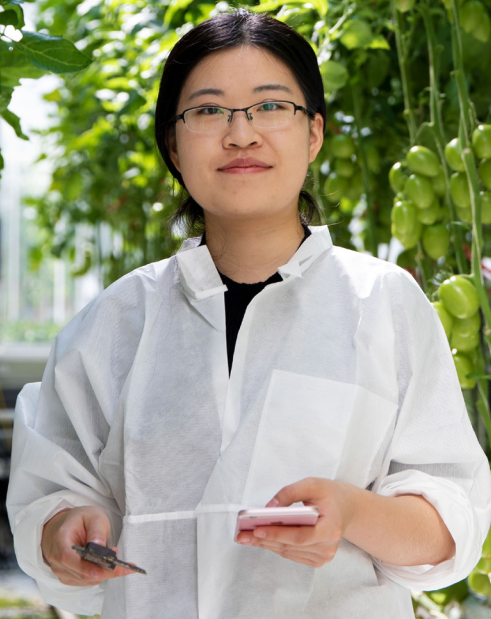


Farming
the
Future



Photography: Dutch Growth Delta

Joining forces for food safety
and food security in China

Foreword

PIB Protected Agri Alliance China, composed of a group of 10 companies from the Netherlands. In January 2021, they have joined forces and operate in the Chinese market as a cluster.

The objective of this cluster is, and I quote, 'Positioning horticulture as an indispensable partner in China by offering sustainable, high-quality and innovative technical solutions, taking into account challenges in the field of water and climate, as response to the local need to become more self-sufficient in producing fresh, healthy, affordable and sustainable food in China'.

Self-sufficiency in food production is a priority for the Chinese government. Not only at the central level, but also provinces and urban agglomerations have this as a priority. China is also striving for greater (resource) efficiency and sustainability in agriculture, especially in horticulture. China has a rapidly growing middle class. Not only in the 'first tier cities' Beijing, Shanghai, Guangzhou and Shenzhen, but also in the 'second tier' and 'third tier' cities. This growing middle class is demanding high quality and availability of horticultural products.

One of the activities within the PIB program is the so-called Knowledge to Knowledge module (K2K). The Embassy of the Kingdom of the Netherlands in China together with RVO (Netherlands Enterprise Agency) and Dutch Greenhouse Delta (DGD), recognise the growing need for adequately trained vocational professionals. They have taken the initiative, together with Dutch private sector companies, to develop this K2K program.

The goal of this K2K is to increase the capacity of Chinese vocational schools in offering greenhouse cultivation classes, to export more knowledge and experience so as meet the vision of Netherlands Agriculture.

The developments in the Chinese horticultural sector offer great opportunities for a deeper cooperation between our two countries. By collaborating with the Chinese sector, this Dutch horticultural cluster is committed to contribute to a flourishing sector in China.



André Haspels
Ambassador of the Kingdom of The Netherlands in China

Joining forces for food safety and food security in China

China is urbanising rapidly. To meet the urban demand for fresh, safe and affordable food, the Chinese government wants to modernise its agriculture sector. The Netherlands can help China introduce technological innovations to increase productivity per hectare and reduce its water and energy use, while training China's agricultural labour force to farm the future. By combining our knowledge, expertise and technology, we help the horticulture sector in China respond to the government's ambition to produce more high-quality fruit and vegetables locally.

Horticulture in the Netherlands

To achieve food security now and in the future, we need to substantially increase our supply of safe, nutritious and tasty food. The Netherlands aims to contribute to this vision by supporting food producers around the world to optimise their production.

The Dutch horticulture sector feeds millions of people around the world. For over a century, we have been growing a wide variety of fruit and vegetables on a small surface, using state-of-the-art technology and sustainable techniques. The foundation of our success is the collaboration between our governments, companies and knowledge institutions. Together, this triple helix develops the tools required to farm the future. We are a forerunner in sustainable and energy-efficient greenhouse horticulture, based on sustainable energy sources, use of LED lighting, CO2 capture and efficient use of residual flows.

Based on this experience, we know collaboration is needed to optimise global supply chains. To realise long-term improvement, we continuously test and finetune our methods, while we educate local staff to become the well-skilled and experienced managers vital for success.

Alliance for feeding megacities

The Chinese government's ambitions for the agriculture sector are high. With our innovative cultivation methods, NL Protected Agri Alliance China can help realise strong agricultural growth for China. We are a group of Dutch private companies and research & education institutes from the horticultural supply chain, supported by the government of the Netherlands. The alliance is led by the agricultural counselor of the Netherlands Embassy in Beijing, together with the Netherlands Enterprise Agency and Dutch Greenhouse Delta.

NL Protected Agri Alliance China was established to cocreate and co-develop solutions that can help China reach food security and food safety. Our partners are eager to establish a long-term partnership with China, based on exchanging technologies, experiences and knowledge. In close cooperation with the Netherlands Embassy, we aim to support China in modernising the local horticulture sector following the central government's vision. With our combined knowledge, technology and experience we can accelerate achieving your food security and food safety.

Our partners are industry leaders from the Netherlands, with many years of experience developing and applying innovative technologies to grow nutritious and healthy crops. Together, we cover all aspects of modern horticulture, from cultivation and managing greenhouses to after-sales, logistics and training, education and research. We can facilitate your transition from low and mid tech solutions to high tech solutions, and help you take the next step towards making your farm a more sustainable and profitable business.

Together with Chinese partners, we aim to develop an ecosystem in which valuable resources such as water and energy are optimised to achieve the best possible yield. We offer integrated and sustainable high-tech agroparks, a total concept developed jointly by our sector parties and their chain partners. By adapting our proven technology to local circumstances, we can support you to produce ultra-fresh, safe and sustainable fruit and vegetables. All year round, against fair process, and as close to the point of consumption as possible.

Finding the optimal solution

Our partners are experienced in all climates and regions, allowing us to find the optimal solution anywhere in the world. We have previously worked on successful and profitable projects covering the entire value chain in China, but also in Korea and the rest of southeast Asia. The numerous large-scale smart horticulture projects were already launched throughout China are good examples of a very successful Chinese-Dutch horticultural collaboration.

By working together, we can accelerate the transition to more sustainable horticulture and increased food safety and security in China. Together we can unlock China's full horticultural potential.

The members of the alliance will be introduced in this brochure. Together we cover the horticultural supply chain. We wish you pleasant reading and are looking forward to collaboration with local parties in China. Don't hesitate to contact Dutch Greenhouse Delta or one of the alliance members for further information.



SDGs

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

The Dutch horticultural cluster contributes to the achievement of the following sustainable development goals:



SDG 03 | Good health and well-being:

The aim of the cluster is to increase the availability of fresh, healthy and locally produced food.



SDG 08 | Decent work and economic growth:

Encouraging “fair” and “decent” work and involvement of the local community should promote economic growth.



SDG 11 | Sustainable cities and communities:

The cluster stimulates local and sustainable production through Dutch technology and knowledge transfer, such as reducing CO2 emissions and water.



SDG 12 | Responsible consumption and production:

The current Dutch horticultural technology can serve as an example for the transition towards climate-neutral production systems and already has many circular features.

Coordinator



Dutch Greenhouse Delta is a powerful international platform representing the entire ecosystem of horticultural expertise from the Netherlands. We serve as the gateway to Dutch horticultural innovation, collaborating closely with our partners to create sustainable ecosystems that address the global demand for fresh, high-quality products.



Partners



Artechno Grow systems is an engineering company engaged in the development and realisation of modern hydroponic cultivation systems. Among the products Artechno manufacture are robotics, irrigation systems, sowing solutions, harvesting lines and turnkey solutions for vertical farming and greenhouse hydroponics.



Bayer - De Ruiter

De Ruiter, part of the Bayer Crop Science division, specialises in the breeding, production and sale of hybrid seeds for greenhouse production. Together with its growers, the company is dedicated to bringing high-quality, nutritious produce to ensure a balanced plate for its global community.



BOAL Group

BOAL Group provides greenhouse builders with a comprehensive portfolio of modular systems and solutions for high-tech-covered cultivation. It ranges from complete aluminum greenhouse structures with integrated insect netting and ventilation solutions to insulated storage areas, climate screen systems, or individual greenhouse parts. Having established long-term collaborative relationships with regional and global greenhouse builders, BOAL Group has supplied over 8,000 hectares of greenhouses in over 50 countries. Their systems significantly contribute to feeding a rapidly growing global population whilst minimizing the use of resources.



DALSEM - Complete greenhouse projects

Dalsem is a leading greenhouse builder that develops complete high-tech greenhouse projects since 1932 that yield the highest quality and quantity of products in the shortest time. Our latest patented development is the DALSEM AIR Semi-Closed Greenhouse Solution, to maximize plant and crop growth by optimizing the climate conditions in a sustainable way. All parts of the greenhouse are built in our Dutch factory. The complete control of the design, manufacturing and execution of the project on-site is unique to our company.





HX Agriculture

HX Agriculture B.V. is committed to integrating the agricultural technology and financial chain resources of China and Netherlands by investing in the construction of the agricultural industry "Sino-Dutch smart agricultural science and technology Industrial parks". We are building bilateral agricultural resources sharing platform, to establish a modern and sustainable development of high-efficiency agricultural industrial clusters and unifying products into the Dutch transit trade system for the sake of providing green and healthy food to the world.



KUBO

At KUBO we can now look back at almost 80 years in horticulture. A stable family company with the third generation now at the helm. KUBO manages complete greenhouse projects. Contracting, engineering, manufacturing, construction and service. All under our own management. This enables us to monitor the entire process, deliver on time and be certain that we are using the latest technologies and concepts.



Ridder develops innovative climate, irrigation and management systems for horticultural projects worldwide. Operating globally, the company specialises in adaptive systems that seamlessly match the knowledge level and needs of the local market. With a high-level of expertise and commitment, Ridder offers total solutions to horticulture businesses across the world – from mechanical systems to digital services.



Van der Hoeven Horticultural Projects

At Van der Hoeven Horticultural Projects we design, build, and operate tailor-made horticultural solutions for our customers, with a reduced footprint in natural resources, water, CO2, and pesticides. We continuously invest in R&D to strengthen our propositions towards our customers. This vision allows us to operate our business successfully for a better future and sets us on the path of our mission: to provide sustainable taste anywhere.



Westland

Leading the way in sustainable horticulture and local food production. As Westland, the capitol of the Greenport in West-Holland, we spread the message of aiming for local sustainable food production all around the world. In our municipal role, we emphasize our joint contribution to several of the Sustainable Development Goals of the United Nations, such as 'Zero Hunger', 'Sustainable Cities', 'Good Health and Well-being' and 'Responsible Consumption and Production'.





Let's partner up!

By working together, we can accelerate the transition to more sustainable horticulture and increased food safety and food security in China. Together we can unlock China's full horticulture potential. So, let's exchange information, knowledge, and technology and inspire each other and the rest of the world, how together we can farm the future!



**Coordinator of
NL Protected Agri Alliance China**

Gert Dral

Gert.dral@dutchgreenhousedelta.com

+31 6 55 16 39 57



**Representative China of
NL Protected Agri Alliance China**

Michael Min

michael.min@dutchgreenhousedelta.com

+86 138 16 40 08 60



Liaison NL Protected Agri Alliance China

Mengyao Pan

+86 186 12 64 98 21



NL Protected Agri Alliance China

