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Report

KORTE KETEN IN VLAANDEREN

Results of a survey among farmers

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SUMMARY

Detailed information on farms involved in short supply chain in Flanders is scarce. The Agency for Agriculture and Fisheries therefore conducted a survey of both farmers involved in short supply chain and those not, throughout Flanders.

The aim is to gain better insight into the characteristics of farms involved in short supply chain, partnerships and the need for them among farms involved in short supply chain, and the need for support. Both farms with and without a short supply chain branch were surveyed about their reasons for starting a short supply chain activity, or not. This will make it clearer which reasons are important for farms involved in short supply chain and which obstacles need to be eliminated to increase the inflow of new short supply chain farmers. The report serves in general to improve the knowledge on the short supply chain in Flanders, and as support for future policy.

Short supply chain is important as a (supplementary) income and farms involved in short supply chain are focusing more and more on the connection between farmers and citizens through farm visits, agricultural education and care farms.

There were 3,271 respondents in total. Of these, 23% have a short supply chain branch. The size of farms involved in short supply chain varies widely. For one-third of farms involved in short supply chain, the importance of the short supply chain in their total revenue is less than 2.5%, for 41% it is between 2.5% and 50%, and for 24% of respondents it is more than 50%. 7% of respondents are a 100% short supply chain farm.

There are proportionately many more farms with crops that sell via short supply chain than farms with animal production. Animal production, with the exception of dairy farming, is underrepresented within farms involved in short supply chain. Horticulture is overrepresented. Of all farms involved in short supply chain, livestock farming has a 35% share, with horticulture at 32%. Mixed farms represent 19% of all farms involved in short supply chain, and arable farms 14%. Among farms not involved in short supply chain, 54% specialise in livestock farming, 12% in horticulture, 22% in arable farming and 12% are mixed farms. The share of horticultural farms is still increasing for the revenue shares where more than 75% of revenue comes from short supply chain. 60% of 100%-farms involved in short supply chain are horticultural farms.

Organic farms are also well represented. 10.7% of farms involved in short supply chain are organic farms, compared to only 1.2% of farms without a short supply chain. Conversely, 72% of organic farms have a short supply chain branch. Short supply chain organic farms are primarily horticultural farms and generate a relatively high proportion of their revenue from the short supply chain. Almost 60% generate more than half of their total revenue from the short supply chain, and just over a quarter are 100%-farms involved in short supply chain, half of which are CSA farms.

Farms involved in short supply chain also have younger managers than farms that are not involved. Most managers of farms involved in short supply chain are between the ages of 45 and 54 (30%) and between 55 and 64 (29%).

Short supply chain sales are an important supplementary income. Income from the short supply chain is (very) important for two-thirds of respondents involved in short supply chain. Apart from short supply chain activity, farms involved in short supply chain are involved more in additional activities (diversification). Of all farms involved in short supply chain, 40% are involved in at least one additional activity (diversification) besides selling via the short supply chain. Among farms not involved in short supply chain, the figure is only 13%. The most common additional activity (diversification) among farms involved in short supply chain is farm visits (24%), followed by agricultural education for schools (16%) and being a care farm (13%). 38% of farms involved in short supply chain generate income from additional activities (diversification).

Of the farms involved in short supply chain, 94% say they will continue with the short supply chain. 4% say they will stop with the short supply chain, but not the entire farm. Of the farms without a short supply chain, only 4% consider it likely that they will set up a short supply chain branch in the future.

Conviction is one of the main reasons for starting a short supply chain activity, followed by economic considerations and the alternative nature of the short supply chain.

Telling a story, pride, a sense of accomplishment and appreciation, connecting with consumers and educating consumers about the importance of agriculture in food chain are the main reasons for farmers to get involved in the short supply chain. Business economics also scores well, including achieving a bigger margin on agricultural production, generating supplementary income and having multiple sources of income. A number of reasons relating to the short supply chain as an 'alternative' to traditional farming are also important: more control/autonomy by having control over sales, consciously choosing an alternative selling approach, and the conviction to take a different approach to farming. Among farms with less than 2.5% of their revenue in the short supply chain, these reasons are less pronounced than farms with a higher revenue share. Conviction-based factors, with the exception of farms with a short supply chain share of less than 2.5%, are important for all revenue share categories. The alternative nature of the short supply chain scores higher in the higher revenue shares and economic reasons especially in the middle revenue categories. Dairy cattle farms scored lower overall, and especially for conviction-based aspects. For dairy cattle farms, economic reasons are relatively more important.

The reasons for short supply chain cited by farms considering starting a short supply chain activity in the future are similar. In addition, 75% want to start a short supply chain activity because it is a way to continue their farming activity, for 47% it is a response to environmental challenges in agriculture and horticulture (e.g. manure action plan and programmatic approach to nitrogen). This is not the only reason behind the decision but it is more relevant here than for farms already involved on short supply chain. The question is whether this is the right reason to start with short supply chain. The scores are also somewhat higher for 'as an alternative for expanding traditional farming activities', and 'as an alternative for working outdoors'.

Complex legislation and business economic motivations are the main reasons for stopping with the short supply chain or not setting up a short supply chain.

Farms that stopped with the short supply chain cite too complex food safety legislation, too high labour intensity, the administrative burden, insufficient profits to cover costs, complex labour regulations and other regulations, and the fact that the short supply chain cannot be combined with traditional farming activities, as the main reasons.

Farms that have no plans for short supply chain in the future In addition to complex legislation, the administrative burden, the cost of additional manpower, and revenues that do not cover the higher costs, these farms highlight more generally problems with permits and spatial planning. And there is also a larger proportion here who highlight the typical farm situation as the reason and the fact that the expertise needed for the short supply chain does not match their own expertise.

Food safety legislation is the main problem for livestock farming. For horticulture, it is the too-high cost of additional manpower, which is the second reason given by dairy farms. Dairy farms generally score higher relative to the other types of farm, for various reasons, which perhaps suggests that the barriers to switching to short supply chain are more significant here. It is also noticeable for dairy farms that compared to the other types of farm, competition with other farmers is a more important reason. This could suggest that there are already a lot of dairy farms with a short supply chain branch, or that farmers are worried they will not be able to stand out enough from other short supply chain milk producers.

Farms involved in short supply chain are highly diverse and sell a broad range of products through a wide variety of sales channels.

Farms involved in short supply chain are highly heterogeneous in terms of type of farm, product range, sales channel, size of farm, share of the short supply chain in total revenue, their business model, etc. The most popular products sold are potatoes, fresh vegetables and fresh fruits. In addition, meat, fruit juices and/or fruit preparations, and dairy products are also important. More than half sell only products from their own farm. 37% also sell products from other farmers and 19% sell non-farm products.

Farm shops are by far the most popular sales channel (58%), followed by retail, cafes, vending machines and other farmers (all around 20%). Sales channels vary widely between types of farms, with fruit farms having the most diverse sales channels. Many sales channels are dominated by horticulture, which has an important share in the short supply chain. 100%-farms involved in short supply chain are less likely to have shop space and vending machines, but more niche sales channels such as public markets, self-picking, vegetable subscriptions, CSA and food teams. The 100%-farms involved in short supply chain and some of the farms between 75% and 100%-short supply chain have more, alternative sales outlets. With regard to the other categories, this is a more distinct group of farms involved in short supply chain. CSA, vegetable subscriptions and self-picking are much more popular at organic farms, while shops and vending machines are much more common at more traditional farms. Farms with a higher proportion of short supply chain sales sell more produce, sell more fruits, vegetables and herbs, and have more sales channels.

To promote sales, 79% of respondents organise at least one promotional campaign. Advertising on the internet and social media is by far the most common method, at 56%.

In total, 83% of short supply chain farmers have invested in short supply chain farming in the last 5 years. The scale of investments varies widely among farms. Three in 10 farmers have invested less than €1,000 in the last three years, 7% have invested more than €250,000. Dairy cattle, beef cattle and crop-livestock farms have invested the most in the short supply chain. The investments were primarily in the processing area (70%) and in sales (63%).

44% of the manpower on the farm is for the short supply chain, most of the working time goes to selling and packing products/preparing orders.

44% of the total manpower on farms is employed on the short supply chain branch. The short supply chain branch has an average of 2.1 full-time equivalents (FTE). Family workers are the most represented here. The number of FTEs on the short supply chain branch is highest among horticultural farms. Most working time goes into selling products and packaging products/preparing orders.

53% have a partnership and 42% of short supply chain farmers need a (better) partnership.

More than half of farmers have at least one partnership with another party. Partnerships in sales, marketing and jointly growing agricultural products received the highest scores, with about a quarter indicating this. 42% of farmers have a need for a partnership or a need for a better partnership in at least one area. The biggest need for partnership, indicated by about one quarter of respondents, is again in marketing and sales. On an item-by-item basis, most farmers tend not to collaborate with others, or do not have much need to collaborate with others.

Fruit farms generally have the most partnerships, 76% have partnerships in at least one area. Dairy farms have the lowest share at only 32%, and the percentage of dairy farms with partnerships is lowest across all categories. Although fruit farms already have a lot of partnerships, there is still significant need for (better) collaboration.

76% have received support in at least one area, 65% need (better) support

When they started their short supply chain branch, three-quarters of farmers received support in at least one area. Most of the support was in the areas of food safety legislation, spatial planning legislation and permits, and taxes. 65% of farmers need (better) support, primarily financial support, and in terms of spatial planning legislation and permits.

Across farm types, arable farming generally has lower levels of support, and dairy farms are higher than the other farm types. Dairy farms stand out in particular for financial support, spatial planning legislation and permits, and food safety legislation.

There is more need for support when the short supply chain revenue share is higher. In particular, the categories between 75% and 100% and 100%-farms involved in short supply chain stand out, with about three-quarters in need of support in at least one area. When looking at the individual categories of support, the share is highest in general for the category between 75% and 100%. There is mostly need for financial support from the government.

80% are positive about their choice for the short supply chain, and 57% state that the short supply chain branch is sufficiently profitable. The energy and purchasing power crisis is having a negative impact.

A large proportion of respondents are generally satisfied with their choice for the short supply chain, and more than half consider the short supply chain branch sufficiently profitable. The vast majority of short supply chain farmers feel that the short supply chain strengthens the connection between farmers and citizens, and that the short supply chain has a role to play in informing the public about the importance of agriculture. More than half of farmers also enjoy support from the local community for short supply chain activities on the farm. Fruit farms and 100%-farms involved in short supply chain are the most satisfied with their choice for the short supply chain. Fruit farms do however report the second lowest score in terms of profitability, and 100%-farms involved in short supply chain do not report the highest profitability either.

The current energy and purchasing power crisis (starting March 2022) does pose problems for farmers, as nearly half of the respondents said they are having difficulty passing on the increased costs resulting from the crisis to consumers. In addition, four in 10 indicate a drop in the number of customers since the start of the crisis. However, only 9% are considering winding down/stopping the short supply chain branch due to the crisis. Fruit farms and 100%-farms involved in short supply chain are the most likely to report higher costs.

Similarly, the COVID-19 crisis prompted a quarter of current short supply chain farmers to start or expand a short supply chain branch. Looking only at farms that started their short supply chain branch in or after 2020, this share rises to 40%.

For short supply chain farmers, it is unclear how the popularity of the short supply chain will continue to develop in the future. Many farmers do not know. The proportion who think more farmers will go short supply chain in the future is slightly higher, at 37%, than those who think this will not be the case. Furthermore, the proportion of respondents without a short supply chain who indicated they would go short supply chain in the future is limited to 4%. The fruit sector sees the most potential for the short supply chain, with 44% believing that more farmers will start a short supply chain in the next three years. They are also the least likely to consider stopping with the short supply chain. Dairy farms see the least potential in the short supply chain. The 100%-farms involved in short supply chain see the most potential for the short supply chain. Half indicate that more farmers will start a short supply chain in the next three years.

1 INTRODUCTION

One in five farms has some form of short supply chain sales, according to Statbel (Directorate-General for Statistics - Statistics Belgium). However, detailed information on these farms involved in short supply chain is scarce. Existing studies on the short supply chain highlight only a limited portion of short supply chain sales, or were carried out a long time ago, so the results are outdated. From an industry and policy perspective, there is a need for up-to-date figures on the short supply chain. This prompted the Agency for Agriculture and Fisheries to carry out a new, comprehensive study on the short supply chain in Flanders.

This comprehensive survey was conducted in February 2023 among 3,271 farmers, both with and without a short supply chain branch on their farms. Among other things, the survey asked about the characteristics of the farm and the short supply chain branch, the reasons why farmers were or were not involved in the short supply chain, the level of, and need for, cooperation and support, and the opinions of short supply chain farmers based on a number of assertions. The results of the survey were analysed and excerpted in this report. Policymakers can use the results of this report to design future policies around the short supply chain. In addition, the report serves to expand the knowledge about the short supply chain. Farmers and horticulturists, sectoral organisations and other interested parties can therefore learn more about the short supply chain in Flanders.

The survey questions were partly inspired by the survey conducted in 2014 by the Agency for Agriculture and Fisheries in the context of the study 'Recht van bij de boer(in)' (Van Buggenhout & Vuylsteke, 2014). A number of questions were taken from the survey from 2014, and adapted here and there to the current context. Many other questions are new. The questionnaire was submitted to experts within the agency and Flanders' Agricultural Marketing Board, as well as experts from the Steunpunt Korte Keten (Short supply chain Centre of Expertise - SKK) and the ILVO, in order to complete the survey.

As there is no complete list of farms in Flanders with a short supply chain branch, the survey was sent out to all farms in Flanders registered in the single application of the Agency for Agriculture and Fisheries. All farms with a short supply chain branch therefore had the opportunity to participate in the survey. Most of the questions are addressed to farms involved in short supply chain and especially the farms where the revenue of the short supply chain branch is at least 2.5%. In addition, there are a limited number of questions for farms without a short supply chain branch.

Short supply chain can be approached from different angles, whereby the proposed characteristics of the short supply chain can vary. As such, making a uniform and clear definition of the short supply chain is often difficult. In consultation with ILVO, Short supply chain Centre of Expertise and Flanders' Agricultural Marketing Board, the following definition of the short supply chain was formulated and used in the survey:

"The short supply chain is an alternative marketing system in which the producer sells (part of) their own agricultural products directly, through other farmers or in a partnership, to consumers or other businesses. Key features include a limited number of links or intermediaries, the local character, and the

producer has more of a say in pricing. The short supply chain strengthens engagement on the part of consumers, and offers opportunities to introduce consumers to farming practices."

The report starts with a description of both short supply chain and non-farms involved in short supply chain, by farm type, farm size, organic agricultural production, age of the managers, and additional activities (diversification) of the farm. The second part of this chapter looks at the revenue of farms involved in short supply chain in different ways. Chapter 3 looks at the motivations of farmers for getting started, or not, in the short supply chain.

Chapter 4 focuses on the farms with a short supply chain branch and specifically those with at least 2.5% of sales from short supply chain sales. Among other things, this chapter describes the product range and sales channels of the short supply chain, the labour situation, cooperation and support within the short supply chain, and several assertions about the short supply chain. Finally, the report combines some of the insights from the various chapters to draw conclusions.

We would like to thank Ann Detelder of the Short supply chain Centre of Expertise and Olivier Guiot of the Flanders Research Institute for Agriculture, Fisheries and Food (ILVO) for their help in preparing the questions and for proofreading the report.

2 ANALYSIS OF FARMS WITH AND WITHOUT A SHORT SUPPLY CHAIN BRANCH

2.1 DESCRIPTION OF ALL PARTICIPATING FARMS

Respondents to the survey consist of farms with and without a short supply chain branch. This section describes the characteristics of all farms. The data from the survey were enriched with data from the single application. This makes it possible to obtain a broader picture of the total population of farms.

Data for the analyses of farm type, farm size (SO) and organic farming were not yet available for the year 2022 or 2023. The data from 2021 were used instead. Farms that did not yet exist or had not yet set up a short supply chain branch by 2021 are therefore not included.

2.1.1 Responses from 3,271 farmers, of which 741 are involved in short supply chain

The questionnaire was sent to 23,325 farmers. A total of 3,271 farmers completed the survey, representing a response rate of 14%. 14 respondents were kept out of the results, including those who incorrectly indicated that they were short supply chain or incorrectly indicated that they had no short supply chain activities. This left a total of 3,257 respondents. Of the 3,257 respondents, 2,516 (77%) indicated that they did not have a short supply chain branch (Table 1). A total of 741 respondents (23%) therefore do have a short supply chain branch. This number is sufficient for statistical processing.

Table 1: Number (and share) of farms involved and not involved in short supply chain

	Number of respondents	Share
Short supply chain	**741**	**23%**
No short supply chain	**2,516**	**77%**
Total	**3,257**	**100%**

Source: short supply chain survey

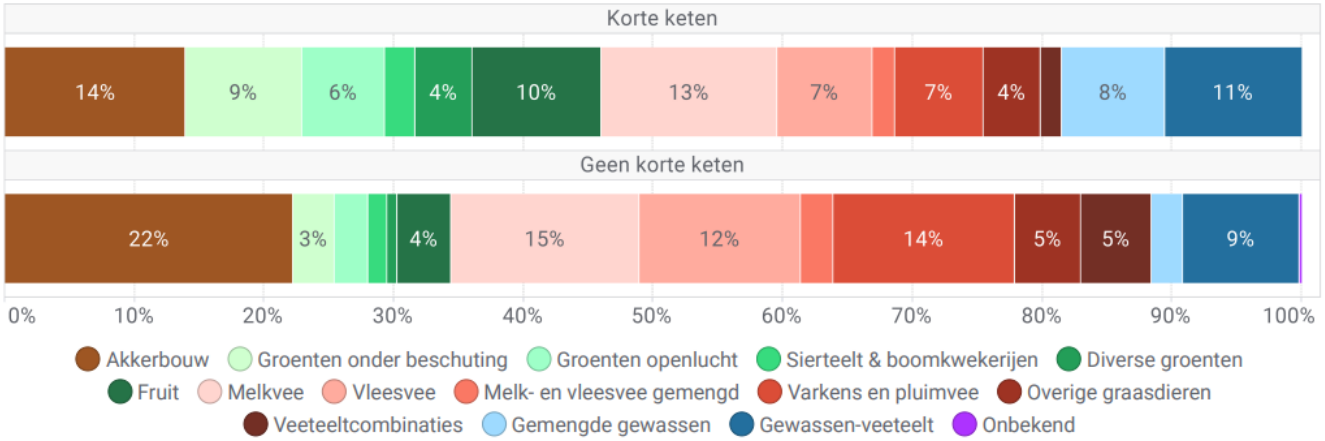
2.1.2 Horticulture over-represented in the short supply chain

Within farms involved in short supply chain, the proportion of specialised arable farms (brown colour in Figure 1) is 14%. The specialised horticultural farms (green) are much more represented, at 31%. Horticulture can be further subdivided into vegetables protected (9%); vegetables outdoors (6%); ornamental crops & nurseries (2%), miscellaneous vegetables (4%) and fruits (10%). Farms specialising in miscellaneous vegetables are primarily farms with a combination of vegetables protected and vegetables outdoors. Strawberries are classified among vegetables according to EU typology. Specialised livestock farms (red) are slightly more common than horticultural farms (35%). Within livestock farming, specialised dairy farms occupy the largest share, with 13% of the total number of farms. Beef cattle, dairy cattle and beef cattle mixed, pigs and poultry, other grazing animals and livestock combinations have respective shares of 7%, 2%, 7%, 4% and 2%. Pigs and poultry consists of two-thirds pig farms and

one-third poultry farms. Within poultry farms, these are primarily laying hens. Finally, around one-fifth of farms involved in short supply chain are mixed farms (blue). Within mixed farms, mixed crops have an 8% share and crop-livestock 11%.

The distribution of farm types differs significantly between farms with a short supply chain and those without. The proportion of arable farms is 8% higher among those without a short supply chain. Horticulture (green) is much more common among farms involved in short supply chain (31%) than farms without a short supply chain (12%). The shares of all farm types within horticulture are higher among farms involved in short supply chain. In turn, the share of livestock farming is much higher among farms without a short supply chain (54% versus 35%). The shares of dairy farms are about the same in both groups, however. Beef cattle and pigs and poultry are more represented among the farms without a short supply chain. Finally, the proportion of mixed farms is higher among farms involved in short supply chain. The difference is mainly related to the type of mixed crops of arable farms and horticulture, which is more common among farms involved in short supply chain. Relatively speaking, there are therefore many more farms with crops and primarily horticultural crops that sell via short supply chain than farms with animal production.

Figure 1: Share (%) of farm type for farms involved and not involved in short supply chain (number of observations = 3,110)



Korte keten	Korte keten
Geen korte keten	Geen korte keten
Akkerbouw	Arable farming
Groenten onder beschutting	Vegetables protected
Groenten openlucht	Vegetables outdoors
Sierteelt & boomkwekerijen	Ornamental crops & nurseries
Diverse groenten	Miscellaneous vegetables
Fruit	Fruit
Melkvee	Dairy cattle
Vleesvee	Beef cattle
Melk- en vleesvee gemengd	Dairy and beef cattle mixed

Varkens en pluimvee	Pigs and poultry
Overige graasdieren	Other grazing livestock
veeteeltcombinaties	Livestock farming combinations
Gemengde gewassen	Crops mixed
Gewassen-veeteelt	Crop-livestock

Source: short supply chain survey and Agency for Agriculture and Fisheries

The standard output (SO) of a farm is the sum of all output from agricultural production. The SO is a measure of the size of a farm. Since output varies widely between sectors, the distribution of SO by farm type is shown in Table 2 using the P25, median and P75.

Farms involved in short supply chain are not necessarily smaller than farms without a short supply chain branch. The SO varies significantly among different farm types, both for farms with and without a short supply chain branch. Within the farms involved in short supply chain, in general, the SO is highest in pigs and poultry, vegetables protected and dairy cattle, and is lowest in arable farming, beef cattle and other grazing animals. The total SO across all farm types of farms involved in short supply chain is about the same as that of farms without a short supply chain. This may be partly a result of the higher proportion of vegetables protected and fruit in a short supply chain with proportionally higher SO, and a smaller proportion of arable and beef cattle farms with the lowest SO. Moreover, there is a very wide distribution of SO within the farm types. The distribution of farm size among farms involved in short supply chain is smaller in horticulture, with the exception of fruit growing, and is larger in beef cattle and arable farming.

Table 2: Standard output (x €1,000) by farm type for farms involved and not involved in short supply chain (number of observations = 3,105)

Farm type	Short supply chain			No short supply chain		
	P25	Median	P75	P25	Median	P75
Arable farming	13.5	48.6	110.3	16.5	37.0	75.7
Vegetables protected	197.2	410.6	846.2	259.2	474.4	943.2
Vegetables outdoors	41.6	107.8	249.7	73.2	144.2	311.3
Ornamental crops & nurseries	111.3	193.1	445.1	175.2	380.8	706.5
Miscellaneous vegetables	51.7	123.2	279.8	176.7	232.8	592.7
Fruit	113.7	206.9	466.5	110.6	239.3	384.0
Dairy cattle	243.5	333.1	445.1	244.0	343.6	498.2
Beef cattle	54.5	96.4	182.1	34.7	74.2	143.0
Pigs and poultry	259.0	619.0	929.1	273.6	549.6	832.0
Other grazing livestock	15.3	29.3	78.7	7.4	13.9	28.3
Livestock farming combinations	34.4	257.2	772.7	244.3	370.4	617.5
Crops mixed	60.2	154.5	342.4	80.9	195.5	339.4
Crop-livestock	90.7	156.6	364.7	60.0	126.9	278.0
All farm types	**65.0**	**180.8**	**400.1**	**48.2**	**173.7**	**394.1**

Source: short supply chain survey and Agency for Agriculture and Fisheries

2.1.3 Organic farming is more common among farms involved in short supply chain and three-quarters of organic farms sell their products through short supply chain

Registered organic farms were identified using data from 2021. Organic farms (both involved and not involved in short supply chain) that did not start up an organic production method until after 2021 end up under non-organic in this analysis. Conversely, there may be farms that were organic in 2021 but have since abandoned organic production methods.

Of the 3,257 participating farms, 110 (or 3.4%) have organic production (Table 3). Of the 110 organic farms, 79 farms (72%) have a short supply chain branch. Of the 79 short supply chain organic farms, 47 (or 59%) have more than 50% of their total revenue coming from the short supply chain. 21 farms (or 27%) generate all of their revenue from the short supply chain. 10 of the 21 fully organic farms involved in short supply chain are CSA farms.

Conversely, organic farming is also more common among farms involved in short supply chain. 79 of the 741 farms involved in short supply chain (or 10.7%) are organic. Among farms without a short supply chain, only 31 of the 2,516 farms (or 1.2%) are organic.

Table 3: Number and proportion of organic farms with and without short supply chain (number of observations = 3,257)

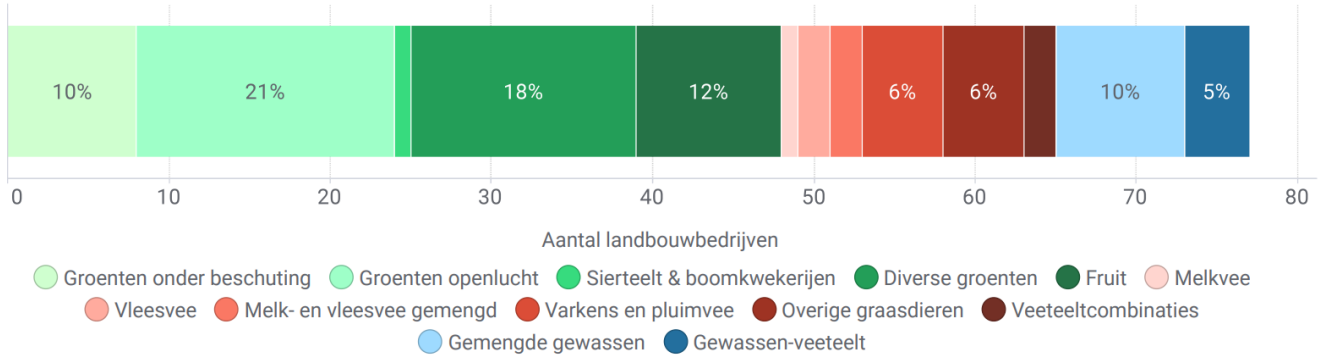
	Short supply chain		No short supply chain	
	Quantity	Share	Quantity	Share
Organic	79	10.7%	31	1.2%
Non-organic	662	89.3%	2,485	98.8%
Total	741	100%	2,516	100%

Source: short supply chain survey and Agency for Agriculture and Fisheries

Fully 62% of short supply chain organic farms are horticultural farms (green colour in Figure 2). Vegetables outdoor and miscellaneous vegetables are the largest in number within horticulture with respective shares of 21% and 18%. Vegetables protected and fruit have shares of 10% and 11%. Ornamental crops & nurseries has the lowest share at 1%. Livestock farms are less represented, at 23%. The shares of specialised dairy and beef farms are very small, at 2% and 3%, respectively. Dairy and beef cattle mixed and pigs and poultry score 3% and 6%, respectively. Other grazing animals and livestock combinations have respective shares of 6% and 3%.

Mixed farms have a share of 15%. The 'crop mixed' farm type has the largest share with 10%, while crop-livestock has a share of 5%. Unlike the entire group of farms involved in short supply chain, there are no organic farms involved in short supply chain specialising in arable farming.

Figure 2: Distribution of farm type for organic farms involved in short supply chain (number of observations = 77)



Aantal landbouwbedrijven	Number of farms
Groenten onder beschutting	Vegetables protected
Groenten openlucht	Vegetables outdoors
Sierteelt & boomkwekerijen	Ornamental crops & nurseries
Diverse groenten	Miscellaneous vegetables
Fruit	Fruit
Melkvee	Dairy cattle
Vleesvee	Beef cattle
Melk- en vleesvee gemengd	Dairy and beef cattle mixed

Varkens en pluimvee	Pigs and poultry
Overige graasdieren	Other grazing livestock
Veeteeltcombinaties	Livestock farming combinations
Gemengde gewassen	Crops mixed
Gewassen-veeteelt	Crop-livestock

Source: short supply chain survey and Agency for Agriculture and Fisheries

2.1.4 Operators of farms involved in short supply chain are younger

The operators are slightly younger at farms involved in short supply chain (Table 4). 11% of the operators of farms involved in short supply chain are under the age of 35, and 23% are between 35 and 44. Among farms without a short supply chain, the figure is 8% and 14%, respectively. 30% of the operators of farms involved in short supply chain are between the ages of 45 and 54, and 29% are between 54 and 65. Among farms without a short supply chain, the share of 45-54 year olds is slightly lower (25%), while that of 55-64 year olds is higher (36%). Finally, the proportion of over-65s among farms involved in short supply chain (7%) is lower than among those without a short supply chain (17%).

Table 4: Number and proportion (%) of farms by age group of youngest operator according to whether involved in short supply chain or not (number of observations = 3,235)

	Short supply chain		No short supply chain	
Age category	**Number**	**Share**	**Number**	**Share**
<35	84	11%	211	8%
35-44	169	23%	337	14%
45-54	218	30%	613	25%
55-64	215	29%	909	36%
65+	52	7%	427	17%
Total	**738**	**100%**	**2,497**	**100%**

Source: short supply chain survey and Agency for Agriculture and Fisheries

2.1.5 Farms involved in short supply chain carry out additional activities (diversification)

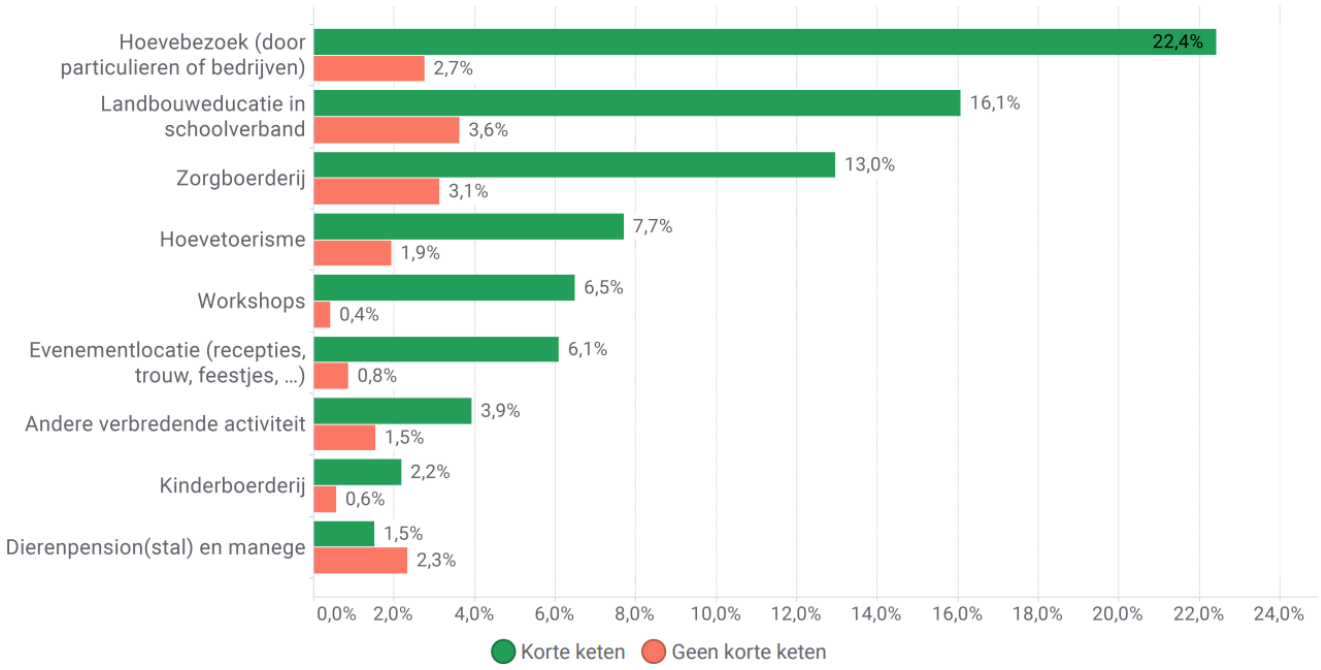
Farms involved in short supply chain carry out proportionately more additional activities (diversification), not including short supply chain sales, than farms without a short supply chain activity. Four in 10 farms involved in short supply chain have at least one additional activity (diversification). Among farms not selling their products through short supply chain, the figure is only 13%.

Figure 3 shows the proportion of farms (involved and not involved in short supply chain) carrying out a given additional activity (diversification). In all farm types, with the exception of the activity 'animal boarding house (stable) and riding school', the share is higher among the farms involved in short supply chain. Among farms involved in short supply chain, farm visits are the most popular, with 22.4% of farms organising this activity. In addition, agricultural education for schools (16.1%) and being a care farm (13%) are also popular initiatives. The activity 'animal boarding house (stable) and riding school' is the least common, with only 1.5%. The category 'other additional activity' is a residual category of

activities that respondents were free to fill in. Some examples include agricultural and/or horticultural contract work, forestry, landscaping/maintenance, making land available for youth camps, etc.

Among farms without a short supply chain, agricultural education for schools is the most popular, although the share of farms without a short supply chain (3.6%) is much lower than the share of farms involved in short supply chain (16.1%).

Figure 3: Share of farms carrying out an additional activity (diversification), for farms with and without a short supply chain (number of observations = 3,257)



Hoevebezoek (door particulieren of bedrijven)	Farm visits (by private individuals or companies)
Landbouweducatie in schoolverband	Agricultural education for schools
Zorgboerderij	Care farm
Hoevetoerisme	Farm tourism
Workshops	Workshops
Evenementlocatie (recepties, trouw, feestjes, ...)	Event venue (receptions, weddings, parties, etc.)
Andere verbredende activiteit	Other additional activity
Kinderboerderij	Petting zoo
Dierenpension(stal) en manege	Animal boarding house and stables
Korte keten	Short supply chain
Geen korte keten	No short supply chain

Source: short supply chain survey

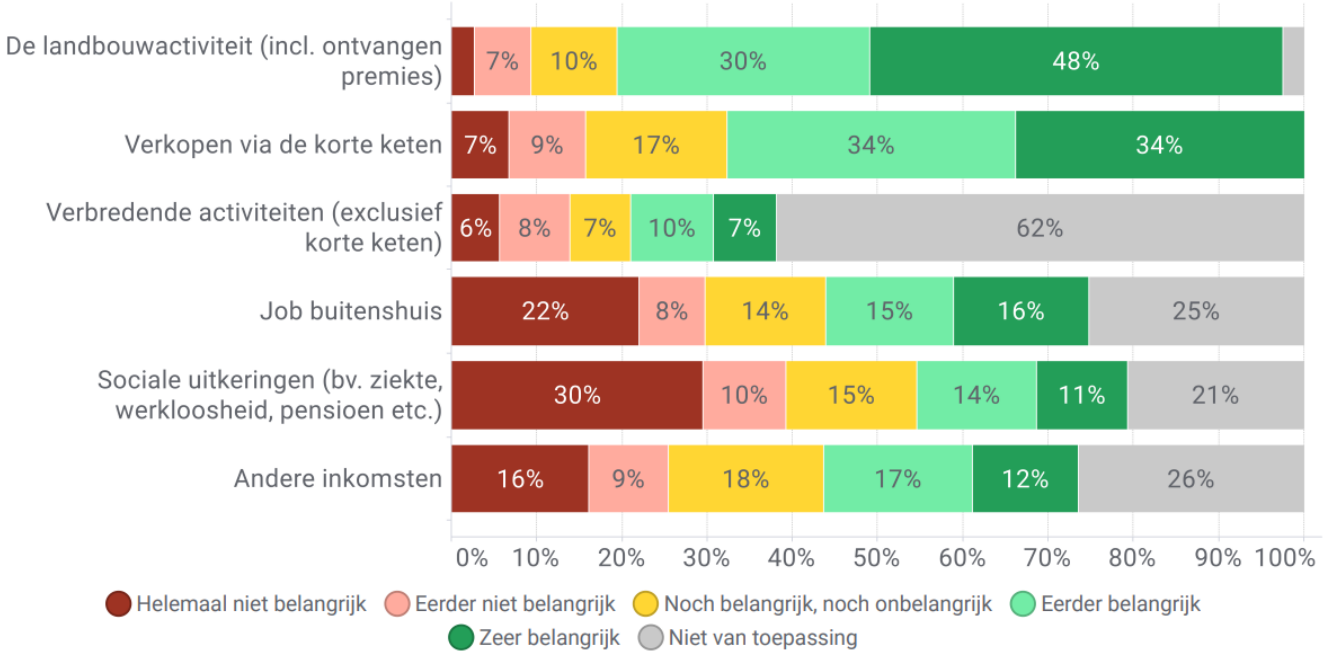
2.1.6 Two-thirds of farms involved in short supply chain believe that the income from short supply chain is important

Farms have other sources of income besides income from the mainstream sale of agricultural products. All respondents were asked to rank the income sources on the farm on a scale from not at all important, to very important. The results for the farms involved in short supply chain can be found in Figure 4, and for the farms without a short supply chain in Figure 5.

Two-thirds of farms involved in short supply chain consider the revenues from the short supply chain as generally important or even very important. This shows that the short supply chain plays an important role as regards supplementary income. 78% of farms stated that the income from their farming activity was important or very important. As indicated above, farms involved in short supply chain generate more of their income from the additional activities (diversification in percentage terms. 17% consider the income from their additional activities to be important or even very important.

Among farms without a short supply chain, the share that considers their income from agricultural activity important to very important is 71%. One notable difference between the two groups is in the area of social benefits. The share of farms involved in short supply chain that consider social benefits an important source of income (25%) is much lower than the share among farms without a short supply chain (35%). Job outside the home and other income are also more important among farms without a short supply chain, although the difference here is smaller.

Figure 4: Importance of different income sources among farms involved in short supply chain (number of observations = 741)

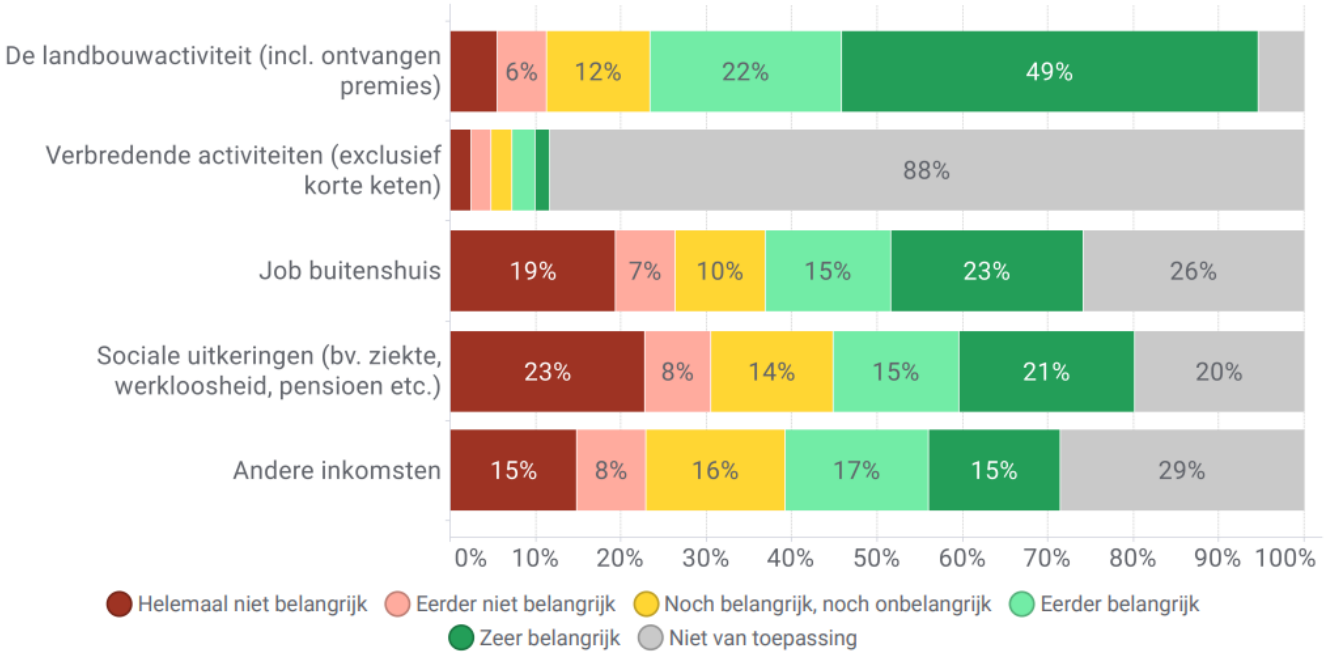


De landbouwactiviteit (incl. ontvangen premies)	Agricultural activity (incl. premiums received).
Verkopen via de korte keten	Selling via the short supply chain

Verbredende activiteiten (exclusief korte keten)	Additional activities/diversification (excluding short supply chain)
Job buitenshuis	Job outside the home
Sociale uitkeringen (bv. ziekte, werkloosheid, pensioen etc.)	Social benefits (e.g., sickness, unemployment, pension, etc.)
Andere inkomsten	Other income
Helemaal niet belangrijk	Not important at all
Eerder niet belangrijk	Generally not important
Noch belangrijk, noch onbelangrijk	Neither important nor unimportant
Eerder belangrijk	Generally important
Zeer belangrijk	Very important
Niet van toepassing	Not applicable

Source: short supply chain survey

Figure 5: Importance of different income sources among farms without short supply chain (number of observations = 2,516)



De landbouwactiviteit (incl. ontvangen premies)	Agricultural activity (incl. premiums received).
Verbredende activiteiten (exclusief korte keten)	Additional activities/diversification (excluding short supply chain)
Job buitenshuis	Job outside the home
Sociale uitkeringen (bv. ziekte, werkloosheid, pensioen etc.)	Social benefits (e.g., sickness, unemployment, pension, etc.)
Andere inkomsten	Other income
Helemaal niet belangrijk	Not important at all

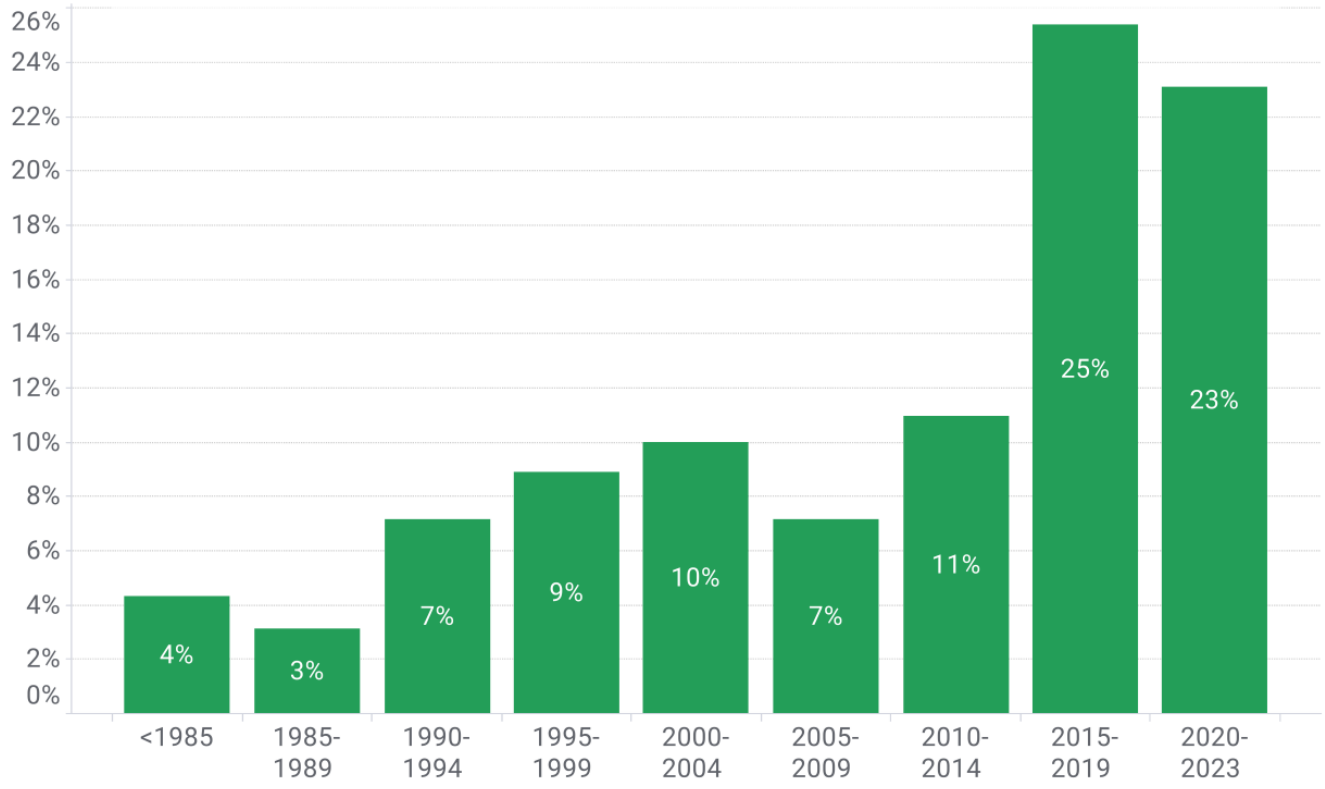
Eerder niet belangrijk	Generally not important
Noch belangrijk, noc onbelangrijk	Neither important nor unimportant
Eerder belangrijk	Generally important
Zeer belangrijk	Very important
Niet van toepassing	Not applicable

Source: short supply chain survey

2.2 DESCRIPTION OF FARMS INVOLVED IN SHORT SUPPLY CHAIN BY REVENUE AND FARM TYPE

Of all participating farms involved in short supply chain, 23% set up a short supply chain branch in 2020 or later[1] (Figure 6). 48% have started a short supply chain branch in the past 9 years (short supply chain branch started in or after 2015). In recent years, there has been a rise in the number of short supply chain branches set up. This may be due to the rising popularity of the short supply chain.

Figure 6: Distribution of the number of farms involved in short supply chain according to the year the short supply chain branch was set up (number of observations = 741)



[1] Remark: The survey was sent out in February 2023. The last bar in Figure 6 therefore only contains three years, compared to five years for the other bars.

The survey was sent in February 2023. The last bar in Figure 6 therefore only contains three years, compared to five years for the other bars.
Source: short supply chain survey

2.2.1 Revenue of the short supply chain branch

2.2.1.1 Most farms involved in short supply chain have a revenue of less than €20,000 and a revenue share lower than 10%

Table 5 shows the distribution of the number of farms according to the average annual revenue of the short supply chain branch. 56% of farms achieve an average annual revenue less than €20,000, 28% of which is less than €5,000. About a quarter (26%) of respondents have a revenue between €20,000 and €100,000. Only 5% of short supply chain farmers surveyed have a revenue higher than €250,000. 6% of respondents do not know the average revenue. The proportion of respondents decreases at higher revenue categories.

Table 5: Share (%) of farms according to the average annual revenue of the short supply chain branch (number of observations = 741)

Revenue of the short supply chain branch	Share of farms
Less than €5,000	28%
€5,000 - €19,999	28%
€20,000 - €49,999	16%
€50,000 - €99,999	10%
€100,000 - €250,000	6%
More than €250,000	5%
I don't know	6%

Source: short supply chain survey

In addition to absolute revenue of the short supply chain branch, the proportion of revenue to total farm revenue was also surveyed. Table 6 shows the distribution of farms according to the percentage of revenue from the short supply chain. A total of 250 farms (or 34% of the total number of farms involved in short supply chain) have a percentage of short supply chain revenue of less than 2.5%.[2] As with the average revenue of the short supply chain branch, the number of respondents falls as the share of revenue from the short supply chain rises. 24% of farms generate at least half of their farm revenue from the short supply chain. 7% of the farms are a 100%-short supply chain farm.

Table 6: Share of revenue from the short supply chain in total farm revenue (number of observations = 741)

Share of revenue from the short supply chain branch	Share of farms
Less than 2.5%	34%
>= 2.5% and < 10%	16%
>= 10% and < 25%	13%

[2] It is these 250 farms that did not have to complete large parts of the questionnaire on the characteristics of the short supply chain.

Share of revenue from the short supply chain branch	Share of farms
>= 25% and < 50%	12%
>= 50% and < 75%	9%
>= 75% and < 100%	8%
100%	7%

Source: short supply chain survey

2.2.1.2 Positive relationship between absolute revenue of the short supply chain branch and the share of revenue from the short supply chain in total revenue

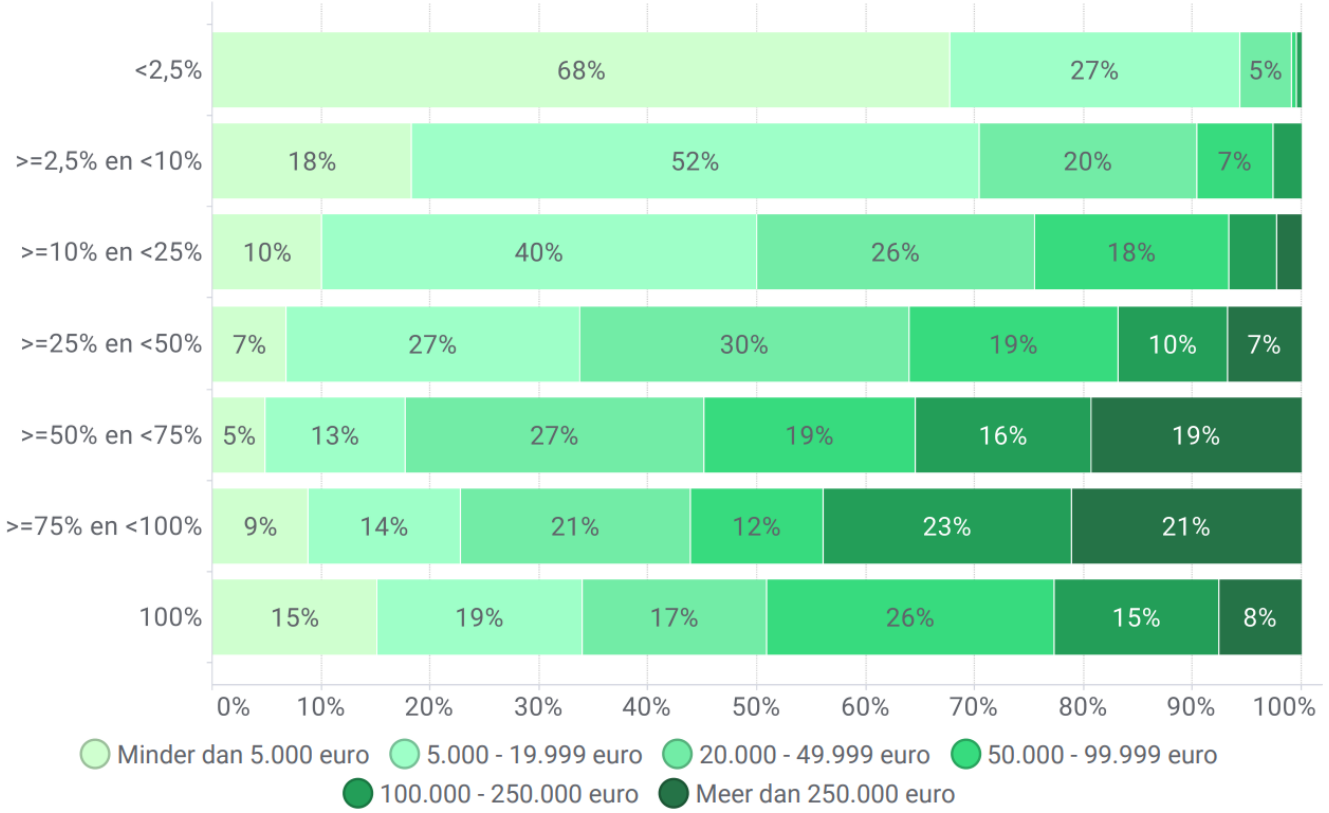
Figure 7 shows, by category of the revenue share, the distribution of farms according to absolute revenue from the short supply chain branch. Two thirds of the farms with a revenue share of less than 2.5% have an average annual revenue from the short supply chain of less than €5,000 and 27% have a revenue between €5,000 and €19,999.
For revenue percentages higher than 2.5%, there is an initial drop in the share of farms with revenue of less than €5,000. Somewhat surprisingly, the share of farms with this revenue increases again for revenue percentages between 75% and 100% and the 100% category.

For revenue between €20,000 and €49,999, the trend is the opposite: the share of farms increases initially as the revenue share increases, and falls again from a share of 75%. For revenue between €50,000 and €99,999, the share increases as the revenue percentage increases. Only at the revenue percentage between 75 and 100% is there a kink in the share of farms, while at 100%-farms involved in short supply chain the percentage increases again to 26%.

Finally, the figure shows that the share of farms with revenue higher than €100,000 from the short supply chain branch rises as the percentage of revenue from the short supply chain branch rises. At the revenue share between 2.5 and 10%, 3% of farms have a revenue higher than €100,000 euros and this rises to 44% for a revenue share between 75 and 100%. However, for 100%-farms involved in short supply chain, the share of farms with revenue higher than €100,000 falls to 23%. 100%-farms involved in short supply chain are more likely to be smaller farms, or sell less valuable agricultural products.

One interesting fact is that especially for 100%-farms involved in short supply chain, the share with less than €20,000 rises again. This is already the case for the group between 75% and 100%, albeit less pronounced. In turn, the share with more than €100,000 falls sharply. We will see in the section below on farm size that the standard output (SO) falls sharply for 100%-farms involved in short supply chain. This may be an indication that the SO only relates to mainstream agricultural production and not the short supply chain. In addition, the 100% short supply chain group consists of a subpopulation with sales channels such as CSA, food teams, self-picking, etc., which could potentially be smaller (see above and below in the report).

Figure 7: Distribution of the number of farms according to the revenue share of the short supply chain branch (y-axis) and the absolute revenue from the short supply chain (colour) (number of observations = 741)



Minder dan 5.000 euro	Less than €5,000
5.000 – 19.999 euro	€5,000 - €19,999
20.000 – 49.999 euro	€20,000 - €49,999
50.000 – 99.999 euro	€50,000 - €99,999
100.000 – 250.000 euro	€100,000 - €250,000
Meer dan 250.000 euro	More than €250,000

Source: short supply chain survey

2.2.1.3 100%-farms involved in short supply chain have the lowest standard output

Table 7 shows the distribution of the SO according to the share of revenue from the short supply chain. At €472,000, the average SO is highest with a short supply chain revenue percentage of less than 2.5%. The average SO initially falls sharply, then has a more downward trend between 2.5 and 100%, but falls sharply among the 100%-farms involved in short supply chain, to €103,000. The average of the SO is above the median in all categories. In the categories between 75% and 100%, and 100%, the average is even above the third quarter (Q3 or P75). In each revenue category, the distribution is therefore skewed by a number of farms with high SO.

Table 7: Distribution of SO across revenue shares of the short supply chain branch (number of observations = 741)

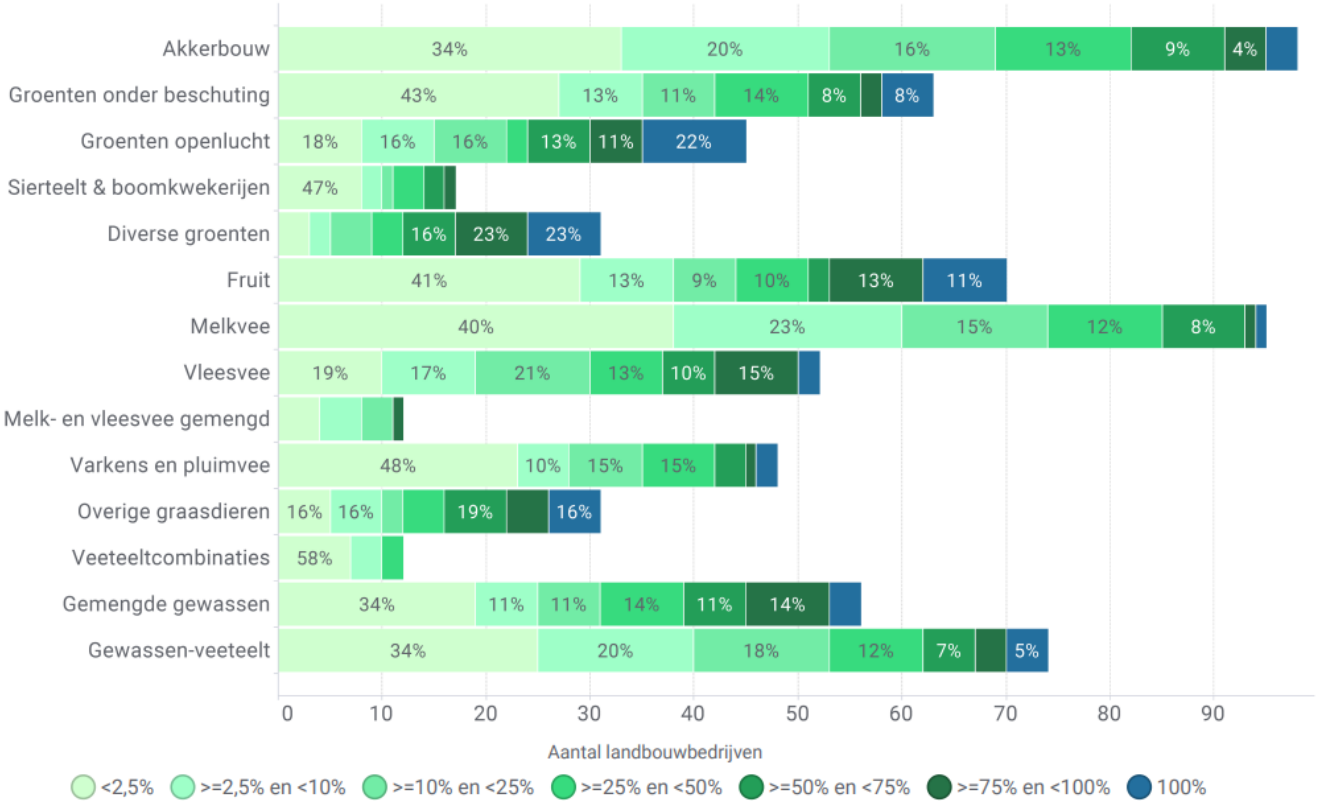
	<2.5%	>= 2.5% and < 10%	>= 10% and < 25%	>= 25% and < 50%	>= 50% and < 75%	>= 75% and < 100%	100%
Average	471.7	298.9	316.1	216.7	218.5	214.1	102.9
Q1	147.0	83.5	81.8	54.2	56.0	26.9	19.4
Median	318.4	242.0	203.9	133.6	136.3	114.2	41.5
Q3	610.2	469.8	382.3	264.6	245.8	191.3	83.4

Source: short supply chain survey

2.2.2 60% of 100%-farms involved in short supply chain are horticultural farms

Figure 8 shows, by farm type, a distribution of the number of farms with a given revenue share from the short supply chain. Most 100%-farms involved in short supply chain are in the horticulture sector. In terms of percentage, vegetables outdoor, miscellaneous vegetables and other grazing animals have the most farms with a high revenue share from the short supply chain. For example, 62% of miscellaneous vegetable farms generate more than half of their revenue from the short supply chain, and 22% are full farms involved in short supply chain. 48% of the other grazing livestock farms generate more than half of their revenue from the short supply chain, and 16% are full farms involved in short supply chain. For vegetables outdoors, 46% generate more than half of their revenue from the short supply chain, and 26% are full farms involved in short supply chain. In absolute numbers, there are many fruit farms with a high revenue percentage. However, due to the large number of fruit farms in total, the percentages are lower. Vegetables outdoors, miscellaneous vegetables and other grazing animals, like beef cattle, have a low percentage at a revenue share of less than 2.5%. Vegetables protected, fruit and dairy cattle have a high proportion of farms (more than 40%) with a revenue share of less than 2.5%.

Figure 8: Number (x-axis) and share (%) of farms with a given revenue percentage according to farm type (number of observations = 704)



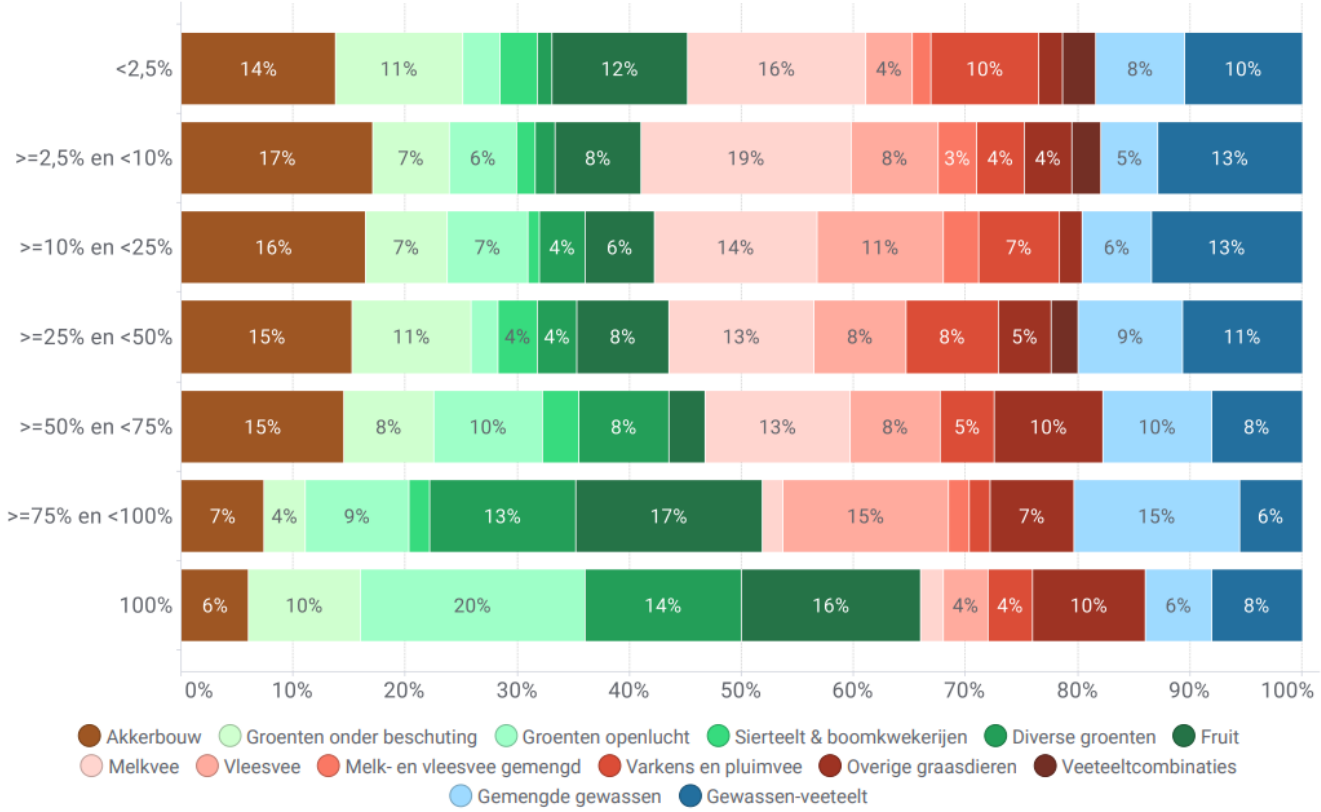
Akkerbouw	Arable farming
Groenten onder beschutting	Vegetables protected
Groenten openlucht	Vegetables outdoors
Sierteelt & boomkwekerijen	Ornamental crops & nurseries
Diverse groenten	Miscellaneous vegetables
Fruit	Fruit
Melkvee	Dairy cattle
Vleesvee	Beef cattle
Melk- en vleesvee gemengd	Dairy and beef cattle mixed
Varkens en pluimvee	Pigs and poultry
Overige graasdieren	Other grazing livestock
Veeteeltcombinaties	Livestock farming combinations
Gemengde gewassen	Crops mixed
Gewassen-veeteelt	Crop-livestock
Aantal landbouwbedrijven	Number of farms

Source: short supply chain survey and Agency for Agriculture and Fisheries

Conversely, Figure 9 shows the shares of farm types by revenue share. The share of arable crops fluctuates around 15% for a revenue percentage lower than 75%, but this falls sharply for revenue percentages higher than 75%. The share of horticultural farms initially drops from 31% to 24% between the categories less than 2.5% and between 2.5% and 10%. This is mainly a result of vegetables protected and fruit that have higher shares at a revenue percentage less than 2.5%. With higher revenue shares, the share of horticulture increases to 44% for a revenue share between 75 and 100% and even to 60% for 100%-farms involved in short supply chain. Within horticulture, the share of vegetables protected remains more or less constant for the different categories. The share of vegetables outdoors increases from a revenue percentage of 50%, with a strong increase among 100%-farms involved in short supply chain. Miscellaneous vegetables and fruit are a lot higher from a revenue percentage of at least 75%.

After an initial slight increase, the share of livestock farms declines as the revenue share increases. Among 100%-farms involved in short supply chain, the share of livestock farms is smallest at 20%. Among the lower revenue shares, dairy farms are the largest of all livestock farm types, fluctuating around 15% of the total. However, from a revenue percentage of more than 75%, the share of dairy farms falls sharply to 2%. The share of beef cattle is an outlier of 15% for a revenue share between 75 and 100%, and a low of 4% among farms with less than 2.5% and among 100%-farms involved in short supply chain. The shares of pig and poultry farms are generally lower for revenue percentages above 50%. Those of other grazing animals are somewhat higher for revenue percentages above 50%. The share of mixed farms remains more or less constant around 20% across revenue categories, but falls to 14% among 100%-farms involved in short supply chain.

Figure 9: The share of farms categorised by farm type and the share of the revenue from the short supply chain branch in total farm revenue (number of observations = 704)



Akkerbouw	Arable farming
Groenten onder beschutting	Vegetables protected
Groenten openlucht	Vegetables outdoors
Sierteelt & boomkwekerijen	Ornamental crops & nurseries
Diverse groenten	Miscellaneous vegetables
Fruit	Fruit
Melkvee	Dairy cattle
Vleesvee	Beef cattle
Melk- en vleesvee gemengd	Dairy and beef cattle mixed
Varkens en pluimvee	Pigs and poultry
Overige graasdieren	Other grazing livestock
Veeteeltcombinaties	Livestock farming combinations
Gemengde gewassen	Crops mixed
Gewassen-veeteelt	Crop-livestock

Source: short supply chain survey and Agency for Agriculture and Fisheries

3 IMPORTANT REASONS FOR SWITCHING TO SHORT SUPPLY CHAIN OR NOT

Farmers have various motivations for switching to short supply chain sales. At the same time, there are also various reasons that actually discourage farmers from starting a short supply chain branch, or prompt farmers to stop their short supply chain branch. This section looks at why farmers start a short supply chain, or not.

Below, we discuss the results of both farms with and without a short supply chain branch. In this regard, in addition to the total of the farms, the results are shown according to the type of farm and the share of revenue from the short supply chain.

3.1 FARMS INVOLVED IN SHORT SUPPLY CHAIN: 94% ARE CONTINUING WITH THIS ACTIVITY

Of the total number of respondents (3,257), 741 (or 23%) currently have a short supply chain branch on their farm. However, not every short supply chain farm will continue their short supply chain farm in the future. Table 8 shows how respondents see the short supply chain branch on their farms evolving over the next five years. The lion's share of respondents (94%) expect to continue their short supply chain branch in the future. Of this group, 42% say their short supply chain branch will grow, 43% predict a stabilisation, and a minority (9%) are considering scaling back. Only 4% say they will stop with the short supply chain, but not the farm itself. Finally, a small minority (2%) state that they will stop their entire farm in the next five years.

The farms continuing their short supply chain branch in the future (1, 2 and 3) were asked about their motivation to go short supply chain. The farms planning to stop their short supply chain, but not their entire farm, (4) were surveyed about the reasons for stopping their short supply chain. The results of the farms that shut down their farm completely (5) are not included here.

Table 8: Number and share of farms with a short supply chain branch according to the expected evolution of the short supply chain branch over the next five years (number of observations = 741)

How will the short supply chain branch evolve over the next five years?		Number of farms	Share
Will continue with short supply chain branch	**Growth (1)**	310	42%
	Stable (2)	321	43%
	Scaling back (3)	71	9%
Stopping with short supply chain	**Only stopping with short supply chain branch (4)**	26	4%
	Stopping the entire farm (5)	13	2%
Total		**741**	**100%**

Source: short supply chain survey

3.1.1 Farms continuing with the short supply chain

3.1.1.1 Conviction is the main reason, followed by economic considerations and the alternative nature of the short supply chain.

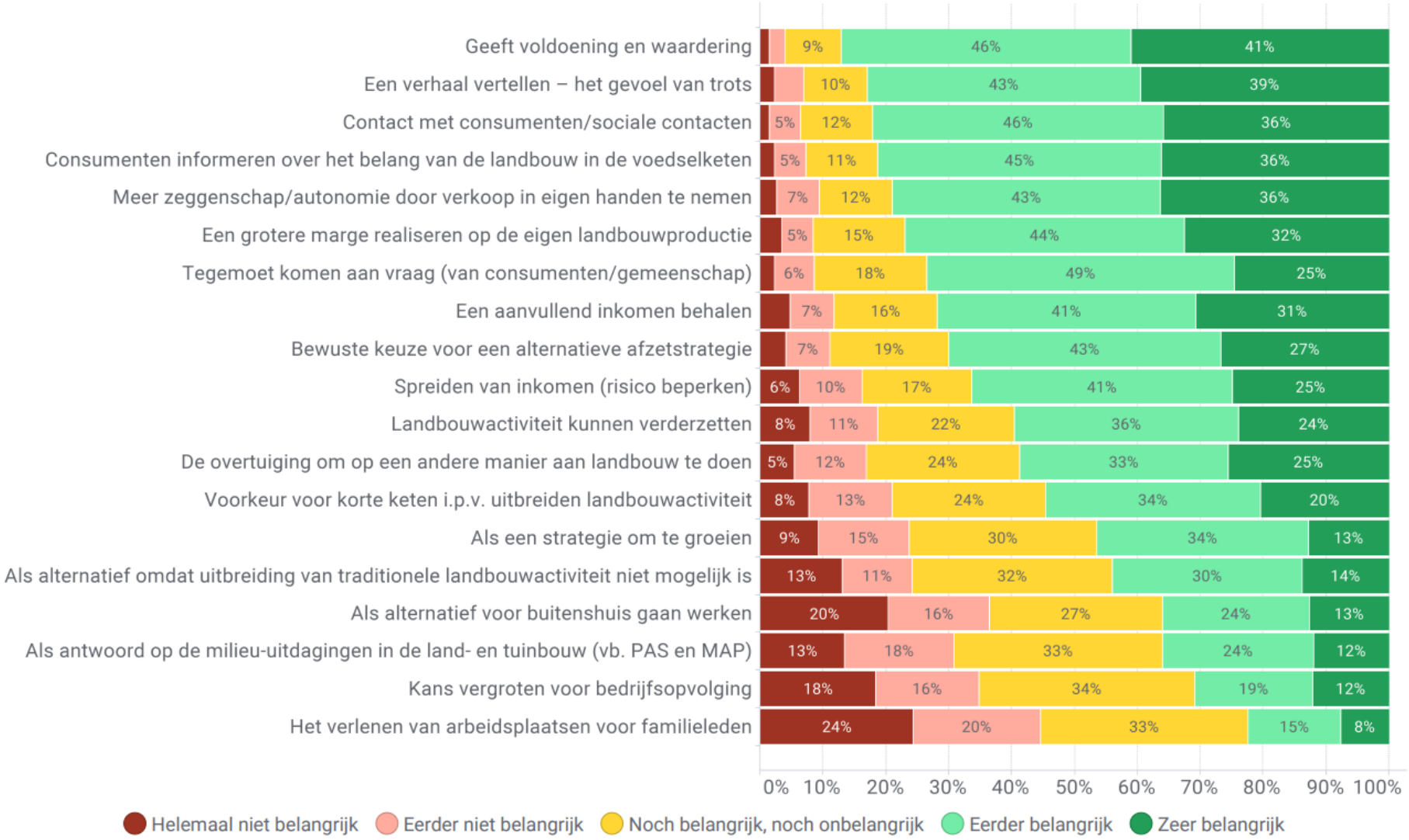
The farms whose short supply chain branch will grow, remain stable or be scaled back were asked to give a score to the reasons for starting a short supply chain activity, from not at all important to very important. Figure 10 gives an overview of the results.

The results show that many reasons are scored as generally/very important. A number of conviction-based aspects of short supply chain sales emerge as the most important. These include getting satisfaction and appreciation (87%), pride/telling a story (82%), contact with consumers/social contact (82%) and educating consumers about the importance of agriculture in the food chain (81%). This is followed by a second group of reasons related to economic aspects such as generating a bigger margin on the farm's own agricultural production (76%), earning additional income (72%) and having multiple sources of income (66%).

A third group of reasons relates to the alternative nature of the short supply chain. These include reasons such as having more control/autonomy over sales (79%), a conscious choice of an alternative sales system (70%) and the conviction to take a different approach to farming (58%). Choosing short supply chain as an alternative because expanding traditional agricultural activity is not possible and as an alternative for working outside the home score slightly lower, with respective percentages of 44% and 37%, although these are still high percentages. The short supply chain as a solution to environmental challenges (e.g., manure action plan and programmatic approach to nitrogen) is considered by about one-third of respondents as generally or very important.

The lowest-scoring reason is providing jobs for family members (23%). Furthermore, it is notable that as the answer is deemed less important, the neutral category (i.e. neither important nor unimportant) also increases. The responses 'generally not important' and 'not important at all' do not increase proportionately as the importance falls. This suggests that among the least important reasons, many respondents have no strong opinion.

Figure 10: Importance of reasons for farms involved in short supply chain continuing their short supply chain branch in the next five years (number of observations = 702)



Geeft voldoening en waardering	Gives satisfaction and appreciation
Een verhaal vertellen – het gevoel van trots	Telling a story - the sense of pride
Contact met consumenten/sociale contacten	Contact with consumers/social contacts
Consumenten informeren over het belang van de landbouw in de voedselketen	Informing consumers about the importance of agriculture in the food chain
Meer zeggenschap/autonomie door verkoop in eigen handen te nemen	More control/autonomy over sales
Een grotere marge realiseren op de eigen landbouwproductie	Generating a bigger margin on the farm's own agricultural production
Tegemoet komen aan vraag (van consumenten/gemeenschap)	Meeting demand (from consumers/community)
Een aanvullend inkomen behalen	Earning a supplemental income
Bewuste keuze voor een alternatieve afzetstrategie	Conscious choice of alternative sales strategy
Spreiden van inkomen (risico beperken)	Having multiple income sources (reducing risk)
Landbouwactiviteit kunnen verderzetten	Being able to continue agricultural activity
De overtuiging om op een andere manier aan landbouw te doen	The conviction to take a different approach to farming
Voorkeur voor korte keten i.p.v. uitbreiden landbouwactiviteit	Preference for short supply chain rather than expanding agricultural activity
Als een strategie om te groeien	As a strategy to grow
Als alternatief omdat uitbreiding van traditionele landbouwactiviteit niet mogelijk is	As an alternative because expanding traditional agricultural activity is not possible
Als alternatief voor buitenshuis gaan werken	As an alternative for working outside the home
Als antwoord op de milieu-uitdagingen in de land- en tuinbouw (vb. PAS en MAP)	As a solution to environmental challenges in agriculture and horticulture (e.g.. PAN and MAP)
Kans vergroten voor bedrijfsopvolging	Improve the chances of business succession
Het verlenen van arbeidsplaatsen voor familieleden	Providing jobs for family members
Helemaal niet belangrijk	Not important at all
Eerder niet belangrijk	Generally not important
Noch belangrijk, noch onbelangrijk	Neither important nor unimportant

Eerder belangrijk	Generally important
Zeer belangrijk	Very important

Source: short supply chain survey

3.1.1.2 Conviction-based factors are important for all revenue share categories, the alternative character of the short supply chain especially among the higher and economic factors especially among the middle revenue categories

This section further subdivides the farms that plan to continue their short supply chain according to the share of revenue from the short supply chain branch in the farm's total revenue. Table 9 shows by revenue share the shares of farms that consider a reason to go short supply chain important or very important. The share of farms that consider a reason not important at all, generally not important, or neither important nor unimportant, is not shown in the table.

For most reasons, the share is lowest at the lowest revenue category less than 2.5%. The revenue percentage between 2.5 and 10% also scores lower than the higher revenue percentages for various reasons.

More control/autonomy over sales has an increasing share as the revenue category increases, to fully 98% of 100%-farms involved in short supply chain who state that this is (very) important. Other factors that enquire as to the alternative nature of the short supply chain, such as 'the conviction to take a different approach to farming' are more important for the highest revenue percentages (more than 75%) than for the middle and especially for the lowest revenue percentages. The conscious choice of an alternative sales strategy is higher for revenue percentages above 10%.

Economic reasons score higher among the middle revenue percentages. 'Earning an additional income' is more important for revenue percentages between 2.5 and 75%, and 'having multiple income sources' for revenue percentages between 10 and 100%. The group with less than 2.5% has lower shares.

'Being able to continue the agricultural activity' has an increasing share for revenue percentages between 2.5 and 75%, and then falls again, which makes sense given the limited importance of agricultural activity for farms more dependent on revenue from the short supply chain. The preference for the short supply chain increases from a revenue percentage of more than 2.5%, and levels off from more than 50%.

Conviction-based aspects score high across all revenue percentages, although the 'less than 2.5%' category tends to have lower shares compared to the higher revenue percentages. The reason 'gives satisfaction and appreciation' is (very) important for 95% of farms with a revenue percentage of more than 50%. For the other conviction-based reasons, the shares are also higher among the higher revenue percentages. Only in the case of 'informing consumers about the importance of agriculture in the food chain' is there almost no difference between the categories.

Table 9: Share of farms that consider a reason to go short supply chain important or very important according to the share of revenue from the short supply chain branch in the farm's total revenue (number of observations = 702)

Reason for starting a short supply chain activity	<2.5%	>= 2.5% and < 10%	>= 10% and < 25%	>= 25% and < 50%	>= 50% and < 75%	>= 75% and < 100%	100%
Gives satisfaction and appreciation	77%	90%	91%	89%	97%	95%	96%
Telling a story - the sense of pride	76%	81%	90%	84%	87%	89%	94%
Contact with consumers/social contacts	74%	80%	86%	88%	89%	95%	86%
Informing consumers about the importance of agriculture in the food chain	79%	79%	83%	87%	80%	78%	84%
More control/autonomy over sales	61%	79%	86%	89%	91%	94%	98%
Generating a bigger margin on the farm's own agricultural production	60%	82%	88%	89%	87%	87%	82%
Meeting demand (from consumers/community)	62%	65%	76%	86%	85%	79%	88%
Earning a supplemental income	52%	82%	90%	89%	85%	70%	64%
Conscious choice of alternative sales strategy	47%	66%	83%	85%	85%	94%	88%
Having multiple income sources (reducing risk)	44%	68%	83%	86%	84%	83%	72%
Being able to continue agricultural activity	42%	57%	66%	77%	81%	74%	66%
The conviction to take a different approach to farming	44%	45%	63%	59%	78%	86%	86%
Preference for short supply chain rather than expanding agricultural activity	36%	41%	64%	71%	74%	73%	74%
As a strategy to grow	29%	38%	54%	57%	50%	64%	50%
As an alternative because expanding traditional agricultural activity is not possible	35%	47%	53%	47%	45%	48%	40%
As an alternative for working outside the home	27%	34%	39%	40%	37%	49%	40%
As a solution to environmental challenges in agriculture and horticulture (e.g. PAN and MAP)	30%	29%	37%	42%	44%	47%	46%
Improve the chances of business succession	22%	27%	32%	41%	42%	34%	38%
Providing jobs for family members	19%	21%	23%	23%	29%	25%	26%

Source: short supply chain survey and Agency for Agriculture and Fisheries

3.1.1.3 Vegetables outdoor and beef cattle find more reasons important to go short supply chain; dairy cattle score lower, especially for conviction-based aspects

Vegetables outdoors and beef cattle generally have higher shares, dairy cattle, on the other hand, scores low. For the conviction-based reasons such as 'gives satisfaction and appreciation', vegetables outdoors, fruit and beef cattle score very high. Dairy cattle give lower scores, especially for conviction-based aspects. Dairy cattle does have a high share for informing consumers about the importance of

agriculture, which is the main reason. For dairy cattle, economic aspects are relatively more important within the reasons they give, such as earning supplementary income, for example.
Economic reasons score higher for beef cattle. These are 'generating a bigger margin' and 'earning supplemental income'. For the rest, generating a bigger margin is fairly similar for multiple farm types. Supplemental income is less important for vegetables outdoors and fruits. Having multiple income sources to reduce risk is less important for pigs and poultry.

Beef cattle farms have higher shares for 'as an alternative for working outside the home', 'as a strategy to grow', or 'as an alternative because expanding the agricultural activity is not possible', as well as for 'as a solution to environmental challenges'.

Table 10: Share of farms that consider a reason to go short supply chain important or very important according to the share of revenue from the short supply chain branch in the farm's total revenue (number of observations = 565)

Reason for short supply chain	Arable farming	Vegetables protected	Vegetables outdoors	Fruit	Dairy cattle	Beef cattle	Pigs and poultry	Crops mixed	Crop-livestock
Gives satisfaction and appreciation	85%	90%	96%	85%	77%	94%	89%	87%	91%
Telling a story - the sense of pride	81%	80%	82%	87%	74%	94%	81%	84%	85%
Contact with consumers/social contacts	80%	78%	92%	87%	77%	88%	81%	73%	83%
Informing consumers about the importance of agriculture in the food chain	76%	80%	85%	86%	83%	80%	83%	81%	76%
More control/autonomy over sales	77%	78%	89%	80%	65%	88%	85%	80%	70%
Generating a bigger margin on the farm's own agricultural production	77%	78%	71%	78%	73%	86%	81%	74%	76%
Meeting demand (from consumers/community)	74%	81%	84%	65%	62%	69%	78%	71%	68%
Earning a supplemental income	77%	75%	66%	57%	76%	80%	75%	71%	78%
Conscious choice of alternative sales strategy	70%	64%	76%	75%	56%	72%	76%	75%	65%
Having multiple income sources (reducing risk)	69%	71%	74%	69%	63%	72%	53%	71%	64%
Being able to continue agricultural activity	71%	51%	58%	52%	46%	74%	57%	65%	64%
The conviction to take a different approach to farming	59%	51%	60%	61%	39%	60%	66%	60%	47%
Preference for short supply chain rather than expanding agricultural activity	54%	56%	57%	60%	39%	62%	53%	53%	48%
As a strategy to grow	48%	51%	42%	48%	31%	53%	49%	44%	43%
As an alternative because expanding traditional agricultural activity is not possible	54%	36%	40%	28%	44%	51%	43%	40%	59%
As an alternative for working outside the home	36%	27%	40%	36%	40%	49%	28%	22%	36%
As a solution to environmental challenges in agriculture and horticulture (e.g. PAN and MAP)	32%	31%	37%	37%	28%	45%	30%	38%	34%
Improve the chances of business succession	34%	21%	29%	24%	28%	38%	30%	38%	35%
Providing jobs for family members	21%	20%	22%	19%	28%	19%	30%	18%	21%

Source: short supply chain survey and Agency for Agriculture and Fisheries

3.1.2 Farms stopping with the short supply chain: profit not enough to cover costs, too labour intensive, too high cost of additional workers and complex legislation

A small proportion of farms involved in short supply chain state that they will stop with their short supply chain branch in the future. Figure 11 shows the reasons farmers find important for stopping with their short supply chain. This group only had 26 respondents in total, so the results should be interpreted with caution.

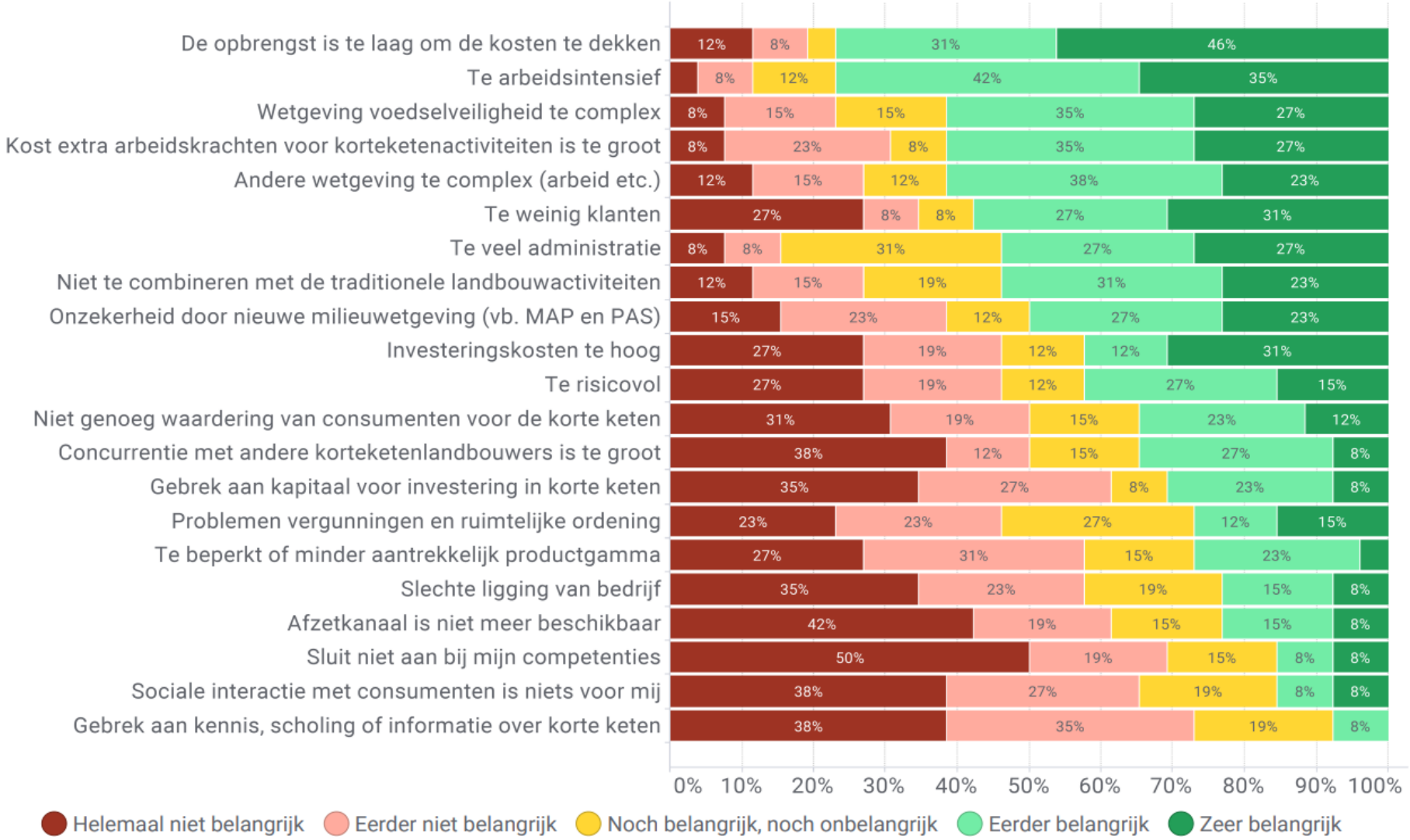
The two main reasons for stopping with the short supply chain branch are too low revenues to cover costs (77%) and the high labour intensity of the short supply chain (77%). Too complex legislation (on food safety, labour, etc.), the too high cost of additional workers, and too few customers are reasons considered (very) important by about 60% of respondents. The administrative burden and the difficulty of combining the short supply chain with traditional farming activities is (very) important for 54% of respondents. Half of respondents felt that the uncertainty of the new environmental legislation (e.g., manure action plan and programmatic approach to nitrogen) was an important reason for stopping with the short supply chain.

The reasons that were given a mixed score are the high investment costs and the risky nature of the short supply chain. Competition with other short supply chain farmers and a lack of capital for investment in the short supply chain is (very) important for about one-third of respondents.

Several reasons, including the poor location of the farm, a product range that is too limited or less attractive, the fact that the sales channel is no longer available, and problems with permits and spatial planning are (very) important for only a quarter of respondents.

Only 8% of farms indicated that a lack of knowledge, training or information was important, and no respondents found this very important. Lack of the right expertise and no need for social interaction with consumers are reasons that also score low, at 16%. Not enough appreciation for the short supply chain on the part of consumers is more important at 35%, although half of respondents also indicated that this reason is not important (at all).

Figure 11: Importance of reasons for farms involved in short supply chain stopping with their short supply chain branch (number of observations = 26)



De opbrengst is te laag om de kosten te dekken	Revenue is too low to cover costs
Te arbeidsintensief	Too labour intensive
Wetgeving voedselveiligheid te complex	Food safety laws too complex
Kost extra arbeidskrachten voor korteketenactiviteiten is te groot	Cost of additional workers for a short supply chain branch is too high
Andere wetgeving te complex (arbeid etc.)	Other legislation too complex (labour, etc.)
Te weinig klanten	Not enough customers
Te veel administratie	Administrative burden
Niet te combineren met de traditionele landbouwactiviteiten	Cannot be combined with traditional agricultural activities
Onzekerheid door nieuwe milieuwetgeving (vb. MAP en PAS)	Uncertainty due to new environmental legislation (e.g. MAP and PAN)
Investeringskosten te hoog	Investment cost too high
Te risicovol	Too risky
Niet genoeg waardering van consumenten voor de korte keten	Not enough appreciation for the short supply chain on the part of consumers
Concurrentie met andere korteketenlandbouwers is te groot	Competition with other short supply chain farmers is too strong
Gebrek aan kapitaal voor investering in korte keten	Lack of capital for investment in short supply chain
Problemen vergunningen en ruimtelijke ordening	Permit and spatial planning issues
Te beperkt of minder aantrekkelijk productgamma	Product range too limited or less attractive
Slechte ligging van bedrijf	Poor location of farm
Afzetkanaal is niet meer beschikbaar	Sales channel is no longer available
Sluit niet aan bij mijn competenties	I do not have the relevant expertise
Sociale interactie met consumenten is niets voor mij	Social interaction with consumers is not important for me
Gebrek aan kennis, scholing of informatie over korte keten	Lack of knowledge, training or information about the short supply chain
Helemaal niet belangrijk	Not important at all
Eerder niet belangrijk	Generally not important
Noch belangrijk, noch onbelangrijk	Neither important nor unimportant
Eerder belangrijk	Generally important
Zeer belangrijk	Very important

Source: short supply chain survey

3.2 FARMS WITHOUT A SHORT SUPPLY CHAIN: ONLY 4% ARE CONSIDERING SHORT SUPPLY CHAIN

Of the total number of respondents (3,257), 2,516 (or 77%) currently do not have a short supply chain branch on their farm (Table 11). Of the farms without a short supply chain, 9% have previously had a short supply chain branch on their farm. 91% have never tried a short supply chain.

Table 11: Share (%) according to whether or not the farm has tried short supply chain in the past, and the likelihood of starting short supply chain for farms without one

Previously had a short supply chain?	Likelihood of starting short supply chain (again) in the future?	Number of farms	Share of subtotal (column 1)	Share of total
Yes	**(Generally) low**	213	93%	8%
	(Generally) high	15	7%	1%
No	**(Generally) low**	2,187	96%	87%
	(Generally) high	101	4%	4%
Total		**2516**	/	**100%**

Source: short supply chain survey

Of the farms that have previously stopped with their short supply chain, 93% consider the likelihood (generally) low that they will start a short supply chain again. Of the farms that have never tried out a short supply chain, 96% indicated that the likelihood of starting a short supply chain is (generally) low. A small minority (4%) are considering a short supply chain, and consider the likelihood (generally) high.

The following are three groups of respondents. The first group consists of respondents who have previously had a short supply chain branch but have since stopped (3.2.1) The second group has never had a short supply chain branch and deems it unlikely that they will start a short supply chain branch (3.2.2). The third group consists of respondents who have never had a short supply chain branch, but deem it likely that they will start one (3.2.3).

3.2.1 Farms that have stopped with short supply chain: complex legislation, too labour intensive, administrative burden and not enough profit to cover costs

228 respondents to the survey have stopped with their short supply chain. Figure 12 gives an overview of which reasons were important in this regard, and which not. The results are similar to the results of the farms involved in short supply chain that will stop with their short supply chain in the future (see section 3.1.2)

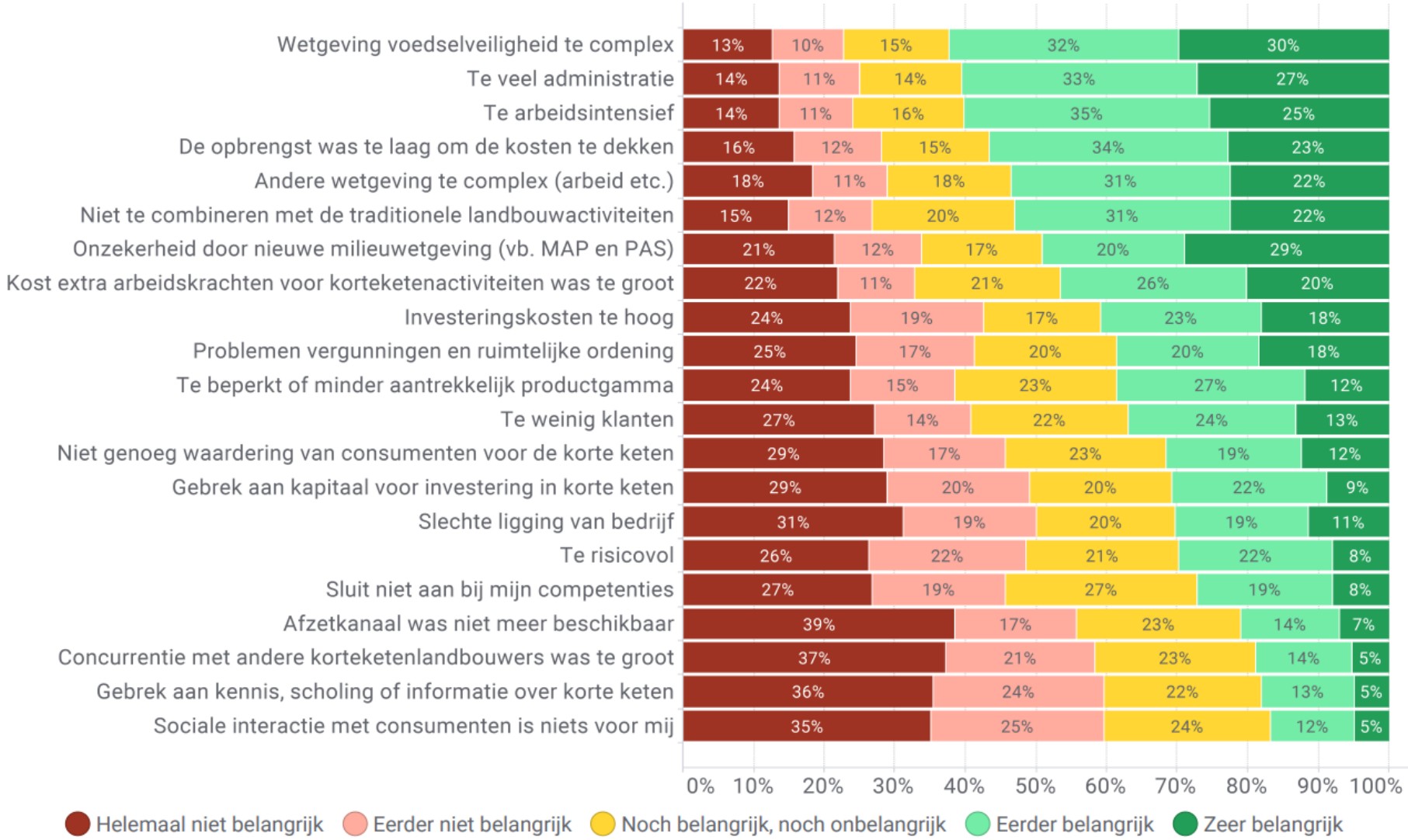
Complex food safety legislation is the main reason for stopping with the short supply chain, with 62% of respondents finding this (very) important. The administrative burden and too labour intensive are also very important reasons for stopping (60%). Too low revenues to cover costs, other complex legislation (e.g. labour, etc.) and the fact that the short supply chain cannot be combined with traditional farming activities are reasons that are (very) important for slightly more than half of the respondents. The uncertainty created by new environmental legislation (e.g. manure action plan and programmatic approach to nitrogen) is important for half of the respondents, and the too-high cost of additional labour for the short supply chain branch for 46% of respondents.

There are a number of reasons that are (very) important/ (not at all) important for an equal share of farms (40%): too high investment costs, problems with permits and spatial planning, a product range which is too limited or less attractive and not enough customers.

About three out of ten respondents consider not enough appreciation for the short supply chain on the part of consumers, lack of capital for investment in the short supply chain, poor location of the farm, the too risky nature of the short supply chain and the fact that the farmer lacks the expertise needed for the short supply chain (very) important.

The least important reasons for stopping with the short supply chain are: the sales channel is no longer available (21%), competition with other short supply chain farmers is too strong (19%), lack of knowledge, training, or information about the short supply chain (18%) and social interaction with consumers is not important for me (17%).

Figure 12: Importance of reasons for farms without short supply chain activity that stopped with their short supply chain (number of observations = 228)



Wetgeving voedselveiligheid te complex	Food safety laws too complex
Te veel administratie	Administrative burden
Te arbeidsintensief	Too labour intensive
De opbrengst was te laag om de kosten te dekken	Revenue was too low to cover costs
Andere wetgeving te complex (arbeid etc.)	Other legislation too complex (labour, etc.)
Niet te combineren met de traditionele landbouwactiviteiten	Cannot be combined with traditional agricultural activities
Onzekerheid door nieuwe milieuwetgeving (vb. MAP en PAS)	Uncertainty due to new environmental legislation (e.g. MAP and PAN)
Kost extra arbeidskrachten voor korteketenactiviteiten was te groot	Cost of additional labour for a short supply chain branch was too high
Investeringskosten te hoog	Investment cost too high
Problemen vergunningen en ruimtelijke ordening	Permit and spatial planning issues
Te beperkt of minder aantrekkelijk productgamma	Product range too limited or less attractive
Te weinig klanten	Not enough customers
Niet genoeg waardering van consumenten voor de korte keten	Not enough appreciation for the short supply chain on the part of consumers
Gebrek aan kapitaal voor investering in korte keten	Lack of capital for investment in short supply chain
Slechte ligging van bedrijf	Poor location of farm
Te risicovol	Too risky
Sluit niet aan bij mijn competenties	I do not have the relevant expertise
Afzetkanaal was niet meer beschikbaar	Sales channel was no longer available
Concurrentie met andere korteketenlandbouwers was te groot	Competition with other short supply chain farmers was too strong
Gebrek aan kennis, scholing of informatie over korte keten	Lack of knowledge, training or information on short supply chain
Sociale interactie met consumenten is niets voor mij	Social interaction with consumers is not important for me
Helemaal niet belangrijk	Not important at all
Eerder niet belangrijk	Generally not important
Noch belangrijk, noch onbelangrijk	Neither important nor unimportant
Eerder belangrijk	Generally important
Zeer belangrijk	Very important

Source: short supply chain survey

3.2.2 Farms that have no plans for short supply chain in the future

The largest group of respondents is those who do not have a short supply chain and who consider the likelihood (generally) low that they will start a short supply chain in the future. The results are first presented below (3.2.2.1) for the entire group of farms. The following section (3.2.2.2) further subdivides the farms according to farm type.

3.2.2.1 Reasons for the entire group of farms: complex legislation, administrative burden and economic reasons, problems with permits/spatial planning, and typical farm situation more important, and expertise of the farm operator

Figure 13 shows the reasons that are important for not starting a short supply chain branch for the farms that have no plans to do so. The results are similar to those of respondents who plan to stop with their short supply chain branch (section 3.1.2) and those who have already stopped with their short supply chain (section 3.2.1). For example, 67% of respondents consider complex food safety legislation an important or even very important reason for not starting a short supply chain. Other complex legislation (e.g., labour) is important or very important for 62% of respondents. Compared to farmers who have stopped/plan to stop their short supply chain, problems with permits and spatial planning are more important here (62%). As with the other groups, about half of the respondents indicated that the uncertainty of the new environmental legislation (e.g. PAN and MAP) is a (very) important reason for not starting a short supply chain branch.

Various economic reasons are also important for not starting a short supply chain branch. For example, 62% of respondents felt that the significant cost of additional labour for the short supply chain was a (very) important reason. 58% believe that the revenues will not cover the higher costs, and half of the respondents stated that the investment cost is too high. Lack of capital for investment in the short supply chain (36%) scores lower.

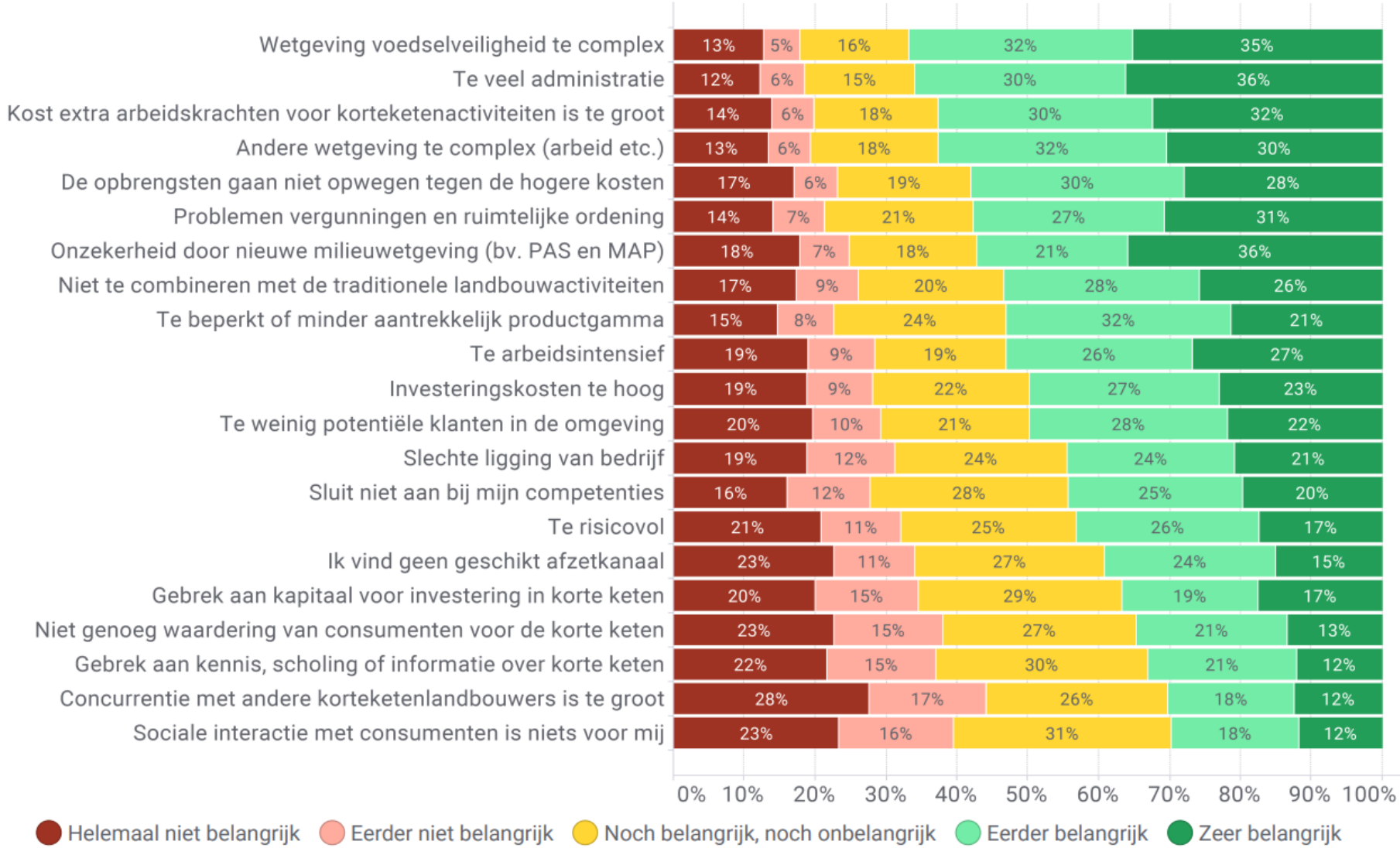
One very important reason for not starting a short supply chain activity is that it the administrative burden is too high (66%). Half of the respondents believe that too few potential customers in the area is a (very) important barrier to starting up a short supply chain. Almost half of the respondents (45%) indicated that the poor location of their farm was an important reason. Furthermore, 43% find the short supply chain too risky and 39% find no suitable sales outlet for the short supply chain.

54% of respondents felt that the short supply chain cannot be combined with their agricultural activity. 53% indicate that a product range that is too limited or less attractive is a (very) important reason. The high labour intensity of the short supply chain is a (very) important reason for 53% of respondents. In addition, too much competition with other short supply chain farmers is (very) important for 30% of respondents.

As with the other groups who stopped their short supply chain or want to stop their short supply chain, knowledge and social aspects are the least important reasons, although here the share of respondents who consider these reasons important or very important is higher. For example, around one-third of respondents consider the following reasons important or very important: not enough appreciation for the short supply chain on the part of consumers; lack of knowledge, training or

information about the short supply chain; and social interaction with consumers is not important for me. However, one striking element is that 45% of respondents indicated that they do not have the expertise required for the short supply chain. This is much higher than among the farms that stopped short supply chain or plan to stop short supply chain.

Figure 13: Importance of reasons for farms without a short supply chain that have no plans to start a short supply chain branch in the future (number of observations = 2,187)



Wetgeving voedselveiligheid te complex	Food safety laws too complex
Te veel administratie	Administrative burden
Kost extra arbeidskrachten voor korteketenactiviteiten is te groot	Cost of additional workers for a short supply chain branch is too high
Andere wetgeving te complex (arbeid etc.)	Other legislation too complex (labour etc.)
De opbrengsten gaan niet opwegen tegen de hogere kosten	Revenues will not cover the higher costs
Problemen vergunningen en ruimtelijke ordening	Permit and spatial planning issues
Onzekerheid door nieuwe milieuwetgeving (bv. PAS en MAP)	Uncertainty due to new environmental legislation (e.g. PAN and MAP)
Niet te combineren met de traditionele landbouwactiviteiten	Cannot be combined with traditional agricultural activities
Te beperkt of minder aantrekkelijk productgamma	Product range too limited or less attractive
Te arbeidsintensief	Too labour intensive
Investeringskosten te hoog	Investment cost too high
Te weinig potentiële klanten in de omgeving	Not enough potential customers in the area
Slechte ligging van bedrijf	Poor location of farm
Sluit niet aan bij mijn competenties	I do not have the relevant expertise
Te risicovol	Too risky
Ik vind geen geschikt afzetkanaal	I can't find a suitable sales channel
Gebrek aan kapitaal voor investering in korte keten	Lack of capital for investment in short supply chain
Niet genoeg waardering van consumenten voor de korte keten	Not enough appreciation for the short supply chain on the part of consumers
Gebrek aan kennis, scholing of informatie over korte keten	Lack of knowledge, training or information about the short supply chain
Concurrentie met andere korteketenlandbouwers is te groot	Competition with other short supply chain farmers is too strong
Sociale interactie met consumenten is niets voor mij	Social interaction with consumers is not important for me
Helemaal niet belangrijk	Not important at all
Eerder niet belangrijk	Generally not important
Noch belangrijk, noch onbelangrijk	Neither important nor unimportant
Eerder belangrijk	Generally important
Zeer belangrijk	Very important

Source: short supply chain survey

3.2.2.2 More barriers for dairy cattle, food safety legislation is the main problem for livestock farming, too high cost of additional labour for horticulture

Table 12 shows the share of farms that consider a reason important or very important for not having a short supply chain activity, with farms divided by farm type. Only the most relevant farm types are included in the results. General trends similar to those above emerge, albeit with some differences depending on farm type. For most farm types, legislative reasons and economic reasons are the most important. The reasons related to knowledge and social aspects score lower in general. Dairy cattle in particular, but also pigs and poultry, tend to score higher relative to the other farm types, while vegetables outdoors, fruits and arable farming score lower.

For arable farms, complex food safety legislation (65%), the administrative burden (65%) and other complex legislation (labour laws, etc.) (62%) are the most important. For farms with vegetables protected, the main reason is the too-high cost of additional labour(72%). The administrative burden and the fact that the revenues will not cover the higher costs is important or very important for about two-thirds of farms. Vegetables outdoor has relatively low shares for many reasons, but gives a very high score for a product range that is too limited or less attractive (65%). Not enough appreciation of the short supply chain on the part of consumers is only (very) important for 12%, which is the lowest share of all farm types. For fruit farms, the main reason is the too-high cost of additional labour for a short supply chain branch (68%). Fruit gives a relatively low score for many of the reasons, but has the highest share (47%) for the reason 'I don't find a suitable sales channel'.

Dairy farms generally score higher relative to the other types of farm, for various reasons, which perhaps suggests that the barriers to switching to short supply chain are more significant here. The administrative burden (82%), food safety legislation (81%) followed by the high cost of additional labour(78%) and too labour intensive (74%) are the most important reasons. Other legislation that is too complex (73%), revenue that does not cover the costs (70%), cannot be combined with traditional farming activities (70%), uncertainty due to new environmental legislation (67%), problems with permits (63%), and competition with other farmers (42%) are also more important for dairy cattle farms than for other farm types

Compared to dairy cattle, beef cattle farms consider many more reasons less important. The main reason for beef cattle is complex food safety legislation (65%). The least important reason is too much competition with other short supply chain farmers (26%). For pig and poultry farms, the complexity of food safety legislation is the most important barrier (70%). Uncertainty due to new environmental legislation is among the most important reasons for pigs and poultry (65%), while this scores lower for other farm types.

Within mixed farms, the results of the mixed-crop and crop-livestock farm types are quite similar. The complexity of food safety legislation is the main reason for both farm types, with respective shares of 67% and 66%. In addition, the administrative burden is an important reason that scores almost the same (65% and 64%). The reason 'I do not have the relevant expertise for the short supply chain' is higher with mixed crops (with 59% the highest share of all farm types) than with crop-livestock (43%). The opposite is true for the reason that the short supply chain is too risky. Here, only 26% of mixed-crop

farms consider the reason (very) important compared to 41% in crop-livestock farms. Lack of capital for investments in the short supply chain is also more important in crop-livestock farms (37%) compared to mixed crop farms (22%).

The description in this regard was from the perspective of the farm type. The main findings from the perspective of the specific reason shows that the cost of additional labour is the main reason in horticulture, and is also very high for dairy cattle, where it is the second most important reason. 'Too labour intensive' also scores relatively high for vegetables protected and dairy cattle, and pigs-poultry, and 'cannot be combined with traditional farming activities' is also higher, which is logical for these three farm types.

Lack of capital is less of an issue with vegetables protected and vegetables outdoors. This is different among animal production farms, where there are higher scores for 'investments too high', and 'lack of capital'. 'Too risky' is higher in particular among dairy cattle and pigs/poultry. The three animal branches also have higher percentages for uncertainty around the new environmental legislation, for beef cattle and pig-poultry, along with a number of other reasons, is the second most important. For dairy cattle farms, competition with other farmers scores higher. This could suggest that there are already a lot of dairy farms with a short supply chain branch, or that farmers are worried they will not be able to stand out enough from other short supply chain milk producers.

Table 12: Importance of reasons for farms without a short supply chain that have no plans to start a short supply chain branch in the future, according to farm type (number of observations = 1,754)

Reasons not to start a short supply chain branch	Arable farming	Vegetables protected	Vegetables outdoors	Fruit	Dairy cattle	Beef cattle	Pigs and poultry	Crops mixed	Crop-livestock
Food safety laws too complex	65%	57%	53%	62%	81%	65%	70%	67%	66%
Administrative burden	65%	68%	58%	64%	82%	43%	67%	65%	64%
Cost of additional labour for a short supply chain branch is too high	57%	72%	62%	68%	78%	57%	61%	57%	62%
Other legislation too complex (labour, etc.)	62%	62%	58%	59%	73%	58%	65%	60%	63%
Revenues will not cover the higher costs	51%	67%	58%	46%	71%	53%	64%	59%	59%
Permit and spatial planning issues	58%	60%	51%	56%	64%	56%	60%	53%	57%
Uncertainty due to new environmental legislation (e.g. MAP and PAN)	53%	46%	47%	41%	67%	57%	65%	50%	56%
Cannot be combined with traditional agricultural activities	49%	60%	47%	46%	70%	45%	58%	45%	50%
Product range too limited or less attractive	54%	57%	65%	52%	56%	49%	53%	59%	56%
Too labour intensive	46%	62%	47%	49%	74%	39%	58%	44%	48%
Investment cost too high	41%	39%	30%	43%	62%	54%	54%	44%	50%
Not enough potential customers in the area	45%	45%	51%	52%	58%	39%	54%	50%	54%
Poor location of farm	43%	50%	45%	45%	52%	36%	47%	40%	48%
I do not have the relevant expertise	44%	37%	34%	36%	51%	42%	47%	59%	43%
Too risky	38%	36%	30%	29%	57%	42%	54%	26%	41%
I can't find a suitable sales channel	35%	39%	35%	47%	43%	33%	43%	43%	40%
Lack of capital for investment in short supply chain	33%	18%	22%	34%	42%	40%	40%	22%	37%
Not enough appreciation for the short supply chain on the part of consumers	33%	33%	12%	30%	37%	34%	38%	39%	41%
Lack of knowledge, training or information about the short supply chain	33%	18%	22%	33%	38%	38%	30%	30%	39%
Competition with other short supply chain farmers is too strong	25%	27%	32%	36%	42%	26%	32%	24%	34%
Social interaction with consumers is not important for me	26%	33%	30%	32%	35%	30%	30%	37%	30%

Source: short supply chain survey and Agency for Agriculture and Fisheries

3.2.3 Farms considering the short supply chain: conviction-based and social aspects the main reason, besides economic reasons and the alternative nature of the short supply chain

Some of the respondents without a short supply chain indicated that they felt there was a good chance they would start a short supply chain branch in the future. Figure 14 gives an overview of the reasons that are important to this group.

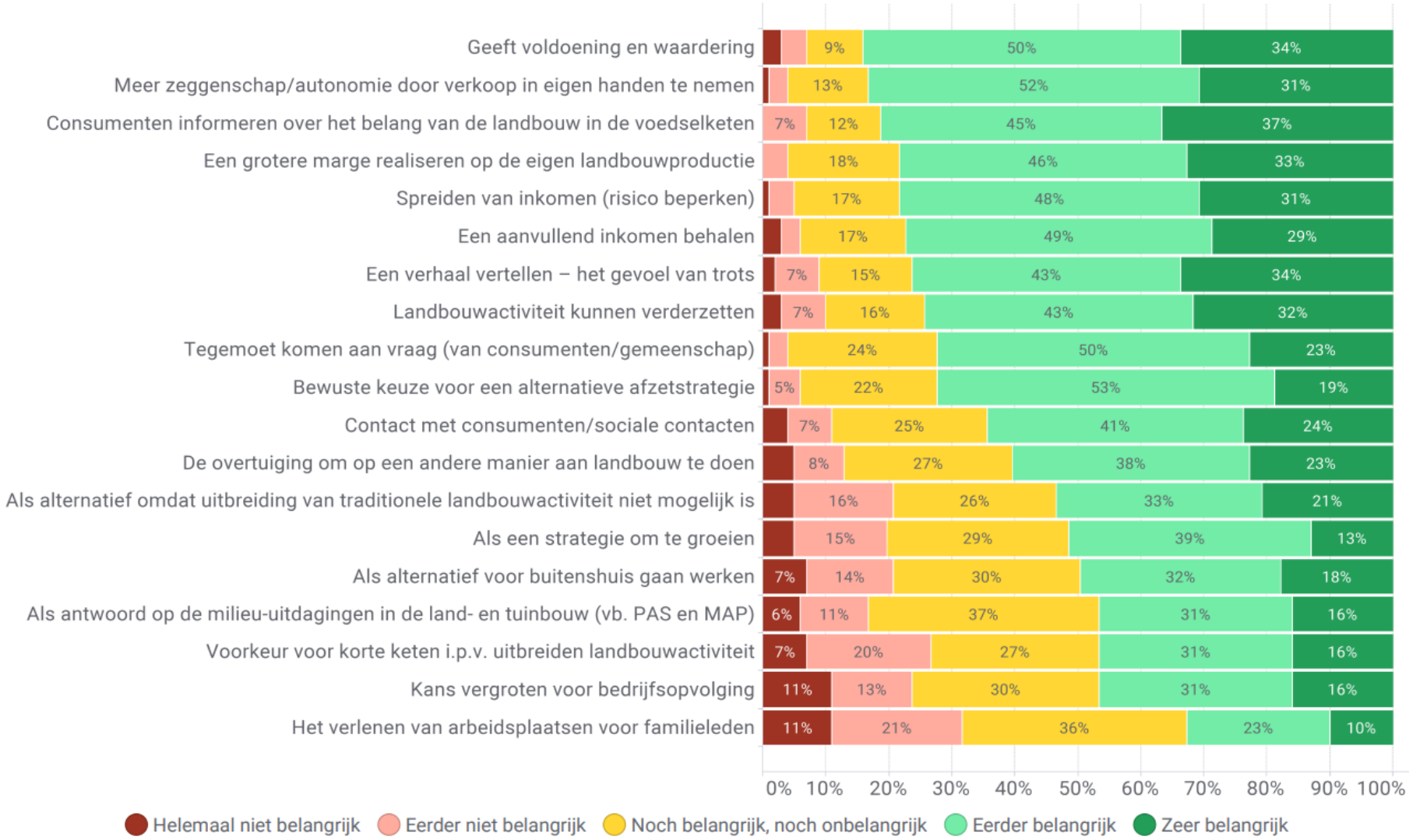
Respondents find many of the proposed reasons important. For 15 of the 19 reasons, more than half of the respondents considered the reason generally important or very important. Similar to the results of the group of farmers who will continue with their short supply chain (section 3.1.1), the main reasons are conviction-based and social reasons. The feeling of satisfaction and appreciation (84%), informing consumers about the importance of agriculture in the food chain (82%), telling a story/sense of pride (77%) and connecting with consumers (65%) are considered important.

The (business) economic reasons, including generating a bigger a larger margin on the farm's own agricultural production (79%), having multiple income sources (79%) and earning additional income (78%) are also given very high scores.

Having more control/autonomy over sales is (very) important for 83% of respondents. Other reasons related to the alternative nature of the short supply chain score slightly lower but are still considered important. A conscious choice for an alternative sales strategy (72%) is the main reason in this regard. The conviction to take a different approach to farming (61%); the short supply chain as an alternative because expanding traditional farming activities is not possible (54%); and the short supply chain as an alternative for working outside the home (50%) are reasons that more than half of the respondents find generally important or even very important. The preference for the short supply chain rather than expanding agricultural activity is considered generally important or very important (47%) by just under half of the respondents.

75% of the respondents want to start with short supply chain because it is a way to continue their farming activity, and 47% see it as a solution to the environmental challenges in agriculture and horticulture (e.g. manure action plan and programmatic approach to nitrogen). That is not the only reason behind the decision, but it plays more of a role here. The question is whether this is the right reason to start with the short supply chain. The scores here are somewhat higher than for the farms already running a short supply chain activity. This is also the case for starting a short supply chain activity as an alternative to expanding traditional farming activities, and as an alternative for working outside the home.

Figure 14: Importance of reasons for farms without a short supply chain considering starting a short supply chain branch in the future (number of observations = 101)



Geeft voldoening en waardering	Gives satisfaction and appreciation
Meer zeggenschap/autonomie door verkoop in eigen handen te nemen	More control/autonomy over sales
Consumenten informeren over het belang van de landbouw in de voedselketen	Informing consumers about the importance of agriculture in the food chain
Een grotere marge realiseren op de eigen landbouwproductie	Generating a bigger margin on the farm's own agricultural production
Spreiden van inkomen (risico beperken)	Having multiple income sources (reducing risk)
Een aanvullend inkomen behalen	Earning a supplemental income
Een verhaal vertellen – het gevoel van trots	Telling a story - the sense of pride
Landbouwactiviteit kunnen verderzetten	Being able to continue agricultural activity
Tegemoet komen aan vraag (van consumenten/gemeenschap)	Meeting demand (from consumers/community)
Bewuste keuze voor een alternatieve afzetstrategie	Conscious choice of alternative sales strategy
Contact met consumenten/sociale contacten	Contact with consumers/social contacts
De overtuiging om op een andere manier aan landbouw te doen	The conviction to take a different approach to farming
Als alternatief omdat uitbreiding van traditionele landbouwactiviteit niet mogelijk is	As an alternative because expanding traditional agricultural activity is not possible
Als een strategie om te groeien	As a strategy to grow
Als alternatief voor buitenshuis gaan werken	As an alternative for working outside the home
Als antwoord op de milieu-uitdagingen in de land- en tuinbouw (vb. PAS en MAP)	As a solution to environmental challenges in agriculture and horticulture (e.g. PAN and MAP)
Voorkeur voor korte keten i.p.v. uitbreiden landbouwactiviteit	Preference for short supply chain rather than expanding agricultural activity
Kans vergroten voor bedrijfsopvolging	Improve the chances of business succession
Het verlenen van arbeidsplaatsen voor familieleden	Providing jobs for family members
Helemaal niet belangrijk	Not important at all
Eerder niet belangrijk	Generally not important
Noch belangrijk, noch onbelangrijk	Neither important nor unimportant
Eerder belangrijk	Generally important
Zeer belangrijk	Very important

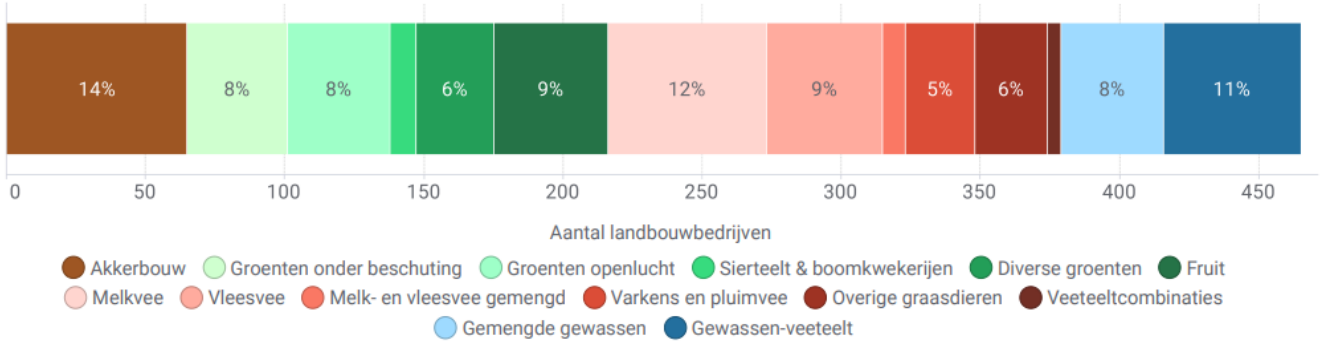
Source: short supply chain survey

4 CHARACTERISTICS OF FARMS INVOLVED IN SHORT SUPPLY CHAIN (AT LEAST 2.5% OF THE TOTAL REVENUE)

A significant part of the survey is focused on farms involved in short supply chain where the share of their revenue from the short supply chain in their total revenue from agricultural activities is at least 2.5%. There are 491 such farms in total.

The composition of farm types for farms with a revenue share of at least 2.5% is similar to the composition of the entire group of farms involved in short supply chain (Figure 15). 14% of the farms are arable farms and 33% are horticultural farms. Within horticulture, fruits, vegetables protected and vegetables outdoors have similar shares of 9%, 8% and 8%, respectively. Miscellaneous vegetables has a 6% share and ornamental crops & nurseries are less represented at 2%. Livestock farming has a 35% share. Within livestock farming, the share of specialised dairy farms is the highest (12%) followed by specialised livestock farms (9%). Other grazing animals, and pigs and poultry, have respective shares of 6% and 5%. Dairy and beef cattle mixed (2%) and livestock farming combinations (1%) are less common. Within mixed farms, mixed crops and crop-livestock have respective shares of 8% and 11%.

Figure 15: Number and share (%) of farms involved in short supply chain by farm type (number of observations = 465)



Aantal landbouwbedrijven	Number of farms
Akkerbouw	Arable farming
Groenten onder beschutting	Vegetables protected
Groenten openlucht	Vegetables outdoors
Sierteels & boomkwekerijen	Ornamental crops & nurseries
Diverse groenten	Miscellaneous vegetables
Fruit	Fruit
Melkvee	Dairy cattle
Vleesvee	Beef cattle
Melk- en vleesvee gemengd	Dairy and beef cattle mixed
Varkens en pluimvee	Pigs and poultry

Overige graasdieren	Other grazing livestock
Veeteeltcombinaties	Livestock farming combinations
Gemengde gewassen	Crops mixed
Gewassen-veeteelt	Crop-livestock

Source: short supply chain survey and Agency for Agriculture and Fisheries

4.1 SHORT SUPPLY CHAIN SALES

4.1.1 Products sold via the short supply chain

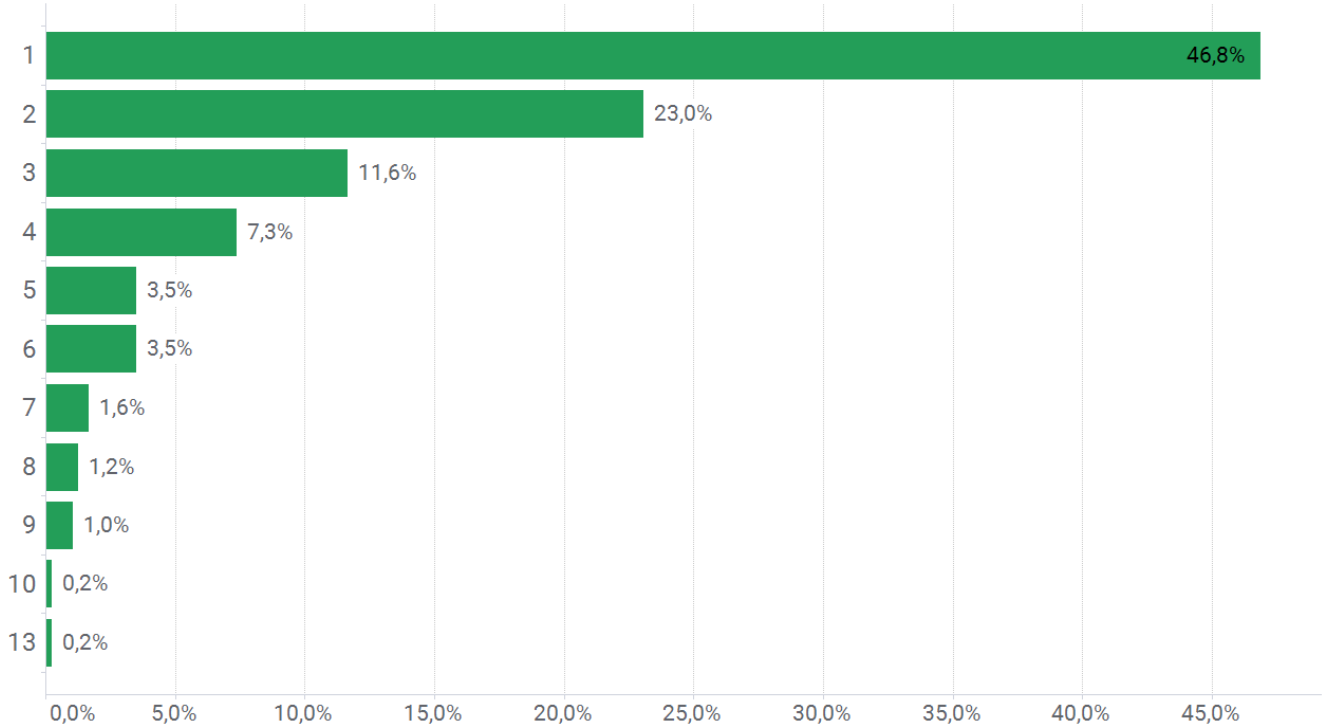
4.1.1.1 Potatoes, vegetables and fruits are sold through short supply chain in particular

Farmers sell a whole range of agricultural products through the short supply chain. These include primary agricultural products and processed products. Table 13 shows the share of farmers by product category.

Unprocessed products are the ones most often sold through the short supply chain. Potatoes are the most popular product, with 39.7% of farmers selling them. Fresh vegetables (34.4%) and fresh fruits (31.6%) are the second and third products respectively. 21.4% sell beef, pork, goat or mutton, and 3.3% poultry meat. 10-20% of respondents sell eggs (18.5%), fruit juices and/or fruit preparations (17.7%), processed dairy products (15.3%) and milk (11.2%). Fresh herbs, alcoholic drinks, and plants, flowers and other ornamental products were sold by 9%, 7.9% and 6.9% of respondents, respectively. The 'other products' (6.7%) category includes cereals, honey, wool, nuts, etc. Processed vegetables (4.1%), and processed potatoes (2.4%) have a low share.

47% of farms only sell one of the above-mentioned product categories through the short supply chain (Figure 16). 23% sell two products, 30% of farms sell at least 3 products, and 11% of farms sell five products or more.

Figure 16: Share of farms per number of products sold (y-axis) through the short supply chain (number of observations = 491)



Source: short supply chain survey

Common product combinations include the following:

- 78% of farms that sell milk sell processed dairy products.
- Of the farms that sell fresh vegetables, 51% sell fresh fruit and only 12% sell processed vegetables.
- Of the farms that sell fresh fruit, 43% also sell fruit juices and/or fruit preparations.
- 55% of farms with fruit also have fresh vegetables in their product range.

Table 13: Share of farms selling a product (category) through the short supply chain (number of observations = 491)

Product category	Share of farms
Potatoes	39.7%
Fresh vegetables	34.4%
Fresh fruit	31.6%
Meat (beef, pork, goat or mutton)	21.4%
Eggs	18.5%
Fruit juices and/or fruit preparations	17.7%
Processed dairy products (cheese, yogurt, ice cream, etc.)	15.3%
Milk	11.2%
Fresh herbs	9%
Alcoholic drinks	7.9%

Product category	Share of farms
Plants, flowers and other ornamental crops	6.9%
Other products	6.7%
Processed vegetables	4.1%
Meat (poultry)	3.3%
Processed potatoes	2.4%

Source: short supply chain survey

4.1.1.2 100%-farms involved in short supply chain sell more vegetables, fruits and herbs on average

The average number of product categories that a farm sells through the short supply chain increases slightly with increasing revenue share from the short supply chain, from 2 at a revenue share between 2.5 and 10% to 2.9 at 100% (Table 14). The median also increases slightly for larger revenue shares. The median is only skewed at a revenue share between 50 and 75%.

Table 14: Distribution of the number of products sold by revenue share of the short supply chain branch (number of observations = 491)

	>= 2.5% and < 10%	>= 10% and < 25%	>= 25% and < 50%	>= 50% and < 75%	>= 75% and < 100%	100%
Average	2	2.3	2.2	2.2	2.6	2.9
Q1	1	1	1	1	1	1
Median	1.5	1.5	2	1	2	3
Q3	2	3	3	3	3	4

Source: short supply chain survey

Table 15 shows the share of farms selling a product type through the short supply chain. The share of farms selling potatoes falls as the revenue share increases, from 47% for a revenue share between 2.5 and 10% to 31% for the 100%-farms involved in short supply chain. The share of farms with processed dairy products first rises slightly between 2.5 and 25%, then falls more or less systematically. For revenue shares higher than 75%, the share is significantly lower.

For fresh vegetables, fruit and herbs, the share remains fairly constant as the revenue share increases. Among 100%-farms involved in short supply chain, the share of farms with fresh vegetables, fruit and herbs is high with respective shares of 52%, 57% and 33%. In Part 2 of the report, Figure 9 also showed that the share of horticulture among a revenue share of 100% is very high. This explains the higher percentages of fruit and vegetable products sold at this revenue share.

The share with eggs, and fruit juices and/or fruit preparations is somewhat lower for the revenue share between 2.5 and 10%, and slightly higher for the revenue share above 75%. For plants, flowers and other ornamental products, the share is a lot higher for farms with a revenue share higher than 75%.

Table 15: The share of farms by product type and revenue share from the short supply chain branch (number of observations = 491)

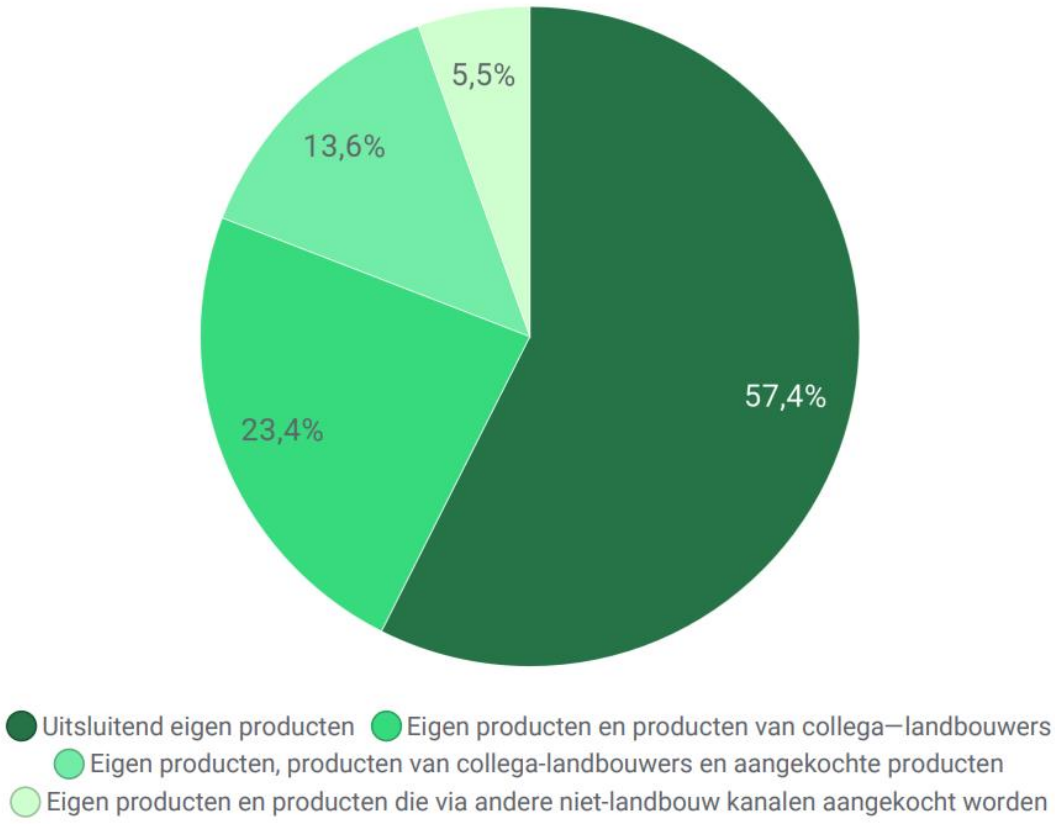
Product	>= 2.5% and < 10%	>= 10% and < 25%	>= 25% and < 50%	>= 50% and < 75%	>= 75% and < 100%	100%
Potatoes	47%	45%	38%	39%	27%	31%
Fresh vegetables	34%	26%	32%	30%	38%	57%
Fresh fruit (including strawberries)	25%	29%	29%	31%	37%	52%
Meat (beef, pork, goat or mutton)	18%	20%	24%	23%	28%	17%
Eggs	15%	17%	21%	17%	23%	22%
Fruit juices and/or fruit preparations	14%	18%	16%	19%	23%	20%
Processed dairy products (cheese, yogurt, ice cream, etc.)	15%	20%	18%	16%	8%	11%
Milk (all animal types)	11%	21%	9%	5%	7%	11%
Fresh herbs	4%	4%	3%	8%	15%	33%
Alcoholic drinks	4%	11%	7%	6%	12%	11%
Plants, flowers and other ornamental products	4%	3%	8%	6%	13%	13%
Other products	7%	7%	5%	5%	10%	7%
Processed vegetables	3%	3%	3%	5%	8%	4%
Meat (poultry)	3%	3%	2%	3%	5%	4%
Processed potatoes	2%	1%	3%	3%	5%	0%

Source: short supply chain survey

4.1.2 57% only sell own products, and for another 24%, more than half of sales are from own products

In addition to their own products, farmers can sell products from other farmers or sell products sourced from non-agricultural channels through the short supply chain. Figure 17 shows the distribution of the product assortment in the short supply chain. 57.4% of farms only sell their own products. In addition to their own products, 23.4% also sell products from other farmers. 13.6% sell their own products, products from other farmers as well as purchased products. Only 5.5% sell only their own products and purchased products. 37% of farms therefore sell products from other farmers and 19% sell products sourced from non-agricultural channels.

Figure 17: Different combinations of own products, products from other farmers and products from non-agricultural channels sold through the short supply chain (number of observations = 491)

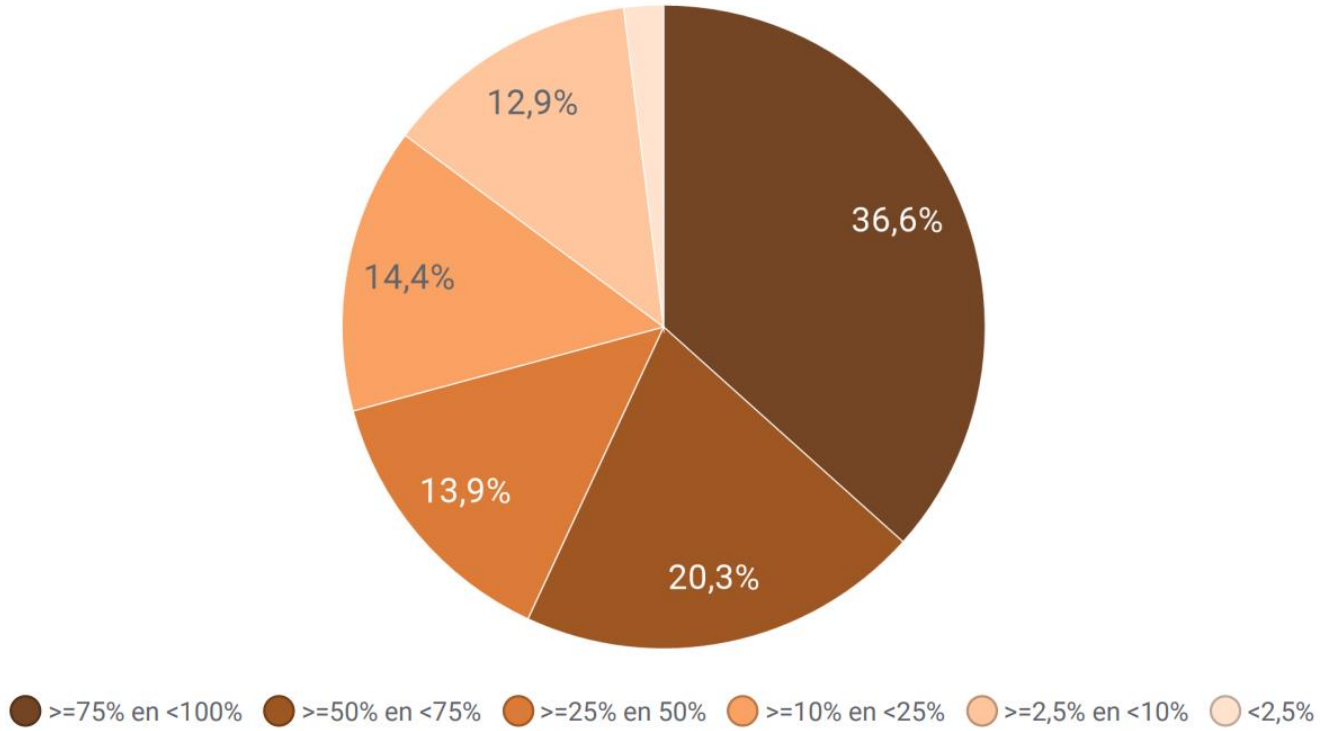


Uitsluitend eigen producten	Exclusively own products
Eigen producten en producten van collega-landbouwers	Own products and products from other farmers
Eigen producten, producten van collega-landbouwers en aangekochte producten	Own products, products from other farmers and purchased products
Eigen producten en producten die via andere niet-landbouw kanalen aangekocht worden	Own products and products purchased through other non-agricultural channels

Source: short supply chain survey

Of the farms that do not exclusively sell their own products (the three light green sections in Figure 17), 57% generate more than half of their revenue from selling their own products (Figure 18). Of these, 36.6% of farms generate 75% to 100% of total revenue from sales of their own products and 20.3% between 50 and 75%. The revenue categories between 25% and 50%, between 10% and 25% and between 2.5% and 10% of own products have respective shares of 13.9%, 14.4% and 12.9%. Farms whose sales of their own products in total sales from the short supply chain are less than 2.5% are the least represented (2.0%).

Figure 18: Share of sales of own products in total revenue from the short supply chain branch (number of observations= 209)



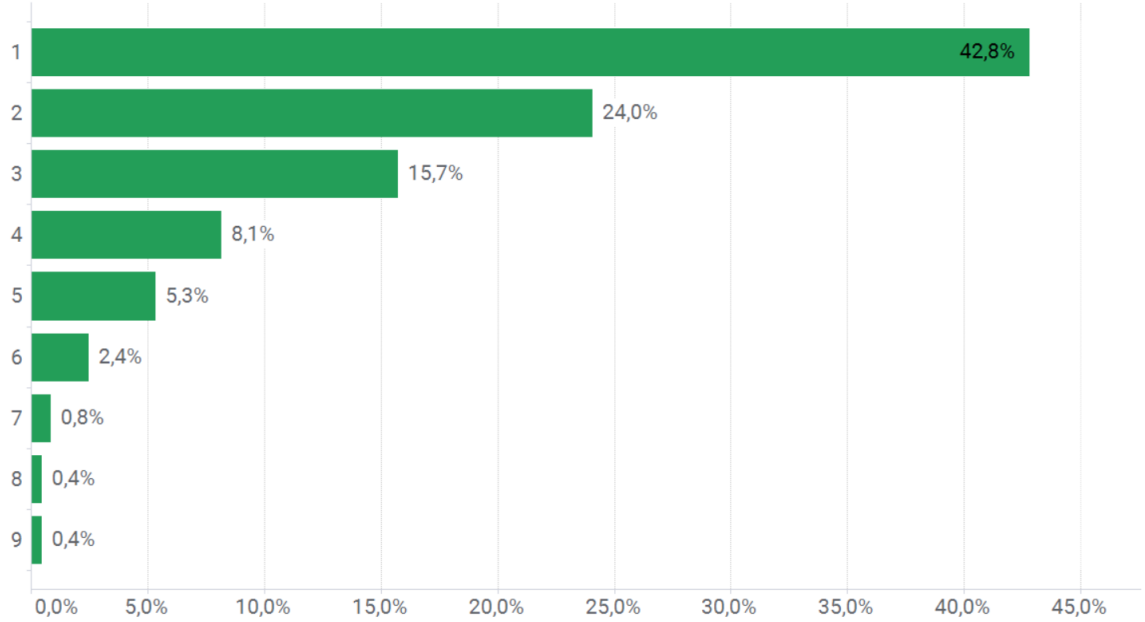
Source: short supply chain survey

4.1.3 Short supply chain sales channels

4.1.3.1 Shop space on the farm the most common

Of all farms involved in short supply chain, 43% have only one sales channel (Figure 19). 24% have two sales channels. 33% of farms have at least three sales channels, and 9% have five sales channels or more.

Figure 19: Share (%) of farms according to number of sales channels (y-axis) (number of observations = 491)



Source: short supply chain survey

Not every sales channel on a farm is the same size; some channels generate a lot of sales and others limited sales. Table 16 shows the share of farms with some form of sales channel for the short supply chain. The table also shows the share of farms that rank a given sales channel first as regards revenue from the short supply chain.

The most popular sales channel is the shop space on the farm (58% of farms involved in short supply chain), which includes the farm store. In second place is direct sales to retail outlets (23%), cafes and restaurants (22%), sales via vending machines (22%) and sales via other farmers (21%). 17% of farms have their own webshop and 13% go to farmers' markets to sell products.

'Neighbourhood farms' (from the 'Boeren en Buren' initiative) (8%), the weekly public market (8%), self-picking (8%), vegetable subscriptions (5%), other online stores (3%), CSA (3%) and food teams (3%) further complete the list. The least common sales channel indicated by respondents is the farmer-citizen cooperative, at 1%. Other channels (9%) is a collection of channels that could not fall under any of the other categories, such as selling products on the farm without setting up a shop area, direct sales to businesses and governments, and direct home delivery to consumers.

Among all farms involved in short supply chain, 46% state that the shop space on the farm is the most important in terms of revenue. Vending machines and retail are ranked first by 11% and 10% of respondents, respectively.

Table 16: Share of farms with a given sales channel in the short supply chain, and the share for which this is ranked first in terms of revenue from the short supply chain (number of observations = 491)

Channel	Share of farms with sales channel	First place according to revenue
Shop space on my farm	58%	46%
Retail (i.e. (local) supermarkets, etc.)	23%	10%
Cafes and restaurants	22%	3%
Vending machines	21%	11%
Other farmers who sell my agricultural products	21%	2%
Own webshop	18%	5%
Farmers' market	13%	3%
Other channels	9%	8%
Neighbourhood farms 'Boeren en Buren'	8%	1%
Public (weekly) market	8%	3%
Self-picking	8%	3%
Vegetable subscriptions	5%	2%
Other webshop	3%	0.2%
CSA	3%	2%
Food Teams	3%	0.4%
Farmer-citizen cooperative	1%	0.2%

Source: short supply chain survey

How important each sales channel is to the revenue from the short supply chain branch can also be examined (Table 17). Of all farms with shop space on the farm, about three-quarters (78%) rank this sales channel as most important for the revenue from the short supply chain. Other channels and CSA are also often ranked most important (87% and 69%, respectively), although for other channels and CSA this is due to the fact that there are many farms that only have this sales channel.

Farms with vending machines also often rank them most important (52%) in terms of revenue. 29% of farms with vending machines rank this channel as second most important. Four in 10 farms that sell via retail rank this channel most important, and 32% second most important. Of the farms with vegetable subscriptions, 43% rank this channel most important and 26% second most important. The share ranking this channel fourth most important or lower is very low (4%).

Only 6% of farms with another webshop rank this channel as most important. 63% of farms rank it fourth most important or lower, suggesting that this channel is less important for revenue. More than half of farms with food teams only rank this channel fourth most important or lower. Among farms selling via neighbouring farms, the share is 39%. Of the farms that sell products through other farmers, 10% rank this channel most important, although 30% rank it second most important.

Table 17: Share of farms within a sales channel that rank the importance of this sales channel in terms of revenue via this sales channel (number of observations = 491)

Sales channel	Most important	Second most important	Third most important	Fourth most important or lower
Shop space on the farm	78%	15%	5%	2%
Retail	44%	32%	17%	7%
Cafes and restaurants	12%	37%	22%	29%
Vending machines	52%	29%	11%	8%
Other farmers who sell my agricultural products	10%	30%	35%	25%
Own webshop	28%	35%	14%	23%
Farmers' market	22%	33%	21%	24%
Other channels	87%	7%	7%	0%
Neighbourhood farms 'Boeren en Buren'	15%	29%	17%	39%
Public (weekly) market	44%	23%	10%	23%
Self-picking	34%	34%	13%	18%
Vegetable subscriptions	43%	26%	26%	4%
Other webshop	6%	25%	6%	63%
CSA	69%	19%	13%	0%
Food Teams	13%	7%	27%	53%
Farmer-citizen cooperative	25%	25%	25%	25%

Source: short supply chain survey

4.1.3.2 Sales channels vary widely between farm types, with fruit having the most diverse sales channels which for some are the highest / high scores.

Fruit farms have the most sales channels on average (3.1). Most farm types have between 2.0 and 2.5 sales channels on average. Arable farming and beef cattle have the least number of sales channels, 1.7 on average. The median is always at or above the average, indicating a slightly skewed distribution.

Table 18: Distribution of the number of sales channels by farm type (number of observations = 389)

	Arable-farming	Vegetables protected	Vegetables outdoors	Fruit	Dairy cattle	Beef cattle	Pigs and poultry	Crops mixed	Crop-livestock
Average	1.7	2.3	2.5	3.1	2.0	1.7	2.5	2.4	2.0
Q1	1	1	2	2	1	1	1	1	1
Median	1	2	2	3	2	1	2	2	2
Q3	2	3	3	4	2	2	3	3	3

Source: short supply chain survey

Among arable farms, as with most other farm types, the shop space on the farm is the most common sales channel (62%) (Table 19). 26% of arable farms have vending machines. The other sales channels are less common, with percentages below 20%. For vegetables protected, vending machines are the most common (53%), the share with vending machines is also much higher than for other farm types. One possible explanation may be that strawberries - often sold through vending machines - fall under 'vegetables protected' rather than 'fruit'. 42% of vegetables protected farms have a shop space on the farm, which is low compared to other farm types, 25% sell products through other farmers and 22% through retail. In addition, public (weekly) markets, self-picking, and vegetable subscriptions, despite their lower shares, are more common than other farm types.

Half of vegetables outdoors farms have a shop space on the farm. 32% sell through other farmers, which is relatively high, and 24% through retail. The share of farms with vending machines is much lower (19%) than vegetables protected. In addition, self-picking and CSA are most common for vegetables outdoors, with shares of 19%. The public (weekly) market and vegetable subscriptions also score relatively high compared to the other farm types.

The sales channels of fruit farms are diverse and several sales channels score highest or high compared to other farm types. 76% of fruit farms have a shop space on the farm, which is very high. Retail, cafes and restaurants and selling products via other farmers each have a 34% share, which is also high. 34% of farms also sell via farmers' markets, the highest share of all farm types. 10% sell through the 'Boeren en Buren' initiative, also the highest, and 15% sell via self-picking which also ranks high relative to other farm types. 20% sell through their own webshop and 12% through another webshop, both the highest proportion of all farm types.

Dairy farms, like fruit farms, most often have a shop space on the farm (77%). 32% sell via cafes and restaurants, which is relatively high, 23% have vending machines and 21% sell through other farmers. 62% of beef cattle farms have shop space on the farm. 24% have their own webshop and 17% have another sales channel (including meat packages, collect from the farm, sales to cooperatives), both the highest of all farm types. Pig and poultry farms rank retail as the most common sales channel (48%), which is the highest among all farm types. 40% of farms have a retail space, which is rather low. Cafes and restaurants and vending machines each have a 36% share, with the share of cafes and restaurants being the highest of all farm types. The high share of vending machines may be explained by the sale of eggs, as two-thirds of farms with vending machines sell eggs, although some of them also sell fruits, vegetables and potatoes. The weekly public market is most common among pig and poultry farms, with a 16% share.

49% of mixed crop farms have a shop space on the farm. 32% of farms sell via retail, and 27% via vending machines. A quarter of farms sell products at farmers' markets. Self-picking, vegetable subscriptions and CSA are also relatively common, with respective shares of 14%, 11% and 11%. Food teams rank highest in mixed crop farms, at 8%. Crop-livestock farms rank their shop space as the most popular sales channel (63%). The other sales channels are less common, with shares below 25%.

From a sales channel perspective, the dominance of horticulture stands out, a sector that naturally has an important share in the short supply chain. Weekly public markets, self-picking, and vegetable subscriptions are primarily for horticulture, and mixed crops. CSA mostly scores high for vegetables outdoors, and food teams mostly for mixed crops. Farmers' markets are most common for fruits and mixed crops, and to a lesser extent for vegetables outdoors, and weekly markets also for pigs/poultry. Fruit farms have diverse sales channels and higher percentages than other farms. Farms' own webshops and other webshops score especially high with fruit farms.

Selling via other farmers is most common for vegetables outdoors farms and fruit farms, but other farm types also collaborate with others. Fruit and dairy cattle primarily have their own shop space, and to some extent also beef cattle and arable farms. Retail scores high mainly for pigs/poultry, fruit and mixed crops. Cafes and restaurants are primarily common with fruit, dairy and pigs-poultry farms.

Vending machines are very common for vegetables protected (including strawberries), and pigs/poultry (eggs). But vending machines are also in second or third place in various other farm types, combined or not with other channels.

Table 19: Share (%) of farms within a farm type with a sales channel and the average number of sales channels by farm type (number of observations = 389)

Farm type	Arable farming	Vegetables protected	Vegetables outdoors	Fruit	Dairy cattle	Beef cattle	Pigs and poultry	Crops mixed	Crop-livestock
Shop space on my farm	62%	42%	49%	76%	77%	62%	40%	49%	63%
Retail (i.e. (local) supermarkets, etc.)	12%	22%	24%	34%	16%	7%	48%	32%	22%
Cafes and restaurants	11%	19%	19%	34%	32%	14%	36%	14%	16%
Vending machines	26%	53%	16%	10%	23%	14%	36%	27%	22%
Other farmers who sell my agricultural products	17%	25%	32%	34%	21%	10%	24%	16%	20%
Own webshop	8%	8%	16%	20%	12%	24%	16%	16%	20%
Farmers' market	12%	8%	14%	34%	4%	7%	12%	24%	8%
Other channels	8%	3%	5%	5%	5%	17%	8%	3%	12%
Neighbourhood farms 'Boeren en Buren'	2%	6%	5%	10%	4%	7%	8%	3%	8%
Public (weekly) market	8%	14%	14%	12%	0%	5%	16%	11%	2%
Self-picking	3%	11%	19%	15%	4%	0%	0%	14%	0%
Vegetable subscriptions	3%	11%	11%	5%	0%	0%	0%	11%	0%
Other webshop	0%	0%	5%	12%	2%	0%	0%	3%	2%
CSA	2%	3%	19%	2%	0%	2%	0%	11%	0%
Food Teams	0%	0%	3%	2%	0%	2%	0%	8%	4%
Farmer-citizen cooperative	2%	0%	3%	0%	0%	0%	4%	0%	0%

Source: short supply chain survey and Agency for Agriculture and Fisheries

4.1.3.3 100%-farms involved in short supply chain are less likely to have retail space and vending machines, but nevertheless more (niche) sales channels such as public markets, self-picking, vegetable subscriptions, CSA and food teams.

The average number of sales channels from the short supply chain increases slightly with increasing revenue share (Table 20). The median remains constant across revenue shares and is slightly below the average. For all revenue categories, the first quartile is 1. The third quartile rises slightly for the larger revenue shares.

Table 20: Distribution of the number of sales channels for the short supply chain, by revenue share of the short supply chain branch (number of observations = 491)

	>= 2.5% and < 10%	>= 10% and < 25%	>= 25% and < 50%	>= 50% and < 75%	>= 75% and < 100%	100%
Average	1.6	2	2.4	2.5	2.7	2.7
Q1	1	1	1	1	1	1
Median	1	2	2	2	2	2
Q3	2	3	3	3.3	4	4

Source: short supply chain survey

Across all channels, the shares tend to be lowest for farms with revenue shares between 2.5% and 10% (Table 21). For many channels, it is higher for the farms with more than 75% short supply chain, and especially for 100%-farms involved in short supply chain.

The smallest category (between 2.5% and 10%) nevertheless scores high for shop space on the farm, and vending machines. Vending machines have the highest percentage among farms with less than 25% short supply chain, and the lowest among those with more than 75% and especially for the 100%-farms involved in short supply chain. The latter also score remarkably lower for own shop space, at 43% compared to about 60% for the other categories. Neighbourhood farms and self-picking have increasing shares according to higher revenue from the short supply chain, with especially higher shares for more than 75% farms involved in short supply chain, and for self-picking a lot higher for 100% farms involved in short supply chain. Also, the proportion of vegetable subscriptions, other webshop, CSA, and food teams is higher for more than 75% farms involved in short supply chain, and especially CSA, other webshop, and vegetable subscriptions is higher for 100%-farms involved in short supply chain. For the latter, weekly public markets are also more important. The 100%-farms involved in short supply chain and some of the farms between 75% and 100%-short supply chain have more, alternative sales outlets. With regard to the other categories, this is a more distinct sub-population of farms involved in short supply chain. Finally, the farm's own webshop shows a rising trend according to the share of revenue, with the exception of 100%-farms involved in short supply chain, and farmers' markets score highest for revenue shares between 25% and 100%.

Table 21: The share of farms by sales channel and revenue share from the short supply chain branch (number of observations = 491)

Sales channel	>= 2.5% and < 10%	>= 10% and < 25%	>= 25% and < 50%	>= 50% and < 75%	>= 75% and < 100%	100%
Shop space on my farm	61%	55%	59%	66%	63%	43%
Retail (i.e. (local) supermarkets, etc.)	10%	23%	32%	27%	28%	24%
Cafes and restaurants	7%	27%	31%	28%	22%	24%
Vending machines	25%	31%	21%	20%	13%	7%
Other farmers who sell my agricultural products	16%	24%	22%	20%	27%	22%
Own webshop	10%	17%	21%	23%	25%	13%
Farmers' market	7%	8%	18%	17%	20%	15%
Other channels	11%	10%	5%	9%	10%	7%
Neighbourhood farms 'Boeren en Buren'	4%	4%	8%	11%	15%	17%
Public (weekly) market	3%	9%	8%	9%	8%	15%
Self-picking	3%	4%	5%	9%	13%	20%
Vegetable subscriptions	1%	0%	2%	3%	8%	24%
Other webshop	1%	3%	3%	0%	5%	11%
CSA	0%	1%	0%	0%	7%	20%
Food Teams	1%	1%	3%	2%	8%	7%
Farmer-citizen cooperative	1%	2%	1%	0%	0%	0%

Source: short supply chain survey

4.1.3.4 CSA, vegetable subscriptions and self-picking are much more popular at organic farms, while shops and vending machines are much more common at traditional farms.

On average, organic farms involved in short supply chain have more sales channels (3) than non-organic farms involved in short supply chain (2.1) (Table 22). The shares of CSA (21%), vegetable subscriptions (25%) and self-picking (28%) are noticeably higher among organic farms than among non-organic farms (<1%, 1% and 4%, respectively). Furthermore, farmers' markets, other farmers selling my agricultural products, own webshop, cafes and restaurants, public (weekly) markets, and retail are also more popular among organic farms.

In contrast, shop space on the farm and vending machines are much more common on non-organic farms (61% and 24, respectively) than on organic farms (39% and 4%). The shares of other webshops, farmer-citizen cooperatives, other channels and food teams are quite similar.

Table 22: Share (%) of organic and non-organic farms with a given sales channel and the distribution of the number of sales channels for organic and non-organic farms (number of observations = 491)

Channels	Organic	Non-organic
Shop space on my farm	39%	61%
Other farmers who sell my agricultural products	36%	19%
Retail (i.e. (local) supermarkets, etc.)	30%	21%
Self-picking	28%	4%
Cafes and restaurants	25%	21%
Vegetable subscriptions	25%	1%
Own webshop	24%	16%
CSA	21%	<1%
Farmers' market	19%	12%
Neighbourhood farms 'Boeren en Buren'	18%	7%
Public (weekly) market	15%	7%
Other channels	9%	9%
Other webshop	6%	3%
Vending machines	4%	24%
Food Teams	4%	3%
Farmer-citizen cooperative	0%	1%
Average number of sales channels	**3**	**2.1**

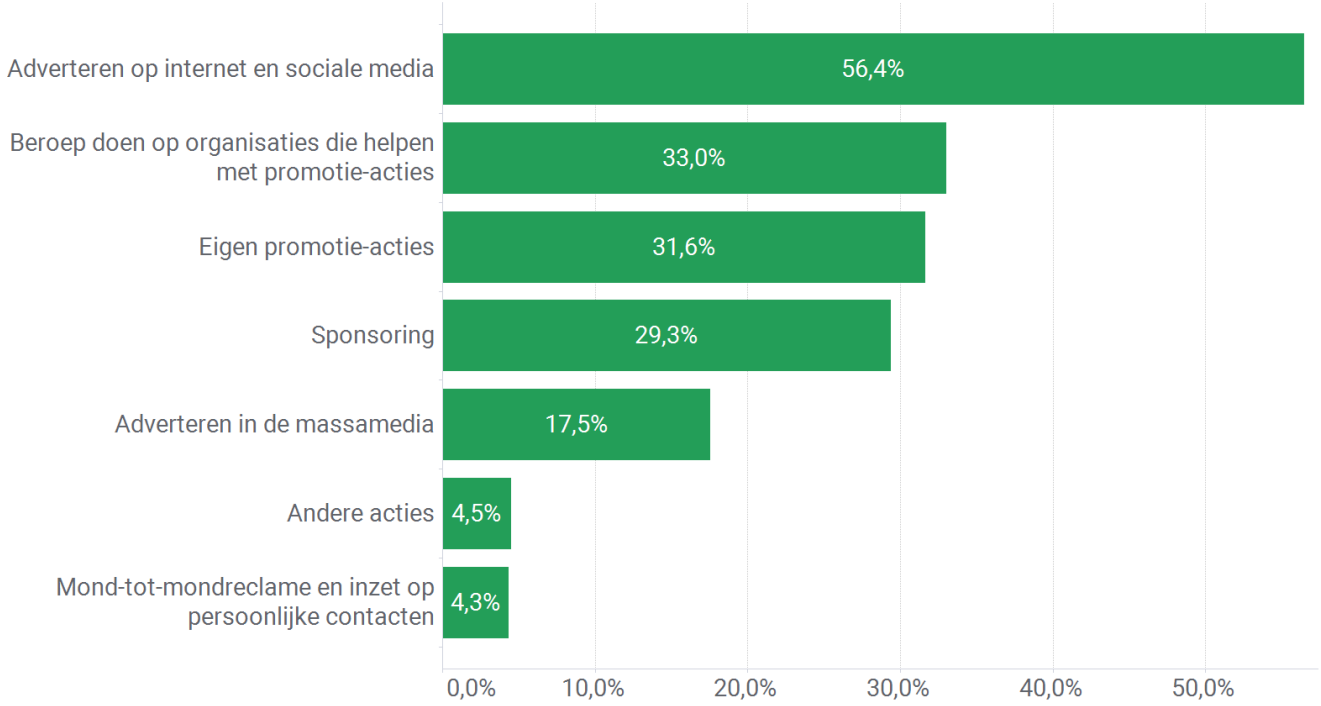
Source: short supply chain survey and Agency for Agriculture and Fisheries

4.1.4 Eight in ten organise at least one campaign to promote sales

In total, 79% of short supply chain farmers organise at least one campaign to promote sales from the short supply chain. 53% organise two or more campaigns and only 4% organise at least five campaigns. Figure 20 shows the proportion of farms involved in short supply chain that run a given promotional campaign. The most common method is advertising on the internet and social media (56%). One third of short supply chain farmers approach organisations such as Flanders' Agricultural Marketing Board, Short supply chain Centre of Expertise and others to help set up promotional campaigns. 32% organise their own promotions, 29% arrange sponsoring and 18% advertise in the mass media.

Word of mouth and prospecting personal contacts was not originally a separate category in the survey. Since many respondents listed this method under the 'other' category, it was made a separate category during the processing. For 4% of the respondents, word of mouth and/or prospecting personal contacts is important. That is likely an underestimate of the actual share. 5% of respondents organise other campaigns.

Figure 20: Share of farms involved in short supply chain with a specific campaign to promote sales from the short supply chain (number of observations = 491)



Adverteren op internet en sociale media	Advertising on the Internet and social media
Beroep doen op organisaties die helpen met promotie-acties	Contacting organisations that help with promotional campaigns
Eigen promotie-acties	Own promotional campaigns
Sponsoring	Sponsoring
Adverteren in de massamedia	Advertising in the mass media
Andere acties	Other campaigns
Mond-tot-mondreclame en inzet op persoonlijke contacten	Word of mouth and prospecting personal contacts

Source: short supply chain survey

4.2 INVESTMENT IN THE SHORT SUPPLY CHAIN

4.2.1 83% have invested in the last five years, but half of these invested less than €5,000

Building, expanding and professionalising a short supply chain branch requires investment. The survey shows that 83% of farms have invested in the short supply chain branch in the past five years (Table 23). 17% did not invest anything and only a few indicated that they had invested but did not remember exactly how much.

Table 23: Investments in the short supply chain (number of observations = 491)

Investment in the short supply chain?	Share
I have invested over the past 5 years	83%
I have invested over the past 5 years, but I don't know exactly how much	<1%
I have not invested over the past 5 years	17%

Source: short supply chain survey

Table 24 shows the distribution of farms by size of the investment. Almost a third of farms have invested up to €1,000 in the short supply chain in the past five years. Half have made no significant investments (less than €5,000) in the last five years. One quarter of respondents invested between €5,001 and €50,000 and 16% between €50,001 and €250,000. 7% invested more than €250,000. The results show that farms with higher average revenue from the short supply chain also invest more in the short supply chain.

Table 24: Share (%) of farms by investment category (number of observations = 407)

Investments in last five years	Share
maximum €1,000	30%
€1,001 - €5,000	20%
€5,001 - €50,000	26%
€50,001 - €250,000	16%
More than €250,000	7%

Source: short supply chain survey

Of the farms that have invested in the short supply chain branch, most invested in the processing area (70%). This includes investments for setting up processing areas, machinery, packaging materials, etc. Investment in sales of sales of products is in second place (63%). This includes investments in shops spaces on farms, vending machines, market stalls, etc. A summary of the purpose of the investments is shown in Table 25.

Table 25: Share (%) of farmers investing in a given part of the short supply chain branch (number of observations = 407)

Purpose of investment	Share
Processing area	70%
Sales	63%
Marketing (material)	41%
Software/IT	31%
Miscellaneous	5%

Source: short supply chain survey

4.2.2 Dairy cattle, beef cattle and crop-livestock farms have invested the most in the short supply chain

Not every farm type has invested to the same extent in the short supply chain (Table 26). Dairy cattle, beef cattle and crop-livestock have the largest shares of farms that invested more than €50,000, with

respective shares of 30%, 30% and 32%. Arable farms, and pigs-poultry farms have the lowest shares at 13% and 15%, respectively. Looking only at the "more than €250,000" category, fruit has the highest share (14%). Beef cattle and pigs and poultry follow with 12% and 10%, respectively.

The farm types with the highest shares of farms that invested less than €5,000 are fruit (54%), arable (51%) and vegetables outdoors (50%). The farm types with the lowest shares, with less than €5,000 invested, are vegetables protected (25%) and beef cattle (27%). In the category "maximum €1,000", the largest share is found in vegetables outdoors (40%).

Table 26: Share (%) of farms by investment category and farm type (number of observations = 319)

Farm type	maximum €1,000	€1,001 - €5,000	€5,001 - €50,000	€50,001 - €250,000	More than €250,000
Arable farming	32%	19%	36%	11%	2%
Vegetables protected	16%	9%	53%	22%	0%
Vegetables outdoors	40%	10%	30%	20%	0%
Fruit	31%	23%	26%	6%	14%
Dairy cattle	33%	2%	35%	22%	8%
Beef cattle	18%	9%	42%	18%	12%
Pigs and poultry	30%	15%	40%	5%	10%
Crops mixed	27%	3%	47%	20%	3%
Crop-livestock	24%	14%	30%	24%	8%

Source: short supply chain survey and Agency for Agriculture and Fisheries

What farms invest in the short supply chain also differs between farm types (Table 27). Investments for the sale of products are made most often by vegetables protected (81%). Crop-livestock, fruit, beef cattle and pigs and poultry also have shares of at least 70%. Vegetables outdoor, dairy and arable have the lowest shares at 55%, 53%, and 47%, respectively. Investments in the processing area are most common among dairy farms (84%) and crop-livestock farms (81%). Vegetables outdoors (47%) and pigs and poultry (50%) have the lowest shares.

More than half of the farms with fruit (57%), mixed crops (53%) and vegetables outdoor (50%) have invested in marketing (materials) for the short supply chain. Dairy cattle farms have the lowest share at 18%. Investments in software/IT are most common in beef cattle farms (45%), fruit farms (40%) and farms with type of vegetables outdoors (40%). Dairy farms (18%), vegetables protected (19%), mixed crops (20%) and arable farms (have the lowest shares). For other investments, all shares are below 10%.

Table 27: Share (%) of farmers by farm type investing in a part of the short supply chain branch (number of observations = 319)

Farm type	Sales	Processing area	Marketing (material)	Software/IT	Miscellaneous
Arable farming	55%	74%	34%	21%	4%
Vegetables protected	81%	47%	38%	19%	3%
Vegetables outdoors	47%	67%	50%	40%	7%
Fruit	74%	69%	57%	40%	6%
Dairy cattle	53%	84%	18%	18%	6%

Farm type	Sales	Processing area	Marketing (material)	Software/IT	Miscellaneous
Beef cattle	73%	76%	48%	45%	9%
Pigs and poultry	70%	50%	40%	35%	5%
Crops mixed	60%	57%	53%	20%	3%
Crop-livestock	76%	81%	46%	32%	0%

Source: short supply chain survey and Agency for Agriculture and Fisheries

4.3 VOLUME OF LABOUR

4.3.1 44% of the workers works for the short supply chain

Table 31 shows the average volume of workforce employed, both for all agricultural activities (including short supply chain) and for the short supply chain separately. The workforce was calculated based on the number of full-time equivalents (FTE) on the farm. 80 observations were not included in the analysis. These are farms that did not provide details on workforce/labour in their total farming activities and/or short supply chain activities.

Workforce can be divided into several categories:

- family workforce;
- non-family workforce employed on a regular basis (i.e. permanent staff);
- non-family workforce employed on an irregular basis (i.e. seasonal workers, flexi-job staff, student workers, etc.).

An average of 4.8 FTEs are employed on a short supply chain farm for all agricultural activities. Short supply chain activities employ 2.1 FTEs, or 44% of the average number of FTEs across the farm. More than half of the workforce (52%) employed in short supply chain activities are from the family (1.1 FTE). Non-family regular and non-regular workers have respective FTEs of 0.3 and 0.7. In total farming activities, most of the workforce is non-regular labour (2.4 FTE). The high volume of non-regular workforce is due to the high proportion of horticultural farms, which rely on seasonal workers. Family and non-family regular workers have respective FTEs of 1.8 and 0.6.

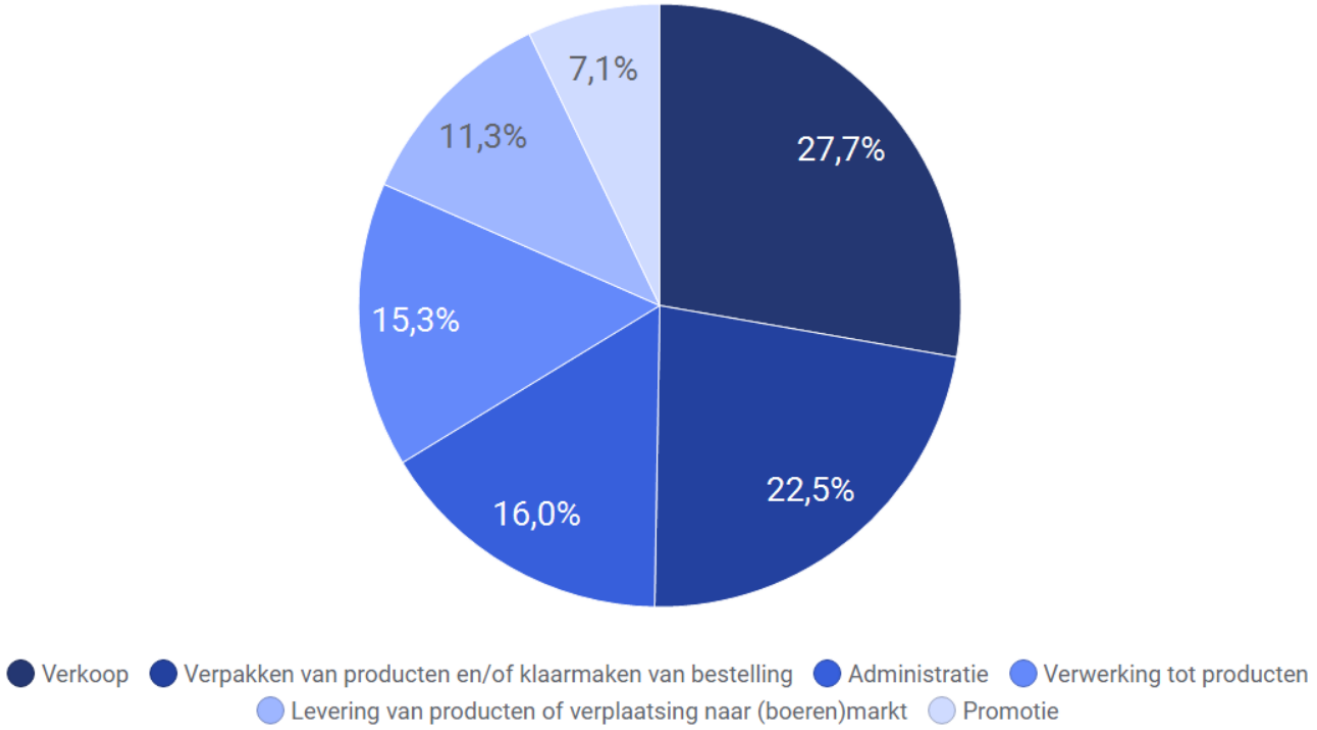
Table 28: Average volume of labour in full-time equivalents (FTEs) for the short supply chain and all agricultural activities (including short supply chain) (number of observations = 411)

Type of labour	Short supply chain	All agricultural activities (including short supply chain)
Family workforce	1.1	1.8
Non-family workforce - regular	0.3	0.6
Non-family workforce - non-regular	0.7	2.4
Total	**2.1**	**4.8**

Source: short supply chain survey

Besides obtaining an overview of the volume of labour, respondents were asked to provide a distribution of working time among the various tasks of short supply chain sales (Figure 21). Most of the time is spent selling the products (28%). This includes, for example, operating a stall at the (farmer's) market, operating a farm store, etc. Packaging products and/or preparing an order is in second place (23%). Administration, processing into products and delivery of products/transport to (farmers') markets represent an average of 16%, 15% and 11% of working time, respectively. The least time is spent promoting short supply chain sales (7%).

Figure 21: Average distribution of working time among different tasks in the short supply chain (number of observations = 491)



Verkoop	Sales
Verpakken van producten en/of klaarmaken van bestelling	Packing products and/or preparing order
Administratie	Administration
Verwerking tot producten	Processing products
Levering van producten of verplaatsing naar (boeren)markt	Delivery of products or transport to (farmers') markets
Promotie	Promotion

Source: short supply chain survey

4.3.2 Volume of workforce for the short supply chain highest in vegetables outdoors and fruits, share of short supply chain labour in total highest in the animal sector

Both the volume of workforce on the short supply chain branch and the ratio of the volume of workforce on the short supply chain branch to the entire farm vary widely among farm types (Table 32). Vegetables outdoors and fruit have the most labour on the short supply chain branch, with 3.2 and 3.0 FTEs, respectively. Arable farming and mixed crops have the fewest FTEs, with 1.8 each. The ratio of the volume of labour on the short supply chain branch relative to the entire farm is highest for livestock farms and crop-livestock farms. Dairy cattle, beef cattle, pigs and poultry, and crop-livestock have respective proportions of 64%, 72%, 64%, and 67%. In horticulture, the figure is a lot lower due to the importance of seasonal and/or permanent workers in traditional farming.

Table 29: Average total volume of workforce for the short supply chain and the entire farm by farm type, and ratio of short supply chain to the entire farm (%) (number of observations = 389)

Farm type	Short supply chain	Entire farm	Ratio of short supply chain and entire farm
Arable farming	1.8	3.4	54%
Vegetables protected	2.0	11.3	18%
Vegetables outdoors	3.2	7.1	45%
Fruit	3.0	7.9	38%
Dairy cattle	2.2	3.5	64%
Beef cattle	2.0	2.8	72%
Pigs and poultry	2.0	3.1	64%
Crops mixed	1.8	6.1	29%
Crop-livestock	1.9	2.8	67%

Source: short supply chain survey

The distribution of working time among different tasks for short supply chain sales differs slightly among farm types (Table 33). For most farm types, selling products takes up the most time. For arable farming, vegetables outdoors and pigs and poultry, packaging products and/or preparing the order takes up the most time.

Vegetables protected farms spend the most time selling products (39%). For pigs and poultry, the figure is only 25%. Vegetables outdoors farms spend the most time packaging products and/or preparing orders (30%) and dairy cattle farms the least (17%). Beef cattle farms spend 20% of their time on administration while for other farm types the figure is around 15%. In percentage terms, dairy cattle farms spend by far the most time processing products (29%). The working time for delivering products and promotion is generally similar for all farm types.

Table 30: Average distribution of working time among different short supply chain tasks for the farming and horticulture sectors (number of observations = 389)

Farm type	Sales	Packing products and/or preparing order	Administration	Processing products	Delivery of products or transport to (farmers') markets	Promotion
Arable farming	25%	29%	14%	10%	14%	7%
Vegetables protected	39%	18%	18%	4%	15%	7%
Vegetables outdoors	26%	30%	18%	10%	9%	7%
Fruit	31%	19%	14%	16%	12%	7%
Dairy cattle	30%	17%	13%	29%	6%	5%
Beef cattle	28%	19%	20%	14%	10%	9%
Pigs and poultry	21%	27%	14%	11%	17%	9%
Crops mixed	32%	26%	17%	7%	12%	6%
Crop-livestock	29%	23%	15%	15%	12%	7%

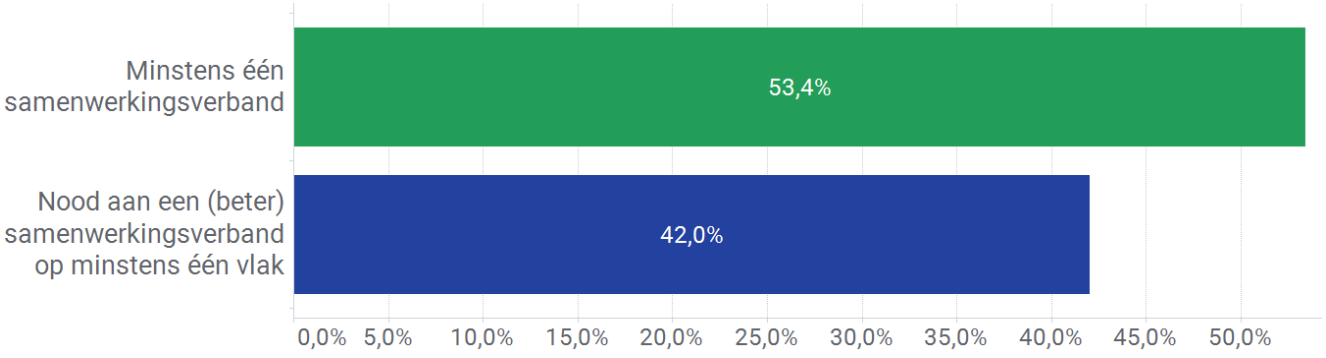
Source: short supply chain survey and Agency for Agriculture and Fisheries

4.4 COOPERATION IN THE SHORT SUPPLY CHAIN

4.4.1 53% have a partnership and 42% need a (better) partnership

53% of respondents have a partnership in at least one area (Figure 22). In addition, 42% of farmers have a need for a partnership or a need for a better partnership in at least one area.

Figure 22: Share (%) of farmers who have at least one partnership and who need a (better) partnership in at least one area (number of observations = 491)



Minstens één samenwerkingsverband	At least one partnership

Nood aan een (beter) samenwerkingsverband op minstens één vlak	Need for (better) partnership in at least one area

Source: short supply chain survey

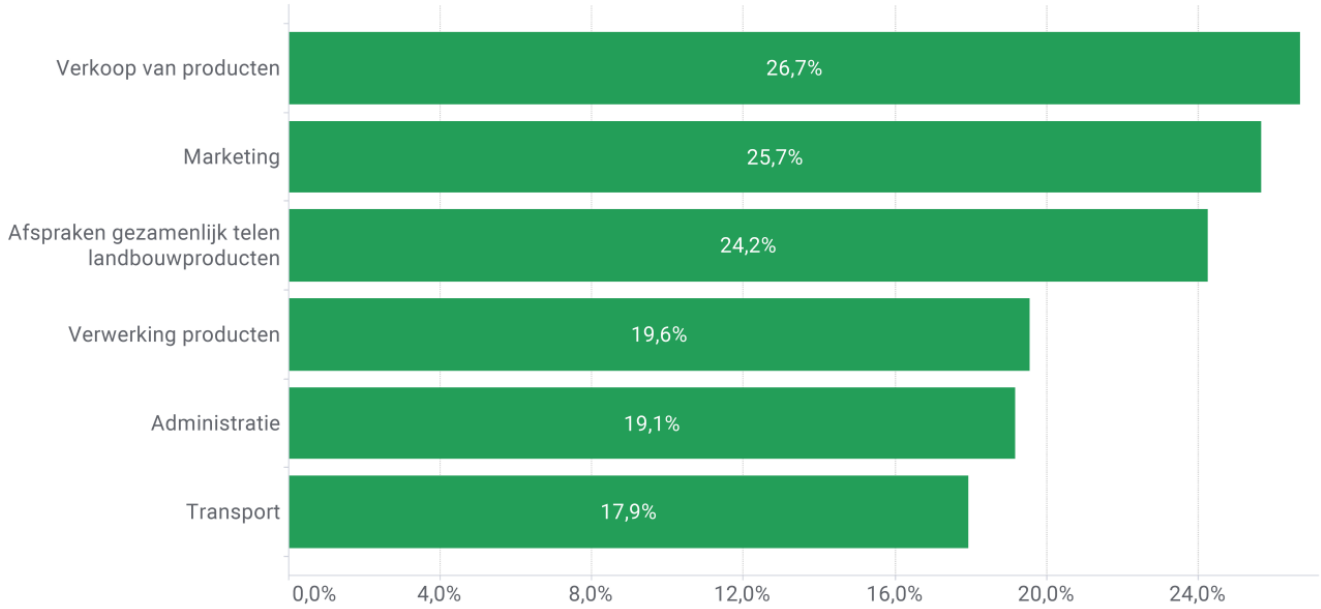
Farmers do not always have the infrastructure or resources to set up short supply chain sales on their own. By collaborating with other farmers or parties, costs can be shared and both parties can benefit. Collaboration can take place in multiple areas: from jointly growing products to jointly managing a sales outlet. Respondents were not only asked whether or not they have a partnership in a particular domain, but also whether they need a (better) partnership.

Figure 23 shows the share of respondents who have a partnership by individual category. The majority of respondents for each category stated that they did not have a partnership. Around one quarter of respondents have a partnership for sales, marketing and jointly growing agricultural products. Just under 20% of respondents have set up partnerships in the area of product processing, administration and transport.

The share of respondents in need of a partnership or in need of a better partnership with other parties is shown in Figure 24. The figure shows a split within a category between farmers who already have a partnership but need better partnerships (dark blue) and those who do not have a partnership and need one (light blue). As is the case for existing partnerships, the need for a (better) partnership scores rather low by individual category. The need for a (better) partnership is highest for marketing and sales of products, with respective shares of 24% and 23%. The need for a (better) partnership for transport, jointly growing agricultural products and processing products each have a share around 15%. The category with the lowest share is administration, at 10%.

Of the farms in need of partnerships, the majority do not yet have a partnership. 77% of the farms in need of a partnership in the area of transport do not yet have one. For most categories, the proportion of farms that do not yet have a partnership is between 60 and 70%. For processing products, the share that does not yet have a partnership is the lowest, at 55%. In other words, there is a significant group that already has a partnership in the area of processing, but is in need of a better partnership.

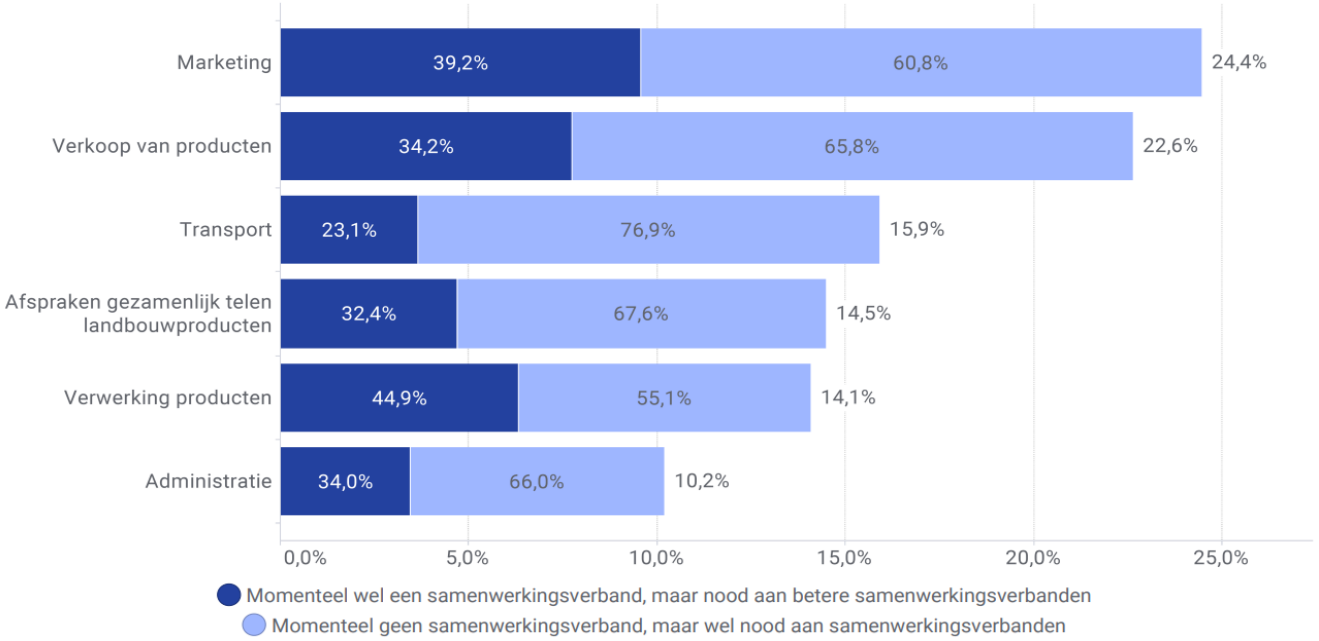
Figure 23: Share of farms with a partnerships in the short supply chain with other parties (number of observations = 491)



Verkoop van producten	Sale of products
Marketing	Marketing
Afspraken gezamenlijke telen landbouwproducten	Agreements on jointly growing agricultural products
Verwerking producten	Processing products
Administratie	Administration
Transport	Transport

Source: short supply chain survey

Figure 24: Share of farms with a need for partnership in the short supply chain (does not currently have a partnership) or a need for a better partnership (already has a partnership), (number of observations = 491)



Marketing	Marketing
Verkoop van producten	Sale of products
Transport	Transport
Afspraken gezamenlijk telen landbouwproducten	Agreements on jointly growing agricultural products
Verwerking producten	Processing products
Administratie	Administration
Momenteel wel een samenwerkingsverband, maar nood aan betere samenwerkingsverbanden	Currently has a partnership, but has a need for better partnerships
Momenteel geen samenwerkingsverband, maar wel nood aan samenwerkingsverbanden	Currently does not have a partnership, but does need one

Source: short supply chain survey

4.4.2 Share of fruit farms with (need for) a partnership is high, dairy cattle and arable farms have fewer partnerships

Table 34 shows by farm type the proportion of farms that have an existing partnership. Fruit farms generally have the most partnerships, with 76% that have partnerships in at least one area. Most other farm types have shares between 50 and 60%. Arable farming has a 45% share and dairy cattle farms have the lowest share with only 32%. By individual category of partnership, no farm type has a share higher than 50%.

The proportion of arable farms with a partnership is low across all categories. Partnerships in the area of marketing and agreements on jointly growing crops are the most common with respective shares of 23% and 22%. Vegetables protected farms primarily enter into partnerships to make agreements for joint growing (31%) and in the area of marketing (28%). Vegetables outdoors farms have the most partnerships for selling products (38%), which is relatively high. Three in 10 farms have agreements with another party for jointly growing products. Partnerships in the area of administration only occur in 8% of respondents, the lowest of all farm types. Among fruit farms, 44% have a partnership in the area of marketing, which is the highest of all farm types. Sales of products and processing products have respective shares of 34% and 32%, which is relatively high.

The proportion of dairy farms with partnerships is lowest across all categories. Partnerships in the area of administration is still the most common (18%). Compared to dairy cattle, beef cattle farms have higher shares. Partnerships in the area of administration, transport and processing of products have been set up in 31% of beef cattle farms. Agreements for jointly growing agricultural products, marketing and sales of products each have a 26% share. Most pig and poultry farms have partnerships for selling products (40%), which is relatively high. 28% of farms have partnerships in the area of marketing and processing products. Mixed-crop farms also have a high proportion of partnerships for the sale of products (43%), the highest among all farm types. 30% have a partnership in the area of administration. For crop-livestock farms, the shares by category are relatively low. Partnerships in the area of marketing are the most common at 24%.

Table 31: Share of farms that have a short supply chain partnership by farm type (number of observations = 389)

Farm type	Partnership in at least one area	Sale of products	Marketing	Agreements on jointly growing agricultural products	Processing products	Administration	Transport
Arable farming	**45%**	17%	23%	22%	14%	18%	12%
Vegetables protected	**58%**	25%	28%	31%	25%	19%	17%
Vegetables outdoors	**57%**	38%	16%	30%	19%	8%	14%
Fruit	**76%**	34%	44%	27%	32%	22%	20%
Dairy cattle	**32%**	9%	16%	9%	7%	18%	5%
Beef cattle	**55%**	26%	26%	26%	31%	31%	31%
Pigs and poultry	**60%**	40%	28%	20%	28%	16%	20%
Crops mixed	**54%**	43%	27%	27%	16%	30%	22%
Crop-livestock	**53%**	22%	24%	22%	20%	16%	16%

Source: short supply chain survey and Agency for Agriculture and Fisheries

Table 35 shows the shares of farms with a need for a (better) partnership according to farm type. Fruit and crop-livestock farms generally have the biggest need for a partnership, with 51% and 49%, respectively, needing a partnership in at least one area. The other farm types have shares between 30 and 50%, with arable farms and beef cattle farms having the lowest shares (34% and 33%, respectively). For fruit farms, the need for a partnership is still high, although this farm type already has multiple partnerships.

In arable farming, the need for a partnership is highest in the area of marketing, at 18%. Vegetables protected also have the highest need for a partnership in the area of marketing (28%). Shares in the other partnership categories are below 20%. Vegetables outdoors farms have the highest need for a partnership in terms of sales of products (24%) and marketing (22%). Fruit farms have the highest need for a partnership in the area of marketing, at 34%, which is the highest share of all farm types. In addition, fruit has the highest shares for administration, transport and sales of products.

One quarter of dairy cattle farms need a (better) partnership in the area of marketing. For beef cattle farms, the need is generally low, with the highest need for a partnership in sales of products (19%). 28% of pork and poultry farms need a (better) partnership in the area of marketing, and 20% for sales of products. For mixed-crop farms, marketing and sales of products are the categories with the highest shares (19%). For crop-livestock, the highest need is for partnerships in the area of marketing (31%).

Table 32: Share of farms that need a (better) short supply chain partnership by farm type (number of observations = 389)

Farm type	Need a (better) partnership in at least one area	Marketing	Sale of products	Transport	Agreements on jointly growing agricultural products	Processing products	Administration
Arable farming	**34%**	18%	17%	9%	9%	11%	11%
Vegetables protected	**42%**	28%	19%	14%	11%	11%	6%

Farm type	Need a (better) partnership in at least one area	Marketing	Sale of products	Transport	Agreements on jointly growing agricultural products	Processing products	Administratio n
Vegetables outdoors	**43%**	22%	24%	16%	14%	14%	14%
Fruit	**51%**	34%	29%	24%	20%	10%	15%
Dairy cattle	**40%**	25%	19%	18%	18%	16%	11%
Beef cattle	**33%**	17%	19%	17%	10%	17%	5%
Pigs and poultry	**36%**	28%	20%	8%	12%	8%	0%
Crops mixed	**38%**	19%	19%	14%	5%	11%	8%
Crop-livestock	**49%**	31%	24%	22%	22%	14%	12%

Source: short supply chain survey and Agency for Agriculture and Fisheries

4.4.3 No strong link between revenue share and degree of collaboration in the short supply chain

The share of farms with a partnership in at least one area does not increase as the revenue percentage increases (Table 36). A partnership in at least one area is most common among farms with a revenue percentage between 75 and 100%, with a 70% share. Farms with revenue percentages between 2.5 and 10% have the lowest share (42%).

For marketing and sales of products, the share that has a partnership is highest among farms with a revenue percentage higher than 75%. At 43%, a partnership in the sale of products is most common among farms with a revenue percentage between 75 and 100%. 100%-farms involved in short supply chain have a share of 35%. It is lowest for the revenue category between 2.5 and 10%. A partnership in the area of marketing is also highest for the highest revenue percentages, with 32% of farms with revenue percentages between 75 and 100%, and 30% of 100%-farms involved in short supply chain.

For agreements on growing (traditional) agricultural products, the share of farms fluctuates as the revenue share increases. The highest share is in farms with a revenue percentage between 25 and 50%, the share is also high for farms with a revenue percentage higher than 75%.

In the area of administration, the share of farms with a partnership is highest in the middle revenue categories. For example, 30% of farms with a revenue percentage between 50 and 75% have a partnership for administration. Transport is especially low for farms with a revenue percentage of less than 25%. Finally, the share of farms with a partnership for processing products is around 20%.

Table 33: Share of farms that have a short supply chain partnership by revenue share (number of observations = 491)

Revenue share	Partnership in at least one area	Marketing	Sale of products	Agreements on jointly growing agricultural products	Processing products	Administr ation	Transport
>= 2.5% and < 10%	**42%**	22%	16%	18%	19%	16%	13%

Revenue share	Partnership in at least one area	Marketing	Sale of products	Agreements on jointly growing agricultural products	Processing products	Administration	Transport
>= 10% and < 25%	**49%**	27%	24%	21%	17%	20%	14%
>= 25% and < 50%	**60%**	26%	29%	33%	21%	22%	23%
>= 50% and < 75%	**52%**	20%	25%	19%	19%	30%	19%
>= 75% and < 100%	**70%**	32%	43%	28%	22%	17%	20%
100%	**59%**	30%	35%	31%	22%	9%	24%

Source: short supply chain survey

There is no clear relationship between the share of farms in need of some form of partnership and their revenue percentage from the short supply chain (Table 37). The share of farms in need of a (better) partnership in at least one area is lowest among those with the lowest revenue percentage. The highest shares are found among farms with revenue percentages between 10 and 50%, and between 75 and 100%. When looking at individual forms of partnership, the need is often highest at a revenue percentage between 75 and 100%.

The need for a partnership for marketing fluctuates widely between revenue categories, with the share being highest for revenue categories between 75 and 100% and 25 and 50%, at 32% and 30%, respectively. Farms with a revenue percentage of between 75 and 100% also have the highest share for transport and administration, with respective shares of 27% and 17%. For jointly growing agricultural products, the need is highest for farms with more than 75% short supply chain. For sales of products, the need is highest for farms with a revenue percentage between 10 and 25%. For processing of products, the need for a partnership is slightly higher for the higher revenue percentages, although the difference is small.

Table 34: Share of farms that need a (better) partnership in the short supply chain, by revenue share (number of observations = 491)

Revenue share	Need for (better) partnership in at least one area	Marketing	Sale of products	Transport	Agreements on jointly growing agricultural products	Processing products	Administration
>= 2.5% and < 10%	**36%**	21%	20%	13%	11%	11%	11%
>= 10% and < 25%	**46%**	24%	30%	20%	11%	14%	9%
>= 25% and < 50%	**47%**	30%	22%	15%	15%	13%	10%
>= 50% and < 75%	**38%**	19%	19%	5%	13%	17%	6%
>= 75% and < 100%	**45%**	32%	25%	27%	22%	15%	17%
100%	**41%**	22%	19%	17%	20%	17%	7%

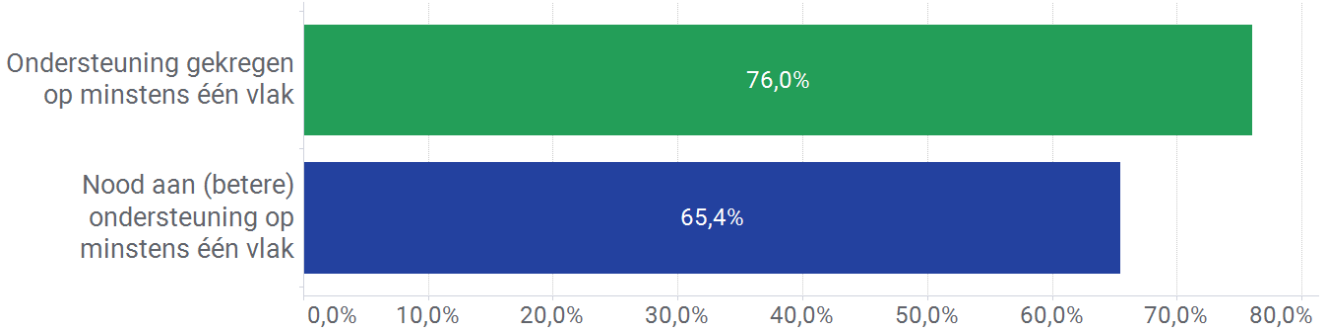
Source: short supply chain survey

4.5 SUPPORTING THE SHORT SUPPLY CHAIN BRANCH

4.5.1 76% have received support in at least one area, 65% need (better) support

Of all respondents, 76% have received support in at least one area (Figure 25). 65% need (better) support in at least one area.

Figure 25: Share (%) of farmers who have received support in at least one area and who need a (better) partnership in at least one area (number of observations = 491)



Ondersteuning gekregen op minstens één vlak	Received support in at least one area
Nood aan (betere) ondersteuning op minstens één vlak	Need (better) support in at least one area

Source: short supply chain survey

Besides partnerships with other parties, getting support can help with starting and operating short supply chain sales. Figure 26 provides an overview of what specific form of support farmers did or did not receive when they started their short supply chain, and in what area they need (better) support.

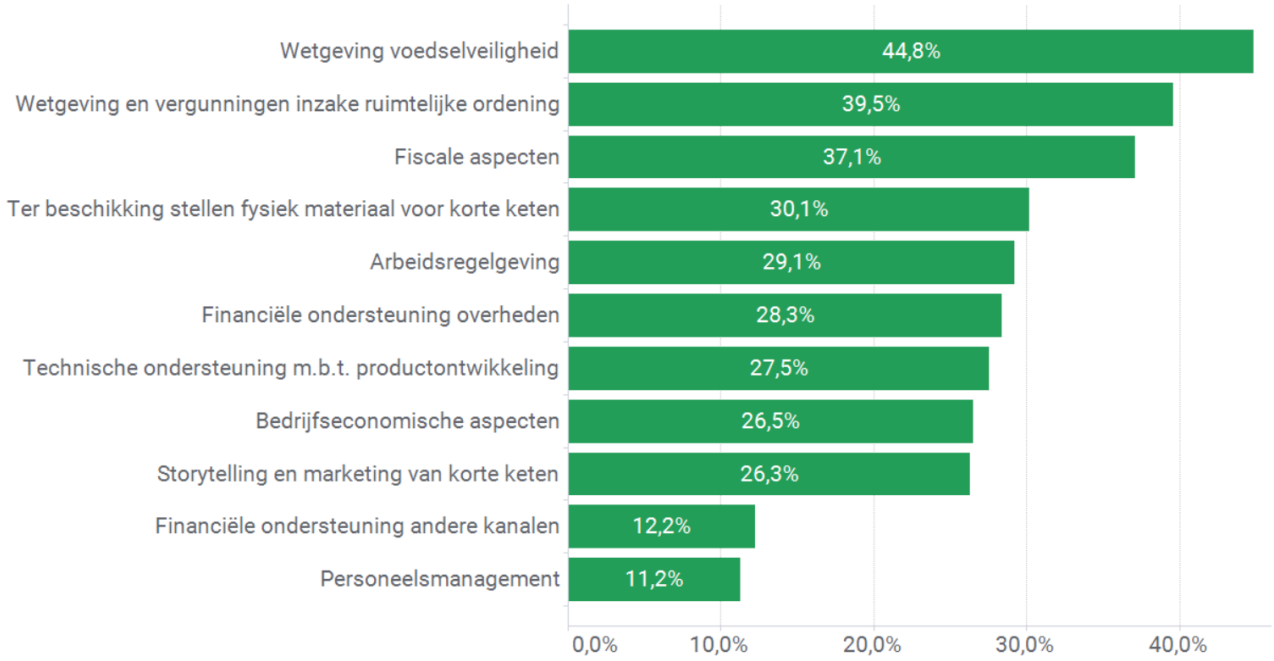
Just under half of respondents (45%) received support in the area of food safety legislation. In second and third place is spatial planning legislation and permits (40%) and tax issues (37%). After that is a group of support measures that around three in ten farmers have received: providing physical material for the short supply chain (30%), labour regulations (29%), financial support from governments (28%), technical support in product development (28%), business economics (27%), and storytelling and marketing the short supply chain (27%). Financial support via other channels (12%) and personnel management (11%) score the lowest.

Figure 27 shows the share of farmers who need support or better support for a specific part of their short supply chain branch. The graph shows a split between farmers who have already received support in the past but need better support (dark blue) and those who have not yet received support and need it (light blue). The need for (better) support is highest for financial support (42%). Second on the list is the need for (better) support regarding spatial planning legislation and permits (36%). Various support measures hover around 30%: tax issues (32%), food safety legislation (32%), business economics

(30%), technical support for product development (30%), providing physical material for the short supply chain (29%), storytelling and marketing (28%), labour regulations (28%) and financial support for other channels (28%). For personnel management, there is the least need for (better) support, at 23%.

Around two-thirds of farmers in need of support have not yet received it in most support categories. For financial support from the government, the measure where most need of support is, 79% have not received support in the past. For financial support from other channels and personnel management, the share of farmers who have never received support is also high, with respective shares of 81% and 83%.

Figure 26: Share of farms that have received support in starting their short supply chain (number of observations = 491)



Wetgeving voedselveiligheid	Food safety legislation
Wetgeving en vergunningen inzake ruimtelijke ordening	Spatial planning legislation and permits
Fiscale aspecten	Tax aspects
Ter beschikking stellen fysiek materiaal voor korte keten	Providing physical material for the short supply chain
Arbeidsregelgeving	Labour regulations
Financiële ondersteuning overheden	Financial support from government
Technische ondersteuning m.b.t. productontwikkeling	Technical support for product development
Bedrijfseconomische aspecten	Business-economic aspects
Storytelling en marketing van korte keten	Storytelling and marketing of the short supply chain
Financiële ondersteuning andere kanalen	Financial support from other channels
Personeelsmanagement	Personnel management

Source: short supply chain survey

Figure 27: Share of farms in need of (better) support by type of support and within each type the share that have not yet received support and are in need of it, and farms that have already received support and are in need of better support (number of observations = 491)

Financiële ondersteuning overheden	Financial support from government
Wetgeving en vergunningen inzake ruimtelijke ordening	Spatial planning legislation and permits
Fiscale aspecten	Tax aspects
Wetgeving voedselveiligheid	Food safety legislation
Bedrijfseconomische aspecten	Business-economic aspects
Technische ondersteuning m.b.t. productontwikkeling	Technical support for product development
Ter beschikking stellen fysiek materiaal voor korte keten	Providing physical material for the short supply chain
Storytelling en marketing van korte keten	Storytelling and marketing of the short supply chain
Arbeidsregelgeving	Labour regulations
Financiële ondersteuning andere kanalen	Financial support from other channels
Personeelsmanagement	Personnel management
Ondersteuning gekregen, maar nood aan betere ondersteuning	Support received, but need better support

Geen ondersteuning gekregen,, maar wel nood aan ondersteuning	No support received, but support is needed

Source: short supply chain survey

4.5.2 Dairy cattle farms have received a lot of support, vegetables outdoor in particular needs support, primarily financial support

Table 35 shows by farm type the share of farms that have received at least one form of support. 84% of pig and poultry farms have received support in at least one area for the short supply chain branch, closely followed by dairy cattle, vegetables protected and fruit with 82%, 81% and 80% respectively. Vegetables outdoor and mixed farms have a share of 76%, beef cattle 74% and arable farming has the lowest at 66%.

In general, the tenor of the entire group of farms is quite similar to that of the individual farm types. Food safety legislation, tax aspects, and spatial planning legislation and permits are all important. Here and there, however, there are differences between sectors in the ranking, and the percentage also differs. Food safety legislation is the most important for most farm types, with the exception of vegetables outdoors and mixed crops. For fruit, it shares first place. The share of farms that have received support with food safety legislation is highest for dairy cattle (65%), and they also score highest for spatial planning legislation and permits (58%).

Support for tax aspects varies between 40% and 50% for many farm types. Arable farming and fruit score the lowest here. Labour regulations are mainly important for horticulture. It ranks in first place (fruit) or second (vegetables outdoors and protected) here; it also ranks second for pigs-poultry. Arable farming, on the other hand, gives this a noticeably low score (8%).

Vegetables protected has a high proportion of support obtained for providing physical material for the short supply chain (47%). Beef cattle (36%) and crop-livestock (43%) also give relatively high shares for this. Support for business-economic aspects is relatively high for vegetables protected (39%), dairy cattle (39%), and pigs and poultry (37%). Financial support from the government is highest for dairy cattle, followed by vegetables protected and vegetables outdoors.

Across farm types, arable farming generally has lower levels of support, and dairy farms are higher than the other farm types. Dairy farms stand out in particular for financial support, spatial planning legislation and permits, and food safety legislation. They also score high for tax and business-economic aspects. Vegetables protected and pigs-poultry stand out for labour regulations and food safety legislation, and vegetables protected also for physical material.

Table 35: Share of farms that have obtained support for the short supply chain branch by farm type (number of observations = 389)

	Arable farming	Vegetables protected	Vegetables outdoors	Fruit	Dairy cattle	Beef cattle	Pigs and poultry	Crops mixed	Crop-livestock
Food safety legislation	37%	50%	30%	34%	65%	40%	52%	41%	47%
Spatial planning legislation and permits	26%	44%	35%	32%	58%	36%	40%	32%	43%
Tax aspects	25%	47%	43%	27%	42%	36%	36%	43%	45%
Providing physical material for the short supply chain	25%	47%	27%	24%	33%	36%	32%	27%	43%
Labour regulations	8%	47%	35%	34%	33%	33%	40%	22%	37%
Financial support from government	12%	39%	35%	29%	47%	24%	28%	22%	27%
Technical support for product development	23%	31%	35%	17%	32%	21%	28%	24%	37%
Business-economic aspects	17%	39%	30%	17%	37%	29%	36%	22%	29%
Storytelling and marketing of the short supply chain	14%	28%	24%	24%	21%	26%	28%	35%	35%
Financial support from other channels	3%	14%	8%	17%	14%	14%	20%	11%	16%
Personnel management	5%	11%	14%	10%	11%	12%	16%	16%	12%
Share that have received support in at least one area	**66%**	**81%**	**76%**	**80%**	**82%**	**74%**	**84%**	**76%**	**76%**

Source: short supply chain survey and Agency for Agriculture and Fisheries

The share of farms in need of support in at least one area is highest in crop-livestock (76%), dairy cattle (75%) and vegetables outdoors (73%) (Table 36). For individual support categories, there is often high need among vegetables outdoor and dairy cattle. In general, the need for financial support for all farm types, with the exception of dairy cattle, which had already received a lot of support in this area, is highest and ranks first or second. Food safety legislation, spatial planning legislation and permits, and tax aspects all score high.

Farms with outdoor vegetables especially need support, with shares above 40% in several areas: financial support from governments (46%), food safety legislation (43%), storytelling and marketing of the short supply chain (43%), spatial planning legislation and support (41%) and labour regulations (41%). These stand out in particular for labour regulation and personnel management. For fruit farms, the need for support is highest in the area of financial support from governments (49%) and storytelling and marketing of the short supply chain (44%). The need for financial support from governments is also highest for vegetables protected farms (31%). For vegetables outdoors and fruit, the need for storytelling is high compared to other farm types.

For dairy farms, the need for support is highest in the area of food safety legislation (44%), as it is for beef cattle farms (43%). Four in 10 beef cattle farms also need financial support from governments. Four in 10 pig and poultry farms need the same support. Mixed-crop farms have most need of financial support from governments (41%) and provision of short supply chain physical materials (41%). Finally, crop-mixed farms are most in need of financial support governments (51%) and support with tax aspects (41%). Among arable farms, the need for financial support from governments and support with spatial planning legislation and permits is highest, each with a 34% share.

Table 36: Share of farms that need (better) support for the short supply chain branch by farm type (number of observations = 389)

Farm type	Arable farming	Vegetables protected	Vegetables outdoors	Fruit	Dairy cattle	Beef cattle	Pigs and poultry	Crops mixed	Crop-livestock
Financial support from government	34%	31%	46%	49%	30%	40%	40%	41%	51%
Spatial planning legislation and permits	34%	28%	41%	32%	33%	38%	32%	35%	35%
Tax aspects	20%	28%	38%	22%	39%	24%	28%	30%	41%
Food safety legislation	31%	17%	43%	17%	44%	43%	24%	38%	27%
Business-economic aspects	23%	25%	30%	22%	33%	26%	16%	38%	33%
Technical support for product development	31%	22%	38%	20%	32%	33%	24%	30%	27%
Providing physical material for the short supply chain	26%	22%	35%	29%	26%	33%	24%	41%	31%
Storytelling and marketing of the short supply chain	18%	22%	43%	44%	25%	31%	24%	27%	27%
Labour regulations	18%	25%	41%	17%	33%	31%	24%	35%	20%
Financial support from other channels	22%	14%	30%	34%	33%	24%	28%	19%	33%
Personnel management	12%	19%	32%	20%	26%	21%	16%	24%	27%
Share that need support in at least one area	**52%**	**56%**	**73%**	**66%**	**75%**	**57%**	**68%**	**65%**	**76%**

Source: short supply chain survey and Agency for Agriculture and Fisheries

4.5.3 More need for support for farms with a short supply chain revenue percentage above 75%

Table 37 shows the share of farms that have received support, with farms broken down by the share of revenue from the short supply chain branch in the total revenue of the farm. In general, the shares of the different revenue categories are quite similar. Food safety legislation and spatial planning legislation and permits score the highest in general.

Trends can however be observed in a few areas. The share of farms that have received support with business-economic aspects, storytelling and marketing of the short supply chain, and technical support for product development is higher in the higher revenue categories. The 100%-farms involved in short supply chain also received more financial support from channels other than the government. In turn, support for providing physical material for the short supply chain is slightly more common in the middle revenue percentages between 10 and 75%.

Table 37: Share of farms that have obtained support for the short supply chain branch by revenue share (number of observations = 389)

	>= 2.5% and < 10%	>= 10% and < 25%	>= 25% and < 50%	>= 50% and < 75%	>= 75% and < 100%	100%
Food safety legislation	46%	47%	45%	42%	38%	48%
Spatial planning legislation and permits	38%	39%	43%	39%	35%	44%
Tax aspects	34%	40%	36%	36%	40%	37%
Providing physical material for the short supply chain	27%	34%	34%	31%	27%	26%
Labour regulations	31%	28%	25%	30%	33%	28%
Financial support from government	28%	29%	31%	25%	28%	28%
Technical support for product development	28%	22%	26%	30%	30%	33%
Business-economic aspects	28%	23%	24%	22%	32%	33%
Storytelling and marketing of the short supply chain	24%	19%	23%	31%	32%	39%
Financial support from other channels	14%	10%	11%	8%	12%	20%
Personnel management	10%	12%	11%	16%	10%	9%
Share that have received support in at least one of the above-mentioned areas	**70%**	**78%**	**81%**	**70%**	**77%**	**81%**

Source: short supply chain survey

As regards the need for support (Table 38), there is a clear correlation in most areas: the need for support is higher among farms with higher revenue shares. In particular, the categories between 75% and 100% and 100%-farms involved in short supply chain stand out, with about three-quarters in need of support in at least one area. When looking at the individual categories of support, the share is highest in general for the category between 75% and 100%. There is mostly need for financial support from the government. Among farms with a revenue share between 75 and 100%, 58% need financial support from governments; among 100%-farms involved in short supply chain the figure is 52%. This is also in first position for the other categories, with the percentage who need support ranging from 33% to 43%. For financial support from other channels, the revenue category between 75% and 100% stands out, with a share of 47%. The share of between 75% and 100% for business-economic aspects is also higher (40%) than the other categories (between 22 and 33%). For personnel management and storytelling and marketing, the shares of the highest revenue categories are also higher.

Table 38: Share of farms that need (better) support for the short supply chain branch by revenue share (number of observations = 389)

	>= 2.5% and < 10%	>= 10% and < 25%	>= 25% and < 50%	>= 50% and < 75%	>= 75% and < 100%	100%
Financial support from government	37%	33%	43%	41%	58%	52%
Spatial planning legislation and permits	34%	29%	36%	39%	42%	44%
Tax aspects	29%	31%	36%	25%	38%	37%
Food safety legislation	33%	25%	34%	33%	38%	31%
Business-economic aspects	30%	29%	29%	22%	40%	33%
Technical support for product development	29%	26%	30%	34%	37%	24%
Providing physical material for the short supply chain	26%	23%	24%	33%	40%	35%
Storytelling and marketing of the short supply chain	25%	27%	27%	25%	37%	33%
Labour regulations	26%	26%	26%	31%	33%	28%
Financial support from other channels	24%	24%	30%	17%	47%	33%
Personnel management	16%	20%	24%	23%	30%	30%
Share that need support in at least one of the above-mentioned areas	**61%**	**61%**	**67%**	**63%**	**75%**	**74%**

Source: short supply chain survey

4.6 STATEMENTS ABOUT THE SHORT SUPPLY CHAIN

4.6.1 80% of farms are positive about their choice for the short supply chain, 57% state that the short supply chain branch is sufficiently profitable

To find out more about the sentiments and expectations relating to the short supply chain, a number of statements were presented to respondents. Respondents rated these on a scale from 'completely disagree' to 'completely agree' (Figure 28).

More than 8 in 10 respondents are ultimately satisfied with their choice for the short supply chain. For more than half of the respondents (57%), the short supply chain branch of their farm is sufficiently profitable. 19% completely disagree or generally disagree with the statement.

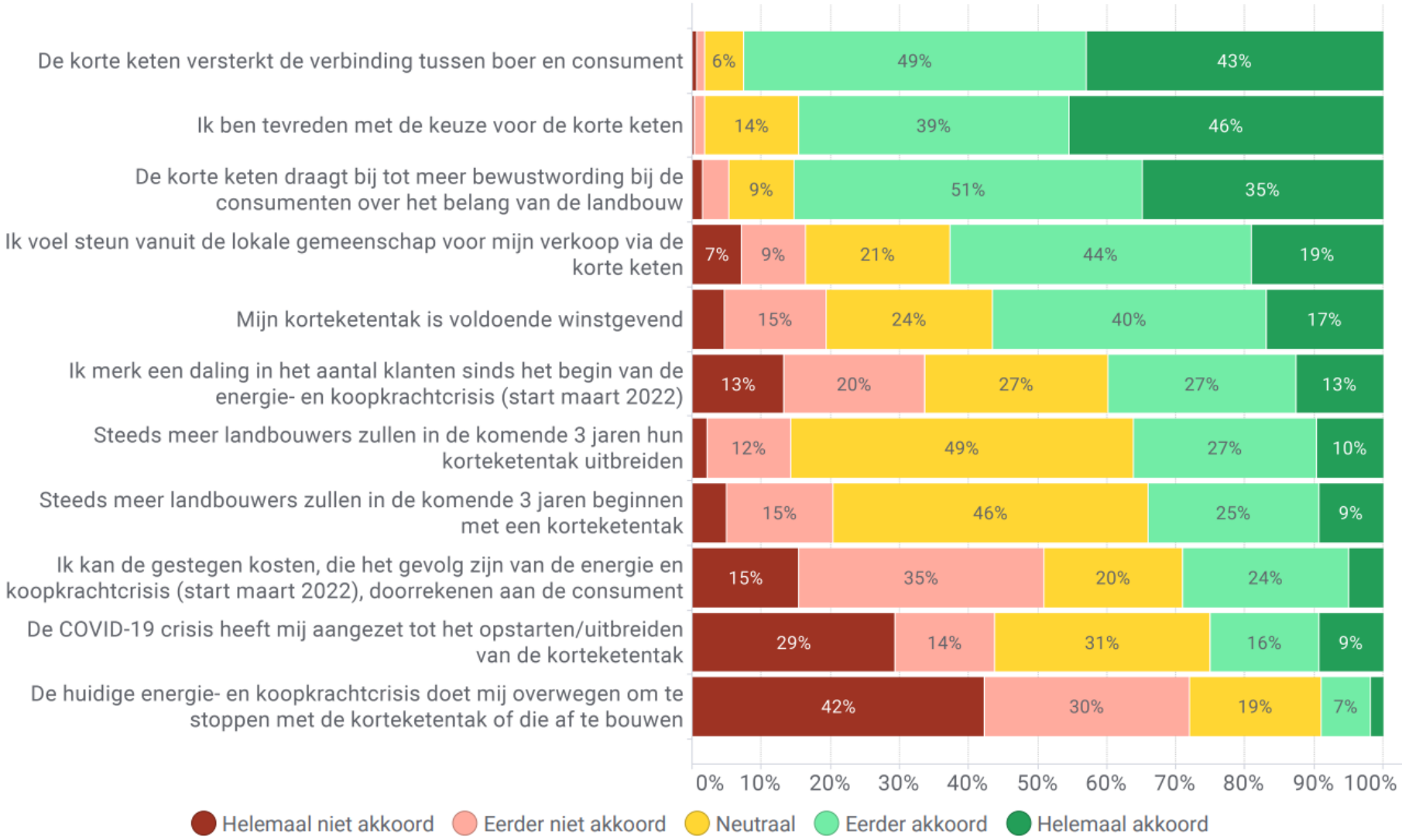
A large majority (91%) of respondents indicated that they generally agreed or completely agreed with the statement that the short supply chain strengthens the connection between farmers and consumers. 81% state that the short supply chain helps raise consumer awareness of the importance of agriculture. Just over half of respondents (57%) state that they feel support from the local community for short supply chain sales.

The COVID-19 crisis prompted 24% of short supply chain farmers to start/expand their short supply chain branch. Looking only at the farms who started their short supply chain branch in 2020 or later, the share that generally agreed or completely agreed rises to 40%. The COVID-19 crisis therefore had a major impact on the short supply chain.

The energy and purchasing power crisis (starting in March 2022) has had a variety of effects on the short supply chain branch. 39% of respondents stated that there was a drop in the number of customers after the start of the crisis, while 32% stated that there was no drop, and 29% were unsure. Almost half of the respondents (47%) have difficulty passing on the increased costs of the energy and purchasing power crisis to consumers. Around one third of respondents have managed to pass these costs on. 73% of respondents said the crisis has not prompted them to consider stopping or winding down their short supply chain branch.

For short supply chain farmers, it is unclear how the popularity of the short supply chain will continue to develop in the future. Regarding the statement that more and more farmers will start a short supply chain branch in the next three years, 48% neither agree nor disagree. Regarding the statement that more and more farms involved in short supply chain will expand their short supply chain branch in the next three years, 51% said they did not know. However, the proportion who think that this will be the case is larger than those who think it will not be: 37% think more farmers will start a short supply chain, and 34% think farmers will expand their short supply chain.

Figure 28: Social and personal statements about the short supply chain (observations = 491)

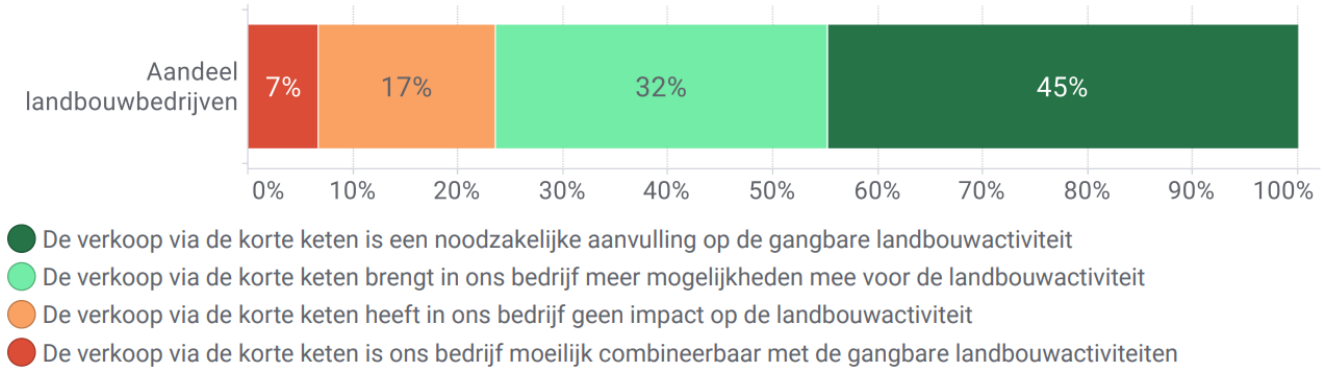


De korte keten versterkt de verbinding tussen boer en consument	The short supply chain strengthens the connection between farmers and consumers
Ik ben tevreden met de keuze voor de korte keten	I am satisfied with my choice for the short supply chain
De korte keten draagt bij tot meer bewustwording bij de consumenten over het belang van de landbouw	The short supply chain helps raise consumer awareness of the importance of agriculture
Ik voel steun vanuit de lokale gemeenschap voor mijn verkoop via de korte keten	I feel support from the local community for my sales via the short supply chain
Mijn korteketentak is voldoende winstgevend	My short supply chain branch is sufficiently profitable
Ik merk een daling in het aantal klanten sinds het begin van de energie- en koopkrachtcrisis (start maart 2022)	I have noticed a drop in the number of customers since the start of the energy and purchasing power crisis (started in March 2022)
Steeds meer landbouwers zullen in de komende 3 jaren hun korteketentak uitbreiden	More and more farmers will expand their short supply chain branch in the next 3 years
Steeds meer landbouwers zullen in de komende 3 jaren beginnen met een korteketentak	More and more farmers will start a short supply chain branch in the next 3 years
Ik kan de gestegen kosten, die het gevolg zijn van de energie en koopkrachtcrisis (start maar 2022), doorrekenen aan de consument	I can pass on the higher costs from the energy and purchasing power crisis (started in March 2022) to consumers
De COVID-19 crisis heeft mij aangezet tot het opstarten/uitbreiden van de korteketentak	The COVID-19 crisis prompted me to start/expand a short supply chain branch
De huidige energie- en koopkrachtcrisis doet mij overwegen om te stoppen met de korteketentak of die af te bouwen	The current energy and purchasing power crisis makes me consider quitting or winding down the short supply chain branch
Helemaal niet akkoord	Completely disagree
Eerder niet akkoord	Generally disagree
Neutraal	Neutral
Eerder akkoord	Generally agree
Helemaal akkoord	Completely agree

Source: short supply chain survey

How the short supply chain branch and agricultural activity relate to each other varies from farm to farm (Figure 29). 45% indicate that the short supply chain is an essential supplement to their traditional farming activity. 32% feel that sales via the short supply chain provide more opportunities for agricultural activity and 17% say that sales via the short supply chain have no impact on their agricultural activity. A small minority (7%) report that sales via the short supply chain are difficult to combine with their traditional farming activities.

Figure 29: Statements on the interaction between the short supply chain and agricultural activity (number of observations = 491)



Aandeel landbouwbedrijven	Number of farms
De verkoop via de korte keten is een noodzakelijke aanvulling op de gangbare landbouwactiviteit	Sales via the short supply chain are a necessary complement to traditional farming activity
De verkoop via de korte keten brengt in ons bedrijf meer mogelijkheden mee voor de landbouwactiviteit	Sales via the short supply chain create more opportunities for the activity on our farm
De verkoop via de korte keten heeft in ons bedrijf geen impact op de landbouwactiviteit	Sales via the short supply chain have no impact on the activity on our farm
De verkoop via de korte keten is in ons bedrijf moeilijk combineerbaar met de gangbare landbouwactiviteiten	Sales via the short supply chain are difficult to combine with the traditional activities on our farm.

Source: short supply chain survey

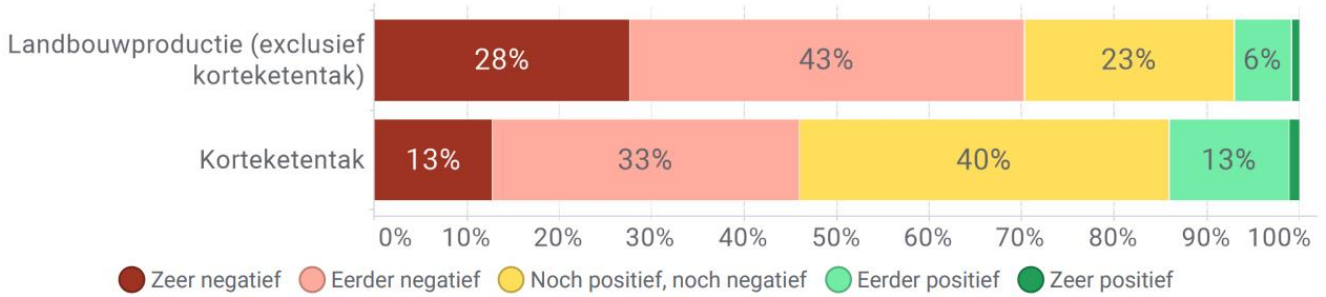
All farms involved in short supply chain, except those that will wind down their entire farm, were asked an additional question on the impact[3] of environmental challenges (e.g. MAP and PAN legislation), both on agricultural production (excluding the short supply chain branch) and short the chain branch (Figure 30).

73% of short supply chain farmers say environmental challenges will have a negative impact on their agricultural production. Only 7% say there will be a positive impact. The impact on the short supply

[3] The survey was sent to farmers on 10 February 2023. In the survey, environmental legislation relating to the MAP (Manure Action Plan) and PAN (Programmatic Approach to Nitrogen), refers to the draft versions of these laws applicable on 10 February 2023.

chain branch is deemed to be less negative, although 47% still state that the impact will be negative. The positive impact is also deemed to be low here, at only 13%. In addition, 40% of respondents state that there will be no positive or negative impact on their short supply chain branch. This may indicate significant uncertainty about the impact of environmental problems on a short supply chain branch or that the farmer expects that there will be minimal impact.

Figure 30: Impact of environmental challenges on agricultural production (excl. short supply chain branch) and short supply chain branch (number of observations = 485) [4]



Landbouwproductie (exclusief korteketentak)	Agricultural production (excluding short supply chain branch)
Korteketentak	Short supply chain branch
Zeer negatief	Very negative
Eerder negatief	Generally negative
Noch positief, noch negatief	Neither positive nor negative
Eerder positief	Generally positive
Zeer positief	Very positive

Source: short supply chain survey

4.6.2 Almost 100% of fruit farms are satisfied with their choice for the short supply chain and feel that the short supply chain connects farmers and consumers

97% of fruit farms (completely) agree with the statement that the short supply chain strengthens the connection between farmers and consumers (Table). All farm types score high on this, with all percentages above 80%. Fruit farms are also the most satisfied with their choice for the short supply chain (97%), while crop-livestock farms are the least satisfied (78%). Despite the high level of satisfaction, only 47% of fruit farms state that the short supply chain branch is sufficiently profitable. Only crop-livestock farms have a lower share (39%) and arable farming scores the same. The highest proportion is found in pigs and poultry (80%).

[4] This question was originally put to all farms involved in short supply chain, with the exception of the farms involved in short supply chain that were stopping with their entire farm. Since this question is analysed together with all other elements in the more extensive analysis, the results of this question are only shown for the farms with a revenue share from the short supply chain branch of at least 2.5%. Moreover, the results remain more or less the same when the number of observations is reduced.

90% of fruit farms find that the short supply chain helps raise consumer awareness of the importance of agriculture. Beef cattle and crop-livestock score the lowest here, with respective shares of 67% and 70%. Support from the local community is lower among livestock farms, and specifically in livestock farming. Horticulture finds that there is more support, with vegetables outdoors standing out in particular (81%).

The Covid-19 crisis was primarily an impetus for fruit farms to start a short supply chain or expand their short supply chain branch (32%). One-third of arable farms, pigs and poultry farms, and crop-livestock farms also started or expanded their short supply chain following COVID-19.

A drop in the number of customers due to the energy and purchasing power crises is most common in crop-livestock and vegetables protected. Dairy farms agree with this the least, at only 18%. Fruit and pigs and poultry are most often able to easily pass on the higher costs from the crisis to consumers (44%), while mixed farms find this more difficult. The share of farms ultimately considering stopping with the short supply chain due to the crisis is low in all sectors, although mixed farms score slightly higher here as well.

Fruit, pigs and poultry, and mixed crops have a slightly more positive view of the future of the short supply chain, although the differences with the other farm types are not significant. Dairy cattle and crop-livestock think to a lesser extent that more farms will start or expand a short supply chain branch in the next three years.

Some of the results stand out here. Fruit has the highest level of satisfaction with their choice for the short supply chain, but at the same time the second lowest profitability. However, of all sectors, the fruit sector is the most likely to state that it is able to pass on higher costs. Fruit is also most positive that the short supply chain strengthens the connection between farmers and consumers and that the short supply chain helps to raise consumer awareness of the importance of agriculture. The fruit sector also sees the most potential for the short supply chain, with 44% believing that more farmers will start a short supply chain in the next three years. They are also the least likely to consider stopping with the short supply chain.

Crop and livestock farms are at the other end of the spectrum. They have the lowest levels of satisfaction with their choice for the short supply chain, the lowest profitability, are the least able to pass on higher costs, with more than half seeing a drop in customers. Along with dairy cattle, they also see the least potential in increasing the number of short supply chain farmers. The statements relating to conviction generally score lower as well.

Table 39: Share of farms according to farm type that (completely) agree with statements about the short supply chain (number of observations = 389)

Statement	Arable farming	Vegetables protected	Vegetables outdoors	Fruit	Dairy cattle	Beef cattle	Pigs and poultry	Crops mixed	Crop-livestock
The short supply chain strengthens the connection between farmers and consumers	92%	92%	90%	97%	88%	88%	84%	95%	88%
I am satisfied with my choice for the short supply chain	80%	83%	86%	97%	80%	78%	92%	87%	72%
The short supply chain helps raise consumer awareness of the importance of agriculture	83%	81%	84%	90%	79%	67%	88%	84%	70%
I feel support from the local community for my sales via the short supply chain	57%	69%	81%	73%	50%	43%	52%	73%	49%
My short supply chain branch is sufficiently profitable	47%	69%	57%	47%	51%	59%	80%	60%	39%
I have noticed a drop in the number of customers since the start of the energy and purchasing power crisis (started in March 2022)	45%	50%	43%	36%	18%	28%	32%	41%	57%
More and more farmers will expand their short supply chain branch in the next 3 years	37%	31%	37%	37%	24%	33%	40%	37%	24%
More and more farmers will start a short supply chain branch in the next 3 years	26%	25%	35%	44%	19%	33%	32%	43%	20%
I can pass on the higher costs from the energy and purchasing power crisis (started in March 2022) to consumers	26%	28%	38%	44%	37%	38%	44%	22%	18%
The COVID-19 crisis prompted me to start/expand a short supply chain branch	29%	25%	16%	32%	11%	27%	28%	17%	28%
The current energy and purchasing power crisis makes me consider quitting or winding down the short supply chain branch	6%	9%	6%	4%	7%	7%	12%	13%	16%

Source: short supply chain survey and Agency for Agriculture and Fisheries

4.6.3 100%-farms involved in short supply chain are the most satisfied with the short supply chain

In general, 100%-farms involved in short supply chain agree more with the statements, while the lowest revenue category tends to agree less (Table 40). 100%-farms involved in short supply chain are generally more positive about the short supply chain. Satisfaction with their choice of the short supply chain is noticeably lower (67%) among farms with a revenue percentage between 2.5 and 10%. Almost all 100%-farms involved in short supply chain are however satisfied with their choice for the short supply chain. The shares of the middle revenue categories are also very high. The farms with a revenue percentage between 10 and 75% state most often that their short supply chain branch is sufficiently profitable. Among 100%-farms involved in short supply chain, the share is lower (50%), and the revenue category between 2.5% and 10% has the lowest share with only 32%.

The share of 100%-farms involved in short supply chain that (completely) agree with the statement that the short supply chain helps create more consumer awareness of the importance of agriculture is the highest of all categories. The other categories have similar shares, with the category between 10% and 25% scoring slightly higher. Support from the local community is again highest among 100%-farms involved in short supply chain. The share of the middle categories, with a revenue percentage between 25 and 75%, is also relatively high. The fact that the short supply chain strengthens the connection between farmers and consumers scores high for all categories, and highest for those with more than 75% short supply chain.

Around one quarter of farms in each revenue category were prompted by the COVID-19 crisis to start/expand their short supply chain branch. Looking at the future of the short supply chain, 100%-farms involved in short supply chain are more optimistic. Around half of 100%-farms involved in short supply chain think more farms will start or expand a short supply chain branch in the next three years. The farms with a revenue percentage between 25 and 75% have shares around 40% for these statements. The farms with a revenue percentage between 2.5 and 10% have the lowest shares.

As regards a drop in the number of customers since the start of the energy and purchasing power crisis, the difference between revenue categories is generally limited. 100%-farms involved in short supply chain are however more able to pass on the higher costs from the crisis to consumers. No revenue category has a high share that is considering stopping their short supply chain due to the crisis, although the shares of revenue categories between 2.5% and 10% and between 25% and 50% are slightly higher.

The following results stand out here. 100%-farms involved in short supply chain are the most satisfied with their choice of the short supply chain, scoring highest on the statements that the short supply chain strengthens the connection between farmers and consumers, the short supply chain helps create more consumer awareness of the importance of agriculture, and feel the most support from the local community. In terms of the profitability of the short supply chain branch, however, they do not score the highest figures, although half indicate that they can pass on higher costs, the highest share. They also see the most potential for the short supply chain. Half indicate that farmers will start or expand a short supply chain in the next three years.

At the other end of the spectrum are the farms with a short supply chain revenue of between 2.5% and 10%. These are the least satisfied with their choice of the short supply chain, and indicate the lowest levels of profitability. They see the least potential in the future of short supply chain, in particular in terms of other farmers starting a short supply chain or expanding it.

Table 40: Share of farms according to revenue share that (completely) agree with statements about the short supply chain (number of observations = 491)

Statement	>= 2.5% and < 10%	>= 10% and < 25%	>= 25% and < 50%	>= 50% and < 75%	>= 75% and < 100%	100%
The short supply chain strengthens the connection between farmers and consumers	85%	94%	89%	91%	96%	96%
I am satisfied with my choice for the short supply chain	67%	86%	86%	91%	93%	97%
The short supply chain helps raise consumer awareness of the importance of agriculture	78%	85%	76%	76%	82%	93%
I feel support from the local community for my sales via the short supply chain	51%	56%	63%	69%	54%	72%
My short supply chain branch is sufficiently profitable	32%	67%	61%	66%	45%	50%
I have noticed a drop in the number of customers since the start of the energy and purchasing power crisis (started in March 2022)	37%	36%	41%	36%	46%	42%
More and more farmers will expand their short supply chain branch in the next 3 years	25%	32%	42%	39%	30%	50%
More and more farmers will start a short supply chain branch in the next 3 years	24%	24%	38%	34%	33%	52%
I can pass on the higher costs from the energy and purchasing power crisis (started in March 2022) to consumers	29%	29%	29%	31%	25%	48%
The COVID-19 crisis prompted me to start/expand a short supply chain branch	22%	26%	20%	26%	27%	25%
The current energy and purchasing power crisis makes me consider quitting or winding down the short supply chain branch	13%	4%	13%	5%	6%	8%

Source: short supply chain survey

5 CONCLUSIONS AND FINDINGS

There is a wide variety of farms involved in short supply chain, but the trend is more towards organic and horticulture.

Farms involved in short supply chain are highly heterogeneous in terms of type of farm, product range, sales channel, size of farm, share of the short supply chain in total revenue, their business model, etc. Animal sectors, with the exception of dairy farms, are underrepresented. In contrast, specialised horticultural farms are overrepresented in the short supply chain, at 32%, as is organic farming (11%). Three-quarters of organic farms have set up a short supply chain. 60% of organic farms involved in short supply chain generate more than half of their revenue from short supply chain sales, and nearly 30% of organic farms - half of which are CSA farms - generate all of their revenue from short supply chain sales.

The most popular products sold are potatoes, fresh vegetables and fresh fruits. In addition, meat, fruit juices and/or fruit preparations, and dairy products are also important product categories. More than half sell only products from their own farm. 37% also sell products from other farmers and 19% sell non-farm products. Farm shops are by far the most popular sales channel (58%), followed by retail, cafes, vending machines and other farmers that sell my products (all around 20%). Sales channels vary widely between types of farms, with fruit farms having the most diverse sales channels. Many sales channels are dominated by horticulture, which has an important share in the short supply chain.

The size of farms involved in short supply chain varies widely. For one-third of farms involved in short supply chain, the importance of the short supply chain in their total revenue is less than 2.5%, for 41% it is between 2.5% and 50%, and for 24% of respondents it is more than 50%.

The share of horticultural farms is even higher for the higher revenue shares. 60% of 100%-farms involved in short supply chain are horticultural farms. 100%-farms involved in short supply chain are less likely to have shop space and vending machines, but more niche sales channels such as public markets, self-picking, vegetable subscriptions, CSA and food teams. The 100%-farms involved in short supply chain and some of the farms with revenues between 75% and 100% have more, alternative sales outlets. With regard to the other categories, this is a more distinct group of farms involved in short supply chain. CSA, vegetable subscriptions and self-picking are much more popular at organic farms, while shops and vending machines are much more common at traditional farms. Farms with a higher proportion of short supply chain sales sell more produce, sell more fruits, vegetables and herbs, and have more sales channels.

Just over a quarter of farmers have partnerships for sales of products and marketing. By a slight margin, this is the highest score. Nevertheless, the need for a partnership or a better partnership is highest in the areas of marketing and sales of products. There are many partnerships in particular in the fruit sector; three-quarters have a partnership in at least one area. But the need for (better) partnerships is also highest in that sector, including in the areas of sales of products and marketing. Dairy farms score the lowest as regards having partnerships.

The choice of the short supply chain is based on convictions, and as an alternative to traditional farming.

The short supply chain plays an important role in strengthening the connection between farmers and consumers. The fact that the short supply chain is not merely an additional source of income can also be seen in the reasons short supply chain farmers consider important for having a short supply chain. The sense of pride, getting satisfaction and appreciation, connecting with consumers, and informing consumers are the main reasons. Dairy cattle generally score lower for a number of reasons for being involved in the short supply chain, but mainly for conviction-based aspects. Conviction-based reasons score high for all revenue categories (except lower than 2.5%).

In addition, the alternative nature of short supply chain is attractive to farmers, and this plays a role as a motivation to have a short supply chain. Almost 80% of respondents highlight the fact they have more control and autonomy over sales. Seven in 10 short supply chain farmers consciously choose the short supply chain as an alternative sales strategy, and for six in 10 the short supply chain is important in taking a different approach to farming. The alternative character is more important for the farms with more than 75% of their revenue from the short supply chain.

Starting a short supply chain activity is a conscious choice by farmers. Consequently, 84% of respondents are satisfied with their choice of the short supply chain. Furthermore, the interaction between agricultural activity and the short supply chain is mostly positive. 45% of respondents indicate that the short supply chain is a necessary supplement to the farm, and 32% feel that the short supply chain offers more opportunities for agricultural activity. Fruit farms and 100%-farms involved in short supply chain are the most satisfied with their choice for the short supply chain. They also score highest on statements that the short supply chain connects farmers and consumers, and helps create more consumer awareness. 100%-farms involved in short supply chain also feel the most support from the local community. Farms with revenue between 2.5% and 10% are the least satisfied with their choice of the short supply chain.

Income from the short supply chain: an opportunity and an obstacle.

The financial opportunities of the short supply chain appeal to some farmers. Sales via the short supply chain offer multiple sources of income, help farmers earn additional income, and provide an opportunity to increase their margin on agricultural production. For dairy cattle farms, economic reasons are relatively more important for having a short supply chain. In addition, as regards revenue share, farms in the middle categories score higher for economic aspects direct support. Two-thirds of farms involved in short supply chain believe that the income from their short supply chain sales is generally or very important. Between one quarter and one third of respondents believe that other sources of income such as diversification of activities (on top of the short supply chain), working outside the home and social benefits are also important. 28% of short supply chain farmers have already received financial support from the government and 12% from other channels. However, more than four in 10 short supply chain farmers do need financial support from the government for their short supply chain branch. Six in 10 farmers also indicate that the short supply chain is generally important or very important in continuing their farming activity. For 44% of respondents, the short supply chain is important as an alternative, because expanding their agricultural activity is not possible.

However, the short supply chain branch is not equally profitable for every farmer. Slightly more than half of short supply chain farmers report that their short supply chain branch is sufficiently profitable. But for 29%, profitability is generally uncertain, and for 18% the short supply chain branch is not profitable. 80% of pigs and poultry farms report that the short supply chain branch is profitable, for arable and fruit the figure is only 47%. The middle categories, with between 10% and 75% of their revenue from the short supply chain, indicate that the short supply chain branch is most profitable, and the lowest revenue category (between 2.5% and 10%) scores the lowest here.

Farmers have difficulty passing on higher costs from the energy and purchasing power crisis to consumers. This puts pressure on the profitability of the short supply chain branch. In addition, some of the respondents have seen a drop in the number of customers due to the crisis. Consumers are therefore sensitive to the high prices and therefore partly return to the (cheaper) mainstream sales channels (e.g. supermarkets). Nevertheless, one third of respondents indicated that there was no drop in the number of customers. A portion of consumers therefore remain loyal to the short supply chain, despite higher prices.

Of all sectors, the fruit sector reports most often that it can pass on higher costs. This is also the case for 100%-farms involved in short supply chain, where half indicated that they can pass on higher costs.

For farmers who have stopped with their short supply chain, the limited profitability of the short supply chain was a major reason for stopping. They indicate that revenues via the short supply chain are too low to cover costs, and that the cost of additional labour for the short supply chain branch is too high. Farmers who have never had a short supply chain branch also indicated that financial reasons prevent them from start a short supply chain activity. 58% believe that the revenues will not cover the costs, and 50% think the investment costs are too high. In addition, 50% of farmers indicate that the short supply chain is not a good match with the farm or the farm operators.

Complex legislation is major obstacle to starting a short supply chain branch.

Only 4% of farms without a short supply chain consider the likelihood (generally) high that they will set up a short supply chain branch in the future. This suggests that short supply chain is not for every farmer, which is reflected in the figures: nearly half of farmers report that their farm is not conveniently located or that the farm operator does not have the necessary expertise for the short supply chain. But there are also aspects that put farmers off. One of the main reasons for not setting up sales via the short supply chain is overly complex legislation, in particular food safety legislation. Livestock farms in particular see overly complex food safety legislation as a major constraint, horticultural farms somewhat less so. Other legislation that is too complex, such as labour laws and problems with permits and spatial planning, are also important reasons for not starting a short supply chain activity. In addition, uncertainty about new environmental legislation relating to e.g. manure and nitrogen is also a barrier to sales via the short supply chain for just over half of the respondents.

Support from government or other organisations helps fledgling farms involved in short supply chain overcome the legislative barriers. For example, 45% have received support with food safety legislation and 40% with spatial planning legislation and permits. Dairy farms have received the most support in

both areas. Nevertheless, about one third of farms need (better) support in the area of legislation. In the future, it is important to keep helping and supporting farmers with questions about legislation.

Labour - especially in horticulture - is a barrier to getting started in the short supply chain

One major barrier to starting a short supply chain is the too high cost for additional labour, and the labour intensity. The cost of additional labour as a reason for not starting a short supply chain is ranked first in horticulture and is also high for dairy cattle. 'Too labour intensive' scores especially high for vegetables protected and dairy cattle. For farms that have stopped with the short supply chain, labour intensity in particular, but also the high cost of additional labour was an important reason. The short supply chain requires a lot of labour. Short supply chain activities employ 2.1 FTEs, or 44% of the average number of FTEs across the farm. The volume of labour for the short supply chain is highest for vegetables outdoors and fruit. The horticulture sector is also relatively more likely to indicate that they have received support with labour regulations.

Divided opinions on the future of the short supply chain

The short supply chain has become more popular in recent years. For example, 36% of farms involved in short supply chain have set up a short supply chain branch in the last five years. As a consequence of the COVID-19 crisis, consumers (re)discovered the short supply chain and more farmers set up a short supply chain branch. 40% of farms that set up a short supply chain branch in or after 2020 stated that the COVID-19 crisis prompted them to start or expand their short supply chain branch. The current energy and purchasing power crisis is a major challenge for the short supply chain. Nonetheless, three-quarters of respondents felt that the crisis was not a reason to stop their short supply chain or scale it back.

Farms involved in short supply chain do however believe that the potential of the short supply chain is limited. As cited above, only 4% of the farms without a short supply chain are thinking of starting a short supply chain branch. In addition, half of current farms involved in short supply chain are unsure whether more farmers will set up/expand a short supply chain branch in the future. Around one-third think more and more farmers will expand or start their short supply chain branch in the next three years. This is slightly larger than the share who think the opposite.

The fruit sector also sees the most potential for the short supply chain, with 44% believing that more farmers will start a short supply chain in the next three years. They are also the least likely to consider stopping with the short supply chain. Dairy farmers on the other hand score the lowest, only 19% think farmers will start a short supply chain in the next three years. Of the farms with no plans to start a short supply chain, dairy farms generally score higher, for quite a few reasons. This could suggest that the barriers to switching to the short supply chain are more significant. Dairy farms also indicate more competition with other farmers as a barrier. 100%-farms involved in short supply chain see the most potential for the short supply chain. Half indicate that farmers will start or expand a short supply chain in the next three years. The farms with between 2.5% and 10% short supply chain see the least potential in the future of short supply chain.

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