



Rikolto International – Rikolto Belgium

Forecast Assessment of the Social Return on Investment of Kortom Leuven By Pol De Greve, I&SConsulting, Mechelen, Belgium

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1. Background

Kortom Leuven was set up as a local distribution platform for connecting local farmers directly with shops and supermarkets, restaurants and industrial kitchens in and around the city of Leuven. At the heart of Kortom Leuven is a group of local farmers, working with Rikolto and the City of Leuven.

Kortom Leuven is a case for testing new, innovative ways for improving competitiveness of local farmers. The key aims of the pilot are to ensure fair prices for their farm produce and to encourage commitment to sustainability measures in farming (for farmers selling on the platform), in value chain operations (for businesses procuring from the platform) and eventually in consumption (for consumers purchasing through the platform). Kortom Leuven sets out new ways for creating a market and expanding market share for local farmers by forging short supply chains in a dynamic way, directly linking producers and buyers.

Kortom is meant to be more than a connectivity tool, it also set criteria for sustainability and fair distribution of value in the transactions it facilitates. Through Kortom, Rikolto wants to encourage consumers to choose more sustainable products, which in turn stimulates producers to produce in a more sustainable way. By displaying the level of compliance on sustainability and fair distribution, Kortom will contribute to more transparency in (short and local) supply chains and to ensure that these criteria are met and the standards behind them are being upheld.

For Rikolto, Kortom is a pilot component of its Food Smart City programme cluster and strategy. Rikolto's ambition is to scale up the principles we find in the short chain. At the Flemish level, it wants to promote and push forward short-chain sales, which is why Rikolto works with mainstream distribution channels, like supermarkets and restaurants as those provide an opportunity to scale up.

2. Boundaries – objectives and scope

Scope & boundaries

- The SROI assessment will cover the Kortom initiative with emphasis on the value creation for direct stakeholders (farmers, cooperative, buyers) with a broad perspective that encompasses economic, commercial, social and possibly ecological values.
- The Rikolto programme is focused on the Kortom cooperative with, at the moment, the 10 farmers and the city of Leuven as shareholders.

Purpose

• Predominantly a pre-investment analysis but with use of historical data for set-up and early operations of Kortom in 2020.

Time span

December 2018 (set-up) + operations from June 2020 – May 2025 – 5 years

- Using business plan June 2020 June 2023 developed early 2020
- Then forecasting costs and benefits until May 2025
- Using different scenarios for annual growth of turnover after June 2023

3. Stakeholders

Stakeholders that were involved in the assessment are farmers, the cooperative, the buyers and the City of Leuven. Value creation for and by these stakeholders was identified and integrated in the numeric SROPI calculation.

Value creation was also discussed in interviews with staff of the *innovatiesteunpunt (ISP) and CERA*. They (ISP staff) mentioned aspects of value creation for other stakeholders (mainly farmers) but not directly for their own organisation. ISP's mission is to inform and inspire farmers in Flanders about new challenges and opportunities and to support them with the development and implementation of concrete projects. Promotion of and support to short chain initiatives is among the focus areas in the ISP's programme. The values created in Kortom contribute to realising ISP's mission and mandate.

In the initial design, Kortom would develop interventions that connect producers, business customers and citizens-consumers, while the three categories would also be shareholders in the cooperative. This dual ambition has not been realised for various reasons. An important argument was the wish and intention to give priority to the establishment of a commercially viable B2B venture connecting farmers to business clients. As there where only few elements of direct connection in the initiative so far, consumers were not part of primary data collection in this assessment. Nevertheless, the consumer angle did come up in interviews with shopkeepers and managers of cafes & coffee shops. It was therefor decided to include a (admittedly) small component of value creation for citizen-consumers in the analysis.

The City of Leuven has played an important role in the establishment and operationalisation of Kortom as a staunch supporter of short-chain initiatives, a (social) investor in Kortom and a shareholder in the cooperative. The contributions of the City as well as the value creation for the City and its residents was consequently integrated in the analysis.

Other partners that played a role in design and establishment of Kortom included Straffe Streek, Provincie Vlaams Brabant, Voedselteams, LinkedFarm, EIT FoodWin, VVSG and Leuven 2030.

Finally, Rikolto's contributions were obviously captured and integrated in the analysis. The value creation for Rikolto is discussed in the following section. Specific roles played by Rikolto were:

- Start-up and (seek) financing
- Market research (producers, hospitality, retail, etc.)
- Working out logistics (web platform, distribution)
- 'Community building' and communication
- Recruitment coordinator
- Business plan

Table 1 – The stakeholders of Kortom and their role in of for the initiative

		Design & Set-up	Production	Transport Storage	Web platform	Order picking	Buying	Shareholder	Financing	Communication
1	Farmers		Х	Х		Х		Х		
2	Manager Kortom			Х	Х	Х				Х
3	Buyers B2B						Х			
4	Consumers						Х			
5	Rikolto	Х							Х	Х
6	City Leuven	(X)						Х	Х	Х
7	ISP	Х								Х
8	Circulair Vlaanderen								Х	
9	EIT Food								Х	
	Other partners	Х								

4. Outcome mapping

Table below is self-explanatory - in section 8, a selected number of effects / outcomes will be monetised to be included in numeric SROI analysis

Table 2 – Effects and outcomes as perceived and reported by stakeholders and reported levels of realisation

No	Stakeholder		ges / outcomes & perceived realisation 0 – level of realisation as perceived by stakeholders / ? means	unsubstantiated or mixed perceptions)
		#	Intended	Not mentioned in initial project outline
1	Farmers	10	Fair price +?Diversification distribution channels ++	Competition between farmersExtra expertise needed e.g. in trading /
		+5 ¹	- Visibility (<i>gezicht geven</i>) ++	marketing
			- Less burden of logistics +	- Different attitude especially in sales
			- Moving towards more sustainability 0 (+?)	- Less turnover of auction houses?
			- Transparency & connection +	
			- Exchanges among farmers ++	
			- Collaboration among members cooperative +	
2	Cooperative Kortom		- Profitability 0?+	- Professionalism
			- Viable and sustainable operations 0?	- Better insights in value chain dynamics
			- Cooperative community of consumers & retailers -	
			- Improve cohesion among market actors +	
			- Credibility of the (local) agri-food sector +	
			- Reduced ecological footprint of agri-value chains 0+	
			 Serving small & Medium Sized Hospitality clients 0 Serving mass catering services and institutional buyers 0 	
3	Buyers B2B2	10	- Fresh products of good quality ++	- Attractive packaging
-	20,000 0202	+112	- Punctual deliveries +	-
		+11_	- Unique products not procurable elsewhere +	
			- Interesting communication for consumers +	
			- Sustainability +	
			- Community building +	
			- Image building as locally embedded business +	

No	Stakeholder	unsubstantiated or mixed perceptions)		
		#	Intended	Not mentioned in initial project outline
4	Consumers (no interviews)		 Convenient access to local products of good quality ++ Connection with local producers 0+ Affection with sustainable food 0+ 	-
5	City of Leuven		 Features in climate action Leuven Roadmap 2050 + Realise the city's food strategy + People's access to healthy green food + Promote sustainable production 0+ Connect consumers – retailers - producers 0 	 Sustainable distribution platform for food & non-food (urban logistics) Reduction in food waste Educational benefits – awareness & mobilisation
6	- Innovatiesteunpunt - Boerenbond		 Promote short chains Support producers Connect farmers Exchange on busines & market innovation Connect city to rural areas Meets new urban demand 	 Impact on existing auction houses Farmer as price setter – within limits!
7	Rikolto		 Experiment – pilot – innovate – learn Upscaling of short chain B2B model Contribute to resilient local chains 	 Align and connect with similar initiatives in other cities – also for efficiency reasons

 $^{^{\}rm 1}\,\rm 10$ farmers are presently shareholder. Five more farmers are considering to join

² 10 regular (weekly) buyers and 21 buyers in total

5. Non-financial contributions

Staff of Rikolto, of its partners in Kortom as well as farmers invested time in the establishment of Kortom. The larger part of their time investment was not compensated financially but nevertheless needs to be included in the SROI as opportunity cost. Farmers invest 'free time' in Kortom such as in meetings of the cooperative – this voluntary contribution is valued at 50% of the professional day fee because opportunity cost is assumed to be time in other social activities and not productive work.

Table 3 - Time spent by Rikolto and partners - period 2019 - Jun 2020

Check & adjust	Days	Daily tariff	Total value	2019	2020	>2020
Rikolto – un-renumerated days	88	300	26,400	15,840	10,560	
Voedselteams	30	300	9,000	5,400	3,600	
City of Leuven	8	300	2,400	1,440	960	
Leuven 2030	2	300	600	360	240	
Straffe Streek	8	300	2,400	1,440	960	
Province Vlaams-Brabant	1	300	300	180	120	
Innovatiesteunpunt	0	300	0	-	-	
Boerenbond	4	300	1,200	720	480	
Sociale Kruidenier	0	300	0	-	-	
VVSG	1	300	300	180	120	
Sub-Total	339	300	42,600	25,560	17,040	
Farmers in coop management and other 'volunteer' engagements	60	150	9,000		9,000	6,000
Total			51,600	25,560	26,040	

6. Business plan Kortom 2020-2025 – Financial feasibility (not yet other value creation)

Use made of the Business Plan made by Michael & Patrick (?) dated 17-02-2020. Two base scenarios

- 1. The original Plan of Kortom –June 2020 till June 2023 (3 years) but with a more modest growth in 2022 to almost 1 million € instead of 1.4 million
- 2. A 5-year forecast plan with basis scenario extended till June 2025 but with slower growth towards a turnover of 1.6 million € after 5 years (not 1.9)

Extra Assumption – extra funding in 2020 not 100,000 Euro as income but limited to 20,000 in 2020 and 10,000 in 2021 – farmers shares used as working capital? Note – 2021 assumption: 5 new farmer shareholders will join.

Table 4 – Business plan scenario July 2020 to June 2025

source - Adapted from Bus.Pla	n Feb.	2020
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Source - Adapted Holli Bus. Plati Feb. 2020
Expected turnover
or per week
Grant City of Leuven
Additional funds
mark up Kort'om
Expected income
Expected costs
Establishment coop
Marketing
Expenses coordinator
Social secretariat
Accountant
Salary coordinator
Webplatform (variabel)
Total logistic cost
Totaal kosten
EBITDA
For plan period June 2020-May 2023

•	2020	2021	2022	2023	2024	< July 2025
	110,199	684,248	989,499	1,294,749	1,600,000	800,000
	3,633	13,159	19,029	24,899	30,769	30,769
	36,000	4,000				
	20,000	10,000				
18%	19,836	123,165	178,110	233,055	288,000	144,000
	75,836	137,165	178,110	233,055	288,000	144,000
	4,000					
	25,000					
	1,000					
	982	1,684	1,684	1,684	1,684	842
	875	1,500	1,500	1,500	1,500	750
	32,200	32,200	32,200	32,200	32,200	16,100
	2,202	10,976	18,585	23,634	23,634	11,817
	25,816	76,324	95,384	119,208	133,503	66,752
	92,075	122,684	159,248	191,173	208,521	104,260
	- 16,239	14,481	18,862	41,882	79,479	39,740
	- 16,239	14,481	18,862	20,941		

7. Summary costs in time series -

Table 5 – Summary of total investment and operational costs

	2019	2020	2021	2022	2023	2024	2025
Financial Costs							
Establishment cost							
Setting up web platform	7.500	7.500					
Renumeration Rikolto	20.000	10.000					
Renumeration ISP & partners	12.500	12.500					
Salary coordinator Aug 2019 -May 2020	27.600	27.600					
Kort'om recurrent costs up to June 2020	6.750	12.250					
Overhead Rikolto international	52.816	17.793					
Overhead Rikolto Belgium	17.793	5.743					
Kort'om recurrent costs June 2020 onwards		92.075	122.684	159.248	191.173	208.521	104.260
Non-financial costs							
At establishment							
Time contributed by Rikolto	15.840	10.560					
Time contributed by partners	7.920	5.280					
Time contributed by farmers		9.000					
Time contributed by farmers	-	-	6.000	6.000	6.000	6.000	6.000
Total Costs	168.720	210.301	128.684	165.248	197.173	214.521	110.260

8. Valuation matrix

Farmers

- The aspiration was that farmers would be less price-takers and more price-setters able to attract fair and rewarding prices for their produce. Perception of realisation of this ambition among stakeholders is mixed. Prices remain 'constrained' by a need to be competitive against alternative sales channels available to buyers. Moreover, the margin (of 22 to 25% on off-farm price) that Kortom charges reduces the possible scope for upward price setting by producers (or sometimes worse ... Kortom purchase price lowest of alternatives)
- The estimated farmers' profit could not be based on figures from each farmer as it was too early in the process to establish actual primary data. Instead, the estimated profit was derived based on an assumed average profit margin of 20% in total turnover (turnover figure from Kortom business plan). Incremental profit as compared to alternative / traditional distribution channels is assumed to be fairly modest (10%). This means we assume deadweight of 90% profit that would have been realised by farmers anyway and is not considered a result of the initiative.
- Farmers specifically appreciate visibility like displays with photos of their farm. Value proxy is investment in displays & alike taken from business plan and repeat investments every 2 years. The value is estimated as the assumed willingness to pay by farmers (or Kortom) to organise open farm days for consumers including willingness of consumers to pay for travel to the farms by public transport, but excluding the cost of promotion for such open farm days or the likely extra profit made form sales to visiting consumers.
- Farmers appreciate the exchanges among shareholders of Kortom. The value thereof is
 estimated using the membership of annual *Landelijke Gilden* which creates similar values
 and the willingness to spend non-prductive /social time on promoting Kortom and engaging
 in meetings and other forms of exchange.

Kortom

 Profit – based on forecast business plan – the forecasted turnover from 2022 appear to be on the high side. This may require a sensitivity check.

Buyers

- Incremental financial profit is reportedly moderate against alternative options of procuring similar amounts via other short chain or traditional channels. There was little evidence of increase in total turnover, higher margin or increase in number of customers because of engagement in Kortom. Commercial value creation is in image building of the shop / business as being locally rooted. We assume a sales margin of 15%. Even without Kortom there is increasing interest in short chains therefore deadweight assumed 75%
- Some customers will choose to buy form a particular shop because of the availability of local farm produce. These customers will usually buy other products as well, the value of which is set a (low) 50% of the value of the Kortom products they buy.
- Buyers appreciate the linking with farmer. The proxy used is the cost of organising annual encounter events for tasting with retailers in the city based on staff time, travel time / cost and operational costs of organisation.

City of Leuven

 Willingness of Stad Leuven to invest € 40,000 as grant and € 30,000 as shares is reflection of the societal value (maatschappelijke waarde) of the initiative's efforts to promote short (food) value chains and mobilise consumers as well as retailers and actors in hospitality around the concept of Kortom. We increase this with 20% to reflect the impact on citizens in other surrounding municipalities with client shops (Huldenberg, St Joris Weert)

Benefits for society

Ecological

- The collection of products from farms and collection points by Kortom coordinator reduces
 the need for transport by farmers themselves and thus leads to lower CO2 emissions. The
 value for this effect is based on estimated reduction in ton-km of farm produce using
 emission rate standards and CO2 exchange market prices established by renowned climate
 experts.
- There are other ecological benefits that presumably are created by the initiative, but evidence is so far only is at most anecdotal. Resource persons referred to value creation in terms of reduced food waste along the value chain, more sustainable farming, processing and trading systems -- among others -- caused by an increase in demand for sustainably produced food (to which Kortom presumably contributes), changes in consumer cooking habits and diets away from less sustainable food.

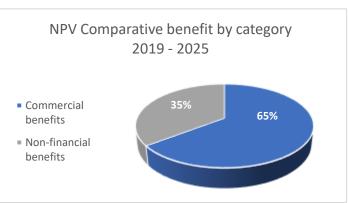
General

The grants received from Vlaanderen Circulair and EIT Food are proof of the societal appreciation of the initiative on its own accord but presumably also as a pilot set-up from which others can learn. In sensitivity analysis we will include a scenario whereby these grants excluded and thus not considered to be a reflection of societal valuation.

Rikolto

• The experiences and lessons learned from Kortom will facilitate establishment of similar initiatives by Rikolto in future and reduce the need for start-up investment especially in

terms of staff time (no need to reinvent the wheel). Value is expressed in % of value of time investment by Rikolto in the launch of Kortom. The resulting monetary value is considered to be a very moderate estimate of the impact of learning. The real impact —if learning succeeds — will be higher.



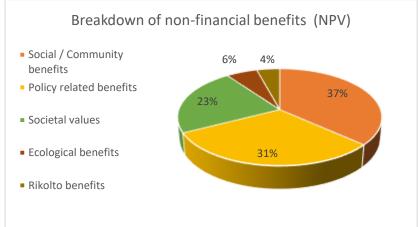


Table 6 – Overview results & effects and approach to their valuation

	Description	Indicators	Quantity	Financial proxy	Value €	Deadweight %	Attribution %	Net Value
Who do we have an impact on? Who has an impact on us?	How would we describe what the project has changed for them?	How do we measure the changes?	What is the amount of the change?	What proxy to use to economically value the change?	What is the value of the change?	What would happen without our action	What part of the change is not part of our project?	Quantity x financial proxy (dead weight and attribution)
Farmers	Increased profit	Profit margin on sales	Based on % of turnover	% on value procurement of Kortom	See time series of business plan Kortom	90%	100%	See business plan coop
Farmers	Value attached to exchange among farmers	Appreciation of farmers to meet other producers engaged in Kortom	Occasional encounters with other farmers at events and meetings	Membership of a social organisation like <i>Landelijke Gilden</i> + time spent	€ 28 membership per year + 4 half days social time each	0%	100%	€ 28 per farmer per year + value of 4 half days per year social time
Farmers	Increased visibility among public also the non-buying customers	Appreciation that farmers have for being visible and displayed as the people behind the product	Lump sum	cooperative investment in displays and related communication	Cost of the displays and other communication	0%	100%	See business plan coop
Kortom	Profit	Profit			See business plan	0%	100%	See business plan coop
Buyers	Incremental profit	Profit margin on sales	Based on % of turnover	% on value procurement of Kortom	Assumed % of turnover	80%	100%	See business plan coop
Buyers	Increase turnover of shops because by customers buying Kortom produce		Expressed in growth rate of turnover (general)	Estimated growth rate turnover over and above Kortom products	Portion of value of purchase from Kort óm	50%	100%	See next table
Buyers	Value attached to exchange with producers	Appreciation of exchange	3 events per year to meet and taste	Cost of organising these events + travel cost participants	In original Rikolto budget or estimate	0%	100%	See next table
Consumers	Value attached to exchange with farmers	Appreciation of exchange	open farm days in 10 farms per year	Cost of organising these events + travel cost participants	In original Rikolto budget or estimate	0%	100%	See next table
City Leuven	Social value creation for city & citizens of short food chains	Appreciation of the value of the initiative from policy point of view	Quantitative	Willingness to pay of City of Leuven to support Kortom	70,000 + 20% thereof for other municipalities	0%	100%	94,000
Society	Ecological benefits from reduced transport	Total CO2 emission avoided	Now & projected ton- km transport Michael?	CO2 emission saved * CO2 exchange price	€ 80 / ton CO2	0%	100%	See next table
Rikolto	Efficiency savings from lessons learnt in Leuven	Lower start-up cost and more efficient for similar FSC initiatives	# initiatives in # countries	% of the time investment	25%	0%	100%	See next table

9. Summary of the incremental benefits

Table 7 – Summary of total benefits attributable to Kortom 2020-2025

	Attribution	2019	2020	2021	2022	2023	2024	2025
Benefit	%							
Grant Vlaanderen Circulair		100,000						
Grant EIT Food		50,000						
Profit farmers	10%-25%		1,837	11,404	17,462	22,928	28,444	14,222
Social Exchange among farmers			6,280	9,420	9,420	9,420	9,420	9,420
Public Visibility short chain farmers			12,500	12,500	5,000	6,542	8,085	4,042
income Kort'om from June onwards			75,836	137,165	178,110	233,055	288,000	144,000
Profit buyers	25%		4,132	25,659	37,106	48,553	60,000	30,000
Profit extra turnover by Kort'om buyers	12.50%		2,066	12,830	18,553	24,277	30,000	15,000
Exchange farmers - clients				17,100	22,205	29,054	35,904	17,952
Exchange farmers - consumers				8,620	12,465	16,311	20,156	10,078
Social value creation for city			23,333	23,333	33,743	44,152	54,561	27,281
Impact other municipalities			4,667	4,667	6,060	7,929	9,798	4,899
Reduced CO2 emissions from less ton-km			3,279	5,931	7,702	10,078	12,454	6,227
Efficiency gains for Rikolto in upscaling				6,783	6,783	6,783	6,783	6,783
Total		150,000	133,930	275,412	354,608	459,082	563,606	289,905

The amount of the grants from Circulair Vlaanderen and EIT Food are considered to be a reflect of valuation by society of a short chain initiative. Grants are given because the organisations expect the initiative to be a testing and learning ground for innovative food system transformation at local level. In case the support would have been in the form of loan, it wouldn't have been considered as a reflection of valuation but rather a repayable investment.

The value of the grant is thought to be a lower limit to the actual value attached to the initiative by the grantor. The true societal value might be higher which also means that the estimated SROPI ratio is an underestimate and the the social return is actually higher than shown in the resultant of this calculation.

Sensitivity analysis shows that if the grants are not regarded as reflection of societal valuation and thus be excluded from the benefit stream, the estimated SROI ratio would decline from 1.97 to 1.81, a 8% decrease.

10.SROI Calculation and sensitivity analysis

Table 8 – SROI Calculation

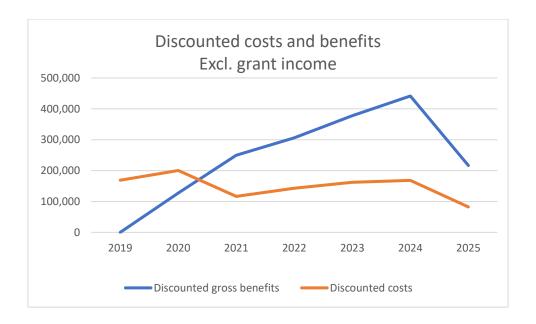
Discount rate = 5%

		2019	2020	2021	2022	2023	2024	< Jul 2025	Total
	Discount factor	1,00	1,05	1,10	1,16	1,22	1,28	1,34	
1	Costs								
1,1	Nominal costs	168.720	210.301	128.684	165.248	197.173	214.521	110.260	1.194.908
1,2	Discounted costs	168.720	200.287	116.720	142.747	162.215	168.083	82.278	1.041.050
2	Benefits								
2,1	Nominal gross benefits	150.000	133.930	275.412	354.608	459.082	563.606	289.905	2.226.544
2,2	Discounted gross benefits	150.000	127.553	249.807	306.324	377.688	441.600	216.331	1.869.304
3	Net benefits								
3,1	Nominal net benefits	-18.720	-76.371	146.728	189.360	261.909	349.086	179.644	1.031.637
3,1	Discounted net benefits	-18.720	-72.734	133.087	163.576	215.473	273.518	134.053	828.254

Total Discounted benefits 1.869.304

SROI- Ratio = ----- = 1,80

Total discounted costs 1.041.050



Conclusion – the Kortom initiative is an effective investment that generates almost 1.80 Euro in terms of value creation for each Euro invested in it. This is a low estimate because

- 1. A number of benefits were not included in the numerical SROI assessment either because (1) it proved difficult to precisely describe the tangible effect or the magnitude of the outcome, (2) by lack of proxies for valuation, or (3) there was only sparse anecdotal evidence at this stage of the effect and the possible attribution with Kortom.
 Benefits that were not monetised included increased transparency in the value chain, sustainability of farming systems and value chain processes, capacity strengthening of different actors in short-chain marketing, reduced food waste, use of Kortom for educational and public awareness purposes, or adoption more sustainable diets by consumers. It is likely that some of these benefits can be integrated at a later stage when more facts and figures on business and market performance of Kortom will become available (or can be explored). Possible options for valuation could be
 - More sustainable farming system so far only anecdotal evidence and not (yet) a prime objective of the cooperative. If this materialises, we can base valuation on other available SROI assessments in EU countries.
 - Food waste estimate the volume and (market-price based) value of food not wasted based on comparison of waste % in the mainstream channels versus observed waste in the short chain of Kortom,
 - Capacity strengthening opportunity cost of attending vocational / adult training courses to acquire the observed capacities (e.g. in food processing or marketing),
 - Savings made by consumers in adopting sustainable diets (e.g. less purchase of processed food, fast foods and snacks) and (based on existing studies) value of health effects of healthy diets. Missing now is an informed estimate of number of consumers reached (and forecast for period to 2025)
 - Educational value comparative cost of taking schoolchildren on educational forest classes in Heverleebos or Meerdaalwoud
- 2. The non-financial values have been set at very modest levels (when comparing with existing SROI studies of similar initiatives in other countries). As the calculation shows a quite favourable SROI already, it was felt that the moderate estimate adds to the credibility and robustness of the analysis.

Sensitivity Analysis	revised	
	SROI	change
No overheads	1,97	10%
Overheads only for Belgium not international	1,84	2%
Time period 8 years with constant turnover and costs after 2023	2,05	14%
Time period 8 years with continuing growth of 10% annually	2,17	21%
Reducing the estimated turnover in 2023 and beyond by 25%	1,70	-5%
Reducing Kortom margin on sales from 18 to 15%	1,81	1%
Disregard social and ecological benefits	1,09	-39%
Only include social & ecological benefits	0,64	-64%
Deadweight farmers profit 70% instead 90%	1,95	9%
Margin retailers 20% instead of 15%	1,88	5%
Extra turnover buyers is 100% of Kortom sales instead of 50%	1,88	5%
Grants Circulair Vlaanderen & EIT not considered sign of valuation	1,65	-8%

The base scenario appears to be fairly robust. Extending the time period to 8 years pushes the SROI to a ratio of 2.05 - 2,17 (+14% up to +21%) depending on the assumption about the future (beyond 2023) expansion. Important determinants that may have a substantial influence (in either positive or negative sense) on the SROI are the future turnover and the margins that different actors charge on sales.

So far, Kortom has focused mainly on establishing a commercially viable short food supply chain. The **ecological** dimension has been given less attention so far. In Rikolto's In an interesting UNIDO report on short food supply chains, Belletti and Marescotti¹ point at different claims on potential positive effects of short food supply chains (SFSC) on the environment.²

Long-distance, mass distribution channels are responsible – together with urbanization and changes in the composition of diets – of the impressive amount of food waste generated in our societies (World Resources Institute, 2013). They are also considered a cause of biodiversity loss (Godfray et al. 2010), as actors in the long and mass chains are encouraged to cultivate, sell and consume only a few species and varieties. Globalized food chains also alters the concept of seasonality, which is largely recognized as a key component of sustainable and healthy diets. Another claim relates to the limited information regarding the environmental impact of the processes of production and distribution consumers usually receive buying a globalized product (Goodman, 2002; Kastner et al., 2011), while SFSC can improve consumer knowledge and responsibility. SFSC can also help in preserving a sustainable peri-urban agriculture, with positive effects on the preservation of the quality of the environment around big cities (avoiding land abandonment, preserving uncovered soil, ...).

The authors of the report at the same time confirm that ecological effects can be hard to capture, let alone measure and monetise. Nevertheless, further exploration at a later stage in Kortom should

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¹ Belletti G. and Marescotti a. (2020) SHORT FOOD SUPPLY CHAINS FOR PROMOTING LOCAL FOOD ON LOCAL MARKETS, United Nations Industrial Development Organization

² See also annex 4 –showing a table (from the same report) with expected benefits and challenges for farmers, consumers and society of short food supply chains.

allow Rikolto to collect further evidence on ecological impacts notably on effects like expansion of sustainable farming systems, reduced food waste, reduced environmentally unfriendly packaging reduced consumption of less sustainable processed food, fast foods or snacks. It is expected that if these effects can be measured, this may have a significant positive effect on the social return of Kortom.

Annex 1 - Investments, resources and other inputs

Investments in Kortom

- VLaanderen circulair grant in 2019 € 100,000 - EIT Food grant in 2019 € 50,000 - City Leuven as grant in 2019-2020 € 40,000

Table 9 - Allocation of grant money

Vlaanderen circulair grant

Traditacien enedian Branc					
Allocated to cost item	Days	Tariff €	Total	2019	2020
Setting up web platform	50	300	15,000	7,500	7,500
Support by Foodwin & partners	45	300	13,500	6,750	6,750
Renumeration Rikolto	100	300	30,000	20,000	10,000
Operational costs (Whose operations?)			5,500	0	5,500
	months				
Full time coordinator	7.8	4,600	36,000	27,600	8,400
Total	315		100,000	61,850	38,150

City of Leuven

city of Leaven			
		2019	2020
Full-time coordinator			40,000
Total	40,0	00	40,000

EIT Food via ISP

		2019	2020
Time spent by Rikolto	5,000	2,500	2,500
Time spent by innovatiesteunpunt	25,000	12,500	12,500
Salary Coordinator	20,000		20,000
Total	50,000	15,000	35,000

Other financial contributions

Farmers sharesCity of Leuven shares

2020	2021
20,000	10,000
20,000	10,000

Other financial contributions

- Farmers shares € 20,000 in 2020 + 10,000 in 2021 from 5 new producers in 2021?
- City of Leuven shares € 20,000 in 2020 + 10,000 in 2021 as Leuven tallies new shares in 2021?

Annex 2 – Assumptions underlying benefit calculation

Underlying assumptions

Profit margin of farmers on sales to Kortom Deadweight farmers (extra turnover due to Kortom = 10%) Attribution % on profit farmers	20% 90% 100%
Profit margin of retailers on sales to Kortom	15%
Deadweight profit retail	75%
Attribution % on margin retail	100%
Deadweight profit on extra turnover retail	50%

Transport = CO2 emission per week				
Average km saved per producer per week				
Tonnage per week	10			
Total km saved per week	150			
Emission kg CO2 per tkm	0.52552			
Total CO2 emission in ton	0.78828			
CO2 price € ton	80			
Total savings per week	63.06			
Deadweight	100%			
Tonnage to increase proportionally to turn-over growth				
Sources				
Joost Dessein, Maarten Crivits en Thomas Block (2017) F	HOE DE KOI	RTE KETEN C	PSCHALEN	1?
Op zoek naar partnerschappen tussen landbouwers en g	rootafnem	ers in Gent e	en omstrek	en,
ILVO, Rikolto, Universiteit Gent				
Joseph E. Stiglitz & Nicholas Stern (Chairmen). Report of	the High-L	evel Commi	ssion on Ca	rbon Prices.
Carbon Pricing Leadership Coalition (CPLC). 2017				

Cost of an open farm day	Unit	Quantity	Unit value	Total value
Staff time	days	2	300	600
Material costs	Lump sum			500
Communication material	Lump sum			250
Travel cost by public transport of people	# people	100	15	1500
Cost per event				2850
Number farmers having a open farm day in first year				6
Cost of a city event where (portential) buyers meet farm	<mark>m</mark> ers for pro	duct tasting,	/ testing	
Staff time	days	4	300	1200
Material costs & location	Lump sum			2000
Communication material	Lump sum			750
Travel cost farmers	farmer-km	900	0.4	360
Cost per event				4310
Number of tasting events per year				2

Annex 3 – Persons interviewed

Farmers:			
Mr. Pieter Arnauts	Melkerhei – dairy farm		
Ms. Ann Geys	Nijswolkje – sheep / dairy		
Ms. Nadine Adams	Duroc Riegel – pork meat		
Buyers:			
Ms. Kristien De Clercq	Proxy Delhaize St-Joris-Weert:		
Mr. Eddy Van Meerbeek:	Spar Kessel-lo & Spar Huldenberg		
Ms. Sara Van Auwera:	Content - Package-free shop		
Mr. Jan Holemans	Bar Elisa by Java		
Mr. David Declerck	Bar Stan		
Rikolto and other stakeholders			
Mr. David Dessers	Councillor City Leuven for mobility, climate & sustainability, agriculture		
	and consumption		
Ms. Elisa van der Zande	Advisor to the Councillor City of Leuven		
Mr. Michael Moulaert	Coordinator Kortom Leuven		
Ms. Anne-Marie Vangeenberghe	Innovatieconsultant Coöperatief Ondernemen, Innovatiesteunpunt		
Mr. Patrick Pasgang	Consultant short chains & new businessmodels Innovatiesteunpunt		
Ms. Laurence Claerhout	Linked Farm		
Ms. Liesbeth Van Meulder	Program Advisor public & private sector, Rikolto België		
Ms. Katharina Beelen	Programme Coodinator, Riokolto België		
Mr. Joris Aertsens	Program Advisor sustainable chain development, Rikolto		
Interviews for inception – covering issues related to Food Smart City			
Mr. Chris Claes	Executive Director of Rikolto (International)		
Ms. Charlotte Flechet	Food Smart Cities cluster coordinator		
Ms. Josephine Ecklu	Inclusive Business coordinator		
Ms. Michaela Boyen	Programme Advisor Planning, Learning & Accountability		
Mr. Tom Van den Steen	Programme Advisor Planning, Learning & Accountability		

Annex 4 – Effects of short food supply chains on different actors & levels

	Benefits	Challenges
Farmers	 Prices increase at farm gate Value added increase Easier market access, especially for small producers Better communication and information to consumers Differentiation of marketing channels and higher resilience More stable commercial relations Opportunity to develop cooperation with other farmers Opportunity to develop cooperation with consumers Allow for a strategic re-orientation of the whole farm 	 New functions to be performed and related increase in costs Increase in workforce Need for investments in equipment for processing, transportation, and selling Need for new competencies and skills Need for diversification of production Opportunities restricted to areas close to the city and/or touristic market Increasing competition in SFSC market segment
Consumers	 More affordable prices for food Easier access to quality products: fresh, local, "authentic", origin food Buy products traceable from a known producer Reconnect food to the farming and processing process Easier access to healthier food options Pursue of social and ethical objectives Support local economy 	 More time needed for food purchase New function to be performed in purchase and in preparing food New competences to be acquired in food preparation Increase in the "total cost" of food (that includes costs related to the whole buying and consumption process) Scarce information on where to buy More accessible for affluent and welleducated people
Society	 Reduction of transport Reduction of pollution (fuel, plastic) Reduction of plastic packaging Less food waste Improved diets: easier access to fresh food, more variety in diet, less preservatives, Preserving peri-urban agriculture Preserving small farming / artisanal food processing Preservation of traditional products Preservation of products based on local agro-biodiversity Strengthening social ties Increasing awareness about food system problems Working opportunities for women Explore niches of innovation 	 Increase in the "real cost" of food reduction in efficiency of resource allocation Transportation inefficiencies Increased risks for food safety (less controls)

Source - Belletti G. and Marescotti a. (2020) SHORT FOOD SUPPLY CHAINS FOR PROMOTING LOCAL FOOD ON LOCAL MARKETS, United Nations Industrial Development Organization