

Sustainable Agricultural Practice through Organic Farming

Lessons from Srakaew Province,
Thailand



A photograph of two men in a boat, one in a blue jacket and one in a dark jacket, with two large woven baskets in the foreground. The image has a torn-edge effect.

Main Causes of Low Farm Price

A Brief Overview

Low Price Level at Farm

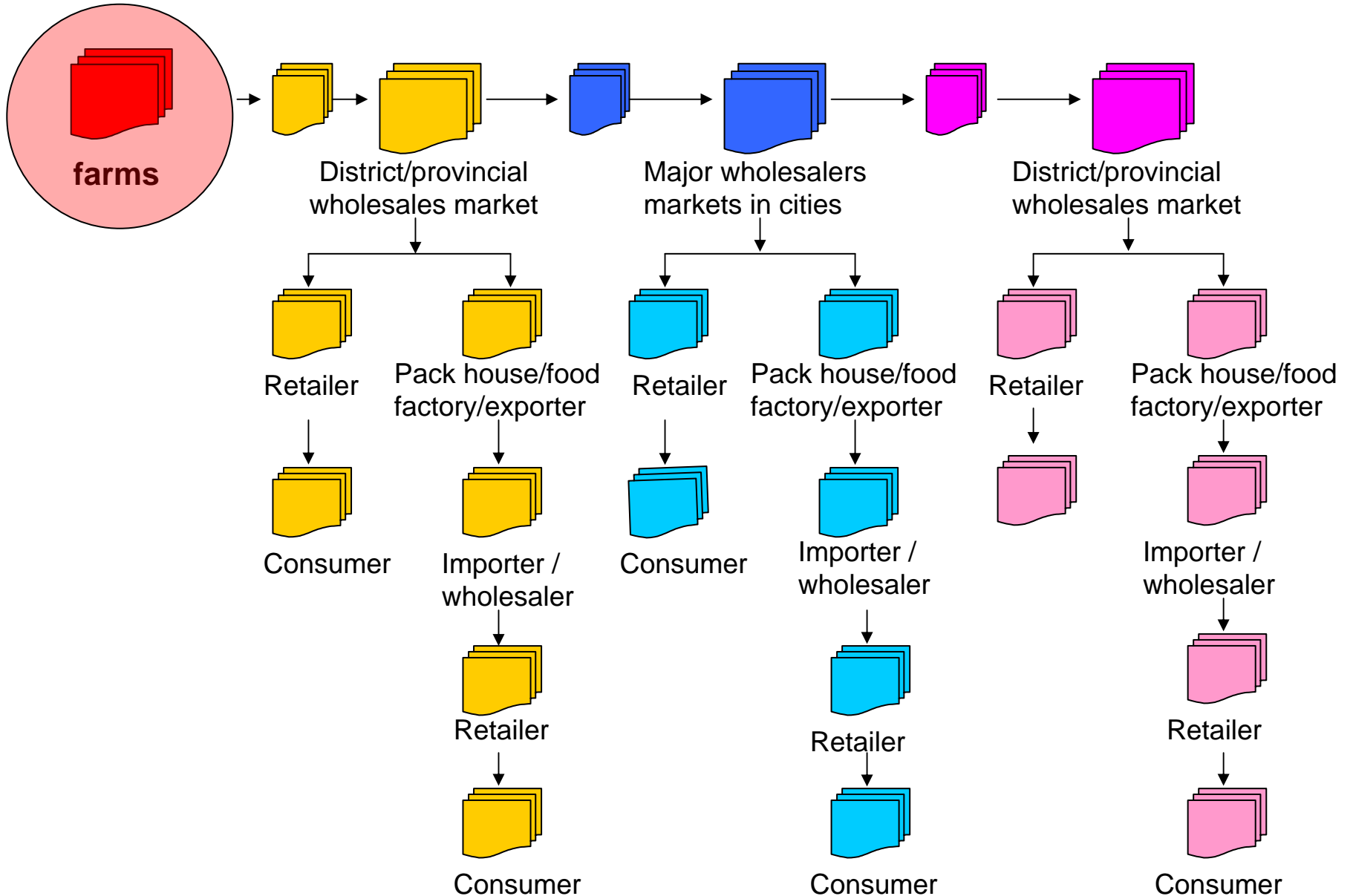
Root causes

- Small land holding structure in agricultural sector.
- No direct market access.
- Prevailing market mechanism works against small growers.
- Wastages from poor handling and inefficient supply chain are push back to growers.

Prevailing Market Mechanism

- Wholesalers develop networks of regular suppliers and oblige to buy from them first
- Buy any excess at a low price, if at all.
- They give good price to any supplier only when there is a shortage of supply.
- High degree of price fluctuation in the market.
- Any losses from poor post-harvest, handling, and transportation systems are pushed back to growers.

PREVAILING SUPPLY CHAIN



Wastages in the Multi-layers Chain

- Longer period of time in delivering the fresh harvest to consumer create wastes and can greatly damage product quality without post harvest control.
- Significant cost and profit-taking are added on at every layer.
- High ambience temperature and inappropriate handling further deteriorate the product quality.
- Resulting in poor quality, relatively high price level, lack of food safety when farm produce reach consumers.





Value Losses

Percentages of losses through wastage and poor quality are given at 10%, 15%, 20% and 25%.

Unit: Million Baht

Agricultural Sector GDP Year, Value	Loss 10%	Loss 15%	Loss 20%	Loss 25%
Yr. 2002, 514,300	51,430	77,145	102,860	128,575
Yr. 2003, 607,900	60,790	91,185	121,580	151,975
Yr. 2004, 654,800	65,480	98,220	130,960	163,700

Sustainable Organic Farming

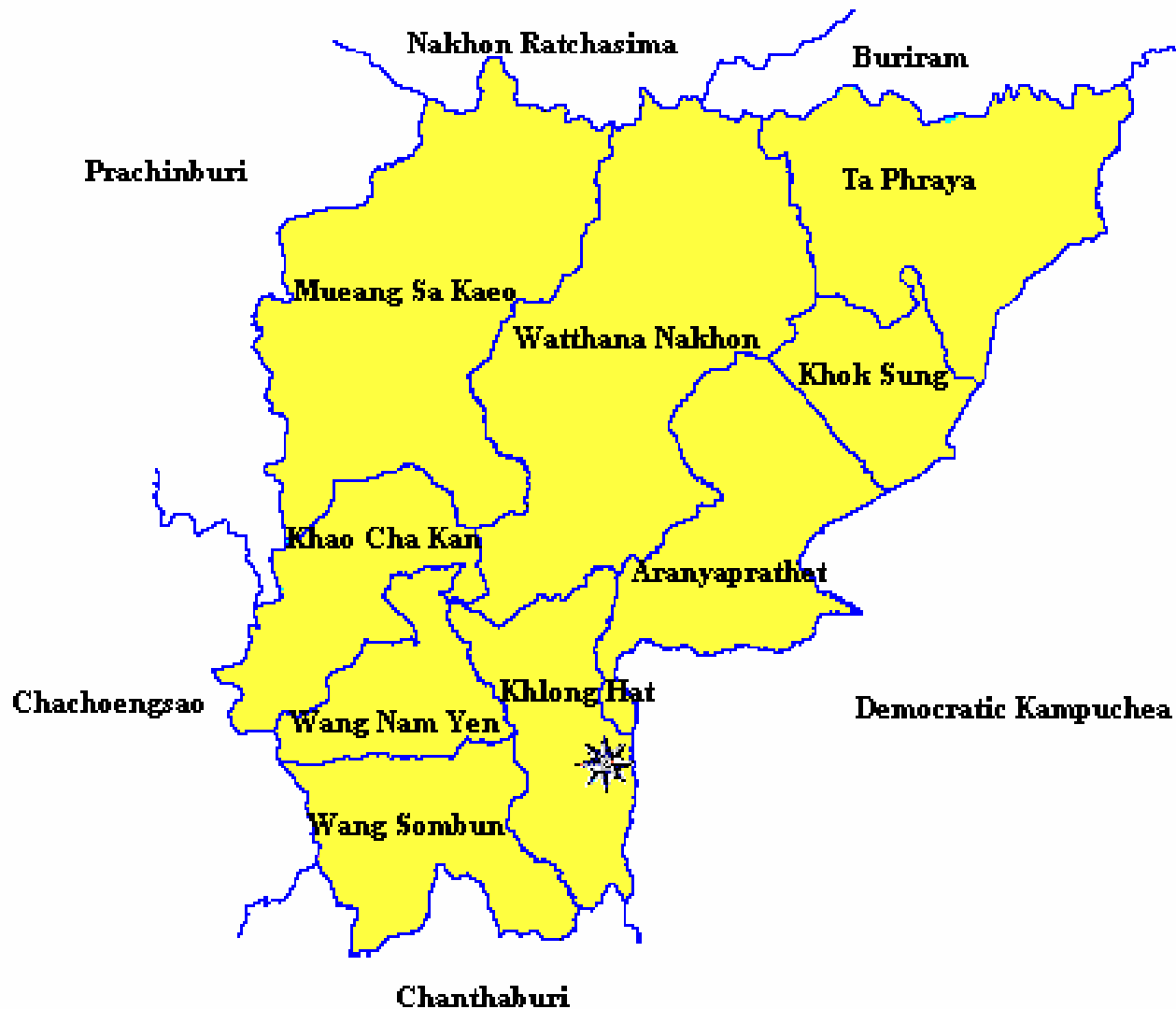
Srakaew Project

Organic Farming in Srakaew

- Contract farming of organic asparagus was organized in the year 2000.
- A small group with a total of 47 members entered into contract with Swift Co., Ltd. in early 2001.
- The combined planting area was 94 rai or 37.6 acre.

SN 1

Grower Groups in 2001



INCOMES

ASPARAGUS AND OTHER MAIN CROPS

Gross and Net Income of Other Main Crops and those of Asparagus (Baht per rai)

(Gross Income = GI Net Income = NI)

Year: 2003



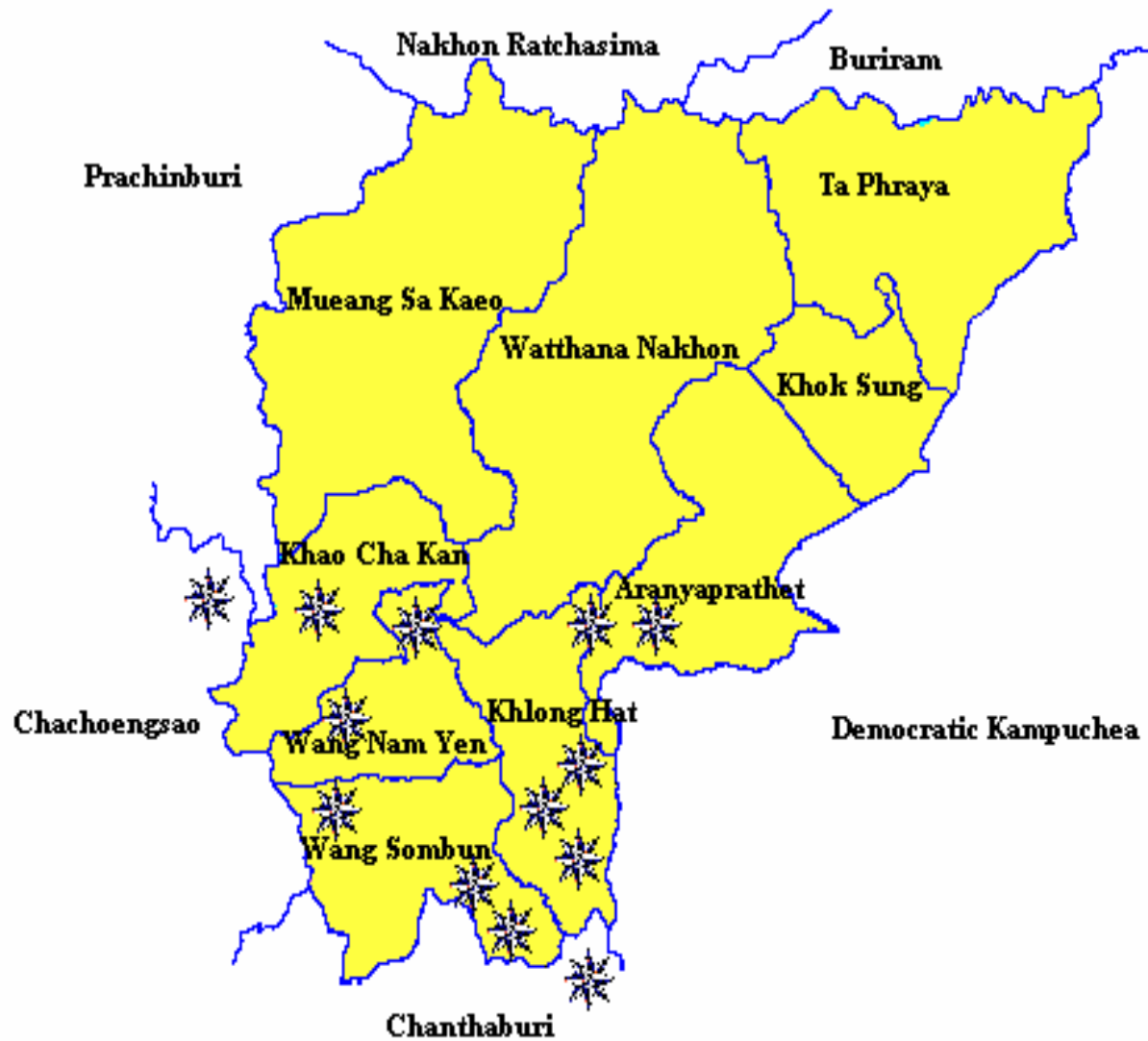
Maize		Tapioca		Sugar cane		Rice		Asparagus	
GI	NI	GI	NI	GI	NI	GI	NI	GI	NI
2,693	958	3,724	1,243	4,605	387	2,279	691	66,065	49,916
USD									
67	24	93	31	115	10	57	17	1,652	1,248

Baht 40.0 : USD 1.0

Success Led to Rapid Expansion

Year	Planting Acreage (Rai)	No. of Members	Percentage of Growth	
			Year on Year	(From Base Year)
Early 2001	94	47	(Base Yr.)	(Base Yr.)
End of 2001	180	90	191	191
2002	361	171	200	384
2003	660	314	182	702
2004	1,100	493	166	1,170
2005	1,228	590	111	1,306
2006	833	414	68	886

Expansion of Acreage



Farm Maintenance Cost

Conventional and organic farms/ cost per rai/one harvest	Synthetic fertilizer	Organic fertilizer	Substrate	Agro-chemical	Approved organic Bio-products	Total per harvesting crop	Total/year
Conventional farming in Nakornpathom	1,424.0	920.0	16,032.0	2,179.0	0	6,126.2	24,504.8
Organic farming in Srakaew	0	1,900.0	240.0	0	356.0	2,496.0	9,984.0

The organic farm maintenance cost was 59.26 % lower than that of the conventional farm.

Certification

- Organic farms of the original group was certified under JAS standard by OMIC (Overseas Merchandise Inspection Co., Ltd.) in 2001-2002
- In 2002-2003, OMIC was again the CB for a larger planting acreage of the original group
- In 2003-2004, BCS (BCS öko-Garantie) of Germany is the CB for EU and JAS standards
- The new additional farms will be certified as “Farms in Transition” to organic in early 2005

Results of the Operation

Sustainability and Poverty Reduction

- The organic farming by groups of small growers in Srakaew is going strong after six years of operation.
- It had gone through good and extremely bad weather in the period.
- The steady and relatively high income has greatly help growers to improve their living standard and quality of life.

Results of the Operation

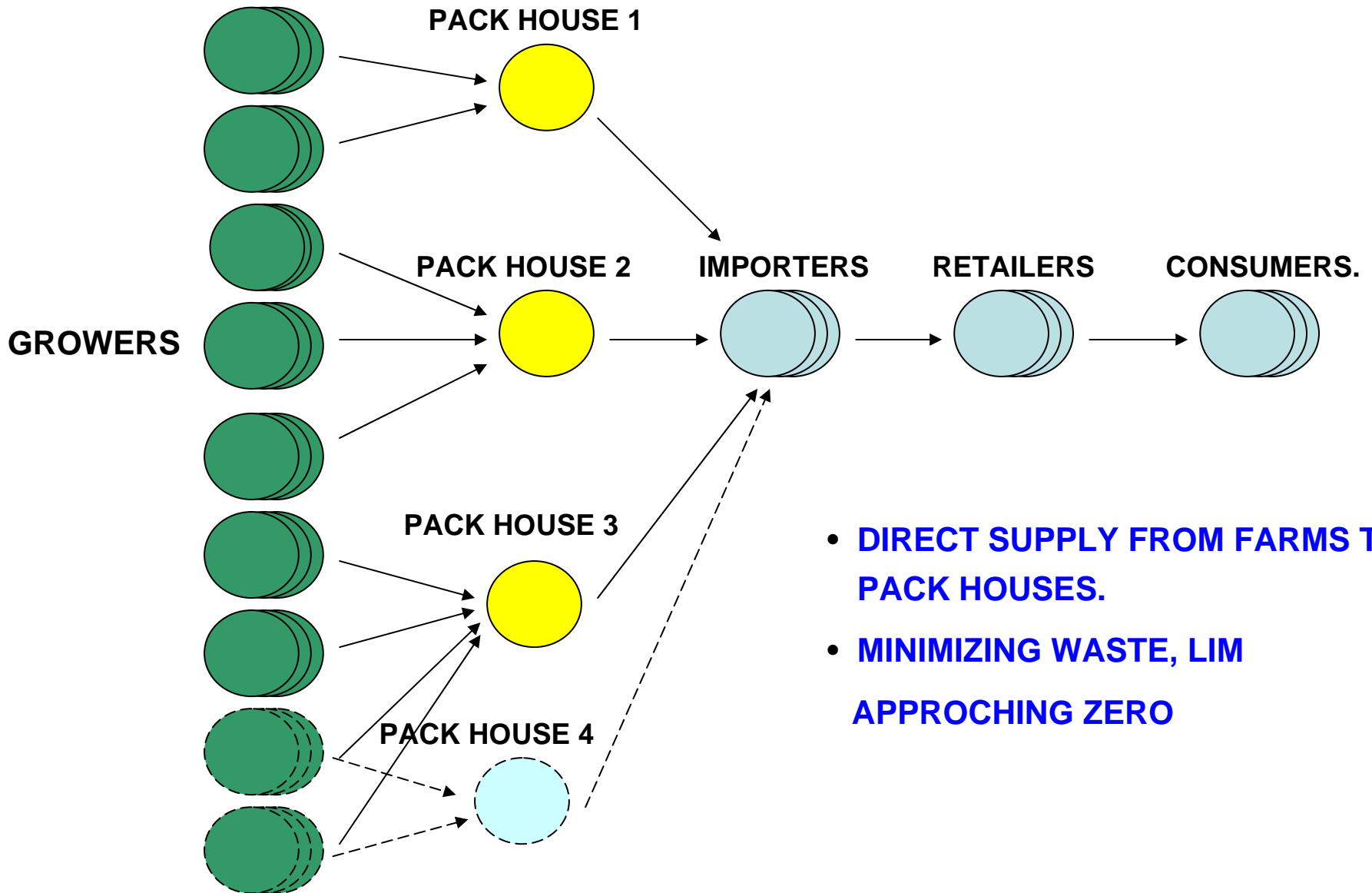
Social Impacts

- With a much better life, they become kinder and gentler members of their communities.
- Helps among peers come freely and willingly.
- Bondages among members of each group and among groups are revitalized through the development of the collective responsibility.
- Social fabric has been strengthen in the farm communities of the groups.

Key Success Factors

- Organic farming knowledge and techniques.
- Commitments of all parties, especially of growers.
- Fair trading, price guarantee, and development of true partnership between growers and the company.
- Direct market access.
- Waste management in the company's supply chain. Wastage is approaching zero.
- An achievement of economic logistics cost per unit from farm to the company's pack-house.
- Ability of the company to market and sell all the organic asparagus from Srakaew and from other provinces.

SWIFT 'S SUPPLY CHAIN



- **DIRECT SUPPLY FROM FARMS TO PACK HOUSES.**
- **MINIMIZING WASTE, LIM APPROCHING ZERO**

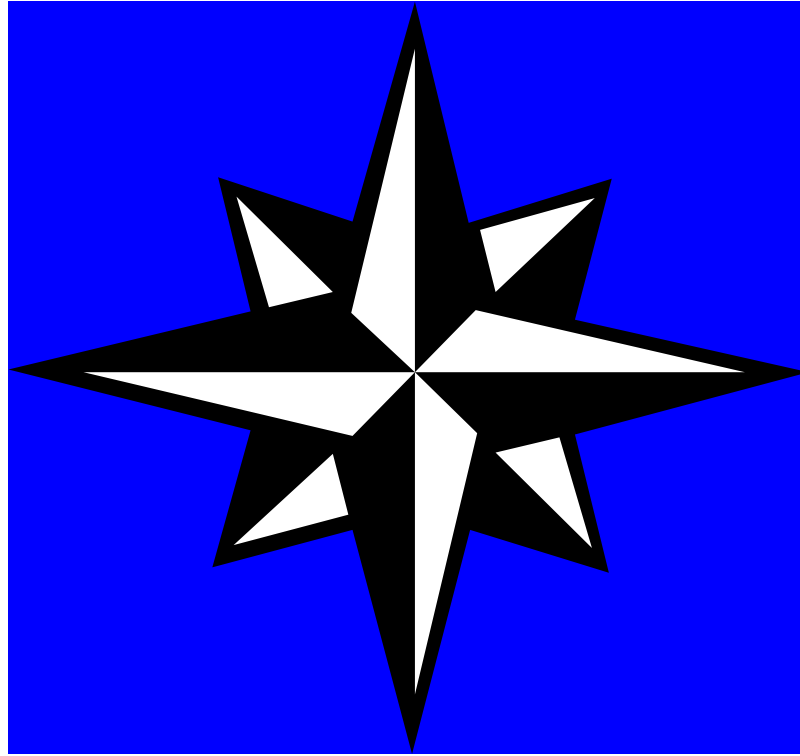
Swift's Model

- Swift's contract farming model can be a powerful tool in breaking poverty circle and in developing sustainable agriculture.
- The irregularity and small volume of supply of small growers are solved by organizing them into well managed groups.
- Farm production plan and combined farm produce provide sufficient volume for economic transport.
- Good farming practices improve quality and product safety of supply from farms.
- Price guarantee and direct access to market generate steady stream of relatively high income to contract growers.

Conclusion

- Organic farming of asparagus is sustainable and profitable.
- Its farm maintenance cost is much less than that of the conventional one.
- However, it can not be readily concluded that farming of other produce is also sustainable and profitable.





THANK YOU
Swift Co., Ltd.

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