

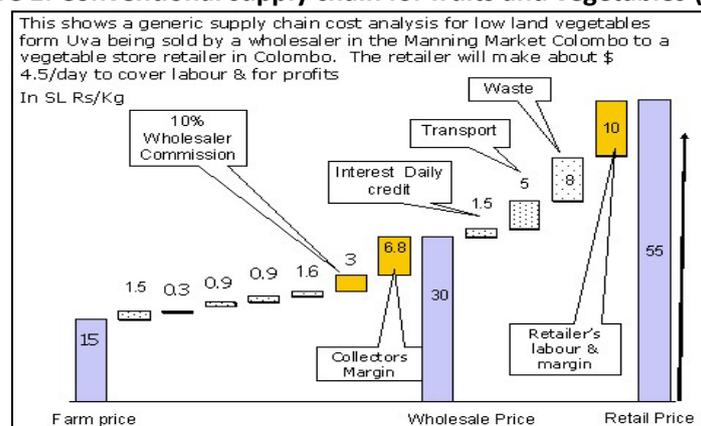
**Case study 2**  
**Sri Lanka**  
**Cargills Ceylon Ltd**

Total cost:	NA
Financier	Private company
Year of initiation:	2001
	2010-2015, Possible partner under the IFAD-supported National Agribusiness Development Programme (NADeP)
Value chain approach:	Relational chain, buyer-driven

**Background.** Cargills Ceylon Ltd (Cargills) is a supermarket chain called Food City in Sri Lanka. It has improved the efficiency of its operations by purchasing directly from producers, increasing the efficiency in the chain, thereby increasing its own income as well as the price paid to smallholders. Its intervention in the passion fruit chain provides an example of how Cargills improved the efficiency of the chain resulting in considerable benefits to the producers and increased sales of passion fruit through its retail outlets.

In a normal fruit and vegetable chain in Sri Lanka (see Figure 1<sup>1</sup>) there are many actors who usually tend to act in their best interests rather than operating as a coordinated chain, resulting in high operating costs. Some 30% of the market value accrues to the middlemen, post-harvest losses amount to about 40% and only around 30% of the final value accrues to the producer.

**Figure 1: Conventional supply chain for fruits and vegetables (SL/kg)**



In the generic chain there are many problems. Usually low quality planting material is used. In addition, premature harvesting and poor post-harvest practices contribute to inferior product quality entering the markets. Fresh produce is traditionally transported to distant primary processing plants or markets, and the quality deteriorates en-route. Due to the inconsistencies and weaknesses in the supply chain the processing industry has been reluctant to invest in machinery, plant and equipment. In reverse, the weak linkages in the supply chain have also led to low on-farm productivity making farmers reluctant to invest on their farms (to improve quality). As a result the end product is not competitive in the open market.

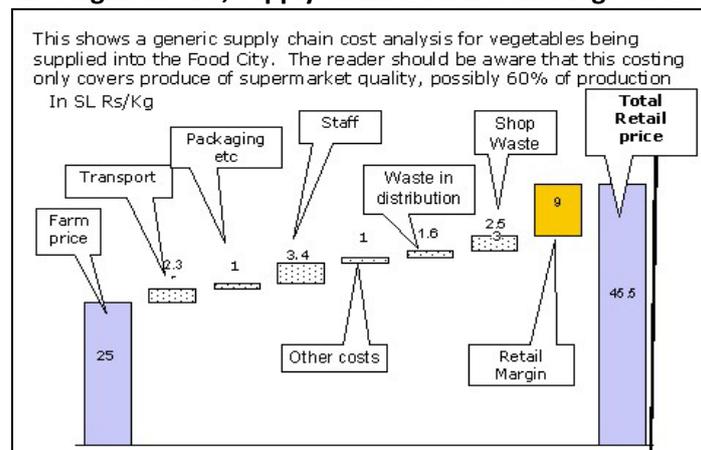
**Intervention.** With the support of service organizations in the production areas, Cargills developed an out growers programme to source its annual requirement of passion fruits. Even though no formal agreements were signed, farmers were assured a competitive market price for their produce, with a minimum guaranteed price of 120% of the cost of production. Cargills provided free seeds and

<sup>1</sup> Source: "Production Resources in Lagging Regions", World Bank Report: Case Study – Sri Lanka, June 2007.

technical advice (from land preparation to harvesting) through its own agriculture extension staff. Collaboration with research institutes, agriculture departments and other service organizations helped Cargills provide the farmers with assistance to improve their skills and knowledge. Farmers were exposed to new technologies and know-how, resulting in reduced post-harvest losses through proper plant husbandry and timely harvesting.

Figure 2<sup>2</sup> shows the supply chain for fruits and vegetables under the Cargills model. As can be seen the farmer receives a higher farm-gate price, and as fewer intermediaries are involved in the chain, farmers receive better prices, while enabling Cargills to lower retail price, thereby improving competitiveness.

**Figure 2: Cargills model, supply chain for fruits and vegetables (SL/kg)**



**Impact on the target group.** The intervention was initiated with 50 farmers in 2001 and has presently reached 350 farmers. The annual production has increased from 50 metric tons to over 300 metric tons of fruits. Farmers have witnessed an increase in income due to improved efficiency in the chain. Farm-gate price has increased by 67% (from USD 0.13/kg to USD 0.22/kg). Reductions in the number of actors involved in the chain have allowed farmers to receive 55% of the final retail price (compared to 27% in the generic chain).

**Price transmission along the fruit and vegetable value chain.** Table 1 compares the price transmission in the fruit and vegetable value chain and the passion fruit chain under Cargill's model and under the generic chain.

<sup>2</sup> Source: "Production Resources in Lagging Regions", World Bank Report: Case Study – Sri Lanka, June 2007.

**Table 1: Price transmission along the fruit and vegetable chain  
– Comparison between Cargills model and a generic chain<sup>3</sup>**

Model	Stage in the chain	Price (USD/kg)	Percentage of retail price (%)
<b>Cargills model</b>	Farm-gate price	0.22	55
	Retailers' costs	0.10	
	Retailers' margins	0.08	
	Retail price	0.40	
<b>Generic vegetable chain</b>	Farm-gate price	0.13	27
	Wholesalers' costs	0.05	
	Wholesalers' margins	0.03	
	Collectors' margins	0.06	
	Wholesale price	0.27	27
	Retailers' costs	0.14	
	Retailers' margins	0.08	
	Retail price	0.49	

### Key features

**Effective governance.** The chain is governed by Cargill, which is a supermarket chain with considerable interest in securing quality supplies and improving chain efficiency to remain competitive in the retail markets.

**Coordinated delivery of services.** The approach has allowed farmers to increase production and improve quality.

**Value-added/Vertical integration.** The intervention has contributed towards reduction of post-harvest losses and quality improvement. Direct linkages between Cargills and the producers, which implies the elimination of intermediaries and shortening of the chain, led to improved chain efficiency.

**Information flow.** Farmers have been exposed to new information and technologies through Cargills' extension staff, and its collaboration with agricultural departments and research institutions.

**Trust.** Cargills developed farmer confidence by offering competitive prices and increased trust by also offering a minimum guaranteed price.

**PPP.** Even though this is not strictly a PPP, Cargills worked with agricultural departments and research institutions to assist the farmers.

**Diversification.** The project beneficiaries were encouraged to diversify into passion fruit production.

**Capacity building.** Cargills Extension Officers trained farmers on appropriate production and harvesting methods, thereby contributing to improved product quality.

**Chain efficiency/Competitiveness.** Cargills has increased efficiency by eliminating all the middlemen from the system. The company invested on plastic crates for the collection centers, and post-harvest losses (especially during transportation) were reduced from 40% to 3%. Since Cargills was able to

<sup>3</sup> Data extracted from presentation given by Heridas Fernando, Deputy General Manager Agro-business Cargills Ceylon PLC, during the Regional Agro-Industries Forum for Asia and the Pacific, Nov 2009.

assess the cultivation condition and forecast the harvest before-hand, the stable and timely supply of fruits improved processing plant efficiency by 25%. The product was placed in Cargills' supermarket stores and the consumer price was reported to be lower than in other supermarkets.

**Inputs.** Seeds were provided free of charge.

**Technology transfer.** Cargills' extension service transferred improved production technologies to producers.

**Market linkages.** The intervention provides an example of farmers' direct linkage to buyers.

**Sustainability.** Sustainability will be assured as long as Cargills remains profitable. This intervention provides an example of a win-win situation between producers and buyers, in which producers have increased production, quality and profitability, and buyers have generated higher margins by shortening the chain and reducing their operating costs.

**Drawbacks.** With the increase of fruit production, Cargills as well as producers experienced the following problems:

- During the peak harvesting period machine capacity was unable to absorb production volumes. Farmers could only sell Cargills about 60% of their production.
- During the lean harvesting period, the plant operated below potential capacity.
- The intervention did not specifically focus on targeting the poorer segments and women.

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*Sources:*

- Presentation by Heridas Fernando, Deputy General Manager Agro-business Cargills Ceylon PLC, during the Regional Agro-Industries Forum for Asia and the Pacific, China, Nov 2009.
- Production resources in lagging regions, World Bank report: Case study – Sri Lanka, June 2007.
- Cargills Food City short-listed for Responsible Retailer of the Year award at World Retail Awards 2009, Barcelona, Spain
- Cargills Ceylon website: <http://www.cargillsceylon.com/home.html>