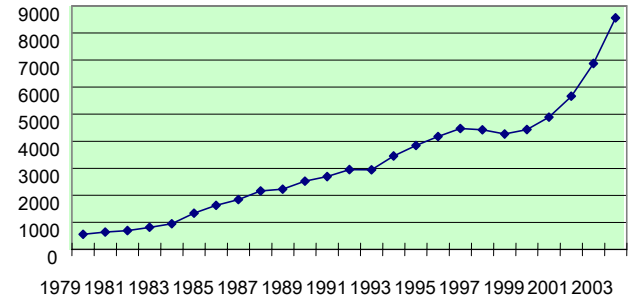# Dynamics of Dairy Supply Chains in China

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Table 1 Scales of Dairy Farms in China

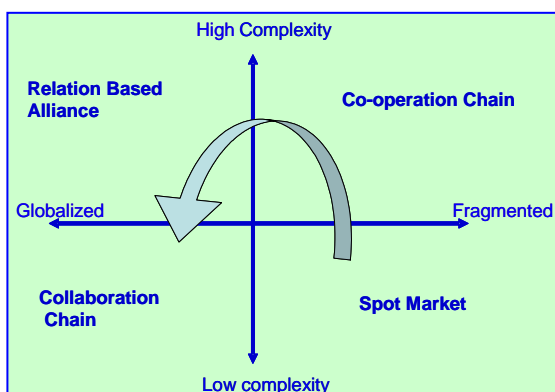| Cows per household	Number of households (%)	Dairy cows (%)
1 - 4	83.3	44.8
5 - 19	14.6	29.3
20 - 99	1.9	14.0
100 - 199	0.1	3.6
200 - 499	0.1	2.9
500 - 999	0.1	2.5
Above 1000	0.1	2.9
Total	100.0	100.0

Figure 1 Number of Dairy Cows in China (*1,000)

Table 2 Profiles of Four Types of Dairy Chains

Profiles	1. Spot market chain	2. Cooperation chain	3. Relation-based alliance	4. Collaboration supply chain
Objectives	Extra income	Large quantity milk	Milk safety	Milk quality
Actors	Small scale dairy farmers	Suppliers, farmers, milking stations, transporters, processors	Suppliers, farmers, local government, banks, processors	Large professional farmers and processors
Time span	Popular before 90s now fading away	Starting middle 90s	Starting later 90s	After 2002
Price formation	Open negotiation	Set by Processing companies	Set by processing companies	Bilateral negotiation
Scale of farm	1 or 2 cows	5-10 cows	30-50 cows	1000 cows
Milk yield	3 tons	4-5 tons	5-7 tons	8-9 tons
Farm system	Mixed family farming	Dairy family farming	Professional farming	Industrialized farming
Milk quality	Uncertain	Unstable	Guaranteed	Best
Milk miles	Very short	Longest	Longer	Shorter
Communities orientation	Very strong	Very strong	Less	Not existing
Degree of chain integration	Not at all	Somewhat cooperation	Committed networking	Long term investment and trust

Figure 2 Dynamics of Chinese Dairy Chains

Discussion:

Except that the 'Spot market' is fading away, all three other types of supply chains are competing strongly in the markets in China.

Which directions the Chinese dairy industry will lead to depends on the market development as well as the national policy choice: community based development or global orchestration?