



Collaborating on the sustainable transformation of India's emerging food markets

Foreword

Consul-General of the Kingdom of the Netherlands in Bengaluru

India is an agricultural powerhouse and one of the largest producers of fruits and vegetables in the world. Given population growth and a changing climate, achieving higher productivity levels is essential. Recently I assumed office as the Consul-General of the Kingdom of The Netherlands in Bengaluru and I can already see that horticulture is a sector of great potential in Karnataka and other states in South India. The different agro-climatic zones and the long tradition of producing a variety of fruits and vegetables makes for a suitable environment to innovate and boost food production. Additionally, the city of Bengaluru does not only have a vast customer base, it also boasts a pool of talented young people and a strong rise in AgTech startups.

The Netherlands is a global leader in horticulture solutions. We are a small country, yet very productive in different crops. Cooperation between entrepreneurs, the educational system, research institutions and government fosters an enduring innovative ecosystem. This ecosystem boosts a production chain of greenhouse builders, growers, seed companies and technology suppliers. The sector collectively works on a horticulture sector that produces more with less inputs. HortiRoad2India is a multi-year public-private partnership that aims to strengthen Indo-Dutch cooperation in horticulture, consisting of Dutch turnkey suppliers and specialist companies covering the entire fruit and vegetable supply chain.

I see great potential for Indo-Dutch cooperation in horticulture, for example by expanding the area under protected cultivation, sourcing quality planting materials and adopting advanced horticultural technology. It is essential to listen to each other and adapt innovative solutions to local circumstances. I am looking forward to see interaction between this network of Dutch companies with Indian stakeholders on all levels.



Ewout de WitConsul-General of the Kingdom of the Netherlands in
Bengaluru

Foreword

Consul-General of the Kingdom of the Netherlands in Mumbai

I am delighted to announce that a large group of leading companies and the Dutch government have joined forces to enter the Indian market as a cluster. Cooperation between Maharashtra and The Netherlands in agriculture is excellent and with Maharashtra being one of the largest producers of horticulture crops in the country I see great potential for further strengthening our collaboration. The relation between Maharashtra and The Netherlands is a two-way street. A lot of agricultural exports going to The Netherlands originate from Maharashtra. The Netherlands is for example one of the largest importers of grapes, while the Dutch private sector in Maharashtra is very active in seed production and floriculture. The relation goes beyond trade only, as there is strong cooperation in education and Government to Government projects. A flagship project is the establishment of Centers of Excellence. The Centre of Excellence on horticulture in Baramati implements technology from The Netherlands in the local environment, while also working on capacity building and training of farmers.

The HortiRoad2India cluster offers a range of solutions that are relevant to the needs in horticulture in Maharashtra: using technology to produce safe and nutritious fruits and vegetables with minimal use of water, energy, pesticides and fertilizers. The top quality produce will cater to the demands of consumers in cities, such as Pune and Mumbai.

The Netherlands aims to contribute to a worldwide food supply that is varied, safe and healthy. We consider India as a most valued partner. There is a wide scope for working together in supply chains of various horticultural products. I'm looking forward to a long and fruitful collaboration for a more sustainable future for India.



Bart de Jong Consul-General of the Kingdom of the Netherlands in Mumbai

Co-creating sustainable food markets

Namaste! We are HortiRoad2India, a public-private partnership from the Netherlands. Together with you, we want to collaborate on transforming India's emerging food markets. We are keen to work together with Indian retailers, investors, AgTech firms and greenhouse builders to develop new mid and high-tech greenhouses and upgrade existing greenhouse facilities. Why? So that we can grow safer and healthier fruits and vegetables locally.



Increasing demand for quality food

The demand for quality fruit and vegetables is rising in India. Especially India's young population and its rapidly growing middle class is increasingly interested in a different type of food: fresh, sustainable, clean, healthy, high-quality.. yet locally produced. Add to this hotels and supermarkets that want to offer their customers quality products and you see an emerging market of consumers willing to pay premium prices for premium products. A market that is only expected to expand in the future due to population growth and an increasing number of domestic and foreign travellers.

About HortiRoad2India

By working together and adapting innovative Dutch solutions to local circumstances, Dutch consortium HortiRoad2India can support India's horticulture sector to produce better quality products. And in their turn, food producers can provide hotels, restaurants and supermarkets with products that not only last longer, but are also fresher, healthier, cleaner and produced using less resources. By pooling resources, we ensure India can increase its production capacity sustainably.

We can, for example, use our innovative technology to equip your greenhouses with irrigation systems, lighting and climate computers or link existing agri software to new hardware, such as sensors. This not only makes your greenhouses smarter, but also more sustainable. Using IoT, AI and other new technologies in horticulture allows you to decrease your emissions, water usage and use of pesticides. The result? Safer, healthier food with a longer shelf-life that can be sold for premium prices.

Towards a long-term partnership

HortiRoad2India is keen to create long-term connections in India. The majority of our members already have experience working in India with local partners, and some even have opened local offices or facilities. Together with local partners, like the government, we can take our responsibility for a more sustainable future for India, by providing consumers with sustainably grown, healthy, clean and pesticide-free food.



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. HortiRoad2India contributes to the achievement of the following sustainable development goals:



SDG 02 | Zero hunger:

The cluster provides integrated solutions for sustainable agriculture that help India to achieve food security.



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:

The cluster combines global expertise with local experience to provide India's consumers with healthy, clean, and sustainable food and at the same time generate jobs and income for all involved.



SDG 09 | Industry, innovation and infrastructure:

The cluster is comprised of pioneers in developing innovative solutions in the field of water management, climate control, labour & energy management to ensure that crops can be grown year-round in a sustainable way.



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.









Dutch Greenhouse Delta is a foundation that promote the Dutch horticultural sector worldwide. Together with Dutch state-of-the-art partners in horticulture, we bring an integrated Fork2Farm solution that offers a complete ecosystem consisting of science, enterprise, education, and the government.

InnovationQuarter is the regional economic development agency for the Province of Zuid-Holland, also known as the greater Rotterdam – The Hague area. Their mission is to strengthen the regional economic structure by stimulating the innovation potential of this unique delta region.

Rotterdam Partners is creating sustainable growth of the Rotterdam economy and aims to promote the Rotterdam region at home and abroad. We open the door of Rotterdam for future international companies and help companies from the region to expand their business abroad.

Partners







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.

Together with global partners, Hoogendoorn delivers sustainable automation solutions that seamlessly coordinate all processes and systems in your horticultural organisation. The modular software ensures that the available resources such as natural gas, fertilisers and water are used as efficiently as possible. With this, Hoogendoorn helps its clients to minimise (energy) costs and CO2 emissions and to maximise crop profitability.

Horti XS is a lean & agile engineering, assembly and installation company of high-tech indoor farms suitable for the cultivation of crops like tomato, cucumbers, peppers and strawberries in any climate. We have strong partnerships in the Dutch ecosystem of hortitech companies, enabling us to incorporate the latest industry innovations into our designs.

Partners













Koppert produces sustainable cultivation solutions for food crops and ornamental plants. Together with growers and in partnership with nature, Koppert Biological systems work to make agriculture and horticulture healthier, safer, more productive and resilient. They achieve this by using natural enemies to combat pest infestations, bumblebees for natural pollination, and biostimulants that support and strengthen the crops both above and underground.

Lumiforte produces smart coating solutions for greenhouse cultivation that help growers protect their crops and greenhouses against too much light and heat. The goal is to safeguard optimal production regardless of local climate conditions. Lumiforte has its own branches in Western- and Southern Europe and in Canada. Together they export to more than 60 countries throughout the world. Lumiforte is a full subsidiary of the Horticoop Cooperative.

Meteor Systems is an innovative company in the production of complete growing systems for the (inter)national horticultural industry (indoor, outdoor & semi outdoor). Among other steel gutters, (movable) growing systems, drip irrigation, suspension and support systems, wire products, fastening materials, hydroponic floaters, vertical farming grow racks and fruit covers.

Priva is a high-tech company that develops hardware, software and services in the field of climate control, energy saving and optimal reuse of water. Priva does that for horticulture, indoor and city farming, and utility buildings such as offices, retail, hotels and hospitals. With 450 colleagues, 15 local offices in 12 countries and over 400 international installation partners, we deliver our sustainable solutions and services in more than 100 countries.

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.

Established in 1887, Svensson is a family-owned business with more than 130 years of experience in the textile industry. Svensson's climate screens, which are produced in Sweden and sold around the world under the name Svensson, improve the success of professional greenhouse growers, enhancing the overall greenhouse climate. No matter where in the world the operation is located, Svensson knows how to make the most of your natural climate.





Van der Hoeven specialises in designing and constructing customised horticultural projects around the world. The company assists investors from the feasibility study phase to construction and crop consultancy, thereby helping stakeholders achieve maximum returns on their investments. By using the latest technologies, Van der Hoeven offers climate-specific solutions, allowing crops to be grown efficiently in any part of the world.

Viscon Group specializes in factory automation for agriculture and food. Their software, machines, and integrated solutions make food and agriculture processes sustainably profitable, scalable and easy.

Let's partner up!

By working together, we can sustainably transform India's emerging food markets. 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!



Cluster Coordinator

Michiel F. van Ginkel

Michiel.vanginkel@dutchgreenhousedelta.com



Desh Ramnath
Desh.ramnath@dutchgreenhousedelta.com

Cluster Coordinator



Cluster Coordinator

Carine Eijkelkamp

carine.eijkelkamp@innovationquarter.nl



