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## **Development of Contract Farming in Chinese Sericulture and Silk Industry**

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# 1. Introduction

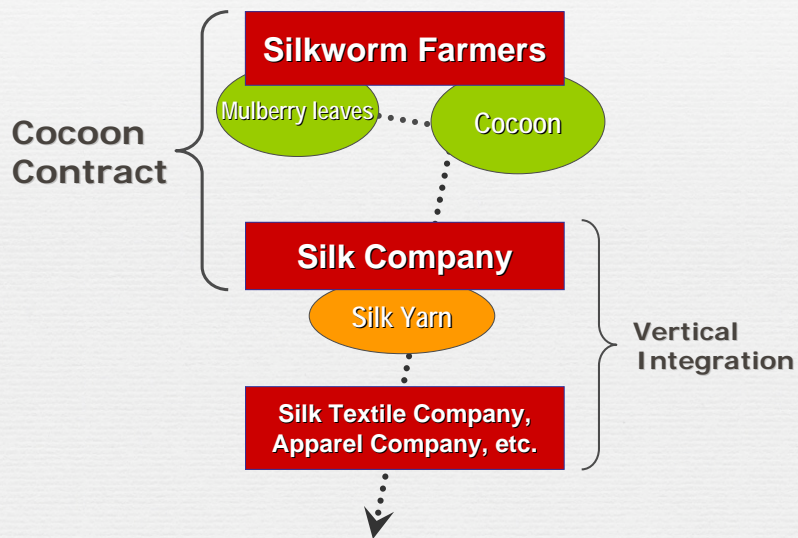
## 1.1. Backgrounds

- Change from “collective land-use system” to “individual land-use system” under the Rural Land Reform Policy in 80’s
- Collectively managed farmland → small, dispersed farmland distributed to huge numbers of individual farmers
  - Difficult and unfavorable condition for large-scale farming of main crops
  - But, sericulture is suitable for small-scale family farming

## 1.2. Sericulture and Silk Industry

- Production cycle is short: about one month → Farmers can get cash income from rearing silkworm once a month
- To realize its value, however, cocoon needs to be purchased by a silk company as the only outlet → The silk industry value chain

## Value Chain Sericulture and Silk Industry



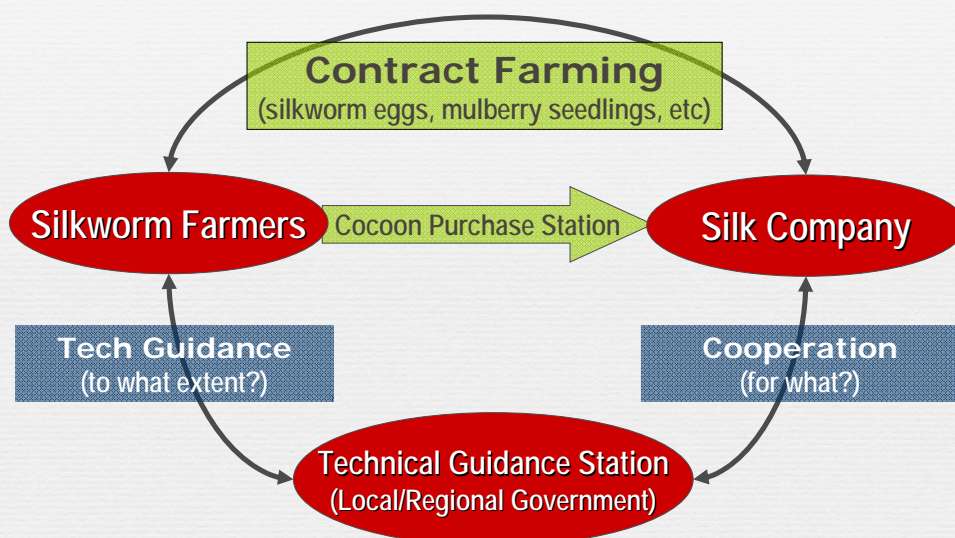
### 1.3. Contract Farming in China

- **Vertical coordination:** silkworm farmers under the control of a silk company
- A typical model of local rural development under a Dragon-head company with the support of local government
  - Ex. vegetable farmers and food-processing companies
- Leading silk companies as Dragon-head companies → How responsible for local economic development?

### 1.3. Contract Farming in China (cont.)

- State-owned silk companies reformed (privatized) in mid 90's → Dagon-head companies
- Farmers organized under silk companies **through silkworm cocoon production contracts**
- The role of local government through its Technology Guidance Station
- **Trilateral relations** established: according to different regions at different stages of development

#### Trilateral Relations: Silk Company, Silkworm Farmers and Guide Station



## Objectives of this research

- Two case studies based on field surveys: Xinyuan Company and Guihua Company
- To clarify the situations of **two different types of contract farming** in Chinese sericulture and the silk industry
- To give implications for a possible type of contract farming to benefit family farmers while assuring the development of the silk industry

## Two Types of Sericulture Contract Farming in China



## 2. Xinyuan Company in Hai'an Jiang Su Province



### 2.1. Developing Process

- **1980's ~ mid 90's:**
  - **Unorganized farmers without direct connection with state-owned silk companies until mid 90's**  
→ price fluctuation and intermediate exploitation
  - **Located in an economically developed region** → Industrial/commercial/residential development
  - **Decline of sericulture and the silk industry**
- **Mid 90's ~ 2000:**
  - **A state-owned silk company reformed to Xinyuan Company in 1994**
  - **Then launched contract farming to secure cocoon**

## 2.2. Contract Farming by Xinyuan Co.

- Traditional producing region → Contract farming launched based on the existing production base of sericulture and silk industry
- Turnaround from the declining trend of sericulture in mid 90's
- Improvement of the cocoon quality and quantity ← Provision of silkworm eggs, mulberry seedlings and relevant technology

- Coordinated largely by the company **instead of** the local government technology station: the latter has little power
  - Xinyuan Co. **in the position to decide on the production** (quality, quantity and price)
  - Closed market for silkworm eggs → No option other than those offered by Xinyuan Co.
  - Closed market for cocoon: all cocoon purchase stations under the control of Xinyuan Co. → No option other than sale to Xinyuan Co.
- Silkworm farmers divided into groups by Xinyuan Co., but no organizations by farmers themselves

## 2.3. Impacts of Contract Farming

- **Benefit for farmers**
  - **Rapid development of sericulture as a whole → Farmers' cash income increased**
- **Risks for farmers**
  - **Change of land use and cropping pattern: some farmers expanded mulberry field at the expense of food crop production → “No food-crop village” appeared**
- **Growth of Xinyuan Co. as a Dragon-head company**
  - **Through vertical coordination of upstream (contract farming) as well as downstream (silk textile and apparel sectors) → More powerful influence on farmers**

## 3. Guihua Company in Guang Xi Province





### 3. Guihua Co. in Guang Xi Province

- Located in the southwestern part of China
- Economically less developed: farmers' income level lower than the eastern provinces → **Income increase** is main concern for the regional government
- Subtropical area: suitable for the growth of mulberry trees and silkworm rearing → An **advantage** over traditional sericulture regions

#### 3.1. Developing Process

- Before 1990s:
  - Mulberry silkworm sericulture production almost nonexistent
- 1990s~2000:
  - China's Western Development Policy → Applied to sericulture and the silk industry
  - Guang Xi gov. began to promote sericulture as a means of increasing farmers' cash income
  - Guang Xi tech guidance station (+ regional univ) focused on subtropical sericulture technologies
  - Guihua Co. established in 2000 → Organized local farmers by use of oral contracts

## 3.2. Contract Farming by Guihua Co.

- Need to develop the local sericulture to secure quantity of cocoon → Guihua Co. launched contract farming
- Extension of silkworm rearing technologies ← Guangxi technology guidance station
- Guihua Co. **also** learned technologies from the station

- Open market system for silkworm eggs and cocoon ← Guangxi government worried about the situation in traditional regions (closed market system under the control of leading silk companies)
  - Farmers **can** decide on the type of silkworm eggs
  - Farmers **can** sell their cocoon anywhere they want ← different prices within and between regions
- Farmers are **organizing themselves** to negotiate with companies
  - The technology guidance station **supports** farmers' organizations, but companies do not

### 3.3. Impacts of Contract Farming

- Many farmers with no experience of sericulture began to rear silkworms for cash income
  - Including sugarcane farmers who have turned to sericulture in hope of more cash income
- As a result, Sericulture in Guang Xi has developed rapidly
  - Quantity: more than enough for Guihua Co. due to its small capacity to process
  - Quality: Guidance Station plays an important role to improve
  - → **No need to vertically coordinate the local sericulture** as in the traditional region “yet”

## 4. Conclusion

Xinyuan in Jiang Su Traditional Region	Guihua in Guang Xi Emerging New Region
Large production scale (Auto silk reeling machine 120 groups)	Small production scale (Auto silk reeling machine 13 group)
Almost all farmers have contract with Xinyuan	Some farmers have contract with Guihua, while others do not yet
Type of seeds decided by Xinyuan Tech guidance provided by Xinyuan	Farmers decided the type of seeds. Guihua and the tech station guide the farmers
‘Closed market’: farmers can sell cocoon only to Xinyuan	‘Open market’: farmers can sell cocoon at higher price
Farmers are divided into groups by Xinyuan	Several farmers are organizing themselves to negotiate with Guihua etc.

## 4. Conclusion

- **Contract farming by Xinyuan Co.**
  - **Company controls local sericulture farmers, local government and the silk value chain**
- **Contract farming by Guihua Co.**
  - **Company, local farmers, local/regional governments cooperate with the aim of developing sericulture and silk industry to boost local/regional economies**
- **A question remains to be answered: is this just a matter of the different stages of development?**

**Thank you for your attention!**