



# Vegetable Seed Trade Between India and the Netherlands

An analysis of trade relationships and CSR policies

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#### **Summary**

India has a large domestic market for vegetable seeds, and especially hybrid seeds have seen a quickly growing demand in past years. At the same time, India has also experienced outstanding growth in the production of vegetable seeds, making it one of the leading producers in the world today. A lack of detailed data hinders a precise mapping of international trade flows by type of seed and company. However, available data and ownership relations show that there are close links between the Indian and Dutch vegetable seed sectors, consisting of both local companies and subsidiaries of multinational businesses. India plays an important role in the trialling and propagation of hybrid vegetable seeds due to favourable growing conditions, a large market, and cheap labour for the intense manual work. In this context, seed companies rely on contract farmers to multiply seeds under buy-back agreements, often subcontracted through middlemen. Important seeds traded with the Netherlands include tomatoes, sweet pepper, and cucumber.

Seed companies in the Netherlands benefit from various government initiatives to facilitate trade and market access and, at times, substantial funds that aim to create an enabling environment for the internationalisation of the sector. Fiscal arrangements and grants supporting research and development are particularly interesting for the industry. Moreover, Dutch and European institutions are supporting intellectual property rights approaches to protect new plant varieties, which are in the interest of large seed companies. However, developing countries like India are worried that the interests and rights of farmers may get harmed by those restrictions.

Concerns around severe human and labour rights issues like child labour, the disadvantaged role of women workers in the sector, and the lack of a living income for seed farm workers have been connected to the seeds value chain in India for many years and documented in several research projects. Seed associations and companies have acknowledged those issues. Improved access to high-quality seeds in low-resource countries and eradicating child labour are at the centre of several sustainability programmes involving public, private, and civil society actors. However, the problems in India persist.

This research assessed the corporate social responsibility (CSR) policies of ten Netherlands-based vegetable seed companies against fundamental, internationally accepted human and labour rights guidelines. The results show that corporate efforts are still falling short in their adequacy to prevent and mitigate labour rights breaches in the supply chain. Several of the assessed seed companies have no CSR policies in place. Companies with a CSR policy in place still fall short of describing how those commitments are brought into practice. At present, the companies' voluntary CSR efforts are insufficient to effectively address the most pressing labour rights issues in the vegetable seed sector, including living wages and child labour. Moreover, the analysis suggests that the assessed companies have not made sufficient efforts to identify and end adverse impacts on women's rights in the production of vegetable seeds.

The unsatisfactory progress in responsible business conduct is recognised by the Dutch government, which is currently preparing mandatory legislation on human rights due diligence, alongside similar legislation at EU level. Upon entry into force, these laws will make due diligence in supply chains mandatory and require several profiled companies to considerably strengthen their approach to monitoring human rights in their supply chains. Meanwhile, companies should formulate human rights policies in line with the United Nations Guiding Principles on Business and Human Rights, the OECD Due Diligence Guidance for Responsible Business Conduct, and the ILO Fundamental Conventions, applying to their complete supply chain.

#### **Abbreviations**

CAGR Compound Annual Growth Rate **CPVO** Community Plant Variety Office **CPVR** Community Plant Variety Rights **CSR** Corporate Social Responsibility **DGGF** 

**Dutch Good Growth Fund** 

**DTIF Dutch Trade and Investment Fund** 

**ECA Export Credit Agencies** EIB **European Investment Bank ERA** European Research Area FDI Foreign Direct Investment

**FMO Dutch Entrepreneurial Development Bank** 

**FPO** Farmer Producer Organisation

GM **Genetically Modified** 

GRDG Gender-responsive Due Diligence

**ICAR** Indian Council of Agricultural Research

ILO International Labour Organization ILV Licensing Platform Vegetable LAN Agricultural Attaché Network

LNV Ministry of Agriculture, Nature and Food Quality Netherlands NAAWU National Alliance of Agriculture and Allied Workers Union

**NSC National Seeds Corporation** n.e.s. Not elsewhere specified

**OECD** Organisation for Economic Co-operation and Development

OPV **Open-Pollinated Varieties** 

OSH Occupational Safety and Health PPE Personal Protective Equipment PIB Partners for International Business

R&D Research & Development

**RBC** Responsible Business Conduct

**RVO** Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland)

SAU State Agricultural University SDG Sustainable Development Goals **SME** Small and Medium-sized Enterprises

SRR Seed Replacement Rate

**TILLING** Targeting Induced Lesions in Genome

**UPOV** Convention Convention for the International Union for the Protection of New Varieties of Plants

Wage Improvements in Seed Hybrids **WISH** 

**WBSO** The Promotion of Research & Development Act

#### Introduction

The production of vegetable seeds in India has seen an exceptional increase in the recent past, making it one of the largest producing countries in the world today. The national and multinational companies operating on the Indian market have close relationships with the vegetable seed companies active in the Netherlands. The Dutch sector, again consisting of local as well as subsidiaries of multinational companies, is estimated to control up to 40% of the world trade in vegetable seeds, giving it a crucial role in the global supply chain.<sup>1</sup>

India is an important partner in the trialling and propagation of hybrid vegetable seeds, benefitting from favourable growing conditions, a large market, as well as cheap labour for the intense manual work. Seed companies rely on contract farmers to multiply seeds under buy-back agreements, as Indian land laws prohibit individuals or companies from owning large land areas. These operations are usually realised through middlemen, so-called seed organisers.<sup>2</sup>

Concerns around human and labour rights issues have been connected to the Indian seeds sector for many years. Already in 2005, Arisa reported on a high prevalence of child labour and gender discrimination in hybrid vegetable seed production.<sup>3</sup> Since then, seed associations as well as companies have acknowledged the issues, condemned child labour, and initiated a number of programmes to combat child labour. However, the problems in the Indian seeds production sector have not been solved yet.

FNV, Mondiaal FNV, and Arisa support projects and initiatives with respect to labour rights in the value chains of vegetable seed companies. Several research projects have been executed to address the specific characteristics of the vegetable seeds value chain and the prevailing labour conditions. Previous research on behalf of FNV Mondiaal documented the characteristics and labour conditions in the seed production regions in Telangana, Andhra Pradesh and Karnataka. It aimed to document the complex value chains from the international company to the grower, which often involves various actors from domestic companies via intermediaries to the farmer. However, a full mapping of these relationships was hampered by a lack of information and willingness to share insights. The research further concluded that while international companies encourage decent labour and other practices for smallholders through different initiatives, the situation in upstream seed production remains problematic. Documented issues included lower wages for women for cross-pollination activities, market wages mostly outweighing minimum wage rates, and a high prevalence of child labour.

Against this background, the current research project has set out to investigate the trade of vegetable seeds between India and the Netherlands in more detail, and to map government policies and support programmes that create an enabling environment for the vegetable seeds industry in both the Netherlands and India. Moreover, the Corporate Social Responsibility (CSR) policies of important companies involved in this trade and business are analysed in relation to their adequacy to prevent and mitigate labour rights breaches in the supply chain.

Based on general data on imports and exports of vegetable seeds between India and the Netherlands combined with shipment data for the years 2019 to 2021, relevant companies involved in the trade as well as key types of seeds that are traded can be identified. An important factor influencing this selection is the fact that both the trade codes for vegetable seeds in statistical data as well as the description of traded goods in shipment data are lacking in detail.

In trade statistics, the applied codes only break down a very limited number of vegetable seeds (cabbage, cauliflower, onion, pea, radish, tomato), while most of them are summarised under "other". Data for key vegetables like cucumber and sweet pepper are therefore not available in more detail. Shipment data based on customs information allow to identify company names and provide some more detail in the description of goods traded; however, most shipments are mixed and consist of two, three or more different types of seeds. Moreover, the individual shipments are only reported based on value but not linked to volume. Shipment data in general is not providing fully comprehensive information. Therefore, the presented data on product flows by company should be treated as approximates. Nonetheless, the data provide important indications of trade

relationships and actors involved. It is not possible to make quantitative statements on the importance of specific types of seeds in the trade, but the conclusion that tomatoes, sweet pepper, and cucumber seeds make up for a considerable share of the trade between the two countries was confirmed by the interviewed key informants.

Ten vegetable seed companies operating in the Netherlands – either with their corporate headquarters or as subsidiaries of international companies - with business relationships to India are briefly profiled. Moreover, their CSR policies are assessed against fundamental, internationally accepted human and labour rights guidelines. To corroborate the findings, interviews were conducted with representatives from the industry and public institutions. Moreover, the profiled companies were given the opportunity to review the sections on their business activities and CSR policies.

To provide a better understanding of the two markets and their connections, Chapter 1 provides brief profiles of the two country sectors as well as general trade relationships for vegetable seeds. In Chapter 2, ten vegetable seed companies operating in the Netherlands and linked to the Indian market are profiled. This is followed by an analysis of the companies' commitments to corporate social responsibility (CSR) based on internationally accepted guidelines on fundamental human and labour rights in Chapter 3. Chapter 4 gives an overview of Dutch, European and Indian government initiatives that support the vegetable seeds sector and its internationalisation. Moreover, the upcoming legislation on human rights due diligence in the Netherlands and the EU is mentioned. This is followed by conclusions and recommendations in Chapter 5.

A summary of the findings of this report can be found on the first pages of this report.

1

### Vegetable seeds trade

The vegetable seeds market is the third-largest segment in the seed sector. Vegetable seeds are considered as low-volume high-value seeds. The Netherlands has been a top producer and supplier globally for decades, while the role of India has increased during recent years. Industry structures and technology levels differ considerably between the two countries.

#### 1.1 The global vegetable seeds market and key actors

Vegetable seeds are the third-largest segment of the global seed industry, with a market share of almost 17% in sales during 2020. The vegetable seeds market is highly fragmented, with the top three companies accounting for a comparatively low 29% of global vegetable seed trade in 2020. In other important seed categories like maize, soybean, and cotton, the top three players combined accounted for 66%, 58%, and 53% of market shares respectively. Reasons for the fragmentation include the wide variety of production methods for vegetables (open field, cold or heated shelters), as well as the wide geographic spread of production areas and demand for adapted seeds. However, a further consolidation is expected in the coming years.<sup>6</sup>

The vegetable seeds industry is very diverse, including diversified multinational companies; regional or specialised companies; and many local players. Among the top 10 global producers in 2020 (Table 1) are several of the large Dutch actors (Rijk Zwaan, Enza) or multinational companies with important Dutch subsidiaries (Bayer, Syngenta, BASF).

Table 1 Top vegetable seed producers globally by sales, 2020

Company	Country	Sales (US\$ million)	Sales share (%)
Vilmorin (Limagrain)	France	780	10%
Bayer	Germany	729	10%
Syngenta	Switzerland	653	9%
Rijk Zwaan	Netherlands	527	7%
BASF	Germany	511	7%
Takii	Japan	458	6%
Sakata	Netherlands	379	5%
Enza	Netherlands	373	5%
Bejo Seeds	Netherlands	250	3%
East-West	Netherlands	168	2%
Total top-10		4,828	64%
Global Vegetable Seed Sales	S	7,573	100%

Source: Malhotra, B. (2022, February 23), "Global vegetable seeds market is increasingly fragmented and diversified", *IHS Markit*, online: https://ihsmarkit.com/research-analysis/global-vegetable-seeds-market.html, viewed in May 2022.

#### 1.2 The Dutch vegetable seeds sector

The Netherlands has one of the largest seed sectors in the world, with vegetable seeds as an important category. The sector benefits from the close collaboration between business, the government, inspection bodies, and the research sector. Moreover, the export-oriented industry is a major supplier to European and international markets. The vegetable seed sector is highly competitive. It is made up of several global players, as well as local companies that also operate at a global level.<sup>7</sup> As shown in Table 1, the top actors incorporated in the Netherlands accounted already for around 22% of the global sales of vegetable seeds in 2020, with Dutch subsidiaries of other leading international actors further increasing the Netherlands' global market share.

In total, around 100 companies are active in vegetable seeds production in the Netherlands, accounting for around 35-40% of the world trade in vegetable seeds.<sup>8</sup> Key companies engaged in the production of vegetable seeds include Rijk Zwaan, Monsanto Holland (Bayer (Germany)), Syngenta Seeds, Bejo Zaden, and Enza Zaden. Several of these companies are located in the so-called 'Seed Valley', between Warmenhuizen, Andijk, Hoorn and Enkhuizen.<sup>9</sup>

In 2021, the Netherlands was the largest exporter of vegetable seeds by value, accounting for around 43% (US\$ 2.1 billion) of global exports. However, in terms of volume the country was only on the second place with a global share of 10% (14,303 tonnes). These differing shares suggest a high value per unit of export for Dutch vegetable seeds. The Netherlands is also the world's largest importer by value (US\$ 500 million in 2021) and volume (12,367 tonnes).<sup>10</sup>

#### 1.3 The Indian vegetable seeds sector

India has more than 700 seed companies, both in the private and public sector.<sup>11</sup> Of these, around 50 are engaged in crop breeding research.<sup>12</sup> The industry is a mix of small, medium, and large seed companies. While large companies are active across the whole value chain including Research & Development (R&D), production, processing, marketing and distribution, smaller ones concentrate on one or more of these activities.<sup>13</sup>

Looking at seeds for the commercial cultivation of vegetables, between 2018 and 2020, the sales of hybrid vegetable seeds in India increased from US\$ 397 million to US\$ 453 million, a growth by 14%. Market research company Mordor Intelligence forecasts a compound annual growth rate (CAGR) of 9.6% for the Indian seed industry in the period 2022-2027.<sup>14</sup>

The organized seed sector in India is only around 50 years old. Breeding centres for major crops, a nationwide trial system and extension support played a key role in making the country the fifth largest market in the world. The fact that India with its large population is the second largest producer of vegetables in the world, behind China, is a key reason for its large seed market.<sup>15</sup>

The growth of the Indian seed market is driven by the increasing adoption of hybrid vegetable seeds. Key hybrid seed types are okra (*Abelmoschus esculentus*), gourds (*Cucurbitaceae*), and tomatoes, with shares of respectively, 15%, 11%, and 9% in 2018. At the same time, the seed replacement rate (SRR) has increased in recent years, where farmers replace farm saved seeds with newly purchased seed more frequently, often hybrid seeds from large plant breeders. Hybrid seeds have a SRR of 100% as the characteristics of their progeny often do not match the typical characteristics of their type. Reportedly, the SRR of vegetable crops increased from 20% in the 1980s to more than 90% today. Reportedly, the SRR of vegetable crops increased from 20% in the

Nowadays, hybrid seeds produced by private sector actors account for a significant portion of the total vegetable seed market in India, while varieties and hybrids from the public sector are mostly replaced. The public sector is mostly confined to produce certified seeds in high-volume and low-value segments of high yielding cereal, pulses, and cotton varieties. <sup>19</sup> In vegetable seeds, government agencies like the National Seeds Corporation (NSC) and state seed corporations are largely concentrating on development and seed production of open pollinated varieties (OPVs). Indian Council of Agricultural Research (ICAR) institutes and State Agricultural Universities (SAUs)

produce breeder seed. Breeder seeds are made available to seed producing agencies and small private seed companies without their own R&D facilities.<sup>20</sup>

One reason for the growing gap between the public and private sector are the much higher R&D budgets of private companies. Moreover, corporate seed firms concentrate on relatively easy to produce and profitable OPVs and hybrids of vegetables like tomato, cabbage, brinjal (aubergine, *Solanum melongena*), chilli, okra and cucurbits.<sup>21</sup> Overall, the increasing R&D expenditure by seed companies as well as government incentives supporting the vegetable seed sector are seen as factors contributing to the growth of the sector. At the same time, the spread of counterfeit seeds is restraining the commercial market growth.<sup>22</sup>

The Indian vegetable seed market is highly consolidated, with a small number of large players like Mahyco, Bayer CropScience, Syngenta, and UPL Limited (Advanta Seeds) accounting for a market share of 42.14% in 2021 (Figure 1).<sup>23</sup> According to a study conducted on behalf of Arisa in 2020, multinational companies control two-thirds of vegetable seeds production in India.<sup>24</sup>

Consolidated- Market dominated by 1-5 major players

India Vegetable Seed Market

Fragmented - Highly competitive market without dominant players

Figure 1 Market concentration in the Indian vegetable seed sector

 $Source: Mordor\ Intelligence\ (n.d.),\ "Vegetable\ seed\ market\ India",\ viewed\ in\ June\ 2022.$ 

While seed production by multinational companies in developed markets is done on own fields, in India contract farming is the dominant form of seed production, with companies agreeing buy-back arrangements with farmers. Such agreements can be directly with the farmers, or through intermediaries, also called seed organisers. The reason for production on farmers' fields are the Indian land ownership laws, which do not allow individuals or companies to own large areas of land. Therefore, companies rely on local seed farmers. At the same time, seed companies increasingly shift and expand their production to new, more remote areas to benefit from the readily available cheap labour for the labour-intensive cross-pollination activities. Seed companies

In the last years, the impacts of the COVID-19 pandemic in the form of lockdowns and limited logistics have hindered the execution of contracts with small and marginalised farmers who grow specific vegetable hybrid seeds. At the same time, small and marginalised farmers and those not represented by Farmer Producer Organisations (FPOs) in remote areas of the country, faced delays in vegetable seed supply due to logistical bottlenecks.<sup>27</sup>

In terms of volume, India had the largest share of the global exports of vegetable seeds with 12% in 2021 (17,754 tonnes), ahead of the Netherlands (10%). However, based on value, India was only on the 9<sup>th</sup> place with a share of around 2% (US\$ 93 million).<sup>28</sup> This relation suggests a relatively low average value per unit of seeds exported. Overall, exports have undergone a significant increase during the last ten years (Figure 2).

Figure 2 Total Indian vegetable seed exports, 2011/12 to 2020/21 (volume and value) 25,000 125 ■ Volume • Value 20,000 100 15,000 75 US\$ million tonnes 10,000 50 5,000 25 2012/13 2014/15 2015/16 2017/18 2013/14 2016/17 2018/19 2020127

Source: Indian Ministry of Commerce and Industry (2022), "Export import data bank", online: https://tradestat.commerce.gov.in/eidb/default.asp, viewed in June 2022.

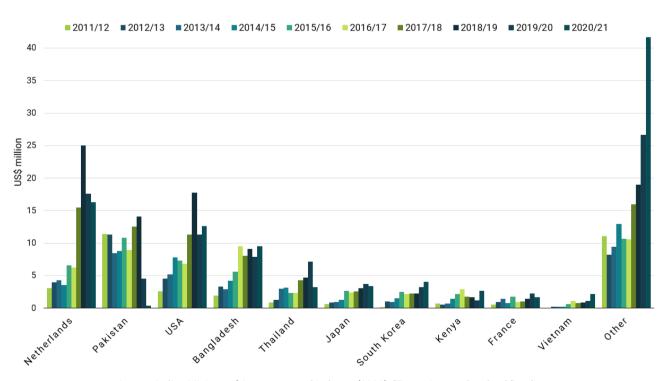


Figure 3 Key destinations of Indian vegetable seed exports, 2011/12 to 2020/21 (value)

Source: Indian Ministry of Commerce and Industry (2022), "Export import data bank", online: https://tradestat.commerce.gov.in/eidb/default.asp, viewed in June 2022.

Looking at the key destinations of vegetable seed exports from India (Figure 3), the Netherlands has played an important role especially since 2017/18, when the exports to the country saw a significant increase in value by almost 150% from the previous year, and another increase by more than 60% in 2018/19. It is likely that the dip in the following two years has been influenced by the restrictions in trade and movement related to the COVID-19 pandemic. Other important trading partners during the decade include Pakistan, the USA and Bangladesh. These four countries combined accounted on average for more around 55% of total Indian vegetable seed exports since 2011/12. The large jump in 'other destinations' in 2020/21 is for a significant part influenced by the United Arab Emirates showing a massive increase in seed imports from India.

#### 1.4 Seed trade between India and the Netherlands

While seed breeding companies are concentrated in the Netherlands, the breeding and production process is often distributed across several geographical regions. Reasons include climatological conditions (counter seasons) and risk spreading. In the activities of foreign seeds companies in India, two main categories can be distinguished:

- to prepare seeds for production in India ('testing ground') this is done by the company itself;
   and
- the production/multiplication of the final product via contractors and sub-contractors.<sup>29</sup>

There are several reasons that make India an attractive country for multinational seed companies, including its climatic conditions and the low labour costs for work intensive seeds like tomatoes and sweet pepper, where every flower must be fertilized manually.

The data on seed trade between the two countries is available by volume and value. However, statistics only provide a very limited breakdown of the types of vegetable seeds that are being traded. The largest part is grouped in the generic category 'vegetable seeds for planting n.e.s.' (not elsewhere specified). While the economically important category of tomato seeds is split out, many other important vegetable types, like sweet pepper (*Capsicum* species) or cucumber are not distinguished, hampering a detailed analysis of the role of these crops in the trade between the two countries. Meanwhile, customs data on individual deliveries of seeds between the two countries mostly reports mixed shipments and only provides information on the total value per shipment, impeding an analysis of the different types of crops and their relevance.

As confirmed by anecdotal data as well as interview partners, tomato seeds play a crucial role, as well as sweet and hot peppers and cucumber.

#### 1.4.1 Imports to India from the Netherlands

Total vegetable seeds imports to India had a value of US\$ 101 million in 2020/21, an increase by 18.1% from the previous year. The Netherlands is the top origin with a value of US\$ 19.07 million or a share of 19%.

During the last 10 years, the volume and value of the vegetable seeds imported from the Netherlands to India showed fluctuations, but overall increased considerably (Figure 4). Seed imports were apparently less impacted by the COVID-19 pandemic than exports (see Figure 5).

Figure 4 Indian imports of vegetable seeds from the Netherlands, 2011/12 to 2020/21 300 30 ■ Volume ● Value 25 250 200 tonnes 150 15 million 100 10 50 5 2019/20

Source: Indian Ministry of Commerce and Industry (2022), "Export import data bank", online: https://tradestat.commerce.gov.in/eidb/default.asp, viewed in June 2022.

As mentioned, it is difficult to identify the crucial types of vegetable seeds imported from the Netherlands based on trade statistics. While cauliflower seeds seem to be important, the largest share of the trade is summarised under a generic category (Table 2). Shipment data suggests that cucumber and sweet pepper are among the types that account for considerable shares.<sup>30</sup>

Table 2 Indian imports of vegetable seeds from the Netherlands, 2019/20 and 2020/21

HS code	Type of coods	Volume (	tonnes)	Value (US\$ mln)	
HS code	Type of seeds	2019/20	2020/21	2019/20	2020/21
12099110	Cabbage seeds used for sowing	2.69	3.32	0.50	0.36
12099120	Cauliflower seeds used for sowing	7.77	10.58	2.24	2.26
12099130	Onion seeds used for sowing	2.30	1.99	0.26	0.09
12099140	Pea seeds used for sowing	0.01	-	0.00	-
12099150	Radish seeds used for sowing	0.14	0.20	0.00	0.01
12099160	Tomato seeds	0.02	0.03	0.11	0.18
12099170	Chilly seeds	4.72	0.41	3.42	1.21
12099190	Vegetable seeds for planting n.e.s.	151.50	141.60	7.85	14.95
	Total imports from NL			14.38	19.06
	Total Indian imports			85.42	100.89
	Share of NL in total Indian imports			16.8%	18.9%

Source: Indian Ministry of Commerce and Industry (2022), "Export import data bank", online: https://tradestat.commerce.gov.in/eidb/default.asp, viewed in June 2022.

#### 1.4.2 Exports to the Netherlands from India

Total vegetable seeds exports from India had a value of US\$ 98 million in 2020/21, an increase by 12.7% from the previous year. The Netherlands is India's top destination with a value of US\$ 16.29 million or a share of 17% (Table 3). However, this represented in turn only a small share of the total vegetable seeds imports by the Netherlands of less than 5%.

In 2020/21, the export value of tomato seeds from India to global destinations reached US\$ 23.3 million. The Netherlands was the top trading partner with US\$ 7.33 million (31% of total). The U.S. followed on the second place with US\$ 6.38 million. Other destinations accounted for much smaller shares.<sup>31</sup> Based on information from shipment data and interviews, the large category of not further categorised seeds is likely to contain especially sweet and hot peppers and cucumber.

Table 3 Indian exports of vegetable seeds to the Netherlands, 2019/20 and 2020/21

HS code	Type of coods	Volume (	(tonnes)	Value (US\$ mln)	
	Type of seeds	2019/20	2020/21	2019/20	2020/21
12099110	Cabbage seeds used for sowing	0.04	-	0.01	-
12099120	Cauliflower seeds used for sowing	0.01	0.01	0.00	0.00
12099130	Onion seeds used for sowing	7.92	-	0.22	-
12099140	Pea seeds used for sowing	-	-	-	-
12099150	Radish seeds used for sowing	-	-	-	-
12099160	Tomato seeds	17.99	18.12	8.22	7.33
12099170	Chilly seeds	0.61	0.71	0.31	0.37
12099190	Vegetable seeds for planting n.e.s.	88.43	62.82	8.80	8.59
	Total exports to NL			17.56	16.29
	Total Indian vegetable seed exports			86.77	97.79
	Dutch share in Indian exports			20.2%	16.7%

Source: Indian Ministry of Commerce and Industry (2022), "Export import data bank", online: https://tradestat.commerce.gov.in/eidb/default.asp, viewed in June 2022.

Exports of vegetable seeds from India to the Netherlands showed considerable fluctuations during the last ten years (Figure 5). While trade increased almost eight times by volume between 2014/15 and 2018/19, from 25.5 tonnes to 225.2 tonnes, it decreased by more than 60% from this high in the two years to 2020/21. This decrease is likely at least in part owed to the impacts of the COVID-19 pandemic, in the form of lockdowns and logistical issues. It is too early to judge whether this trend will turn around again.

Figure 5 Indian exports of vegetable seeds to the Netherlands, 2011/12 to 2020/21 300 30 ■ Volume • Value 250 25 200 connes 15 150 100 10 50 5 2017/18 2019/20

Source: Indian Ministry of Commerce and Industry (2022), "Export import data bank", online: https://tradestat.commerce.gov.in/eidb/default.asp, viewed in June 2022.

## 2

# Netherlands-based vegetable seeds companies trading with India

The Netherlands is home to some of the leading vegetable seeds producers globally. These include companies incorporated in the Netherlands as well as subsidiaries of foreign companies. Often trade with India is organised via Indian subsidiaries. The value of the trade differs considerably, depending on the type of relationship and business activity.

#### 2.1 Overview

Many companies are operating in the Netherlands trade vegetable seeds with India, albeit at varying frequencies. A list of ten important companies involved in this trade has been identified from shipment data (Table 4).

Table 4 Important Netherlands-based seed companies with links to India (value in US\$ 1,000)

NL-based	Davant	Ocumtum	NL imports from India			NL exports to India		
company	Parent	Country	2019	2020	2021	2019	2020	2021
Syngenta Seeds <sup>a</sup>	ChemChina	CN	5,278	4,080	4,095	0	7	160
Monsanto Holland	Bayer	DE	3,749	4,080	3,975	4	28	22
Rijk Zwaan	-	NL	2,114	2,723	1,054	2,603	2,527	3,315
Enza Zaden <sup>b</sup>	-	NL	3,304	2,306	1,863	0	3	24
Vilmorin NL / Hazera	Limagrain	FR	903	985	1,085	-	128	47
BASF Vegetable Seeds	BASF	DE	-	250	484	40	861	204
Axia Vegetable Seeds	VoloAgri	US	350	520	422	-	-	-
Bejo Zaden	-	NL	221	-	1	152	389	-
Ikasido Global Group	-	NL	-	70	287	-	-	-
East West International	-	NL	49	8	99	-	-	17

Notes: Data should be considered as approximates; 0 represents values below 0.5 million; values may include some flower seeds.

aSyngenta AG, the direct parent of Syngenta Seeds, is owned by ChemChina; bincl. Vitalis Biologische Zaden;

Source: Indian shipment data, available to Profundo.

As most of the shipments contain mixed loads and can only be analysed based on value, this list should not be treated as a ranking, but rather a selection of important companies. Due to varying prices per type of seed, the traded volumes may show a different pattern. Especially the captured

exports to India have often a low value, which is likely linked to the supply of small volumes of seeds for testing or propagation.

The ten companies can be roughly split into two groups, with Syngenta, Monsanto, Rijk Zwaan, Enza Zaden and the Dutch Limagrain subsidiaries important vegetable seeds from India with a high annual value of at least US\$ 1 million in recent years. Rijk Zwaan forms an exception in also showing high values of exports of vegetable seeds from the Netherlands to India. Due to the multiple impacts of the COVID-19 pandemic since 2020, it is difficult to interpret variations in trade flows during the presented three years. The trade relationships by the other five companies are considerably smaller and show also more fluctuations.

The following sections provide short company profiles. Where information is available, grants under Dutch government programmes are included in the company profiles. No mentioning of such grants does not necessarily mean that they were not received but may be due to limited reporting requirements for some of the companies (simplified financial statements).

#### 2.2 Syngenta Seeds

#### 2.2.1 Syngenta Group (Switzerland / China)

Syngenta is a multinational company based in Switzerland, with about 30,000 employees and activities in more than 90 countries. The Syngenta Group was bought in 2017 by ChemChina. It is a private company, with plans to go public in 2022. The subsidiary Syngenta Seeds, headquartered in the U.S., develops and produces flower, vegetable, and other seeds, as well as herbicides and pesticides. It has a portfolio of 30 vegetable seeds, and more than 2,500 varieties, launching over 150 new varieties of vegetable seeds annually. In 2020, Syngenta was the third largest producer of vegetable seeds globally with a market share of 9%.

In 2021, Syngenta's total group sales amounted to US\$ 28.2 billion, +23% compared to 2020. Syngenta Seeds' sales grew 24% to USD 4.1 billion in 2021. Vegetable seeds saw growth in all regions (7% increase in sales globally).<sup>34</sup>

#### 2.2.2 Syngenta Seeds (Netherlands)

Net turnover by Syngenta Seeds amounted to € 386.2 million in 2020. The company reported government grants for R&D with a value of € 3.49 million in 2020 (€ 3.8 million in 2019).<sup>35</sup>

The company has several Dutch branches. It develops, produces, and sells vegetable and flower seeds, young plants and unrooted cuttings, and sells corn, wheat and cereal seeds. About two-thirds of the sales are related to Syngenta group companies globally, while the remaining third are sales to domestic and foreign third-party customers. In 2020, around half of the customers were based in Europe, including 9% in the Netherlands, while the other 50% were sales to customers outside of Europe. Seeds are sourced mainly from Syngenta Group farms in the Netherlands, Israel, Kenya, Ethiopia, and Guatemala.<sup>36</sup> India is not named in the 2020 Annual Report.

The Dutch company offers more than 200 varieties of vegetable seeds for 13 different crops. This includes tomato (39 varieties), lettuce (38 varieties), brussels sprouts (37 varieties), cauliflower (33 varieties) and other vegetables like savoy cabbage, spinach, onions, and peas.<sup>37</sup>

#### 2.2.3 Syngenta India

In India, Syngenta has been active since 2000. It operates research stations, seed production sites, R&D facilities and laboratories across the country (Figure 6).<sup>38</sup> It markets 22 varieties of vegetable seeds including hybrid tomato, sweet pepper, cucumber, cabbage and cauliflower seeds.<sup>39</sup>

Chandigarh (0)

Karnal

Delhi (0)

Aurangabad

Pune

Goa (Global
Supply and R&T)

Chanai (1)

Chandigarh (0)

Kolkata (0)

Nuthankal

Tanaku

Kumbakonam

Chanai (1)

Figure 6 Facilities of Syngenta India

Syngenta India (n.d.), "Research and Development", viewed in June 2022.

Plants

Head Office (HO)

Chennai (0) Bengaluru

Office (0)

R&D Farms

#### 2.2.4 Indian-Dutch vegetable seeds trade

Ranebennur

Ramapuram

According to trade data, Syngenta Seeds in the Netherlands received vegetable seeds with a value of US\$ 4.1 million from India in 2021, making it the biggest recipient of vegetable seeds from India. All shipments originated from Syngenta India, including tomato, sweet pepper and cucumber, among others.<sup>40</sup>

The value of vegetable seeds shipped to India from the Netherlands by Syngenta Seeds reached around US\$ 160,000 in 2021, considerably more than in previous years. Included was a mix of vegetable seeds and seed samples for Syngenta and for the National Bureau of Plant Genetic Resources, such as sweet pepper, cabbage, and tomato.<sup>41</sup>

Some of the Indian trading companies that are part of the Syngenta Flowers India distribution network are also engaged in vegetable seeds trade. The network includes Liebigs Agro Chem, V. D. Pareks Seeds, Namdhari Seeds, Swift Agro Chemicals & Nutrients, and Varsha Enterprises. 42 Liebigs Agro Chem trades flower seeds and vegetable seeds, while Namdhari Seeds according to its website only trades vegetable seeds.

#### 2.3 Monsanto Holland

#### 2.3.1 Bayer (Germany)

Monsanto Holland is since 2018 part of Bayer, a multinational company headquartered in Germany specialising in crop science (including pesticides and herbicides, seeds, and plant traits), as well as pharmaceuticals and consumer health products. In 2021, the Bayer Group comprised 374 consolidated companies in 83 countries. In fiscal year 2021, the Group employed around 100,000 people and had sales of € 44.1 billion.<sup>43</sup> Bayer was the second largest actor by sales in the global vegetable seeds market in 2020, with a market share of 10%.<sup>44</sup>

#### 2.3.2 Monsanto Holland (Netherlands)

Monsanto Holland reported a net turnover of € 327.3 million in 2020. The company received grants and subsidies relating to R&D expenses with a total value of € 2.70 million in 2020 (2019: € 3.88 million). These included an RDA part (grants on expenses) as well as a WBSO grant for R&D.<sup>45</sup>

Monsanto Holland is principally dealing with the vegetable seeds business of Monsanto for the Europe, Middle East and Africa region (EMEA), developing, growing and commercialising vegetable seeds. Key crops are tomato, pepper, cucumber, and melon. The seeds are sold across the EMEA region and beyond. Key customers are growers, plant raisers and local distributors.<sup>46</sup>

#### 2.3.3 Bayer CropScience India

In India, Monsanto India merged with Bayer CropScience in September 2019. While becoming part of Bayer's product portfolio, Monsanto products have kept their brand names. <sup>47</sup> Bayer CropScience's activities are focused on the breeding and production of vegetable seeds including tomato, cabbage, cauliflower, and cucurbits, as well as seeds for field crops (rice, cotton, oilseeds, millet). <sup>48</sup> Bayer CropScience acquired the vegetable seeds company SeedWorks in 2015. <sup>49</sup>

Bayer has ten locations in India, including an insecticide production location in Vapi. <sup>50</sup> In May 2022, Bayer Crop Science announced plans to introduce hybrid varieties of high-yielding and disease-resistant vegetable seeds into the Indian market, namely sweet corn, cabbage, cucumber, watermelon, and onion seeds. In recent years, the company released already hybrid varieties of tomato, pepper, okra and gourd. <sup>51</sup>

#### 2.3.4 Indian-Dutch vegetable seeds trade

Important types of seeds traded by Monsanto between the two countries include especially tomato and sweet pepper. Hot pepper and cauliflower seeds are also showing up in trade records.

In 2021, exports of vegetable seeds from Monsanto in India to Monsanto Holland had a value of US\$ 4.0 million, similar to previous years. In the opposite direction, Monsanto Holland exported vegetable seeds with a much smaller value of US\$ 22,000 in 2021.<sup>52</sup>

#### 2.4 Rijk Zwaan

#### 2.4.1 Rijk Zwaan Holding (Netherlands)

Rijk Zwaan is a family-owned international vegetable breeding company based in De Lier, Netherlands. It has about 3,600 employees and 37 subsidiaries around the globe. Around half of its employees work in the Netherlands, in either its head office or the R&D facility in Fijnaart.<sup>53</sup> In 2020/21, the company generated a net turnover of € 498 million. Out of this total, 43% were generated in Europe. The Netherlands accounted for 7%. The remaining 57% were generated outside of Europe. Under other operating income, the company reports R&D grants in the Netherlands with a value of € 16.7 million in 2020/21 (€ 16.2 million in 2019/20).<sup>54</sup>

Rijk Zwaan is principally engaged in the breeding of vegetable varieties, as well as the production and sale of vegetable seeds for the professional horticulture market globally. It is the largest European pure vegetable seed player. With a market share of 7%, Rijk Zwaan belonged to the top four vegetable seed companies in the world by sales in 2020. The company offers more than 1,500 different varieties of vegetables. 56

#### 2.4.2 Rijk Zwaan India Seeds

Rijk Zwaan Holding owns 100% of the shares in Rijk Zwaan Zaadteelt en Zaadhandel as well as 100% of the shares in Rijk Zwaan Participations. The former holds a 100% interest in an Indian subsidiary in Karnataka in India, Rijk Zwaan India Seeds.<sup>57</sup> Rijk Zwaan India was founded in 2011 and has evolved from a small office in Bangalore to its current distribution site in Garakahalli. It offers a wide variety of vegetable seeds.<sup>58</sup>

#### 2.4.3 Indian-Dutch vegetable seeds trade

In recent years, the value of a broad mix of vegetable seeds exported from India to Rijk Zwaan in the Netherlands decreased considerably. While Rijk Zwaan imported seeds with a value of more than US\$ 2.0 million in 2019 and 2020, this value dropped to US\$ 1.0 million in 2021. Only one consignment of seeds from Rijk Zwaan India Seeds is reported in the three-year period but destined to a different company. Meanwhile, the shipments to Rijk Zwaan Production in the Netherlands came from four Indian companies: Ananta Vegetable Seeds; Genuine Seeds; Khadakpurna Seeds; and Painganga Seeds. 59

According to shipment data, the value of vegetable seeds imported to India from the Netherlands by Rijk Zwaan totalled US\$ 3.3 million in 2021. This was a significant increase from previous years, where annual shipments had a value of around US\$ 2.5 million in 2019 and 2020. A wide variety of seeds included among others aubergine, lettuce, cucumber, sweet pepper, tomato and red beet.<sup>60</sup>

#### 2.5 Enza Zaden

#### 2.5.1 Enza Zaden (Netherlands)

Enza Zaden, headquartered in Enkhuizen, the Netherlands, is a vegetable-breeding company, that develops, produces, and sells around 1200 vegetable varieties of more than 30 international and local crops. These include sweet peppers, tomatoes, cucumbers, lettuce, bitter gourd, and bird's eyes chillies. Every year, the company launches around 100 new vegetable varieties on the global market. Enza Zaden has more than 2000 employees, 45 subsidiaries and three joint ventures in 25 countries. It works with networks of distributors in the countries where it does not have any branches.<sup>61</sup> Enza Zaden reported net revenues of € 367.5 million in 2021.<sup>62</sup>

Enza Zaden has a subsidiary called Vitalis Organic Seeds, which is located in Voorst and a 100% organic vegetable-breeding company. Vitalis offers at least 22 vegetable crops, including different types of lettuces, cabbage crops, root crops, tomato, cucumber, etc. <sup>63</sup> Enza Zaden also has a participation in KeyGene, based in Wageningen and founded by Enza Zaden (together with Rijk Zwaan, Vilmorin & Cie and Takii), a biotechnological company with 150 employees, specialised in vegetable genetics. KeyGene has locations in the Netherlands, the USA, and India. Its representation office in India is located in Hyderabad in the state of Telangana and intends to "[...] serve the vast and growing Indian agro food market with valuable non-GM solutions [non-genetically modified] for improved crops." <sup>64</sup>

#### 2.5.2 Enza Zaden India

Enza Zaden India Private Limited is an unlisted company, located in Pune in the west-central state of Maharashtra. Pune is an important vegetable production region and India's tomato-breeding hub. The company has a commercial facility and a R&D station.<sup>65</sup>

#### 2.5.3 Indian-Dutch vegetable seeds trade

In 2021, Enza Zaden India exported vegetable seeds for a value of around US\$ 47,000 from India to its Dutch counterpart, a higher value than in previous years. The value of Indian seed imports by Enza Zaden in the Netherlands originating from other companies was much higher. Genuine Seeds shipped vegetable seeds for a value of around US\$ 600,000 in 2020 and 2021. Namdhari Seeds supplied seeds with a value of around US\$ 215,000 in 2021, a significant drop from previous years. These shipments included among other tomatoes, sweet pepper and cucumber. For its organic seeds subsidiary, Vitalis, exclusively deliveries from Namdhari Seeds are reported, including pumpkin and cucumber seeds with an annual value of around US\$ 1 million in recent years. 66 Namdhari Seeds is a leading Indian hybrid seed company with international activities. 67

The values of shipments between the company entities in the opposite direction totalled US\$ 24,000 in 2021, which was an increase from previous years. Important seeds are tomato, cucumber, and pumpkin. Enza Zaden in the Netherlands also exported small batches of mostly tomato and cucumber seeds to Genuine Seeds Private and Namdhari Seeds.<sup>68</sup>

#### 2.6 Vilmorin Nederland / Hazera

#### 2.6.1 Groupe Limagrain (France)

The Dutch Fields Company and Hazera show up as recipients of vegetable exports from India. They are both subsidiaries of the seed producer Vilmorin & Cie (France).<sup>69</sup> Vilmorin & Cie was founded in 1743 and is a publicly traded company principally owned by the agro-industrial

cooperative Groupe Limagrain, which states to be the largest plant breeding and seed company in the European Union.

Vilmorin & Cie has operations in vegetable seeds, field seeds, and garden products. The vegetable seed operations are in turn organised under various subsidiaries: Hazera, HM.Clause, Vilmorin, and Vilmorin-Mikado (Figure 7). For the financial year ending June 30, 2021, vegetable seed sales reached € 700.6 million. Vilmorin & Cie's product line-up comprises more than 80 different crops, for around 40 of which the company develops research programs. These crops include among others tomato, sweet and hot pepper, onion, carrot, cucumber, lettuce, cabbage, and cauliflower.<sup>70</sup>

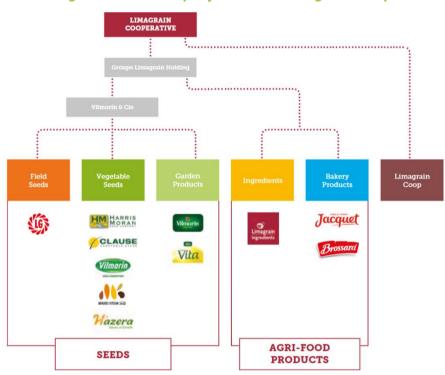


Figure 7 Company structure Limagrain Group

Source: Limagrain (2022), 2021 Corporate Social Responsibility Report, p. 18.

#### 2.6.2 Hazera Seeds / Dutch Fields (Netherlands)

In the Netherlands, Vilmorin acquired Nickerson Zwaan, which became Hazera Seeds. Hazera Seeds, The Dutch Fields Company, Vilmorin Nederland, and Limagrain Nederland all have registrations at the same address in Rilland. Hazera Seeds is headquartered in Made, in Brabant, and has two additional research stations in Rilland and Warmenhuizen. It produces various varieties for 19 vegetable crops,<sup>71</sup> with sales mostly coming from Brassica seeds for fresh local produce. Hazera does not produce seeds in India for international sales.

#### 2.6.3 HM.Clause (India)

Vilmorin's Business Unit in India is called HM.Clause. It produces various vegetable seeds, including varieties of carrot, tomato, cauliflowers, hot pepper, onions and beetroot.<sup>72</sup> HM.Clause has a quality control laboratory in Hyderabad, and a storage and forwarding centre in Pune (Maharashtra), both opened in 2021. Vilmorin & Cie acquired several Indian companies over the years, including Bisco Bio Sciences, today Limagrain India, a key Indian player in corn seed.<sup>73</sup>

#### 2.6.4 Indian-Dutch vegetable seeds trade

Vegetable seed trade from India to the Netherlands mentions Vilmorin and The Dutch Fields Company. The value was quite stable at around US\$ 1 million between 2019 and 2021. Important

species were tomato, sweet pepper and melon. Next to the company's own subsidiary, HM Clause India, Indian companies Sagi Seeds and Genuine Seeds are important suppliers.<sup>74</sup>

From the Netherlands to India, Hazera Seeds exported seeds with a value of US\$ 47,000 in 2021, less than half of the previous year's value. The recipient was its counterpart HM.Clause in India.<sup>75</sup>

#### 2.7 BASF Agricultural Solutions

#### 2.7.1 BASF Group (Germany)

BASF's vegetable seeds business is part of BASF. BASF is a multinational company consisting of six segments including Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care, Agricultural Solutions. Agricultural Solutions offers seeds and traits, seeds treatment, as well as fungicides, insecticides, and herbicides, among other crop treatment products. In 2021, Agricultural Solutions sales amounted to €8.2 billion (€7.7 billion in 2020) out of total BASF sales of €78.6 billion.<sup>76</sup>

#### 2.7.2 BASF Vegetable Seeds (Netherlands)

BASF Vegetables Seeds offers under the Nunhems brand around 1,200 varieties of 24 vegetable crops. These crops include tomato, carrot, leek, lettuce, pickling cucumber, among others. Nunhems Netherlands B.V. reported a revenue of € 284 million in 2020.<sup>77</sup>

#### 2.7.3 BASF Vegetable Seeds India

In India, BASF Vegetable Seeds is active for more than 25 years now, selling 145 commercial varieties of diverse crops, including gourd, carrot, hot pepper, cucumber, and melon. BASF Vegetable Seeds' business has R&D stations in Bengaluru and Karnal, a processing facility at Hyderabad, and Sales and corporate office in Gurgaon.

#### 2.7.4 Indian-Dutch vegetable seeds trade

Exports of vegetable seeds to BASF Vegetable Seeds in the Netherlands are reported at a value of US\$ 484,000 in 2021, around twice the 2020 value. These include tomato, watermelon, and hot pepper seeds, among others.<sup>78</sup>

From the Netherlands, BASF Vegetable Seeds exports especially tomato, sweet pepper, and cucumber seeds. Its values reached US\$ 204,000 in 2021, down from US\$ 860,000 in 2020.<sup>79</sup>

#### 2.8 Axia Vegetable Seeds

#### 2.8.1 Axia Vegetable Seeds (Netherlands)

Axia Vegetable Seeds, founded in 2010 and headquartered in Naaldwijk is a vegetable seed breeding company. It is 76% owned by the U.S.-based VoloAgri Group. Axia mainly develops vegetable seeds for tomatoes, peppers and cucumbers and serves large growers and distributors globally. Seeds are sourced from large suppliers in Thailand, Guatemala and the Netherlands.<sup>80</sup>

Axia has around 150 employees, and has breeding stations in the Netherlands, Spain, Italy, Turkey and China, as well as a testing station in Sicily in Italy. According to its site, it sells 12 tomato segments, and each counts several varieties, which are grown in more than 70 countries.<sup>81</sup> In the Netherlands, Axia focuses on tomato seeds development, while cucumber, eggplant, sweet pepper, and courgette seeds are developed in the Mediterranean countries like Turkey and Spain.

The sales network in North America is called US Agriseeds, which focuses more on open air seed breeding. US Agriseeds is linked to the Indian seed company SeedWorks (part of Bayer CropScience, see section 2.3.3) which is engaged in the research, development and marketing of hybrid seeds of vegetables, rice and cotton, among others. The vegetable seeds they offer vary from tomato, cucumber, okra, and different varieties of gourds to roots crops and cabbage, and these are distributed through an extensive network of distributors throughout India.<sup>82</sup>

#### 2.8.2 Indian-Dutch vegetable seeds trade

Axia Vegetable Seeds has trade relationships with Plantgene Seeds and Sagi Seeds in India. In trade with Sagi Seeds, shipments included among others cucumber and sweet pepper seeds. In 2021, the value of shipments reached US\$ 422,000, higher than in previous years.<sup>83</sup> Sagi Seeds offers multiplication of hybrid vegetable seeds.<sup>84</sup>

Trade with Plantgene Seeds consisted of cucumber, different types of pepper, and tomato seeds. The annual value of shipments dropped to US\$ 3,000 in 2021, down from US\$ 394,000 in 2020. Plantgene Seeds is a contract producer of a variety of hybrid vegetable seeds for customers around the world. Shipment data for the period 2019 to 2021 does not show records of Axia Seeds sending seeds to India from the Netherlands.

#### 2.9 Bejo Zaden

#### 2.9.1 Bejo Groep (Netherlands)

Bejo Zaden is part of Bejo Groep, a family-owned company (1,900 employees, of whom about 700 based in the Netherlands) which is organised under Bejo Finance, breeding, producing, and selling more than 1,200 different varieties of about 50 vegetable crop seeds. This includes an organic assortment of 192 varieties of 45 crops. The company specialises in onion seeds.

Bejo is headquartered in Warmenhuizen, the Netherlands, and has branches in more than 30 countries in Europe, the Americas, Oceania, Asia, and Africa. Production stations are located in the Netherlands, Guatemala, India, Zambia, South-Africa, Thailand, and Vietnam and R&D / breeding stations in both Guatemala and Vietnam.<sup>87</sup> Reportedly, all seeds, regardless of where they are grown, go to Bejo in the Netherlands for quality control, calibration, processing and packing.<sup>88</sup>

In 2020/21, Bejo Zaden generated a net turnover of € 241.3 million (€ 249.1 million in 2019/20). These included subsidies of € 6.05 million (€ 5.67 million in the previous year) under the WBSO programme for R&D (see section 4.1.10).<sup>89</sup> The parent Bejo Finance reported consolidated sales of € 339.8 million in the same year.<sup>90</sup>

Bejo has signed various license agreements with, among others, Rijk Zwaan and Limagrain, for the exchange of non-exclusive licenses for patented properties in vegetables. Bejo is one of the fouders - together with Rijk Zwaan and Syngenta and other breeding companies - of the International Licensing Platform Vegetable (ILP). The ILP, seated in The Hague, claims to make "[...] innovations in vegetables widely available to breeders through an "open access" approach that offers members access to patents on properties in vegetables on fair and reasonable terms."

#### 2.9.2 Bejo Seeds India

In India, Bejo Zaden is based in Bangalore, offering several varieties of in total 25 different vegetable crops, including cucumber, carrot, cauliflower, onions, sweet pepper, and red beet. 92 Bejo Groep sold its 48.78% holding in Beej Sheetal Research in financial year 2021/22.93

#### 2.9.3 Indian-Dutch vegetable seeds trade

In shipments from India to the Netherlands, Bejo only shows up with one shipment of hybrid onion seeds in 2019, supplied by its associate Beej Sheetal Research with a value of US\$ 221,000. In addition, some small deliveries of sweet pepper and watermelon seeds are reported, with values below US\$ 1,000.94 These were supplied by Bench Bio, a company focusing on using a non-transgenic method called TILLING (Targeting Induced Lesions in Genome).95

No deliveries from the Netherlands to India by Bejo Zaden are reported in shipment data in 2021. During 2019 and 2020, small deliveries to Bejo Seeds India are reported, consisting of samples for testing for a wide variety of vegetables. According to the data, Bejo Zaden mostly shipped seeds to AM Orgo Tech in India, with values of around US\$ 387,000 in 2020 and US\$ 152,000 in 2019. These deliveries consisted of carrot and red beet seeds.<sup>96</sup>

#### 2.10 Ikasido Global Group

#### 2.10.1 Ikasido Global Group (Netherlands)

Ikasido Global Group is a company active in the field of breeding, selection, screening and marketing of genetic material of flowers, plants and vegetables. The company is located in Wateringen and active in numerous countries around the globe. International activities include the subsidiary Kitano Seeds.<sup>97</sup>

Ikasido's vegetable seeds catalogue comprises different varieties of fifteen crops, including cucumber, tomato, and sweet pepper. 98 For Kitano, its catalogue comprises sixteen crops. 99

#### 2.10.2 Indian-Dutch vegetable seeds trade

The value of vegetable seed imports from India destined for Ikasido in the Netherlands totalled US\$ 287,000 in 2021, up from US\$ 70,000 in 2020. These deliveries are all reported as tomato seeds, shipped by four Indian companies: Namdhari Seeds; Novel Seeds; Nurture Crop Science; and Plantgene Seeds. 100

No shipments by the company from the Netherlands to India were reported in shipment data.

#### 2.11 East-West International

#### 2.11.1 East-West International (Netherlands)

East-West International is registered in Enkhuizen with a logistical hub facilitating seed shipments between different tropical regions. The company is itself not producing or selling seeds. While formally a Dutch company, its headquarters are in Thailand, one of its main markets in Asia. The total group had 2,226 employees in 2020, of which only four in the Netherlands. Most activities take place in Asia. It has more than 20 subsidiaries, including in India (East West Seed India), Thailand, the Philippines, as well as other Asian, African, and South American countries.

The company names as its principal activity the provision of high-quality tropical vegetable seeds to smallholder farmers, characterised by high productivity and built-in, non-GM, disease resistances. It lists 80 crops and more than 700 varieties offered to farmers. Its top-10 crops are bitter gourd, cucumber, onion, tomato, pumpkin, sweet corn, hot pepper, waxy corn, ridge gourd and yard long bean.<sup>101</sup>

In 2020, East-West International reported revenues of US\$ 177.9 million. The company received a grant under the Dutch PSOM programme (later called PSI, Private Sector Investment Programme). This subsidy programme was ended as of 2015, however, the East-West grant was not amortized yet in 2020 (US\$ 446,000 outstanding, of which US\$ 77,000 with East West Seeds India). 102

#### 2.11.2 East West Seed India

East West Seed India is one of the subsidiaries of East-West International. The company had 262 staff members in 2020. 103 Key destinations of vegetable seed shipments from India include various tropical countries, including Bangladesh, Thailand, Nepal, the Philippines and Myanmar as the most frequent destinations. 104

#### 2.11.3 Vegetable seeds trade

Shipment data shows records of deliveries that are further forwarded to other East West subsidiaries. In 2021, the value of trade via the Netherlands reached US\$ 99,000.<sup>105</sup> The company does not deal in seeds for temperate climate zones.

## 3

## CSR policies of vegetable seed companies

The analysis of the voluntary CSR policies of the companies profiled in Chapter 2 focusses on the alignment with fundamental human and labour rights as defined in internationally accepted guidelines by the United Nations (UN), the International Labour Organisation (ILO), and the OECD. It shows that the vegetable seed sector is not yet fully taking responsibility to mitigate CSR risks in their supply chains.

#### 3.1 Methodology

The voluntary Corporate Social Responsibility (CSR) policies<sup>a</sup> of the ten Netherlands-based vegetable seeds companies identified in Chapter 2 were assessed for their alignment with the human rights and labour rights provisions included in the United Nations' Guiding Principles on Business and Human Rights (UNGPs), the ILO Fundamental Conventions, and the OECD Guidelines for Multinational Enterprises.

All publicly available CSR policies were retrieved from the companies' websites for the analysis. Profundo contacted companies that had not published CSR policies to request documentation that could be used for the analysis. Moreover, all companies were invited to participate in an interview. The purpose of these interviews was to verify Profundo's findings and to capture unpublished information about the companies' CSR efforts. Only two of the companies accepted to participate in an interview and wished to remain anonymous.<sup>b</sup>

The policy frameworks that were considered in the CSR policy analyses are presented in the following subsections. A list of questions that were used in analysing the CSR policies is provided in Appendix 1.

#### 3.1.1 UN Guiding Principles on Human Rights

The United Nations defines "Human Rights" as rights inherent to all human beings, regardless of race, sex, nationality, ethnicity, language, religion, or any other status. Human rights include the right to life and liberty, freedom from slavery and torture, freedom of opinion and expression, the right to work and education, and many more. Everyone is entitled to these rights, without discrimination. <sup>106</sup>

The Corporate Responsibility to Respect Human Rights<sup>107</sup> is one of the three pillars of the United Nations Guiding Principles on Business and Human Rights (UNGPs). It provides outlines for businesses to implement the United Nations "Protect, Respect and Remedy" framework on the issue of human rights. This framework comprises a set of principles that provide guidelines for companies to act with due diligence to avoid infringing on the rights of others and addressing harms that do occur. It is a global standard of expected conduct acknowledged in virtually every voluntary and soft-law instrument related to corporate responsibility.<sup>108</sup>

<sup>&</sup>lt;sup>a</sup> CSR policies is used here to include all kinds of corporate regulatory frameworks and standards governing companies' sustainability efforts. This may include, but is not limited to: (Supplier) Codes of Conduct, Human Rights Policies, Environmental and Human Rights Due Diligence Policies, and Sustainability Reports.

b The interviews were conducted via video conference. The interview duration varied from 45 to 60 minutes.

The analysis will use the official Interpretive Guide issued by the UN Office of the High Commissioner for Human Rights for implementers of the UNGP. The Interpretive Guide covers the substance of the UNGPs that address the corporate responsibility to respect human rights. These consist of five foundational principles and eleven operational principles:<sup>109</sup>

- Foundational Principles: (Guiding Principles 11; 12; 13; 14 and 15)
- Operational Principles:
  - Policy Commitment (Guiding Principle 16)
  - Human Rights Due Diligence (Guiding Principles 17; 18; 19; 20 and 21)
  - Remediation (Guiding Principles 22; 29 and 31)
  - Issues of Context (Guiding Principles 23 and 24)

To implement a systematic policy evaluation, the analysis will group the sixteen principles in four main categories and a total of 19 provisions, namely:

#### 1. Foundational Principles and Policy Commitment:

- Have a policy that states commitment to respect HR (Guiding Principle 11; 15a; 16)
- Policy refers to international standards (Guiding Principle 12)
- Policy states responsibility to prevent and mitigate (Guiding Principle 13a; 13b)
- Policy applies to all stakeholders (Guiding Principle 14)

#### 2. Human Rights Due Diligence:

- Human Rights Due Diligence process is in place to identify, prevent, mitigate, assess, and remediate impacts (Guiding Principle 15b; 17a)
- Human Rights Due Diligence process is on-going (Guiding Principle 17c)
- Human Rights Due Diligence process accounts for size of business and nature of risks (Guiding Principle 17b)
- Human Rights Due Diligence process applies to all stakeholders (Guiding Principle 18a)
- Human Rights Due Diligence process involves consultation with affected groups (Guiding Principle 18b)
- Findings from Human Rights Due Diligence process is integrated in planning (Guiding Principle 19)
- There is monitoring of the Human Rights Due Diligence process (Guiding Principle 20)
- Human Rights Due Diligence reports are published (Guiding Principle 21)

#### 3. Remediation:

- Remediation takes place through a legitimate process in alignment with national, international or customary law (Guiding Principle 22; 31a)
- Establishes or participates in an effective operational-level grievance mechanism (Guiding Principle 29; 31)
- Grievance mechanism is based on dialogue/engagement (Guiding Principle 31h)
- Grievance mechanism is legitimate, accessible, clear, equitable, and transparent (Guiding Principle 31a; 31b; 31c; 31d, 31e)
- Grievance mechanism is a source of continuous learning (Guiding Principle 31g)

#### 4. Context:

- Business activities comply with national law and international standards (Guiding Principle 23a; 23b;23c)
- Actions are prioritised to address most severe Human Rights violations (Guiding Principle 24)

#### 3.1.2 ILO Fundamental Conventions

The ILO Declaration on Fundamental Principles and Rights at Work , was adopted in 1998 and amended in 2022. The Declaration affirms the obligations and commitments of governments, employers' and workers' organisations to respect, promote, and realise basic human values, namely:<sup>110</sup>

- freedom of association and the effective recognition of the right to collective bargaining;
- the elimination of all forms of forced or compulsory labour;
- the effective abolition of child labour;
- the elimination of discrimination in respect of employment and occupation; and
- a safe and healthy working environment.

The five principles above and have been expressed and developed in the form of specific rights and obligations in eight Conventions recognised as fundamental both inside and outside the ILO. These are:<sup>111</sup>

- 1. Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)
- 2. Right to Organize and Collective Bargaining Convention, 1949 (No. 98)
- 3. Forced Labour Convention, 1930 (No. 29)
- 4. Abolition of Forced Labour Convention, 1957 (No. 105)
- 5. Minimum Age Convention, 1973 (No. 138)
- 6. Worst Forms of Child Labour Convention, 1999 (No. 182)
- 7. Equal Remuneration Convention, 1951 (No. 100)
- 8. Discrimination (Employment and Occupation) Convention, 1958 (No. 111)

#### 3.1.3 OECD Guidelines for Multinational Enterprises

The OECD Guidelines for Multinational Enterprises (OECD Guidelines) are recommendations developed by the OECD governments for multinational enterprises operating in or from adhering countries. The OECD Guidelines are voluntary and not legally enforceable. Nevertheless, some subjects covered may be regulated by national law or international commitments. Multinational Enterprises are expected to fulfil the recommendations set out in the Guidelines and the countries adhering to the Guidelines make a binding commitment to implement them. 112

The research limits the analysis of the adherence of the policies to two chapters of the OECD Guidelines for Multinational Enterprises. The two chapters are: Human Rights (chapter IV); and Employment and Industrial Relations (chapter V). 113

The contents of the OECD Guidelines chapters on Human Rights and on Employment and Industrial Relations are largely comparable to the UNGP and the ILO Fundamental Conventions, as shown in Table 5.

Table 5 Provisions in the OECD Guidelines which are comparable to the UNGP and ILO FC

OECD Guidelines	Comparable provisions in UNGP and ILO FC		
Have policy commitment to respect HR	Have policy that states commitment to respect HR (UN CRHR; Foundational Principles and Policy Commitment)		
Seek ways to avoid, prevent or mitigate HR violations that link to their business	Policy states responsibility to prevent and mitigate (UN CRHR Foundational Principles and Policy Commitment)		
Address the HR violations when they occur	HR DD process is in place to identify, prevent, mitigate, assess and account for impacts (UN CRHR; Human Rights Due Diligence)		

OECD Guidelines	Comparable provisions in UNGP and ILO FC
Conduct HR DD appropriate to their size and intensity of their risk	HR DD process accounts for size of business and nature of risks (UN CRHR; Human Rights Due Diligence)
Provide cooperation through legitimate process for remediation	Through legitimate process: (UN CRHR; Remediation)
Respect the right of workers to join trade union of their own choosing	Freedom of Association and Protection of the Right to Organise Conventions, 1948; (ILO Convention No. 87)
Contribute to the effective abolitions of child labour.	Worst Forms of Child Labour Convention, 1999; (ILO Convention No. 182)
Contribute to the elimination of all forms of forced labour	Forced Labour Convention, 1930; (ILO Convention No. 29); Abolition of Forced Labour Convention, 1957 (ILO Convention No. 105)
No discrimination against worker based on race, colour, sex, religion, political opinion, social origin etc.	Abolition of Forced Labour Convention, 1957 (ILO Convention No. 105)
Standards of employment and industrial relation not less favourable to comparable employer in the country, and when none exist provide the best possible wage, benefit and conditions relevant to the economic position of the company	Equal Remuneration Convention, 1951 (ILO Convention No. 100)
No intimidation caused by worker exercising a right to organize	Freedom of Association and Protection of the Right to Organise Conventions, 1948; (ILO Convention No. 87)

The OECD Guidelines chapter on Industrial Relations provides additional provisions that are not covered by the ILO Fundamental Conventions, which are on 'actively advanced exercise on freedom of association'. The OECD Guidelines' provisions on actively advanced exercise on freedom of association are:

- Engage with trade union or representative organisation for collective bargaining, negotiations for agreements
- Provide facilities for trade unions in the negotiation of a collective agreement (e.g., necessary assistance, fair information, etc.)
- Promote consultations between employers, workers, and representatives on matters of mutual concern
- Take adequate steps to ensure Occupational Safety and Health (OSH) in their operations; and
- Mitigate practicable adverse effects when considering changes in their operations, especially in closure of entity that involves collective layoffs

Meanwhile, the UNGP have more detailed provisions than the OECD Guideline chapter on Human Rights, for companies to conduct Due Diligence and remediations for human rights and/or rights of surrounding communities.

#### 3.1.4 A note on the gender-responsiveness of regulatory frameworks and of CSR initiatives

Gender-responsive due diligence (GRDD) refers to the recognition that rightsholders are not a homogeneous group, and that abuses in supply chains may affect certain people differently. 114 This is often the case for women compared to men, but also particularly for groups and individuals that face multiple forms of discrimination and marginalisation, such as Indigenous peoples, migrants, people with non-normative sexual and gender identities, people from religious or language minorities and other forms of identity. Spatial and temporal contexts also determine the

degree to which different groups can be at heightened risk of marginalisation, and these are further influenced by geographical, cultural, societal, and sectoral or industry-specific factors. Against this background, due diligence can prevent companies from overlooking certain groups of rightsholders and create accountability for perpetuating gender-based discrimination and inequality.

In light of the findings of the investigations by the National Alliance of Agriculture and Allied Workers Union (NAAWU)<sup>115</sup> on the characteristics and labour conditions in Indian seed production that unveiled precarious working conditions (i.e., salaries below the statutory minimum, modern slavery, lack of written contracts, and rampant child labour) affecting women more than men; this study uses a gender perspective to analyse the extent to which the Netherlands-based seeds companies' CSR policies respond to these gender-based disparities. This perspective follows the recommendations of women's rights advocates on gender-responsive due diligence and seeks to address the shortcomings of the regulatory frameworks. These shortcomings are summarised below.

#### Regulatory frameworks

Current due diligence tools that are part from a regulatory framework fall short on providing clear guidance on gender-responsiveness. The UNGPs, for example, do not address gender actively other than calling for special attention to individuals or groups "that may be at heightened risk of vulnerability or marginalisation" and calling on companies to collect "gender-disaggregated data where relevant". In addition, established mandatory due diligence laws such as the French vigilance law and the UK Modern Slavery Act (and of upcoming legislation, such as the EU Directive on Corporate Sustainability Due Diligence) do not address gender-related issues in connection with due diligence other than acknowledging that women and girls are disproportionately marginalised. In 2018, the Danish Institute for Human Rights (DIHR) assessed the National Action Plans (NAP) of States implementing the UNGPs on gender-responsiveness and found that despite widespread recognition that women are disproportionately affected, countries inadequately provide a gendered approach in implementing responsible business conduct principles.

The Feminists for a Binding Treaty, a collective of 15 organisations working on gender justice in global supply chains, have been actively advocating for the integration of a gender justice approach into the UN Binding Treaty for Business and Human Rights. The collective has advised the UN to introduce mandatory gender impact assessments of business activities, gendersensitive justice and remedy mechanisms, and ensuring respect and protection of women human rights defenders. While some references to women have been included, civil society organisations claim that gender-responsiveness is not truly integrated but rather treated as an afterthought. Similar concerns exist for the development of the upcoming EU Directive on due diligence, and multiple NGOs on the European level have been actively advocating for gender-inclusive and gender-responsive legislation. While it is likely that a gender lens will be integrated, or at least the consideration for disproportionate impacts will be included in the law, it remains to be seen to what extent the EU and other future legislative tools will truly embody intersectional gender-responsive mechanisms.

Legislative shortcomings notwithstanding, there are two online-tools that provide guidance to multinational companies in conducting HRDD in a gender-responsive manner: The Gender Responsive Due Diligence Platform and the Gender-Responsive Human Rights Due Diligence Tool. The Gender-Responsive Due Diligence Platform developed by Women Win and with support from the Ministry of Foreign Affairs of the Netherlands offers companies a comprehensive guide to implementing GRDD and consolidates the various resources that support its practical implementation. In this context, the platform takes care in highlighting the importance of GRDD and guides companies through the OECD Guidelines (section 3.1.3) using a gender lens. Moreover, it provides an overview of existing resources and tools to further support companies in conducting GRDD and presents case studies and examples of companies that have made progress in implementing one or multiple steps of the due diligence process. 122 Many of the major Fast-

Moving Consumer Goods (FMCG) companies worldwide (such as Nestlé, Mondelez, and Mars) appear to have used this tool for their HRDD,<sup>123</sup> however, there is no indication that global providers of seeds and chemicals are using it.

Likewise, the Gender-Responsive Human Rights Due Diligence Tool expands on existing requirements for businesses to comply with human rights principles, as set out in diverse national and international legal frameworks. Among these are the UN Guiding Principles on Business and Human Rights and the OECD Guidelines (sections 3.1.1 and 3.1.3). <sup>124</sup> In this context, the tool is comprised by three sections, once of which is a hands-on manual that guides companies wishing to undertake GRDD through the six steps of the OECD Guidelines. Moreover, another part of the handbook includes practical examples through cases in the cocoa, ready-made garments, and tourism and hospitality sectors. <sup>125</sup> The Tool was launched in 2021 by the Girls Advocacy Alliance, a programme conducted between 2016 and 2020 across several countries by Plan International, Defence for Children, and Terre des Hommes with the support of the Ministry of Foreign Affairs of the Netherlands. <sup>126</sup>

#### **CSR** initiatives

Likewise, companies with CSR policies often mention engagement for women and girls in the form of capacity-building and trainings, improved access to health services or enabling maternity leave. These often take place in the form of geographically and / or sectorally limited projects. Commitments to more broadly prioritising the procurement of raw materials, products, or services from under-represented communities, including women producers and women-owned businesses, are much less common.

While increasing women's entrepreneurship capacity is important, structural challenges such as access to credit and/or land tenure rights hamper their economic opportunities. Likewise, in their role as household members, women are generally made responsible for care work such as procuring and preparing meals and for the care of family members. When key provisions that sustain households are strained, women are forced to devote even more time to ensure their families' wellbeing. This comes at the expense of education, paid economic opportunities or leisure 127

Despite a larger role for gender in mainstream CSR activities, the contribution of corporations seems limited. According to the World Economic Forum, only 0.2 percent of companies strongly aligned to the UN SDGs, and most companies (38 percent) roughly align with the SDGs. Of the 8,550 assessed companies, 1,092 companies (12.8 percent) aligned somewhat with SDG 5, and not a single company strongly aligned with gender equality. Companies active in value chains dominated by a female workforce, such as the textile sector, have more traditionally integrated gender perspectives into their CSR, but also in these sectors the contribution to women's empowerment is unsatisfactory. According to the 2021 Gender Benchmark by the World Benchmarking Alliance, the women-dominated apparel industry is not on track to contribute to SDG 5, as most companies have not embraced transformative action to support the women workers in their supply chains. Page 129

#### 3.2 CSR policy analysis

#### 3.2.1 Syngenta seeds

Syngenta has publicly stated its commitment to upholding the principles set out in the Universal Declaration of Human Rights and the ILO core conventions. The company also affirms its efforts to keep improving its human rights performance by following the United Nations Guiding Principles on Business and Human Rights. Syngenta has not publicly committed to the OECD Guidelines.

Syngenta's commitment to human rights is expressed in the Syngenta Code of Conduct, its Principles for Sustainable and Responsible Agriculture, and the Syngenta Labour Standards Policy. All of Syngenta's employees are expected to uphold this commitment. The company also states that "[w]e also recognize that our impact on human rights goes beyond our direct operations

and expect our suppliers to conduct business in a legal and ethical manner, as outlined in our Compliance guide for third parties and Minimum requirements for suppliers."<sup>131</sup>

Syngenta's Labour Standards Policy states that the employment practices outlined in the policy document are intended to support the company in implementing the commitments specified in articles 22 to 24 of the Syngenta Code of Conduct. These three articles pertain to labour rights, discrimination and harassment, and diversity at the workplace. The Labour Standards Policy lays out expectations regarding working hours, wages and benefits, conditions of work, child labour, discrimination, and forced labour. While the policy makes important provisions on freedom of association (e.g., the company allows the development of parallel means for independent and free association and bargaining in contexts where unions are restricted by law), however, it is dated 2009 and there are no publicly available updates for this policy. Moreover, the company has not set clear guidelines on how workers or third parties can file grievances and neither has published a hotline or any similar venue where to file complaints.

On decent work, Syngenta states that the company observes applicable laws and regulations on wages and working hours, recruitment and employment contracts, but does not make commitments to go beyond legal minimum requirements, for example in providing living wages. When asked about living wages, the Syngenta representative interviewed for this research stated that in India there is a long way to go to reach legal minimum wage, and that the company should first focus on achieving supplier compliance with minimum wages before moving on to living wages.

While Syngenta has not published its due diligence framework, the company representative interviewed for this study stated that in India, Syngenta audits 20% of the 15,000 farms supplying the company with vegetable seeds every year. The audited farms are chosen at random, and they are audited for compliance with the company's labour standards and Supplier Code of Conduct. Moreover, how the company responds to non-compliance depends on their analysis of root causes for non-compliance. For example, if the farm fails to provide its employees with adequate personal protective equipment (PPE), it could be because of a lack of awareness or because of supply chain issues. If it is an awareness issue, then Syngenta engages in awareness-raising work. In addressing other issues such as minimum wage, Syngenta claims to engage a range of actors, including local governments, CSOs, and the farms themselves. To keep track of non-compliance and the steps taken to correct this, Syngenta's auditors use an application where they describe the form of non-compliance and its root causes and define a timeline and mutually agreed steps to achieve compliance. These steps are followed up by the company.

None of Syngenta's policies pertaining to human and labour rights provide safeguards for upholding women's rights. While Syngenta's 2021 ESG report provides gender disaggregated data, this refers to female employees in management positions. Other references to women's rights and gender issues include Syngenta's recent adoption of the UN LGBTI Standards of Conduct for Business, and the UN Women's Empowerment Principles.<sup>137</sup>

Despite its availability to inform this research through an interview, the company did not respond to our request for feedback on the analysis of its HRDD policies and practices.

#### 3.2.2 Monsanto Holland

This study found no publicly available CSR policies by Monsanto Holland's. Therefore, we have analysed the policies of Monsanto's parent, Bayer. In its Human Rights Policy, Bayer commits to the Universal Declaration of Human Rights and to the UN Guiding Principles on Human Rights. The company does not explicitly state commitment to the ILO core labour standards, although in its Supplier Code of Conduct it states its expectations towards suppliers to avoid any sort of child labour in their business operations and to ensure compliance with working hours consistent with the ILO core labour standards. Bayer has not made public commitments to the OECD Guidelines.

Bayer expects all business partners to respect the same human rights across the supply chain. 

140 In Bayers' Supplier Code of Conduct, all suppliers and subcontractors are expected to follow these

same standards, with specific expectations outlined on occupational safety and health, modern slavery, child labour, working conditions (including wages and working hours), freedom of association and collective bargaining, discrimination, harassment and community engagement.<sup>141</sup>

Bayer expects its suppliers to encourage and provide means for their employees to report concerns, complaints or potentially unlawful activities in the workplace without threat of reprisal, intimidation or harassment. Moreover, any report should be treated in a confidential manner and suppliers are expected to investigate such reports and take corrective action if needed.<sup>142</sup> There are no publicly available venues to file grievances, although in its Human Rights Policy, Bayer suggests employees to contact their manager/supervisor, department head, Law, Patents and Compliance Department, Compliance Officer, Corporate Auditing or Human Resources to report grievances. In this policy, Bayer also affirms to have established a worldwide system available to employees and the general public through which possible compliance violations can be reported – anonymously if desired.<sup>143</sup> There is no publicly available information about how this system works and how Bayer keeps track of grievances or whether it provides remedy to affected parties.

In its Supplier Code of Conduct, Bayer claims its right to audit and to conduct an evaluation of the supplier's performance. 144 Moreover, Bayer's 2020 annual report states that "[i]f critical results are recorded in the event of a serious violation or several major findings being identified in a supplier's sustainability performance, specific improvement measures are then jointly defined. "145"

Neither Bayer's Supplier Code of Conduct nor its Human Rights Policy state if and how the company commits to championing women's rights across its value chains. Its 2020 annual report provides gender disaggregated data only in relation to Bayer Pharmaceutical's effort to provide women in low-income countries with contraceptives.<sup>146</sup>

Neither Monsanto Holland nor Bayer responded to our request for feedback on the analysis of its HRDD policies and practices.

#### 3.2.3 Rijk Zwaan

Rijk Zwaan has not published a human rights policy or a (supplier) code of conduct and has not publicly committed to any of the international standards on human rights or the OECD Guidelines. Although Rijk Zwaan does not outline a commitment to the ILO Fundamental Rights at Work, in its "It's in our genes" brochure, the company states "[w]e are strongly against child labour and actively make it a topic of discussion. In our contracts with producers in India, we explicitly state that we will not tolerate child labour. We subject our growers to external audits and collaborate with other breeding companies and local partners to invest in educating local parents. We now plan to roll out this approach in other countries." Aside from that statement on external audits, no other references to human rights due diligence could be found on its website.

With respect to its stated opposition to child labour, it is not clear how Rijk Zwaan ensures that human rights are respected within its own operations and its supply chains. The company has not publicly disclosed key documents, such as a Supplier Code of Conduct, and does not report on risk screening, prevention efforts and mitigation activities. Moreover, Rijk Zwaan has not published sustainability reports, and although on its website there is a section titled "CSR updates", these updates publish news items of the company's interventions in different countries such as farmer trainings and donations in kind.<sup>148</sup>

Rijk Zwaan does report on labour relations and engagement with trade unions representing its own workers or its suppliers' workforce. Its only reference to the conditions of these workers is made on its website, under the section "Our approach to the Sustainable Development Goals". In this context, Rijk Zwaan affirms to actively contribute to SDG 8, by offering its employees "an enjoyable and long-term job with attractive pay and conditions." However, the company does not state whether this applies to workers along the supply chain. In addition, while Rijk Zwaan claims that decent work is the guiding principle in its decision-making, at every level and all over the world, it is not clear how this principle is enacted in practice.<sup>149</sup>

No information could be found on the availability of a grievance mechanism to raise concerns on human rights or labour conditions, and neither is there any information about Rijk Zwaan's policies towards women and female workers (either directly employed by the company or women workers in their supply chains). Moreover, Rijk Zwaan did not respond to our request for feedback on the analysis of its HRDD policies and practices.

#### 3.2.4 Enza Zaden

Enza Zaden has not publicly committed to any international standards on human rights and labour conditions, including the OECD Guidelines, the UNGPs, or the ILO Fundamental Rights at Work. In addition, the company has not published any information about sustainability and human rights policies, due diligence mechanisms, CSR, or other responsible business conduct topics.

The only relevant publicly disclosed statement by Enza Zaden is in its website, under a section titled "Focus on people and the environment". This section briefly describes the company's commitment to limiting its impact on the environment and improving living standards, it does not contain any provisions on labour conditions. In addition, twice a year, Enza Zaden publishes a magazine called "Partnership", which reports, amongst other things, on voluntary CSR initiatives but does not mention human rights or due diligence activities.

As a result, it could not be assessed if and how Enza Zaden ensures that human rights are respected in its operations and in its supply chains. Moreover, the company did not respond to our request for feedback on the analysis of its HRDD policies and practices.

#### 3.2.5 BASF Vegetable Seeds

BASF Vegetable Seeds has not publicly committed to any international standards on human rights and labour conditions, namely the OECD Guidelines, the UNGPs, or the ILO Fundamental Rights at Work. However, the company applies the BASF Supplier Code of Conduct to monitor and check its suppliers' operations, <sup>152</sup> and BASF states that its Code of Conduct is inspired by the United Nations Global Compact initiative, the United Nations Guiding Principles and Human Rights, and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. <sup>153</sup> From this perspective, it could be said that, by proxy, BASF Vegetable Seeds commits to these standards.

In its Supplier Code of Conduct, BASF outlines its expectations towards suppliers to "support the protection of internationally proclaimed human rights, fight forced labor (including modern slavery and human trafficking) and child labor [...] comply with minimum wages and working hours in accordance with local laws, and ensure compensation of a living wage according to local living conditions." While the Code does not state BASF's stance on living wages, the company's representative interviewed for this research stated that the company pays market wages and in the context of an investigation the company has commissioned with Syngenta and Arisa, they are trying to establish whether paying minimum wages helps preventing child labour. As part of their feedback to our analysis, the representative of BASF added that with this collaboration, the company aims to address minimum wage compliance and child labour issues in the vegetable seed sector.

Moreover, the Code expects suppliers to treat "[their] employees with respect and provide a workplace free of harassment or abuse of any kind, harsh and inhumane treatment, unlawful practices or discrimination" and to "enable [their] employees and other stakeholders to report concerns or potentially unlawful practices at the workplace." However, the Code does not state the venues where employees can file their grievances. BASF's Management Report 2020 states the company's wish to further strengthen its grievance mechanisms and introduce a standardised global hotline and reporting system in 2021.<sup>155</sup>

When asked about the company's grievances mechanism, the company representative interviewed mentioned that the project to standardise the company's hotline by 2021 had been implemented. Moreover, the BASF representative assured that all of the company's policies are socialised

amongst the farming communities that produce seeds for BASF at the beginning of every season and that independent audits (conducted by an external company) are conducted in all of the supplier farms once a year. In its feedback of our analysis, BASF assures that they audit 100% of direct seed suppliers in India we cover 100% and 90% non-seed are subjected to sustainability evaluations. Because there is no publicly available information about grievances filed against Vegetable Seeds or BASF, it is not possible to ascertain whether these companies effectively track progress and provide remediation to affected employees and communities.

Lastly, in its Supplier Code of Conduct, BASF expects its suppliers "to uphold the freedom of association and the right to collective bargaining in accordance with applicable laws," but it makes no commitments towards female workers or provides gender-disaggregated data in the sustainability section of its 2020 report.

#### 3.2.6 Axia Vegetable Seeds

Axia has not publicly committed to any international standards on human rights and labour conditions, including the OECD Guidelines, the UNGPs, or the ILO Fundamental Rights at Work. In addition, the company has not published any information about human rights policies, due diligence mechanisms, CSR, or other responsible business conduct topics. The only information publicly available that could be interpreted as a hint to the company's CSR efforts is on Axia's webpage. Under the heading "Certification and Social Involvement" in the section "About us", Axia describes how its products are made to require less water, fertilisers, energy and crop protection agents. No further references are made to human, women's or labour rights.<sup>157</sup>

As a result, it could not be assessed if and how Axia ensures that human rights are respected in its operations and in its supply chains.

#### 3.2.7 Vilmorin / Limagrain

In its 2015 Ethical principles and code of conduct, Vilmorin & Cie, through its parent Limagrain, has stated to share the principles of the Universal Declaration of Human Rights, the core Conventions of the ILO, and the OECD Guidelines.<sup>158</sup>

Vilmorin & Cie's Ethical principles and code of conduct is applicable to all of the company's suppliers and subcontractors. The company affirms to be particularly vigilant not to contract suppliers that use child or forced labour and to ensure its partners respect the core ILO conventions. However, Vilmorin does not outline specific requirements that suppliers need to meet, for example by banning the confiscation of migrant workers' passports or by banning retaliation against union organisers.

On its 2020-2021 annual report, Vilmorin mentions a prevention policy and a safety at work policy launched in the fiscal year 2014-2015. While these policies are not publicly available, the 2020-2021 annual report presents the rate of accidents in the workplace and puts these figures in perspective by comparing it to its 2018 benchmark. However, these figures only apply to Vilmorin's workers in France and not to its subsidiaries or suppliers elsewhere. Moreover, it is not clear whether Vilmorin's OSH policy applies to workers in its supply chain.

Vilmorin & Cie has a whistle-blower system in place to report events, actions or behaviours contrary to the provisions of its Ethical principles and code of conduct. While the system is available to all Vilmorin employees, as well as any temporary or external workers as well as any third parties connected with Vilmorin, it can only be accessed through email. Moreover, the grievance mechanism does not detail how complaints are evaluated and remediated. In addition, Vilmorin makes no statements on protecting anonymity of whistle-blowers and non-retaliation safeguards are lacking. The lack of these safeguards raises significant concerns for the privacy and safety of human rights defenders.

Vilmorin's Ethical Principle and Code of Conduct includes no gender-specific provisions or safeguards. While its annual report 2020/21 mentions women, it only provides gender-

disaggregated data about the percentage of women employed in management positions in France. 162

#### 3.2.8 Bejo Zaden

Neither Bejo Zaden nor its parent company Bejo Groep have publicly committed to any international standards on human rights and labour conditions, including the OECD Guidelines, the UNGPs, or the ILO Fundamental Rights at Work. In addition, the company has not published any information about human rights policies, due diligence mechanisms, CSR, or other responsible business conduct topics. On its Responsibility webpage, Bejo states: "As a family business, Bejo is a unique position to plan and invest for the future. We like to say that it is in our genes to think in the long term, while also caring for each other in daily life. It's what gives us our strong sense of responsibility to our employees, our partners in the chain, and the environment." 163

However, Bejo does not outline what its responsibility to its employees entails or what specific expectations and policies are set for its own operations and its suppliers to respect labour rights. As a result, it could not be assessed if and how Bejo Zaden ensures that human rights are respected in its operations and in its supply chains.

Beijo Zaden responded to the research team's request for feedback stating: "we notice incorrections in your document and therefore refrain from giving any confirmation to this. We recognize the sources of your research, and can inform you that we have given some of them the same response as we are giving you now. It is not our intention to make corrections to all kinds of reports and researches that are initiated in this world. However, I can confirm that all information that you can find on our bejo.com website and in our financial reports is valid and correct."

#### 3.2.9 Ikasido Global Group

Ikasido Global Group has not publicly committed to any international standards on human rights and labour conditions (including the OECD Guidelines, the UNGPs, or the ILO Fundamental Rights at Work) either in its Indian or its Netherlands webpages. In addition, the company has not published any information about sustainability and human rights policies, due diligence mechanisms, CSR, or other responsible business conduct topics.<sup>164</sup>

Ikasido has published a mission stating "Our mission - to bring joy, make life healthier, brighter, happier through development of innovative breeding. We aspire to a healthy lifestyle, harmony and beauty. Construction of long-term, strong and confiding relationships with customers is the key to achieving our goals. Th' company's business is built on mutually beneficial collaboration and effective interaction of all its participants." However, there is no clarity about the action the company takes to achieve this mission or who is meant by "all its participants".

As a result, it could not be assessed if and how Ikasido Global Group ensures that human rights are respected in its operations and in its supply chains. Moreover, the company did not respond to our request for feedback on the analysis of its HRDD policies and practices.

#### 3.2.10 East-West International

East-West International has not published a human rights or responsible business conduct policy and has not publicly committed to international standards on human rights and the OECD Guidelines. Although East-West International does not outline a commitment to the ILO Fundamental Rights at Work, in its CSR policy, the company provides a framework regarding equal employment, child labour, minimum wage, and workplace health and safety. Responding to our analysis, the company stated: We have not publicly announced commitment to ILO and other directives and guidelines, but we apply the main principles in our daily practice. In addition, we have undertaken a large number of public/private partnerships and similar projects with support from the Dutch government through RVO (PSI/PSOM, FDOV, SDGP and others) where we have also confirmed our commitment to the ILO and OECD directives and guidelines in line with RVO requirements."

With regards to its wage policy, East-West aims to pay employees "equitably and fairly" within its defined job markets and to comply with minimum wage legislation in its countries of operations. 167 The company, however, makes no reference in its policy about living wages, which are however a crucial component of decent work. In response to this, East-West stated: "I...I we have also taken initiatives to promote compliance of minimum wage rules by production farmers to their labour, but have found that often compliance by our supply chain partners with minimum wage regulations, let alone payment of living wages, is guite difficult to achieve and/or to enforce, especially in markets where we are not the leading contractor of farmers. We find that any positive deviation from local 'market practice' is strongly resisted by contract farmers as they fear opposition or even violence from other employers in the area who regard this as 'unfair' competition. We have concluded that this is best dealt with by working together with other (seed) companies rather than driving this as a single company, and are working together on this in the ECHO platform and other forums. Possible measures (aside from better government enforcement) include awareness training and training aimed at further improvement of production quality and efficiency, that will in turn enable better market prices and fairer labour compensation. We are making some progress but recognize this will not be solved in the short term, but will require a long-term joint effort by businesses working together with the government and in the supply chain."

Regarding OSH policies, East-West states that it will "provide and maintain a safe and healthy work environment, in accordance with industry standards and in compliance with legislative requirements, and strive to eliminate any foreseeable hazards which may result in property damage, accidents, or personal injury/illness." <sup>168</sup> The specific measures that the company takes to realise its OSH objectives are not publicly available and the number of accidents, OSH trainings, or other forms of monitoring are not published on East-West annual reports. In response to our analysis, East-West stated: "On work safety, while we do not post this on our website, we have active work safety programs to raise awareness among our staff, led by our EWS safety managers in the countries where we have our operations. We have also conducted OSH training programs for our staff."

East-West provided documents to support its claim that it conducted OSH trainings for its staff, including samples of the safety newsletters it circulates amongst staff to raise awareness. The newsletter is written in the English language is sent around in email form, which arguably means that non-English speakers and/or persons without connectivity can hardly access it. Moreover, it is not clear whether the trainings and awareness-raising documents are also directed to subcontractors and their staff.

With regards to the company's CSR policy, East-West states that it will only do business with partners, suppliers or contractors who do not engage in forced labour and the hiring of minors. In this context, East-West's child labour policy requires suppliers to commit to not employing anyone under the age of 14 (or anyone deemed a child under Indian law) in the agricultural production processes involves in the germination of seeds. Disobeying this condition is a ground for ending the supply contract. To ensure compliance with its labour child policy, East West conducts field observations in 100% of its hybrid seeds fields. In addition, quality inspectors inspect 30% of the plots during the pollination and seed extraction stages. Also, an external audit is conducted every two years with the inspector company reserving the right to choose the plots to be audited.

Adding to the child labour policy, in its feedback to our analysis, East-West Seeds stated: "We have also actively worked with, and shared our experience in combating child labour with, other seed companies through our membership of seed industry associations such as Plantum, and of Asia Pacific Seed Association (APSA) of which we are one of the founding members". Moreover, the company provided a few examples of engagement with other industry players raising awareness about the link between minimum wages and child labour.

Despite its policies, East-West has not publicly disclosed key documents, such as a Supplier Code of Conduct, and does not report on risk screening, prevention efforts and mitigation activities.

4

# Government initiatives influencing the vegetable seeds sector

Key government policies support or influence, directly or indirectly, the vegetable seed trade between India and the Netherlands, for example through subsidies or market access policies, among others. Moreover, government institutions and programmes directly or indirectly support various agencies and institutions that facilitate this trade. Next to the government, also European policies play a role in this context. Aside from enabling policies, companies of a certain size will have to comply with the upcoming human rights due diligence laws which are expected to be implemented soon in the Netherlands and on EU level.

#### 4.1 Dutch government initiatives

#### 4.1.1 Introduction

According to representatives for the Ministry of Economic Affairs, "the Netherlands boasts a unique combination of strong, internationally eminent seed companies, an excellent regulatory framework that promotes innovation and guarantees quality seed and groundbreaking public-private research programmes [...] The Netherlands also plays an active and often leading role in developing the various international treaties on seed."<sup>171</sup>

This section explores key government policies that may support or influence, directly or indirectly, the vegetable seed trade between India and the Netherlands. The government also directly or indirectly supports various agencies and institutions that facilitate the trade. Especially the Netherlands Enterprise Agency (RVO) plays an important portal for companies to acquire information about export markets, available financial schemes, and other support. While the government aims to facilitate the internationalisation of the sector, the Dutch human rights due diligence law will place mandatory obligations on companies that are active in supply chains that carry particular human rights risks.

#### **4.1.2** Netherlands Enterprise Agency (RVO)

The RVO, an agency under the Ministry of Economic Affairs and the Ministry of Agriculture, Nature, and Food Quality (LNV) supports Dutch companies and entrepreneurs with their business in innovation, networking, sustainability, and agricultural and international entrepreneurship. The RVO also manages subsidy programmes and other support schemes which are provided by the different ministries.

The programmes that are relevant to vegetable seed companies trading with India include collaboration and networking schemes (through the Partners for International Business programme), subsidies to investigate and combat child labour in their value chains (the Fonds Bestrijding Kinderarbeid, FBK) or subsidies to execute demonstration projects, feasibility studies and investment preparation projects (Demonstratieprojecten, Haalbaarheidsstudies en Investeringsvoorbereidingsprojecten (DHI), a programme of the Ministry of Foreign Affairs).<sup>172</sup>

The RVO uses its international network of embassies, consulates, and Netherlands Business Support Offices in countries without an embassy or consulate to accompany its programs abroad. Its international network of agricultural counsellors at the embassies, the so-called Agricultural Attaché Network (LAN), described in section 4.1.11, is relevant to companies in the agricultural sector.

The RVO co-funds among others the a multistakeholder collaboration on Wage Improvements in Seed Hybrids (WISH) (see section 4.1.4).<sup>173</sup>

#### 4.1.3 Partners for International Business - PIB

Partners for International Business (PIB), established in 2012, is a programme that allows Dutch businesses to enter a public-private partnership to realise their international ambitions. The PIB aims to put companies in a better position in promising foreign markets and increases access to these markets. The PIB programme is open to all countries, except those subject to international sanctions, and executed by the RVO. All activities within the programme will fall within the scope of one of three modules that include promotion and matchmaking, knowledge exchange and networking, and economic diplomacy. These activities are carried out by the Dutch representation in the respective country and by the relevant ministries.<sup>174</sup>

Together with clusters of Dutch businesses and knowledge institutions, the Dutch government is currently developing a two- or three-year action plan for the PIB. This will list strategic activities to provide platforms abroad for a Dutch (sub-)industry and specific clusters.

The Indo-Dutch Agriculture Portal lists a number of PIB projects in India that focus on agriculture, including horticulture and dairy. For example, Rijk Zwaan participates in the "HortiTechIndia" consortium consisting of Dutch companies and knowledge institutes from the horticulture sector, supplying their technology and knowledge to the Indo-Dutch polyhouse. Rijk Zwaan is supplying seeds and advises agronomists on how to improve the yield and quality.<sup>175</sup>

#### 4.1.4 Fund against Child Labour (FBK)

The Fund against Child Labour (Fonds Bestrijding Kinderarbeid) targets companies that want to investigate and combat child labour in their production chains, or in their own company. The five-year subsidy programme runs from 2018-2022 and in 2022, a total of € 7.4 million is available. Companies can be reimbursed a maximum of 70% of the total eligible costs per project, up to a maximum amount of € 475,000.

Since 2017, thirteen projects have been supported in India, of which two are related to the vegetable seed sector. The Wage Improvements in Seed Hybrids (WISH) project with a budget of ₹475,000 involves Syngenta Seeds, BASF Vegetable Seeds (Nunhems Netherlands), Netherlands Enterprise Agency (RVO), and the civil society organisation Arisa. It started in 2021 and has its end date in August 2025. The project was launched in February 2022. WISH addresses systemic child labour issues and aims for minimum wage compliance in the vegetable seed sector in India. The four-year project is implemented in 28 villages and involves around 500 suppliers in the India states of Maharahtra and Karnataka. The second project, Towards Vegetable Seed Production Without Child Labour, started in 2017 and was finalised in 2019. The project with a total budget of ₹470,120 involved East-West International, East-West Seeds India, Global Research Services, and RVO. The Project with a total budget of ₹470,120 involved East-West International, East-West Seeds India, Global Research Services, and RVO. The Project with a total budget of ₹470,120 involved East-West International, East-West Seeds India, Global Research Services, and RVO.

#### 4.1.5 Invest International

Invest International, operational since October 2021, is a publicly financed private company that acts as an impact investor to support Dutch entrepreneurs and the Dutch economy. It aims to find "Dutch solutions to global challenges", which eventually contribute to the realisation of the Sustainable Development Goals (SDG's). Invest International is a joint venture of the Dutch state (51%) and the development bank FMO (49%).

Key sectors Invest International focusses on are agri-food, climate and energy, healthcare, manufacturing, and water & infrastructure. It offers export finance, project finance and value chain finance. Products vary from financing arrangements based on Dutch government public funds for international financing to risk capital solutions such as equity, debt, or mezzanine. Invest International is open to start-ups, SMEs, large corporates, governments, and other investors.

Invest International manages among others the Dutch Good Growth Fund (DGGF) and the Dutch Trade and Investment Fund (DTIF). DTIF is not further discussed as India is not included.

#### **4.1.6** The Dutch Good Growth Fund (DGGF)

The DGGF is a programme of the Dutch Ministry of Foreign Affairs, managed by Invest International. Other parts are administered by Atradius Dutch State Business (for Dutch entrepreneurs) and a consortium of PwC and Triple Jump (for local SMEs).

The DGGF provides loans, participations, guarantees, export credit insurance and export finance (with a repayment obligation) for Dutch entrepreneurs and starters interested in emerging markets or developing countries (DGGF countries) and who cannot get finance from a bank. <sup>180</sup> India is a so-called DGGF country. <sup>181</sup>

If a company wants to import goods from a DGGF country but is not able to raise the finance it needs, the DGGF can support the entrepreneur with guarantees and loans up to a maximum of € 15 million. Entrepreneurs can also get finance to help their local suppliers in a DGGF country grow. Companies that run an investment fund which helps local entrepreneurs in a DGGF country access finance, the DGGF Investment fund can encourage the company to take innovative initiatives. In the past, a few seed-related investments were supported through the DGGF, including the set-up of a vegetable seed-producing company in Tanzania with a loan of DGGF and co-financed by investors in 2019, as well as the expansion of a seed company in Moldavia. No vegetable seeds project with DGGF financing is listed for India. 182

The extent to which companies will make use of DGGF may depend on the type of company, as most family companies in the seed sector prefer to finance their investments themselves.<sup>183</sup>

#### **4.1.7 DRIVE**

DRIVE is a programme of the Ministry of Foreign Affairs to facilitate investments in public infrastructure projects that contribute to development in food security, water, climate and sexual and reproductive health and rights. These investments are supposed to promote private sector development by boosting entrepreneurship, productivity, and employment. The DRIVE-programme can be implemented in low and middle-income countries, including India.

The projects must support and be in line with the Dutch agenda for aid, trade, and investment, for example by linking up with initiatives that have already been developed as part of Dutch development policy.

#### 4.1.8 Topsectors Agri & Food and Horticulture & Starting Materials

The Dutch government aims to consolidate and further promote the Dutch position and competitiveness in the international markets in various domains through the so-called Topsectors. These Dutch platforms representing the government, companies and knowledge institutes are privately and publicly financed and supposed to support Dutch companies and institutions to innovate, invest and share knowledge in their respective sectors, which include for example water, energy, food, and technology, with an ultimate mission to contribute to the solution of social problems.

The Topsectors Agri & Food and Horticulture & Starting Materials are promoting public-private cooperation through a Knowledge & Innovation Agenda with a series of financing arrangements. These platforms facilitate access to financial instruments, including fiscal instruments (like WBSO, described in section 4.1.10), financing, guarantees, advisory services and seed money.

Seed Money projects are collaborations of Dutch and local companies, knowledge institutes, service providers, and NGOs, and interesting for companies that want to enhance their international activities, build up new international networks or explore the feasibility of new international production chains. <sup>184</sup> Currently, two vegetable seed projects are running in Indonesia and in Kurdistan. The twelve Seed Money projects currently ongoing in India include projects on for example food waste reduction, food processing or value chain development in a variety of farming and livestock segments, but none related to seeds. <sup>185</sup>

#### 4.1.9 National Growth Fund (Nationaal Groeifonds)

Through the National Growth Fund, the Dutch government allocates € 20 billion between 2021 and 2025 for projects that promote knowledge development, R&D and innovation (and until 2022 also infrastructure was included). The programme is an initiative of the Dutch Ministries of Economic Affairs and Climate and Finance and was set up in the aftermath of the COVID-19 pandemic to boost structural and sustainable economic growth.

In the round of projects, honoured in April 2022, the CROP-XR programme will receive € 42 million over the next ten years to develop new and more resilient plant varieties, bred to be better adapted to climate change and less dependent on fertilizers and pesticides. <sup>186</sup> The CROP-XR programme was launched in 2022, involving many public and privately funded players. Among the public participants are knowledge institutions such as Utrecht University, Wageningen University and Research, the University of Amsterdam, Delft University of Technology and 'green colleges' united in the Green Pact. The private sector is represented by Plantum, the industry association representing around 250 seeds producers based in the Netherlands. <sup>187</sup> No directly related activities in India that are financed by the fund are mentioned on its website.

#### 4.1.10 WBSO tax credit for research and development

The WBSO R&D tax credit is a fiscal arrangement that enables companies to do research and development and pay lower wage taxes and national insurance contributions. This arrangement is important for seed companies of any size, as they generally spend a significant percentage, an estimated 10-30% of their turnover, on R&D.<sup>188</sup>

The WBSO offers support for two types of projects: 1) development projects that develop technically new physical products, physical production processes or software (or parts thereof), and 2) technical-scientific research. Companies can apply for the WBSO for R&D activities carried out by the company and/or its employees and for incurring costs and expenditures while carrying out the R&D project. Individual entrepreneurs will be granted a fixed deduction. Start-ups may also benefit from the customary salary scheme or the share option programme for start-ups. For 2022, the WBSO budget is € 1,336 million.<sup>189</sup> At least two of the profiled companies, Monsanto Holland and Bejo Zaden, made use of the tax credit scheme in recent years (see Chapter 2), but this may be the case for more of them.

#### 4.1.11 Agricultural Attaché Network (LAN)

The agricultural attaché network (LAN) is an international network of agricultural counsellors stationed at Dutch embassies and committed to the internationalisation of the Dutch agricultural sector. The LAN's mandate is to contribute to the earning capacity of the Netherlands, a sustainable world food supply and increased biodiversity in line with vision of LNV and the Sustainable Development Goals. The LAN supports Dutch companies, entrepreneurs, and knowledge institutions in the agricultural sector in their international ambitions. The counsellors raise issues around new regulations influencing trade, market access and protection with local authorities, and facilitate 'promising projects' for the Dutch agricultural sector. The top sectors Agri & Food and Horticulture & Propagation Materials are often involved in this.

The team is employed in the economic departments of 60 Dutch embassies and/or consulates, serving 80 countries including India. The person employed at the Netherlands embassy in Delhi is

responsible for India and Sri Lanka. They are also representing the Netherlands in international organisations like the FAO, IFAD, EU, and the OECD. 190

The counsellor's mandate used to be uniquely focused on trade promotion, and access to markets, but comprises now also questions around climate change, food security, and biodiversity within the framework of the Sustainable Development Goals. The counsellors join actions in the field of making agricultural production more sustainable, knowledge exchange and achieving, for example, the biodiversity goals.

Moreover, Dutch embassies finance programmes in the seed sector to improve the availability and use of quality seeds in low-income countries, for example the Integrated Seed Sector Development (ISSD) project in the Sahel.<sup>191</sup>

#### 4.1.12 Dutch institutions and agencies promoting vegetable seed trade

The Dutch government also finances or indirectly supports institutions and agencies that directly or indirectly facilitate the vegetable seed trade between India and the Netherlands. Table 6 presents a non-exhaustive overview of some of these institutions and agencies. It is not known how many companies are making use of these services.

 Table 6
 Overview of institutions and agencies supporting vegetable seed trade

Name of organisation	Туре	Mission
ASSOCHAM Netherlands	Non-profit advisory organisation	Provides market, tax and regulatory insights for companies doing business in India and The Netherlands.
Dutch Greenhouse Delta	Foundation	Worldwide promotion of Dutch greenhouse horticulture industry.
FMO	Development Bank, 51% state-owned	Dutch entrepreneurial development bank investing in developing/emerging countries and economies, focussing on financing the private sector active in energy, agriculture, finance.
PUM Netherlands Senior Experts	Volunteer organisation	PUM connects local business with senior experts who share their knowledge through advisory missions or online coaching activities.
NLinBusiness	Consultancy	NLinBusiness is an initiative of the Dutch employers' organisations VNO-NCW and MKB Nederland, supporting Dutch entrepreneurs to identify and enter international markets. Focused on practical business-to-business support (like recruitment, salary levels, opening a bank account, financial transactions, etc).
HollandDoor Cooperative	Consultancy	Supports knowledge, experience, and business relations in the Dutch agribusiness.
Netherlands India Chamber of Commerce & Trade (NICCT)	Non-profit advisory organisation	NICCT promotes business relations between the Netherlands and India.
SeedNL	Public-private partnership (PPP)	SeedNL is a PPP aimed at strengthening the seed sector in low- and middle-income countries. Dutch seed companies are directly involved in partnerships and projects on the ground. A key aim of SeedNL is to support the development of an enabling legal environment. India is one of the focus countries.

Source: Netherlands Enterprise Agency (n.d.), Netherlands Trade Mission to India, 14 - 18 October 2019 - #NLINDIA: Innovation through co-creation; SeedNL (n.d.), "Quality seed for all farmers".

#### 4.1.13 Other initiatives related to responsible business conduct

In addition to the schemes mentioned above, like e.g. the FBK, the Dutch government offers or supports several other measures to assist companies operating in foreign countries to implement a policy on responsible business conduct (RBC). The RiskChecker website hosted by MVO Nederland helps to identify different kinds of sustainability risk in a specific country. India has 17 country risks listed, of which seven relating to labour rights. 192

Dutch companies that want to conduct research into the CSR risks that they may face in their value chains linked to countries that are on the list of official recipients of development assistance and aim to implement measures to address them, can make use of the Fund for Responsible Business Conduct. The four-year programme from 2019 to 2022 has a total amount of € 4.8 million available for multi-stakeholder projects.<sup>193</sup>

The INDUS platform for sustainable matchmaking has been set up to address the concerns of Dutch businesses in relation to CSR risks. It is a joint initiative by MVO Netherlands, the Dutch Embassy in India, Solidaridad Asia, CII-ITC, and the Centre for Responsible Business.<sup>194</sup>

#### 4.2 European Union initiatives

Seed companies can also take advantage of European Union (EU) policies and programmes when doing business.

#### 4.2.1 Horizon Europe: research and innovation

Horizon Europe is a framework programme of the European Commission for research and innovation, aiming to increase Europe's competitiveness by stimulating science and innovation. The programme also wants to challenge the business community and the academic world to find solutions for relevant social issues together. The programme will run until 2027 and has a total budget of € 95.5 billion. It is open to organisations, individual researchers, and companies, who are internationally active in research, technological development, or innovation. Horizon Europe has three pillars and one component to support activities that widen participation and strengthen the European Research Area (ERA).

The five so-called mission areas of the programme are 1) fighting cancer, 2) adapting to climate change, 3) protecting oceans, 4) living in greener cities, and 5) ensuring soil quality and food. Each mission involved actions like research projects, policy measures or legislative initiatives. The Horizon Europe - Cluster 6 funds projects that contribute to research and innovative solutions that focus on various themes including agriculture, food systems, bioeconomy, environment, and biotechnology. Activities under this Cluster will directly support the European Green Deal, the Paris Agreement, and the Sustainable Development Goals. <sup>196</sup>

Dutch seed companies seem to prefer Dutch support programmes (like WBSO, Topsector support, etc.) over European programmes like Horizon Europe, due to the high administrative burden associated with the often very large European research projects. Such projects are more important for universities. Companies might be interested to join if universities or partners in a consortium take the lead.<sup>197</sup>

#### 4.2.2 Intellectual property protection

Intellectual property protection is indirectly influencing the vegetable seed trade, as this protection improves the market position of seed breeders and exporters. At EU level, the Community Plant Variety Office (CPVO) is responsible for granting Community Plant Variety Rights (CPVRs) to seed breeders in the EU. This consist of a single protection title that is valid throughout the whole territory of the EU with the same scope and effect. The CPVO has its seat in Angers (France) and is the EU Agency responsible for administering and implementing the CPVR system (both at technical and administrative level).

The legislative basis for this regional plant breeders' rights system is EU Regulation 2100/94, which models on the 1991 Act of the Convention for the International Union for the Protection of New Varieties of Plants (UPOV Convention), which provides IP protection for new plant varieties and fits the specific needs of the industry. <sup>198</sup> UPOV is an intergovernmental organization that aims "[...] to provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society [...] provides the basis for members to encourage plant breeding by granting breeders of new plant varieties an intellectual property right: the breeder's right." <sup>199</sup> In general, Dutch companies are intensive users of these breeding protection rights, as an estimated 30-40% of all new plant varieties in Europe are registered by Dutch companies. <sup>200</sup>

#### 4.2.3 EU financial instruments: equity, guarantees, and loans

EU funding is available through a range of financial instruments including equity and debt, loan guarantees and venture capital, capacity building and risk-sharing facilities. For example, the EU provides loans to businesses of all types for investment in research and innovation. It also provides guarantees to help beneficiaries to obtain loans more easily or at better conditions from banks and other lenders. The EU may also financially participate in a project by owning parts of it. Financial instruments can also be combined with grants.

Financial instruments are implemented in partnership with public and private institutions such as banks, venture capitalists or angel investors. These institutions determine the exact financing conditions – the amount, duration, interest rates and fees.<sup>201</sup>

Financial instruments can be provided by the EU through financial intermediaries in the Member States (shared management) to support its policies and programmes. Start-ups, micro-companies, and larger businesses can all benefit from this type of funding.

The European Investment Bank (EIB) is the lending arm of the European Union. It provides loans, guarantees, equity investments and advisory services, with a priority for activities related to climate and environment, development, innovation and skills, small and medium-sized businesses, infrastructure, and cohesion. In 2022 EIB Global was set up to increase the impact of development finance.<sup>202</sup>

It is not clear to what level Dutch companies are making use of these instruments.

#### 4.2.4 EU - India trade negotiations

Since the 90s there is an ongoing dialogue between India and the EU to work towards better trade relations. A key EU objective is "to work towards a sound, transparent, open, non-discriminatory and predictable regulatory and business environment for European companies trading with or investing in India, including the protection of their investments and intellectual property."

India's trade regime and regulatory environment is considered relatively restrictive. Barriers to trade, sanitary and phytosanitary (SPS) measures, and discrimination based on legislative or administrative measures are considered not in line with internationally agreed standards and affect a wide range of sectors.

In 2021, the EU-India High-Level Dialogue on Trade and Investment was established after a 2020 EU-India Summit. Talks have been resumed to negotiate a trade agreement and negotiations on an investment protection agreement.<sup>203</sup>

In case a trade agreement would come into effect, this could boost trade between European countries and India, and further open markets to each other. Potential negative effects could be that less powerful local companies cannot compete anymore with a more powerful international industry as they lose their price advantage. This would also influence the vegetable seed trade between the Netherlands and India. For small farmers this may lead to a further increasing dependence on a small number of large, multinational seeds companies which already control a large share of the global seed market.

The EU has been known to push developing countries to adopt UPOV for the protection of new varieties of plants when negotiating trade agreements. Meanwhile, India is among the countries that rejected UPOV over concerns that it fails to protect farmers' rights and interests, as seeds are traditionally freely exchanged between farmers. As the UPOV Convention makes no mention of farmers' rights, only few developing countries have signed it.<sup>204</sup> A draft of the Intellectual Property Rights Chapter of the Free Trade Agreement between the EU and India leaked in 2021 did not mention UPOV, instead pointing to the "applicable laws" that the parties are subject to for the protection for plant varieties. This suggested some flexibility in the EU negotiation position on the topic and consideration of the interests of small farmers.<sup>205</sup> However, the March 2022 draft of the EU's proposal for a legal text on intellectual property rights in the trade agreement contains an explicit demand for each party to protect plant variety rights in accordance with UPOV.<sup>206</sup> At negotiations in October 2022, it was agreed to hold intersessional talks about the topic.<sup>207</sup>

#### 4.3 Indian government policies

#### 4.3.1 Key seed sector policies

Key policies for the Indian seed include the Seeds Act (1966), the Seeds Rules (1968), the New Policy on Seed Development (1988), Protection of Plant Varieties and Farmers Right Act (2001) (PPV&FR Act), the National Seeds Policy (2002), the Seed Bill (2004) and its discussed replacement, the Draft Seed Bill (2019).<sup>208</sup>

The Department of Agriculture and Co-operation implements since 2005/06 a Central Sector Scheme as 'Development and Strengthening of Infrastructure Facilities for Production and Distribution of Quality Seeds'. The objective of the ongoing scheme is two-fold:

- 1. to ensure production and multiplication of high yielding certified/quality seeds of all crops in sufficient quantities and
- 2. to make the seeds available to farmers, including those in remote or not easily accessible areas, at an affordable price.<sup>209</sup>

According to interview partners, it remains difficult to follow all developments in the Indian seed policy sector. Reportedly the government aims to significantly increase domestic seed production to cut dependency from foreign suppliers. However, this seems unrealistic in the global market structure, and the need for technology and knowledge exchange. For exports, the Middle East, Thailand, Bangladesh, and Sri Lanka are seen as interesting destinations.

For foreign industry actors, it is seen as disadvantageous that India has not signed UPOV,<sup>210</sup> as it supposedly discourages the development of new seed varieties in the country by foreign actors.

India instead established the PPV&FR Act to fulfil its obligations under WTO and regional trade agreements. It provides for intellectual property rights (IPR) through plant variety protection (PVP) instead.<sup>211</sup>As it is not fully in line with UPOV, companies may be cautious about introducing their latest varieties in India.

#### **4.3.2 Foreign Direct Investment**

Foreign Direct Investment (FDI) in the development and production of seeds and planting material is allowed up to 100%. Conditions apply as outlined in Circular No. 1 of 2011: Consolidated FDI Policy, issued by the Ministry of Commerce & Industry. This approach to allow full foreign funding is meant to encourage the influx of foreign investment into the seed sector and to facilitate R&D in local seed companies.<sup>212</sup>

#### 4.3.3 Trade policies

The export/import of seeds and planting material is governed by the Export and Import (EXIM) Policy 2002-07 including amendments. Since 2002, various restrictions on the export of cultivated varieties of seeds have been removed. However, several exceptions remain of which some are relevant for the vegetable seeds sector due to restrictions on:

- breeder or foundation or wild varieties;
- onion, pepper cuttings. <sup>213</sup>

The export of these seeds is only allowed on case-to-case basis under a specific licence issued by Director General Foreign Trade.

To facilitate seed export, India participates in OECD Seed Schemes for the following categories of crops:

- Grasses and legumes
- · Crucifers and other oil or fibre species
- Cereals
- Maize and sorghum
- · Vegetables.

Imports of most seeds is allowed without a license in accordance with an import permit granted under the Plant Quarantine Order. However, some vegetable seeds and planting materials are subject to separate provisions.<sup>214</sup>

#### 4.3.4 Government subsidies

The Indian Government aims to strengthen the seed sector through various initiatives for credit support subsidies.<sup>215</sup> Examples include:

- · Credit for schemes for certified seed distribution
- Subsidies under seed village program
- Transport subsidies for seeds
- Subsidies and credit support for hybrid seed production
- Support to seed infrastructure under Rastriya Krishi Vikas Yojana.<sup>216</sup>

#### 4.4 Other international seed trade regulations

Several international organisations, conventions and treaties deal with the regulation of seed trade covering access, production to delivery of quality seeds to farmers.<sup>217</sup> Among these are:

- Organisation for Economic Co-operation and Development (OECD), whose seed schemes are globally recognised when it comes to international trade. The OECD Seed Certification aims to facilitate international seed trade.
- International Seed Testing Association (ISTA) which has developed globally recognised standard procedures for seed sampling and testing
- International conventions and treaties hosted by the Food and Agriculture Organization of the
  United Nations (FAO), which provide the international regulatory framework for related aspects
  of seed trade, plant health and phytosanitary measures, access, and benefit-sharing for plant
  germplasm, including the International Treaty on Plant Genetic Resources for Food and
  Agriculture (ITPGRFA). Within the EU, the production and marketing of different species are
  regulated under various Council Directives.

#### 4.5 Human and labour rights due diligence legislation

#### 4.5.1 EU Proposed Directive on corporate sustainability due diligence

The European Commission announced in April 2020 its commitment to introducing rules for mandatory corporate environmental and human rights due diligence as part of a Sustainable Corporate Governance initiative. <sup>218</sup> Following this announcement, the European Parliament adopted a report with recommendations to the Commission in January 2021, urging the Commission to present an ambitious proposal on corporate due diligence and accountability. <sup>219</sup>

The much-anticipated proposal for the Directive on Corporate Sustainability Due Diligence (CSDD) was released in February 2021, after a number of delays. The proposal would represent a landmark

step forward in creating corporate accountability for adverse human rights and environmental impacts along supply chains and provide new avenues for justice. Laudable achievement notwithstanding, the proposed text has been subject of criticism by civil society organisations who find the proposal much weaker than the recommendations from the European Parliament.<sup>220</sup>

According to various civil society organisations, some strong points of the proposed directive are:

#### Scope of due diligence

The proposal follows the OECD Due Diligence Guidance, outlining that the required due diligence process should encompass not only the company's operations but also the activities of direct and indirect business relationships, from the upstream part of the supply chain through to use and end of life of the product or services. However, no definition of 'business relationships' has been provided, which means that the scope is still rather unclear.221

#### · Directors' responsibility

In line with the UNGPs, the directive specifies a duty of care for company directors, which helps ensure that due diligence is not outsourced to operational teams but is accompanied by executive management and board oversight over human rights risks.<sup>222</sup>

#### • Alignment with other legislative frameworks

The proposed directive clearly seeks alignment with other EU legislative frameworks, such as the proposal for Corporate Sustainability Reporting Directive, the Sustainable Finance Disclosure Regulation, Taxonomy Regulation and other important laws and policies that lay out sustainability and human rights obligations for companies.<sup>223</sup>

Despite its potential, the proposed Directive contains significant weaknesses and limitations, all with implications to tackle the negative human rights impacts of European supply chains:

#### • Limited coverage of companies

If adopted, the Directive will only apply to companies with more than 500 employees on average and with a worldwide net turnover of more than € 150 million in the last financial year. For companies in high-impact sectors (textiles, agriculture, forestry and fisheries, and mineral resource extraction), this scope is slightly wider at more than 250 employees on average and a worldwide net turnover of more than € 40 million in the last financial year. This means that small and medium-sized enterprises (SMEs) are not covered, and in total only 13,000 EU and 4,000 non-EU companies will be required to comply, representing around 1% of EU companies. It is also a direct departure from the UNGPs, which explicitly covers all companies regardless of their size or circumstances.

Because of the little transparency regarding revenues and number of employees, it is difficult to ascertain whether the Directive will apply to some of the seeds companies based in the Netherlands.

#### Gender-blindness and failure to include vulnerable rightsholders

The proposed Directive does not acknowledge the negative impacts of business activities on women and/or other marginalised groups, including indigenous people or human rights defenders. Through this omission, the Commission has ignored the call of civil society and private companies to apply a gender lens to due diligence despite the body of evidence showing that corporate human rights abuses disproportionately impact women and girls. According to civil society advocates, the absence of a gender lens and intersectional approach in the draft due diligence directive would lead to the exclusion of women and render the adverse impacts on their rights invisible. Moreover, the proposal does not acknowledge vulnerable groups that may be particularly affected by corporate abuse, such as Indigenous people, migrant communities, and religious or ethnic minorities.

#### Loopholes in accountability and checkbox compliance

The proposal outlines that a company's due diligence responsibility extends to 'established business relationships' but fails to define this term. This could incentivise companies to pursue short-term contracts, instead of long-term engagement with suppliers.<sup>227</sup> In addition, the proposal's reliance on contractual cascading of due diligence obligations provides a perverse incentive for companies to dodge responsibility by increasing the distance between the company and its suppliers through indirect supplier relationships. Companies can use contractual clauses and third-party certification or auditing to fulfil due diligence obligations in these constructions. In effect, this provides a means to avoid liability when harm occurs and moves compliance responsibility from large multinational firms to SME suppliers. It is also contrary to existing best-practice that encourages companies to work together with business partners to address human rights risks.<sup>228</sup>

#### · Remedy and civil liability

The proposed Directive would establish a civil liability mechanism but includes limited provisions for companies to actively provide for or cooperate in remediation through grievance mechanisms other than civil suits. In addition, while civil liability is a welcome avenue, the sole reliance on this mechanism for legal remediation places a large burden on affected rightsholders and civil society organisations to pursue and finance such cases.<sup>229</sup> At the same time, the proposal mentions significant support to SMEs and third-country governments, but it fails to recognise this burden on civil society, trade unions and communities to monitor and hold corporations accountable and provides no commitment to supporting to these groups.<sup>230</sup> Likewise, the proposed Directive fails to address other structural barriers, including the burden of proof, statutes of limitations, collective redress, and other procedural obstacles that create real barriers to access an effective remedy.<sup>231</sup> Lastly, the civil liability mechanism only covers direct suppliers, shielding companies from liability for abuses committed further down the chain and preventing victims' access to justice.<sup>232</sup>

#### 4.5.2 EU Corporate Sustainability Reporting Directive

The Corporate Sustainability Reporting Directive (CSRD) is a proposed amendment to the existing Non-Financial Reporting Directive (NFRD), which was adopted in 2014 and came into force in 2017. The NFRD lays out rules on disclosure of non-financial information, such as environmental, social, human rights, anti-bribery, corruption, and diversity matters, by large EU-based corporations. To address the shortcomings of the NFRD, which has not led to the expected disclosures that are useful for stakeholders, the new CSRD proposal tightens these expectations. Amongst others, the CSRD reframes the reporting requirements in line with the Sustainable Finance Disclosure Regulation and extends the scope to include all large companies and listed SMEs rather than only large public interest companies with over 500 employees. In addition, the CSRD would expect companies to report how sustainability issues impact their company and how their company impacts people and the planet while introducing EU sustainability reporting standards that all companies would be required to use.<sup>233</sup>

The CSRD would require companies to report on their business model and strategy concerning stakeholder interests, sustainability risks, and opportunities. Moreover, it would set sustainability targets and report against them, report on due diligence processes and (potential) adverse impacts in value chains and disclose the role of management in these sustainability matters.

If approved, the CRSD would be a Directive amending the NFRD. The first set of draft standards was submitted in June 2022 with a view to adoption by the Commission at the end of October 2022, with the second set of standards to follow in October 2023.<sup>234</sup>

According to the Danish Institute for Human Rights, a key strength of the proposal is that the CSRD is likely to require undertakings to disclose a description of the due diligence process implemented with regard to sustainability matters; the principal actual or potential adverse impacts connected with the undertaking's value chain, including its own operations, its products and services, its

business relationships and its supply chain; any actions taken, and the result of such actions, to prevent, mitigate or remediate actual or potential adverse impacts. In this way, the CRSD would strengthen the Proposed Directive on Corporate Sustainability Due Diligence.<sup>235</sup>

#### 4.5.3 Law on Responsible and Sustainable International Business Conduct

In relation to responsible business conduct, the Dutch government has in the past repeatedly stressed that "due diligence is at the heart of Dutch RBC policy" and that it wants to make sure that Dutch companies are acting responsibly when doing business abroad. 236 Companies are expected to comply with the OECD Guidelines for Multinational Enterprises and UNGPs, and to conduct due diligence in their supply chains. Adhering to the OECD guidelines and due diligence are a prerequisite for RVO support and participation in missions.

In relation to business relationships with India, the government explicitly recognised that several Dutch companies in the agrifood sector have taken measures to address the issue of child labour in their supply chain. However, an overall evaluation by the Ministry of Foreign Affairs of its RBC policy concluded in 2020 that despite many positive steps taken by businesses, the policy was not sufficiently effective. The conclusion that voluntary agreements are not enough to achieve the sustainability goals<sup>237</sup> led to the proposal of a due diligence law.

In March 2021, an initiative proposal *Wet verantwoord en duurzaam internationaal ondernemen* (Law on Responsible and Sustainable International Business Conduct) was submitted to Dutch parliament by several members of parliament in opposition parties. The proposal introduces a duty of care act in supply chains to prevent and mitigate abuses of human rights, labour rights and environment. The initiative proposal is still pending.<sup>238</sup>

On multiple occasions, the Dutch government stated a preference for EU rather than national legislation on mandatory human rights due diligence. In a letter to parliament in November 2021, the former Minister of International Trade and Development Cooperation stated that the government aimed to push for a European-wide approach, but that a national law was possible should there not be sufficient progress on the EU level.<sup>239</sup> In December 2021, the Minister announced that due to multiple delays on the EU level, the government would develop a national legislative proposal, which was reaffirmed in the new government's coalition agreement as well as in the January 2022 briefings to the new ministers.<sup>240</sup>

On 31 May 2022, the Dutch parliament discussed the progress on a Dutch mandatory due diligence law, alongside a discussion about the proposed CSDD by the European Commission. The proposal provides for a general duty of care that applies to every Dutch company that knows or can reasonably suspect that its activities may have adverse consequences for human rights, labour rights or the environment in a country outside the Netherlands. Second, the proposal contains an obligation for certain large companies to exercise due diligence in their production chains, including the conduct of business relations, such as suppliers, of the company. On 16 June 2022, the Council of State issued an opinion on this proposal released with some suggestions for improvement.<sup>241</sup>

The initiators are currently working on an amended version of the proposal and the house of representatives has set submission date for the report on 26 January 2023. Once submitted, a round table discussion will organised prior to the input for the report. The preparatory group will consist of members of the governing coalition. In addition, the Committee requests the initiators to have a meeting with the Minister for Foreign Trade and Development Cooperation before the submission deadline.<sup>242</sup>

#### 4.5.4 Child Labour Duty of Care Act

In October 2019, the Dutch parliament adopted the *Wet zorgplicht kinderarbeid* (Child Labour Duty of Care Act). The Act requires that companies selling or transporting goods to the Dutch market are responsible for preventing that these goods are produced through child labour. In preventing that goods produced through child labour are sold on the Dutch markets, the law implies a due

diligence responsibility, requiring companies to identify risks of child labour in their supply chains, and conduct action plans to address (suspicions of) child labour occurrences. This responsibility, however, is not aligned with international standards on due diligence such as the OECD Guidelines, as it only requires companies to take action when there is a reasonable suspicion, but no requirement to continuously map and monitor supply chains.<sup>243</sup>

Despite being adopted in 2019 and a planned enforcement from 2022, the law has not yet been implemented.<sup>244</sup> In response to parliamentary questions to explain this delay, the former Minister of International Trade and Development Cooperation stated that the government does not want to introduce this law and prefers to wait for the European Commission to adopt the Directive on corporate sustainability due diligence.<sup>245</sup>

The current Minister for Foreign Trade and Development Cooperation confirmed in a letter dated 27 May 2022 that, in addition to the previous (proposed) legislation, a national CSR law is being prepared. It is stated that the national CSR law will be submitted to the House of Representatives around the summer of 2023 (consultation after the summer of 2022). When drafting the CSR Act, the Minister will take into account CSR legislation in surrounding countries and the CSRD proposal, and also take into account the initiative proposal for the Responsible and Sustainable International Business Act. The Child Labour Duty of Care Act will be included in the national CSR law as well.<sup>246</sup>

## 5

### **Conclusions and recommendations**

The findings of this study confirm the important economic relationships in the vegetable seeds sector that connect Netherlands-based actors with the Indian market. Public policies and initiatives provide a range of support instruments to the sector. Despite the known labour rights issues in the Indian sector, efforts by several of the leading corporate actors in mitigating CSR risks are still falling short.

The Dutch seeds sector, represented by domestic companies as well as subsidiaries of multinational corporations, holds a leading position in the global market. The sector is supported both by Dutch and EU enabling policies and programmes. It is not fully known to what extent Dutch vegetable seed companies are making use of these different arrangements and how much financial support is given. However, the fiscal arrangements under WBSO providing direct or indirect support for R&D activities are very popular. This is reflected in the, at times substantial, WSBO grants reported by some companies. Of interest to the industry is also the CROP-XR programme for the faster development of resilient new crops.

Next to the provision of subsidies and tax credits, the Dutch government also supports the internationalisation of the sector through engagement around issues like trade regulations, market access and intellectual property rights, both domestically, on the EU level, and through its embassy network in other countries. Moreover, improved access to high quality seeds in low-income countries as well as the eradication of child labour are at the centre of several sustainability programmes that involve public, private, and civil society actors.

Netherlands-based seed companies have multiple links with the Indian market. The role of India in the international market for vegetable seeds has rapidly increased, making it one of the leading actors today and an important business partner for the Dutch sector. With mutual shares between 17% and 20% during recent years, both countries play a key role in their respective seed trade. These relations involve the position of India as a 'testing ground' for seeds as well as multiplication and commercial quantity production. The role of the country as a production hub is influenced by the large size of the Indian vegetable market, climatic conditions, and availability of cheap labour for work-intensive manual tasks that are commonly executed on smaller farms.

Previous research has shown that the relationships in the Indian vegetable seeds sector consist of complex chains of actors, including contractors and sub-contractors. At the same time, evidence of human and labour rights breaches in seed production in India have long been documented. Tackling these issues is impeded by the multiple steps in the chain, however, complexity cannot be an excuse for insufficient due diligence procedures. The shipment data suggests that some of the seed producing companies in India supply multiple Dutch and international seed companies, giving also a role to industry associations in taking more responsibility for adherence to fundamental rights of workers among their members. Despite being aware of it since many years already and the broad recognition of issues like child labour, the disadvantaged role of women workers in the sector and the lack of a living income for seed farm workers, the analysis of voluntary CSR commitments of ten relevant actors suggests that the vegetable seed sector is not yet fully taking responsibility to mitigate CSR risks. Still a considerable number of Netherlands-based seeds companies (Axia Vegetable Seeds, Bejo Zaden and Ikasido) do not have a CSR policy in place. Other companies (Rijk Zwaan and Enza Zaden) do mention a commitment to CSR. However, they use voluntary initiatives (such as development projects in their sourcing countries) to embody this

stated commitment. Where companies do have a CSR policy in place (Syngenta, Monsanto (Bayer), BASF Vegetable Seeds, East-West International, and Vilmorin), they still fall short to describe how those commitments are brought into practice.

At present, the companies' voluntary CSR efforts are insufficient to effectively address the most pressing labour rights issues in the vegetable seed sector, including living wages and child labour. Some companies acknowledge that they settle for "market" wages either to prevent violence towards their suppliers (who would be engaging in "unfair competition" by accepting higher wages), or because they deem it a first step to achieve living wages. While these arguments are, by many accounts, inexcusable, it is true that achieving living wages for workers in the sector (and thereby addressing one of the major drivers of child labour) will require the close collaboration of all large seed traders. By the same token, the analysis suggests that all the companies included in the analysis have not made sufficient efforts to identify and end adverse impacts on women's rights occurring in the production of vegetable seeds linked to Netherlands-based companies.

This insufficient progress in responsible business conduct is also recognized by the Dutch government, which is currently preparing mandatory legislation on human rights due diligence, alongside similar legislation on the EU level. These will make due diligence in supply chains mandatory and require several of the profiled companies to considerably strengthen their approach to monitoring human rights in their supply chains.

In addition to these legislative steps, the government should also ensure that the substantial financial support that goes to the sector is connected to strict requirements in relation to responsible business conduct.

Regardless of whether companies will fall under the criteria of the upcoming due diligence legislation, (i.e., the EU Directive and the Dutch law), the findings in this report lead to the following recommendations to vegetable seeds companies:

- Publicly commit to respecting human rights throughout supply chains, including at the upstream supplier level, in line with the United Nations Guiding Principles on Business and Human Rights and the OECD Due Diligence Guidance for Responsible Business Conduct.
- Require suppliers at all stages of the seeds supply chain to respect fundamental human and labour rights (UN Declaration of Human Rights, ILO Declaration on Fundamental Principles and Rights at Work), and proactively support suppliers in implementing these standards.
- Monitor adherence to fundamental labour standards in all stages of the supply chain through independent, unannounced audits. Identify adverse impacts in operations and supply chains and take action to cease, prevent or mitigate.
- Commit to and implement a living wage for all workers in the seed supply chains and actively
  work with suppliers in increasing salaries to a living wage standard. Increase collaboration and
  coordination with other downstream buyers of seeds to more effectively tackle living wages
  and child labour.
- Prioritise commitments to and implementation of human and labour rights above pure adherence to voluntary Corporate Social Responsibility initiatives.
- Implement gender-sensitive human rights due diligence procedures that include stakeholder consultation.
- Create grievance mechanisms in line with international standards that are easily accessible to
  workers and other rightsholders to raise complaints about human rights abuses by the
  company, suppliers, and other business relations. This should mechanisms that are available in
  local languages and that consider connectivity and accessibility as well as different literacy
  levels.
- Track implementation of measures taken and communicate results.

#### **Appendix 1** Checklist for analysis of CSR policies

#### 1. Embed responsible business conduct into policies and management systems

Is there a public responsible business conduct or human rights policy covering labour conditions?

Does the company explicitly commit to the following international standards:

- The OECD Guidelines
- The ILO Declaration on Fundamental Principles and Rights at Work
- The 8 fundamental ILO Conventions:
- Conventions 87 and 98 (freedom of association)
- Conventions 29 and 105 (elimination of forced labour)
- Conventions 100 and 111 (elimination of discrimination in the workplace)
- Conventions 138 and 182 (abolition of child labour).

Does the policy statement outline expectations/requirements that suppliers (direct and indirect) and other business relations also respect human rights (including women's rights) and labour rights?

### 2. Identify and assess actual and potential adverse impacts associated with the enterprise's operations, products or services

Does the company conduct a risk screening or scoping exercise to identify the areas of business where CSR risks are most present and significant?

Does the risk assessment actively consider labour rights, particularly the Fundamental Principles and Rights, but also occupational health and safety, subcontracting practices, and living wages?

Does the company consult and engage impacted and potentially impacted rightsholders, including workers, workers' representatives, and trade unions? Do companies seek to engage with women groups specifically? If consulting rightsholders is not possible, independent expert such as human rights (including women's rights) defenders, trade unions and CSOs should be consulted.

Is the risk screening gender sensitive? E.g., is gender disaggregated data selected, is there specific attention to gendered impacts and risks?

#### 3. Cease, prevent and mitigate adverse impacts

Does the company have a mitigation plan in place when adverse impacts are identified? I.e. engagement with suppliers, action plans, monitoring mechanisms etc.?

Does the company actively promote and protect workers' representation and trade unions, and engage with workers, workers' representation and trade unions to prevent and mitigate risks?

Does the company engage in cross-sectoral approaches in addressing systemic labour issues, such as child labour?

#### 4. Track implementation and results

Does the company report on continuous tracking of the implementation and effectiveness of due diligence and mitigation activities? E.g. reporting on engagement with suppliers, reporting on whether risks have been mitigated etc.?

For human rights impacts the enterprise has, or may, cause or contribute to, does the company seek to consult and engage impacted or potentially impacted rightsholders, including workers, workers' representatives and trade unions to track progress?

#### 5. Communicate how impacts are addressed

Is the company transparent by publicly disclosing relevant information on due diligence policies, processes, activities conducted to identify and address actual or potential adverse impacts, including the findings and outcomes of those activities?

 Check for example for: Human Rights / Due Diligence Policy, Codes of Conduct, Sustainability Reports.

Does the company disclose labour, human rights, or environmental audit or assessment results with impacted or potentially impacted rightsholders, while respecting confidentiality requirements?

Does the company disclose gender disaggregated data where relevant, including on impacts on workers?

#### 6. Provide for or cooperate in remediation where appropriate

Does the company commit to cooperating in or providing remedy when it has caused or contributed to actual adverse impacts?

Does the company have a grievance mechanism that is accessible for:

- Direct employees and subcontractors
- Indirect workers in the supply chain
- Communities and other external stakeholders

Does the company communicate transparently about the grievance mechanisms, including aspects like procedure, processing times, remedial activities?

Does the company guarantee non-retaliation against whistle-blowers with protection mechanisms where relevant (e.g., guaranteeing anonymity, procedural safeguards, gender sensitivity e.g. in relation to gender-based violence (GBV))?

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