in the planned Oosterwold. This 4,000 hectare development with housing, offices and farms is intended to become the vegetable garden of Almere. The study calculates what this urban farming would mean in terms of fossil fuel usage, greenhouse gas emissions and food kilometers.

The starting point for the calculations is Almere's ambition to make sure that by 2030, one euro in five spent on food in the town goes on local produce. This will largely consist of fresh or lightly processed items such as potatoes, vegetables and fruit, which can be grown on relatively small areas.

Over-ambitious

It seems the target is over-ambitious. Even theoretically, it would be a mammoth task to replace twenty percent of the current content of our shopping trolleys with local products, admits Jan-Eelco Jansma of PPO in Lelystad. 'If you insist on sticking to potatoes and fresh fruit and vegetables, it will be difficult.' If you add a good proportion of the eggs and milk consumed, then twenty percent becomes feasible. But to do that you need twice as much land: more than is available in Oosterwold. For this reason, says Jansma, Almere has changed its target to ten percent local produce.

Carting food around

The environmental gains are somewhat disappointing too. The savings that are possible are 'relatively small in proportion to Almere's total energy consumption'. For example, the reduction in CO₂ emissions is equivalent to the emissions caused by 2,000 Dutch citizens. But to achieve that, Almere's 350,000 future residents would have to do a fair proportion of their shopping locally. The main climate-related gain would be the reduction in kilometres covered to bring food to consumers. Jansma: 'We had expected that more food was carted around the country than now appears to be the case. You can see that positively though: a lot of food is already produced locally in the Netherlands.'

Kilometres

Local production alone will not solve the problem of the transportation of food, says Jansma. To achieve a real change here we will have to change our [eating habits](#) drastically. That means: less meat, fewer exotic products and fewer highly processed ones. Anything that comes from far away costs many food kilometres. Another point is that we must stop throwing away so much food. According to Jansma, this will deliver far higher environmental gains. Urban farming can contribute by making consumers more aware of the food they buy and of sustainable consumption. The results are therefore not a reason to abandon urban farming, says Jansma. 'It still makes a considerable contribution. And every little helps. What is more, there are many other arguments in favour of urban farming.'

Provided by Wageningen University

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