Making the most of Turkish sunshine

A demonstration greenhouse is going up in Turkey to showcase Dutch horticultural expertise. Ton Schrover from the greenhouse construction company Dalsem and researcher Ruud Maaswinkel paid a working visit. 'If we were a bit younger, we would move to Turkey.'

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The pair joined a Dutch trade delegation to Turkey in April: Schrover as export manager for greenhouse constructor Dalsem, and Maaswinkel as a researcher at Bleiswijk. One of the aims of the trip was to visit a greenhouse being built at Aydin, part of which is being geared up as a demonstration centre for Dutch horticultural expertise. The design of the greenhouse is based on a

collaboration entered into by Ruud

Hemming of Wageningen UR Greenhouse Horticulture with Horti-X, an organization for greenhouse constructors and suppliers. Dalsem is building the 4.1 hectare greenhouse, which will be heated with geother-

FASTER GROWTH

At the site in Turkey, underground sources of hot water at 170 degrees Celsius provide a plentiful supply of heat. Some of it will be used to generate electricity, and the rest will heat the greenhouse. Schrover: 'The energy costs are next to nothing.' And as if that were not enough, the water pumped up from underground also contains a high concentration of CO2, which can be used in the

greenhouse to get the tomatoes growing faster.

Schrover and Maaswinkel have known each other for about four years. Schrover: 'I was working on a subsidy programme for export to Turkey. The Ministry of Economic Affairs, Agriculture and Innovation thought the plan should be expanded to cover the whole sector. And that is how Wageningen UR got involved.' At the time, Schrover was not keen to have too many competitors hitching a ride on his initiative, but he is now very happy with the imposed collaboration with Wageningen UR Greenhouse Horticulture. 'Wageningen is a big name, and that helps tremendously. It is one thing for us to say that something works or doesn't work, but when a third party with a good reputation





Ton Schrover and Ruud Maaswinkel in front of the skeleton of the new demonstration greenhouse.

says it, you get accepted much more easily.' Greenhouse construction is a booming business in Turkey. Big investors hope to make fat profits out of it. Many of these investors are entrepreneurs who have made their money in other economic sectors such as construction or textiles. Schrover: 'If you do well, you can earn back your investment in four or five years.' This is partly to do with the conditions in Turkey. Maaswinkel: 'You have far more daylight hours there than in the Netherlands. Even in the winter there is quite a lot of light. So you can grow there all year round.'

GOOD HARVEST

But if you thought the Turkish sun could deliver a great tomato harvest even without the aid of a high-tech greenhouse, you were wrong. Maaswinkel: 'Out of doors, you might get five kilos of tomatoes per square metre. A Dutch greenhouse produces fifteen times that amount. And a greenhouse tomato is cleaner because you use organic pest control instead of chemical pesticides.' In spite of the good conditions, Turkish growers do not manage the same sorts of harvests as their Dutch counterparts. This is probably because many of their greenhouses are not especially suitable for the climate. Maaswinkel: 'If you do it properly, you can make sure that it is hardly ever too hot.' If the temperature goes up too high, the plants close their pores and stop absorbing CO₂. And that is a day lost.'

The greenhouse in Aydin features almost all

the techniques that enable Dutch horticulturalists to achieve their top harvests. Everything, that is, except the growth lamps, which are not cost-effective in sunny Turkey. Schrover: 'I think that they are going to do even better than Dutch horticulturalists.' Most Turkish investors in greenhouses are aiming at export, but Schrover thinks they should set their sights closer to home. 'The economy there is growing incredibly fast. Big supermarket chains such as Carrefour are opening new shops every week. They want good produce without chemical pesticides. Turkish growers get much better prices on the home market, and it is certainly still growing. If we were younger we would know what to do. We'd move to Turkey, wouldn't we Ruud?"