

Chapter 3 Small Scaled Enterprises and Agricultural Industrialization



Scenario-Making for Small and Medium-Size Enterprises

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1. Study theme

There is a tacitly accepted proposition that policies to promote small and medium-size enterprises (SMEs) effectively contributes to industrialization and modernization in developing countries. In this paper, I will examine the validity of this proposition and in the aspects and areas in which it is proved valid, I intend to suggest policy measures for promoting SMEs, in terms of a conceptual framework and crude long-term scenario.

2. Determination of facts in Asian countries

(1) A survey of the existing literature concerning SMEs reveals the following three points.

- (a) The growth of SMEs means not only the expansion of very minor enterprises into small and medium-size ones, but also the conversion of household industries into modern companies. It is a phenomenon covering the upgrading of the industrial organization and other matters relating to the changes in the stage of development. Although most of the literature study these developments and policies of SMEs without questioning in what particular stage of development these developments took place. In other words, no attention is paid to whether that conclusion applies to other stages.
- (b) The growth of SMEs is primarily the product of the work of the market mechanism. Generally, market economies are the less developed in developing countries the earlier the stage of industrial development goes back. A greater part of the growth of SMEs is explained as a result of the individual or collective behaviors of private units voluntarily working even within an incomplete framework of the market economy.
- (c) It is observable in the process of SME growth, however, these are chances for the policy intervened and promoted the growth of SMEs (See Table 1). An individual policy prescription is specific to a certain stage of development. If the prescription does not match the development stage, its effect is significantly weakened. A cost-benefit analysis of the effects of policies indicates that some policies have positive effects, while others have negative effects.

(2) Development stages and effective policies

Table I is based on the experience of Asian countries, centering on Japan. In this section, I will discuss typical cases for each individual stage of SME development.

(a) The stage of cottage industries

As a stage of the SME development, this stage is the one in which small and medium-size enterprises in the modern corporation sector are less developed, and cottage industries occupy an overwhelming position in the national economy. Concerning the analysis and policy choices of the industrial and enterprise structure of household industries, cases in India during and after the period of her second five-year plan and thereafter offer rich materials (See S. Ishikawa, *Economic Development in Asian Perspective*, 1967, Ch. 5, particularly pp. 407-417).

(i) M. C. Shetty's book, an excellent work concerning a study of Indian SMEs, covers three types of enterprises: handicraft industries (which supplement household income), household industries (as the principal means of employment for family members and the primary source of their income), and small manufacturing companies. A small manufacturing company means an establishment that is registered under the factory law and that has 10 employees or more if using electric power and 20 employees or more if not using electric power. The small companies referred to by Shetty have 49 or less employees and a capital of 0.3 million rupees or less (See M. C. Shetty, *Small-Scale and Household Industries in a Developing Country*, Asia Publishing House, Bombay, 1963). In this paper, those establishments with employees less than 20 persons are all referred to as "cottage industries." According to a National Sample Survey in India, in 1955 the number of employees in the cottage industries was 11.96 million in rural areas and 4.13 million in urban areas. Of those, employees in handicraft industries accounted for 25.5% of the cottage industries' employees in rural areas and 10.1% in urban areas.

(ii) Government reform under the second five-year plan.

This reform consisted of "active" supporting measures, including improvement the skills of people employed in household and small industries, offering technical advice and providing facilities, materials, and capital, and protective measures, referred to as a "common production program." The latter played a decisive role. The protective measures aimed (a) to divide expected total demand for specific products, including cotton textiles and clothes, between large enterprises and household and small ones, so that the latter could secure orders; (b) to restrict the expansion of large companies' production facilities; and (c) to support household and small enterprises through tax and subsidy systems. In India, which at that time was the world's largest producer and exporter of spun cotton, the common production program forced modern large-scale cotton companies to rapidly lose competitiveness. "Active" measures were proposed as an alternative to this program, concerning which criticism was first expressed in 1954 by the Ford Foundation. The government's attitude has

since vacillated between these two policies (See Government of India, *Fourth Five-Year Plan—Resources, Outlay and Programmes*, New Delhi, Sept. 1965).

(b) Growth of Japanese medium-size companies before World War II

The growth of Japanese smaller nonagricultural enterprises before the war was brought about primarily by market forces, not by government intervention. As is often said, in the Meiji era the majority of enterprises were generally either large or small, while medium-size enterprises were very few. Medium-size enterprises emerged during the period between the end of the Meiji era and the 1930s, when there was a worldwide economic depression, due to the spread of electricity, small electric motors, and industrial machines after World War I. This is also shown by statistics (See Ishikawa, *Economic Development in Asia Perspective*, 1967, pp. 417-419). What deserves special mention with regard to government intervention is that the government lent a hand around the 1930s by enacting laws to help organize industrial associations that would seek to improve the technical capabilities of manufacturers, the quality of products, and reliability in the export market. Such laws include the 1925 Major Exports Manufacturers Association Law and the 1931 Manufacturing Industry Association Law. The forerunners of these associations were Raifeisen-type associations created pursuant to the 1900 Industry Association Law or associations that had authority to control informal operations by their members. The former spread in rural areas and evolved into present-day Agricultural Cooperatives but did not spread in urban areas. The latter associations, though they, too, were not welcomed in urban areas, spread in many industries after the addition of a Raifeisen element. In the area of technical assistance, industrial-experimentation stations did not spread as widely as agricultural-experimentation stations did.

(c) Japan's SME promotion policy after World War II

There were two major developments in the 1960s, when SMEs seem to have made a most distinct contribution to Japan's economic growth. First, medium-size enterprises that had begun to emerge in the 1930s demonstrated the benefits of "concentration," i.e., concentrating their efforts in a specific area, sometimes by product. In other cases, they got stronger by demonstrating the benefits both of a division of labor and of cooperation between finished goods manufacturers and parts suppliers through vertical disintegration. Second, in the mid-1950s, when facing international pressure to immediately liberalize trade and the flow of capital, the Japanese economy promoted the integration or cartelization of large finished-goods makers and small-parts manufacturers under the Law for Temporary Measures to Promote the Machinery Industry (1956). Its aim was to rapidly increase the international competitiveness of the automobile industry. This second development contributed to the creation of robust auto-parts suppliers in the 1960s (See Junzo Wada's paper in Asian Productivity Organization, *Intra-National Transfer of Technology*, 1976). Although there are different evaluations of this law even in the academic world, the division of labor and the promotion of cooperation generated benefits,

it is certain that the law contributed acceleration of division of labor and cooperation that was maintained in the first development in the automobile industry.

Concerning the benefits of "agglomeration", references are often made to *sanchi* ("production areas"), e.g. Tsubame for tableware, Sanjo for glasses frames, Sakai for bicycles, and Fukui and Ishikawa Prefectures for chemical-fiber textiles. With respect to the benefits of a division of labor and of cooperation, the case of Ota City, where auto-parts manufacturers are clustered, can be mentioned. (There is much literature regarding this. Motoshige Ito's and Hidejiro Urata's recent papers in *Keizai-gaku Ronshu*, 63-3 (October 1997) and 64-1 (April 1998), respectively, compare the cases of three production areas—Tsubame City, Ishikawa and Fukui Prefectures, and Ota City.) A feature common to these cases is that the major factors that contributed to the growth of SMEs in any of the areas, including the renewal of technology and the provision of technical services, provision of machines and materials, product marketing, financial support, and supply of human resources, were found in a developed market and cooperation between markets (or competitive pressure). The government plays a complementary role only when the market and companies cannot meet demand. For example, technology centers of the central and local governments play such a role. There are no official technology centers in production areas of the sectors in which large companies have superb technological capability.

Table 1. Developmental stages of SMEs and types of effective policies

Stage	Entity and purpose	Factor, capital	Inputs and technology	Market	Contribution of SME policies	Cases
1. Household industries	Household; self-sufficiency	Own capital	Conventional	Local only	Social relief	India in the 1950s; Japan in the Meiji era
2. Growth of individual household enterprises and small enterprises	Households and enterprises; Self-sufficiency and profit maximization	Dual structure (capital by personal connection and private-sector capital)	Dual structure	Widened in parallel with the spread of electricity and electric motors	Promoting organization of manufacturer associations	Japan in the 1930s and after
3. Growth due to agglomeration and cooperation	Sharp decrease in the importance of households; maximization of corporate profit	Combination of private financing and government aid	Official technology center and support by large companies	Formation of a national market; concentration and cooperation	SME subsidy system and policies: the machine-promotion law in the 1960s	Japan in the 1950s and after
4. Dependence on the market mechanism (Removal of duality)	Individual companies; profit maximization, development of the market	Financial market with a single structure; private companies	To put technology on the market	Realization of a national market	To depend on market mechanisms is better	U.S.A. and Europe in the 1950s and after

3. Mechanisms of growth and stagnation of SMEs in each stage

(1) Institutional assumption

The economy of developing countries consists mainly of household industries (T), including self-sufficient household economic units, and modern enterprises. The latter are structured hierarchically according to the size of the enterprise. For simplicity, enterprises are divided into two groups: large enterprises (L) and small ones (S). In this paper, SMEs include S and T groups. There exists a duality of factor prices (wages and rental prices of capital) and a rationing of the factors (allocation of land, labor, and capital among enterprises).

(2) The possibility of the coexistence of large and small enterprises

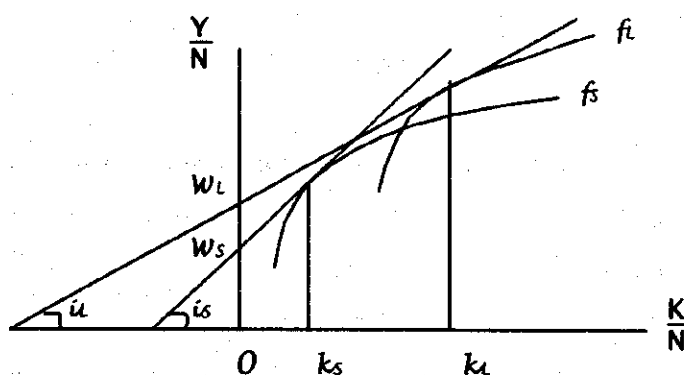


Figure 1. The Coexistence of large and small enterprises

Figure 1 shows that under circumstances such that the factor market is less developed, large and small enterprises can find their optimum point of production under corresponding wage rates, interest rates (i.e., the "rental" prices of capital) and production functions, and both groups can coexist. If there is a relatively well developed market, it is possible for W_L , W_S , i_L , i_S , k_L , and k_S in this figure to have optimum and stable relations through the groping process in the market. But if the market is less developed, such relations can occur only by chance. In the below I discuss how difficult it is to optimize allocation in the less-developed market, focusing on small enterprises (and household industries).

(3) Obstacles to the growth of household industries and small enterprises

Figures 2-1 and 2-2 show the results of surveys of manufacturing enterprises conducted in Japan in the 1960s as well as 1970s which reflected such obstacles. SMEs probably start to grow from household industries that depend on the family business owner and on family members as laborers. But as they grow, they begin employing unskilled younger workers. In most cases, the employer themselves trains

them while working himself, and has them help production pursuant to an apprenticeship system. Then, utilizing a type of division-of-labor process, the employer gradually separates tasks—including professional work, training, repairs, sales, and accounting—and assigns responsibility of performing individual tasks to individual employees. This is the process by which household industries are eventually brought to a large scale corporations. Figure 2-1 clearly indicates that the easiness in which SME is brought up from one smaller size class to the next larger class continues to become lessened until the SME of a particular size reaches the size class of 20-24 employees. (as is shown in the figure, there are in each size class a group of enterprises which becomes smaller in the next year and a group of enterprise which become larger the difference in the number of enterprises in these two groups determines the easiness of the growth of enterprises.) This size with the least easiness of upward shift, we would call the "bottleneck size".

Figure 2-2 indicates that the similar bottleneck size "exists in many branches of industry. In this figure, it is shown that the enterprises having 20-29 employees are the most difficult to go over. There is another bottleneck size in the size of 200-299 employees. The reasons for this have not yet been determined.

(4) Stability of the growth of large companies that started as household industries or small enterprise and proceeded along the difficult path of becoming a large-scale business (or of companies that were large-scale from the start)

Figures 3 and 4 show that the cottage ratio, which is defined as the ratio of employment in the household enterprises and small manufacturers sector to that of the entire industrial sector, tends to fall as the economy grows. This tendency is explained by the change in the number of companies by size in a certain period, as shown in Figure 2. However, Figure 2 also indicates that within a group of companies of similar scale, some companies expanded in size while others remained the same size. The share within an entire industry's group of companies having more than 100 employees rises as the economy grows.

Therefore, it is possible to make the following generalization regarding the aforementioned tendency. Household industries and small enterprises in developing countries start as family businesses and follow a difficult path to growth, and only a relatively small number of them can survive and grow rather smoothly to a high level of operation. Companies that are large in scale from the start can do so, too.

(5) From a dualistic industrial structure centering on SMEs toward a developed-country-type industrial structure

Figure 5 compares Japanese and U.K. statistics for the 1960s with regard to the distribution of employees among companies by size (in terms of the desired structure of the employment term) and to gaps in productivity and wages among companies by size. The Japanese structure of employment-term corporate

sizes was based on a duality of productivity and wages and tended to favor SMEs. The U.K. structure was based on the leveling of productivity and wages and tended to favor large companies. Given the above statistics, the Japanese structure with its dual-factor market involved inducement to get rid of duality as a result of rapid capital flows from SMEs to large companies. The U.K. structure can be said to indicate a goal achieved by such a change.

Figure 6 presents supplementary data concerning the dual factors. Japanese conditions in 1909 and 1914 are those in the stage before the formation of SMEs.

4. Policy connotations of the mechanism—The contribution of SME policies

The analysis of the mechanism suggests a policy for encouraging both a shift from household industries to modern companies and a shift from small to large enterprises. At the same time, it implies that to apply a prescription that skips development stages is dangerous.

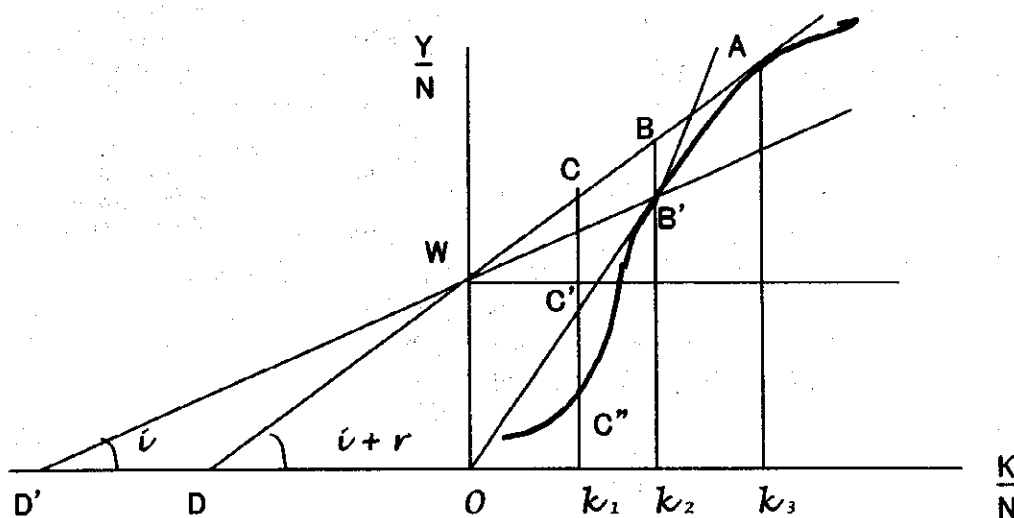


Figure 7. Effective policies by stage

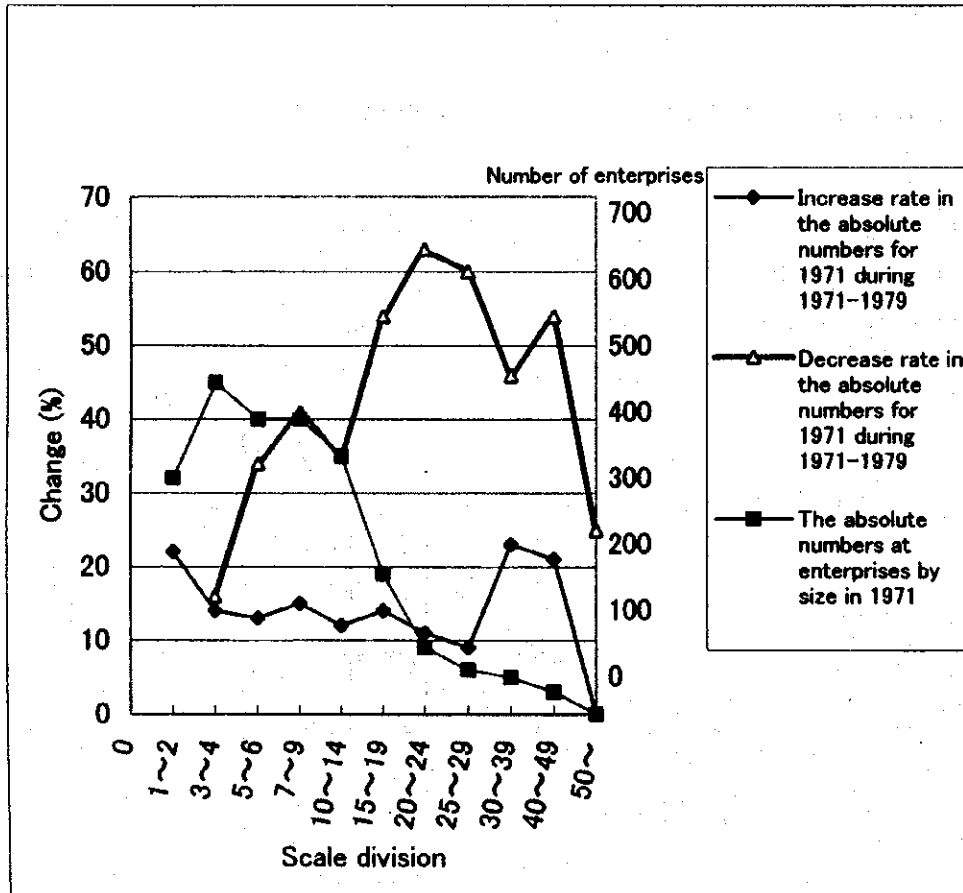
The production function of the three types of enterprises constituting this economy—household industries (I), SMEs in a modern industry (II), and modern large companies (III)—is represented by points A, B' and C'' along the Wicksellian production function (Figure 7). Capital input per employee is indicated as k_1 , k_2 , and k_3 . i to the dominant interest rate and r refers to the rate of profit after the payment of interest. The duality of factor prices is omitted in this figure.

- (1) Stage 1, when (I) is dominant—An effective policy is granting a subsidy equal to the difference C' or C'' between (w) and productivity brought by (I).
- (2) Stages 2 and 3, when (II) is dominant—An effective policy is that which enables the addition of productivity equal to BB' on the extended line from k_2 to B. For example, technical and financial assistance,

and improving productivity through organizational reform. Part of BB' can be attained by a institutional reform of the market economy.

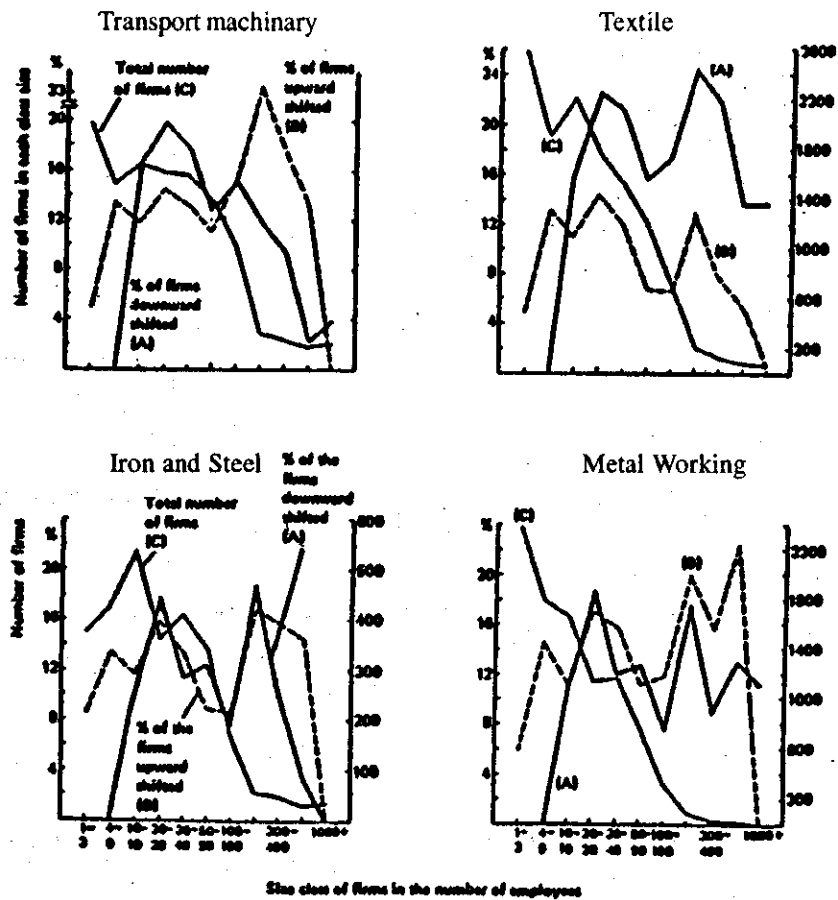
(3) Stage 4, when (III) is dominant—A policy for SMEs is not necessary.

Figure 2-1. Intertemporal change in the number of enterprises in the small-enterprise sector by size classes, Japan, 1971-1979, survey by the National Finance Corporation



Source: Kiyohisa Fujikawa's article and others in National Finance Corporation, Chosa Geppo [Monthly survey report], September 1975.

Figure 2-2. Basic survey concerning SMEs: Change in the number of enterprises by industry and size, Japan, 1960-1962

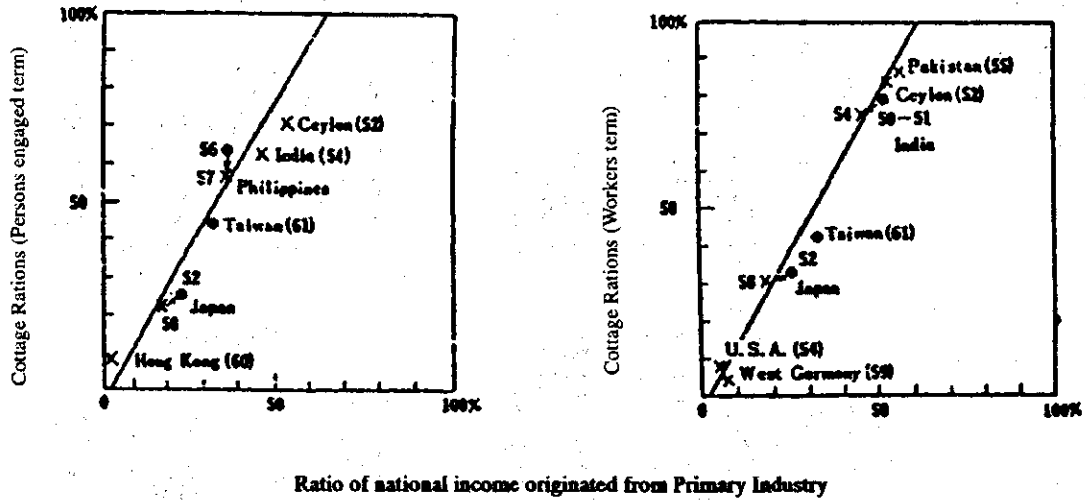


Source: *Dai-nikai Chūshō-Kigyō Sōgō Kihon Chōsa Hōkokusho: Sokatsu-hen* (Report on the Second Comprehensive and Basic Survey of Medium and Small Firms as of the End of December, 1962: General Summary)

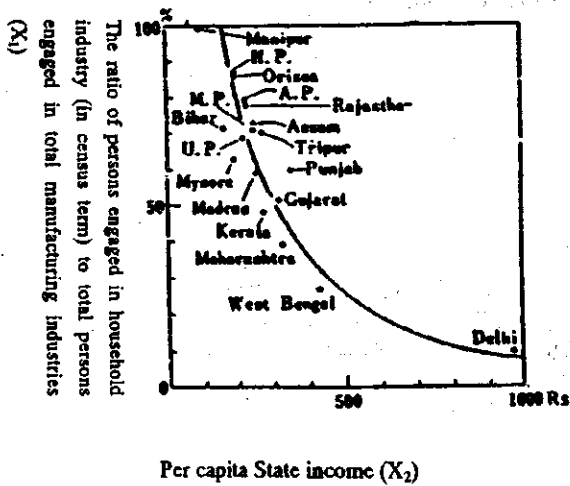
Shigeru Ishikawa, *Appropriate Technologies: Some Aspect of Japanese Experience*, in Austin Robinson ed., *Appropriate Technologies for Third World Development*, Macmillan, London, 1979

Figure 3. Ratio of smaller enterprises employment to total manufacturing employment which varies in parallel with economic growth

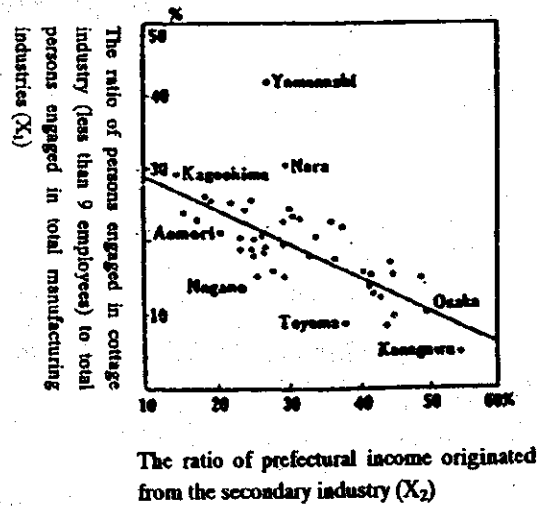
(1) International cross-section



(2) India (1960-1961)



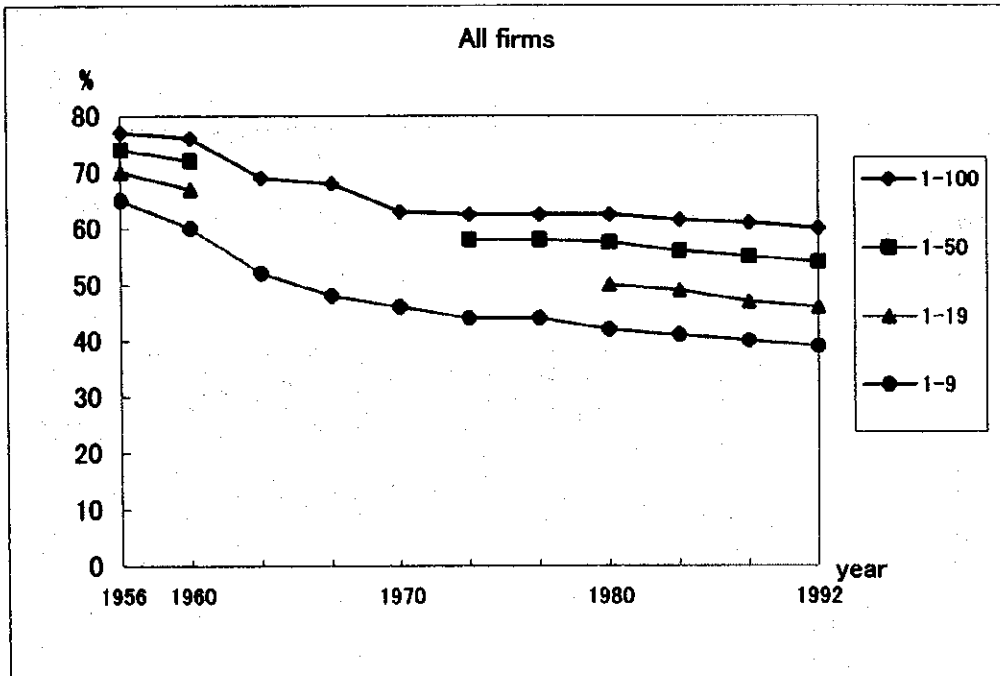
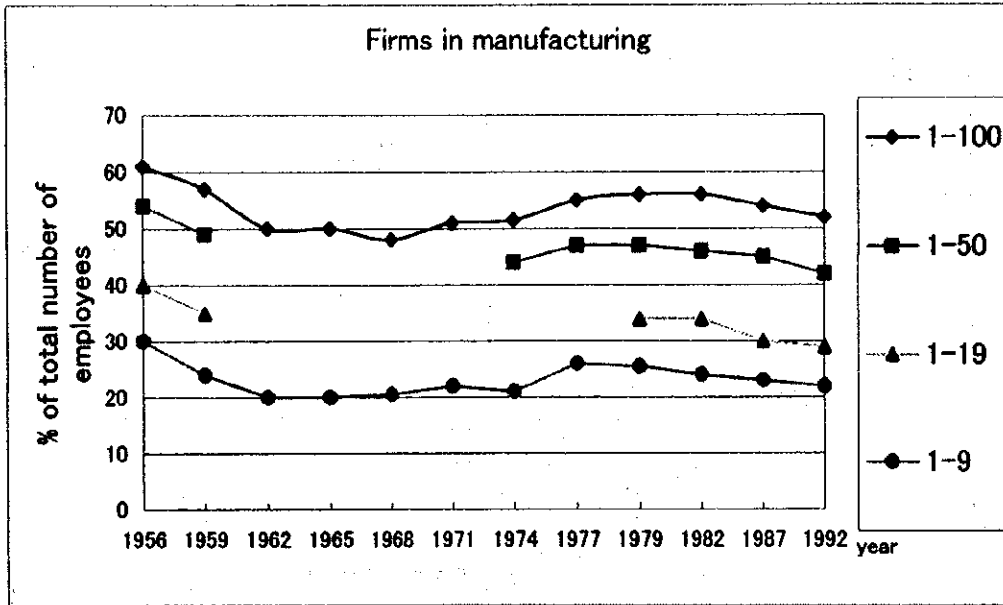
(3) Japan (1960)



Source: Shigeru Ishikawa, *Economic Development in Asian Perspective*, Kinokuniya Co., Tokyo, 1967

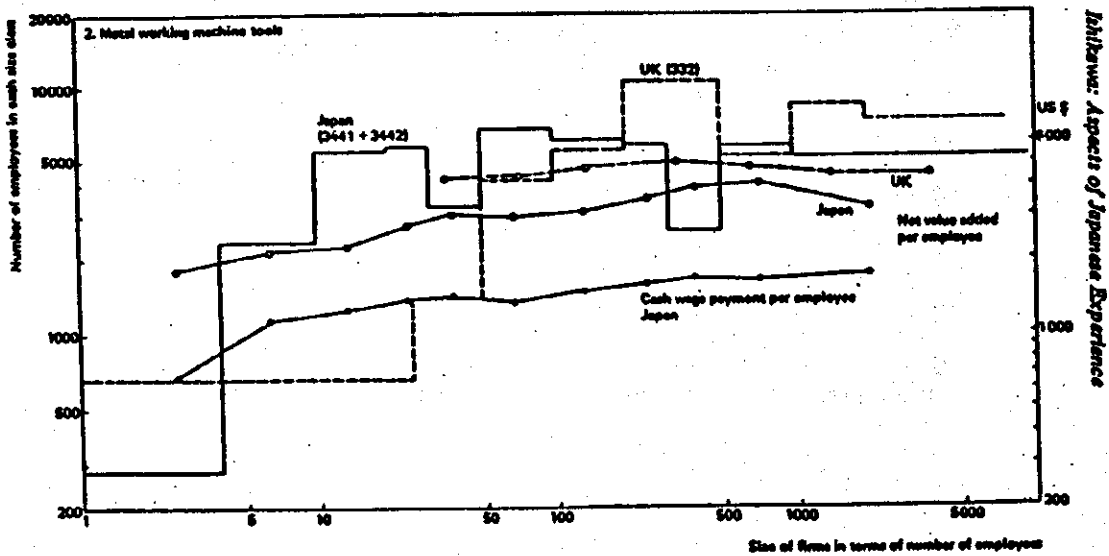
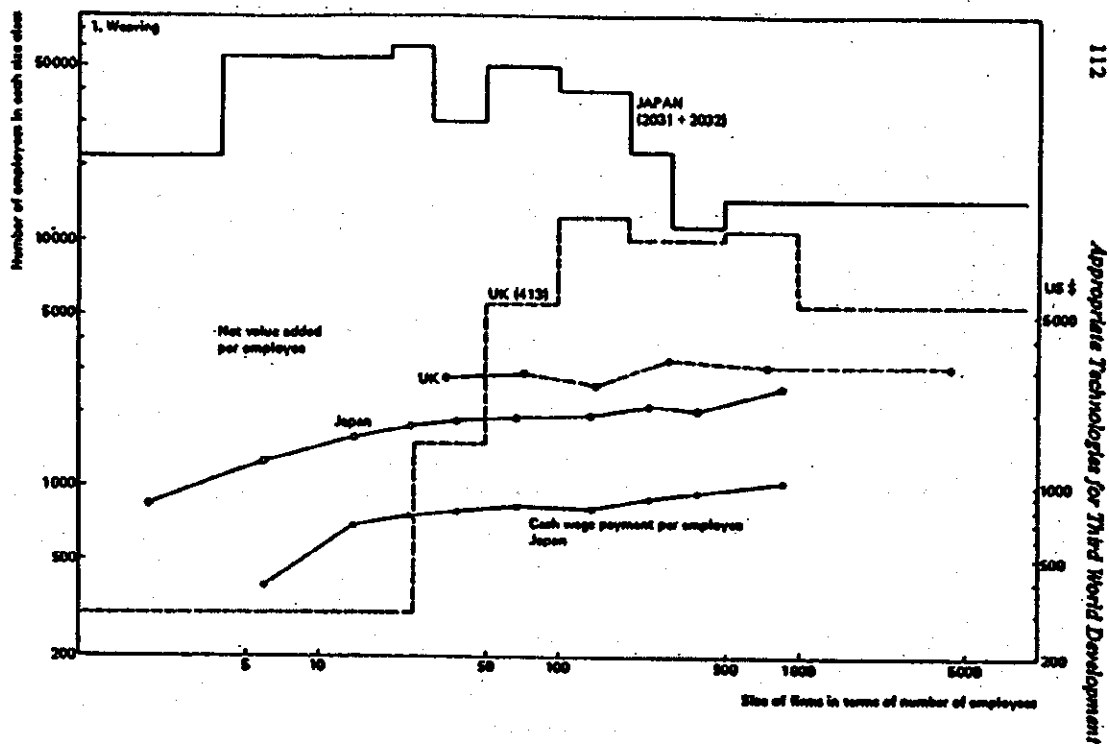
Note: Cottage ratio in (1) is defined as the ratio of persons engaged in cottage industry (less than 20 employees) to total persons engaged in total manufacturing industries.

Figure 4. Decrease in the percentage of smaller-enterprise sector's employment in total sector employment, which occurred in parallel with economic growth (employment term)



Source: Bureau of Statistics, *Shugyo Kozo Kihon Chosa Hokokusho* (Report on Employment Status Survey), every year issue.

Figure 5. Comparison of size structure productivity and wage earnings of weaving (cotton, linen and man-made fibres) and metal-working machine tools industries: UK. 1968 and Japan 1966.



Sources-Japan: *Dai-san-kai Chūshō-kigyō Sōgō Kihon-chōsa Hōkokusho*; UK Department of Industry, Business Statistics Office, *Report on the Census of Production 1968*, London 1974.

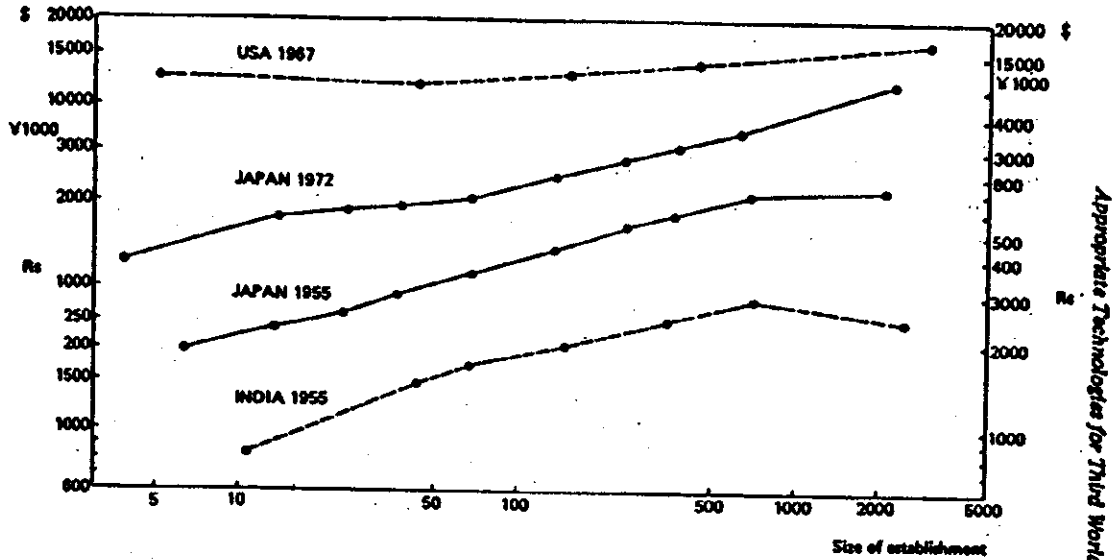
Note: Values in yen and £ are converted into US\$ using the official exchange rates of \$1 equal to ¥362.5 and £.4194 respectively.

Source: the same as in Fig. 2-2

Figure 6. Differentials in wages and labor productivity among manufacturing companies, by size: Japan (1909-1972), U.S.A. (1967), India (1995)

(1) Comparisons of differentials in value added per employee of manufacturing industry as a whole by size class of establishments:

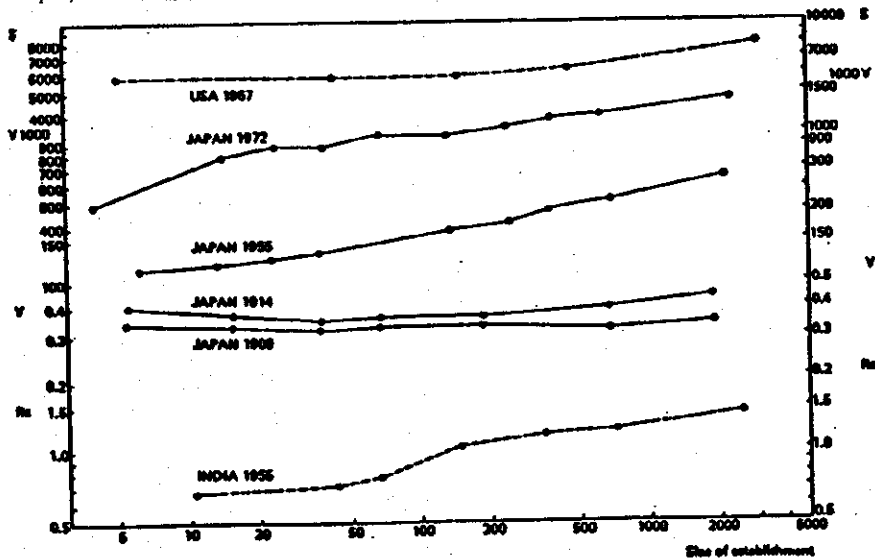
Japan, USA and India.



Sources: (1) Japan: *Kogyō (Kōgyō) Tōkei-hyō*, annual issues, (2) USA: *Statistical Abstract, 1974*, (3) India: *Census of Manufactures 1955*.

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(2) Comparison of differentials in average annual wage earnings of employees in manufacturing industry as a whole by size class of establishments: Japan, USA and India.



Jahrbuch: Aspects of Japanese Experiences

Source: the same as in Fig. 2-2

Prospects for Vietnamese Rural Industrialization —Research tasks suggested from the experiences in East Asia and China

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1. Introduction

In this note I plan to discuss briefly the question on the potentiality of rural industry development in Viet Nam in terms of one of the effective paths toward the nation's industrialization and modernization by 2010 and 2020. The question was inspired by my previous studies on the courses of industrialization in Japan, other East Asian countries and in particular China, as countries of "later comers" than those of Western industrialized countries. Thus, the experiences of the industrialization in "Asian late comers" suggest two different courses of industrialization which have become increasingly manifest recently. These result in two broad questions to Viet Nam.

- (1) The process of industrialization in modern economic growth (or in economic growth that took place after the period of British Industrialization) was used to be described in terms of the interaction between the traditional agricultural sector and the emerging modern industrial sector. Transference of surplus labor and the surplus food that fed it from the former sector to the latter was a necessary condition for this process of industrialization to work successfully. This process was described best by W.A. Lewis's model of "unlimited supplies of labor" (or often called a "dualistic development" model). In England, emergence of the modern industrial sector was preceded by the stage of proto-industrialization in which agricultural development gave birth to numerous small rural industries. But these industries were later superseded by the successor, modern industrial enterprises and then disappeared. In Japan, the early Meiji era was characterized by the rise of a number of proto-industries in rural regions, but soon the modern enterprises were established through transplanting entirely different sets of modern technologies and organizations from the West. For several decades, the proto-industries and these modern enterprises coexisted side by side. It is only after the 1980s in China when rural industries called Township and Village Enterprises (TVEs) started to spring up that industrialization has come to proceed simultaneously in two different courses: one along the course of the Lewis model and the other along the course that resembles proto-industrialization (which may be summarized as a TVE model). The related question is thus: Whether in Viet Nam in the forthcoming years will the economy's industrialization and modernization

be proceeded along the Lewis model and the TVE model in parallel or singly along the former, and why?

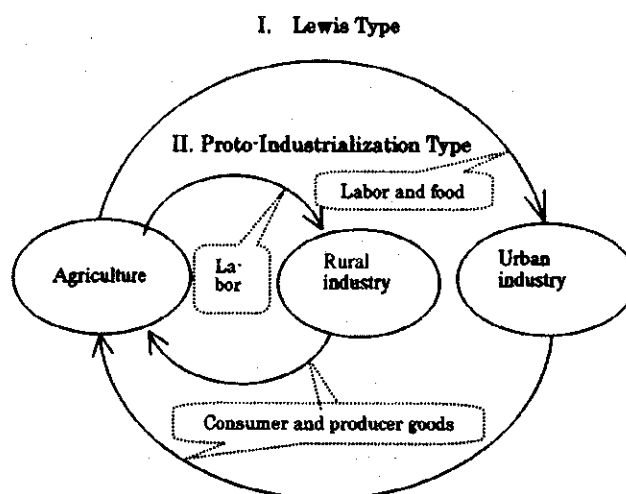


Chart I Coexistence of two types of industrialization (China)

(2) The TVE model, which formalizes China's success story establishing the second course of industrialization, is characterized by the industrialization which took place within the agricultural sector, hence non necessity of transference of either labor or food toward outside. Key factors of this model were typically the following three: 1) productivity "breakthrough" in agriculture, 2) improvement in individual farm economy and 3) development of the TVEs. In response to the introduction of the market-oriented economic reform, the interrelationship among these three, which had been characterized as a vicious circle, were converted to one with a virtuous circle, and all of these factors were reactivated. Triggers of the conversion were several. Among them that attached to factor 1) seems particularly important in China's case, as the post-People's Commune regime of agricultural productivity increase by way of "Two-tier Management system" was successful, reinforced by the financial support coming from factors 2) and 3). It is particularly worthy of noting that, although the course of industrialization along the Lewis model has not been robust and even instable due to the still weak SOE reform, the successful course of industrialization along the TVE model has played the role of leading the good performance of overall economic development. The question then is: What is, and will be, the prospects for the rise in the Vietnamese TVE sector, and hence for the reactivation in Viet Nam of the industrialization along the TVE model? And, how would the two courses of industrialization interact each other in the future?

In connection with the above approach of mine in tackling with the Vietnamese rural industrialization, I must mention my feeling that this paper is strongly complementary with the paper on the same subject which Professor Yumio Sakurai has presented at this workshop. Namely, while my study is rather forward-looking, using the "dynamic TVE model" as a reference model for investigating the possible process of Vietnamese

(as a late-comer) industrialization with particular emphasis on the role of rural industries, Sakurai's paper is aiming at clarifying the present state of Vietnamese rural industrialization, taking as given the present industrial structure and social and administrative systems. This is clear even from the fact that he considers the main objectives of rural industrialization in Viet Nam as the eradication of rural underdevelopment and raising of individual farm economy. And his detailed account of the five types of rural industries currently observable in Viet Nam are themselves extremely useful for our dynamic study: Namely, (1) traditional handicrafts flourished in Occupational Village, manufacturing cheap consumer goods for popular use, (2) some traditional handicrafts manufacturing, however, artistic products with higher skills, (3) rural industries which emerged as a result of doi moi reform in urban and border regions in the early 1990s, (4) rural industries with origins from Industrial Production Cooperatives that were established in the planned era and (5) rural industries which was established as Industrial Cooperatives but continued now as a kind of SOEs.

Incidentally, Sakurai's empirical findings like these indicate a fairly strong possibility that rural industrialization will have a bright prospect, despite the generally pessimistic view held by external observers over this issue.

In the following, I shall make very brief presentation of my study results and the related questions in three sections.¹

2. Lessons from the experiences of industrialization in Japan and the countries of East Asia

This section is taken from my more detailed study on the same topic (see Ch. 2 of my forthcoming booklet on *Japan's Economic Cooperation Policy in Quiet Evolution* IDE, 2000). In this study, I have used as part of the study method of economic development of a particular country the approach to observe the development from two cross viewpoints:

- (1) Stages of economic development (*Absolute underdevelopment*) of a particular country.
- (2) Differences of the development stages between this country and the developed countries (*Relative underdevelopment*).

This approach from two cross view-points represents a feature of our stance to the development issue as compared to that of IMF and WB which is premised on the existence of well developed market economy.

¹ As a matter of fact, Lewis's dualistic model is applicable largely to the old agricultural economies where as a result of age-old population pressure, population is dense and agricultural land is scarce. For Viet Nam, although it is evident that this model was, before, not applicable to the southern part, as a result of persistent population pressure it seems that Lewis's model has come to be applicable for the entire economy without serious error.

Some of the important observations are shown as follows:

A. Studies on the experiences up to the 1980s

(a) From the development stage view-point

(1) Agriculture

• Key factors in productive force formation

In Monsoon Asia, basic investments for water control and utilization are the basic prerequisite of agricultural progress (Chart 2); these are also the largest claimer for investment in development. Once agricultural progress is achieved, industrialization becomes easier to achieve.

• Key factor in economic system reform

Both product and factor markets are not sufficiently developed to accommodate to the requirement of such basic investments. Village communities often play a role of complementing the weak function of the market system. (Table 1 and 2)

(2) Industry

• Key factors in productive force formation

A two-tier process of industrialization is normally observed:

(i) Growth of firms starting from small (often family based) enterprises, a process that is indispensable regardless of the importance of (ii) (Chart 3: see also Fig. 2-1, 3-1, Chapter 3, Part 2 of this Vol. 1, using the same source)

(ii) Growth starting from the larger-scale firms with modern technology, equipment and human capital

• Key factors in systemic reform

In the case of above (2) (i), the government and community make up for the weak market function supporting the growth of small enterprises. Small enterprises also spontaneously protect itself from competitions from large scale firms by innovating lower-quality, cheaper substitutes of the competitors' products.

(b) From relative underdevelopment

(1) Traditional measures for dealing it: "Infant industry protection" by higher tariff rates, etc.

(2) Application of the devise for the lower quality, cheaper substitutes with the aim of the protection against foreign competitors.

(3) Prerequisite for adopting "gradualism" —an explicit and publicly announced program of market-oriented reform. E.g. a 1960 trade and exchange liberalization plan of Japan (Please refer to *Study on Economic Development Policy in the Transition Toward a Market-oriented Economy in Viet Nam <Phase2 >Final Report, Vol.1 General Comments/Agricultural and Rural Development,*

February 1998, pp.42-47).

- B. Lesson from the experiences after the 1990s when world-wide technology innovation has become rapid.

Preliminary conclusions

At least the following may be concluded:

- (i) Agricultural development in Monsoon Asia, starting from the basic investment in irrigation, is a prerequisite for successful industrialization.
- (ii) For agricultural development, rural community relations played a vital role.
- (iii) Industrialization for the late-comers in Asia has taken simultaneously two different courses: one the course starting from small firms and the other the course starting from the modern corporate firms with up-to-date technologies.

3. Feasibility of Vietnamese rural industrialization

This section concentrates on the analysis of rural industrialization as a variant of the course of industrialization starting from small firms. It is essentially a comparative study between Chinese and Vietnamese cases.

- (1) In China, the success of rural industrialization after the mid-1980s is publicized in terms of its contribution to the overall industrial growth and systemic reform. A question should then be raised: Why in Viet Nam has similar rural industrialization not been taken place?

A number of explanations were made, most of which were passive arguments justifying the present state. Among them there is a variant of low-level equilibrium theory observing a vicious circle: (i) extremely high man-land ratio → (ii) low per capital productivity of agriculture → (iii) low per capita income of farm households; hence, a low marketing ratio of their products, and a small amount of purchasing power and savings → (iv) no conditions for rural industrialization; hence, no contribution is possible to alleviate the high man-land ratio. The circle becomes complete when (iv) leads to (i).

However, the Chinese experience of successful rural industrialization suggests that it is worthwhile to investigate the feasibility of converting this vicious circle to a virtuous circle, after converting our stance from a static to a dynamic view-points.

(2) A study on the Chinese Township and Village Enterprises (TVE). At first, so-called a Southern Jiangsu type TVE is examined. *Ishikawa* (2000) pp.24-31 is analyzed. (Chart 3)

- a. Trigger of development In 1984, central government lifted the policy that was enforced during the planning era to restrict the movement of the products, raw materials and man-power of the industrial production of individual People's Communes strictly within their domain (San jiudi). In immediate response to it, TVEs started expansion of their productive activities.
- b. Behind the TVE's expansion are observed three potentially dynamic relations: as shown in Table 8 of Part 1, Chapter 1, 1-1.
 - (i) TVEs and the local (Xiang and village) governments which established and have supported most of TVEs and which sociologically are founded on the traditional community relations with the aim at maximizing the common welfare of the member families. In this region the proportion of individual-based TVEs is very small. TVEs' capability is further strengthened by the returnee technicians and skilled workers from the neighboring industrial cities.
 - (ii) Expanding products and factor markets for TVEs are supplied largely from the farm economy which in turn has been made richer by agricultural progress.
 - (iii) The agricultural progress in this region is made possible by the successful introduction of the so-called "two-tier management regime of agriculture in the rural areas" after the dissolution of People's Commune regime. The two-tier management consists of (a) individual farm's cultivation work and (b) provision of production services by the "community type cooperative economic organization". The success of the tier (b) activities has depended on the availability of capital and working funds. In this region, the funds are in many cases supplied sufficiently from the agricultural progress as well as the TVE expansion, making the productivity increase persistent.
- c. The potentially dynamic relations have thus been made really dynamic. The result is the conversion of the vicious circle into the virtuous circle.

(3) The case of other successful TVEs

The Wenzhou type-Most of TVEs are of the individuals or their unions type, but still under the community government aegis. The products are daily necessities and sold nationally by their own salesmen or through the professional markets developed in this district.

The Pearl River Delta type-TVE expansion was accelerated after the mid-1980s by the advent of FDI whose consignment processing of the labor-intensive consumer goods at the local TVEs constituted the major products. The role of government in enabling the success of this pattern of TVE expansion is also marked.

4. Is it possible to convert the vicious circle to the virtuous circle?

This is a key question to be inquired for Viet Nam.

First, some empirical facts about the actual state of Vietnamese rural industrialization provide us an impression that its spread is not so insignificant as is often claimed to be. Whether this impression is valid is to be investigated, together with the significance of the "occupational villages" (or various other names are used).

Second, serious studies should be made with regard to the working in Viet Nam of the three potentially dynamic relations, perhaps concentrating geographically on the conditions in Red River Delta.

(i) Rural non-farm business units and its relations with the local governments and traditional community

These units do not comprise the local government owned enterprise. Together with the prevalence of trade village, the RRD pattern may be similar to the Wenzhou type in China. But why is the role of government and community so subtle?

(ii) The economic conditions of the farm economy, as a determining factor of the markets

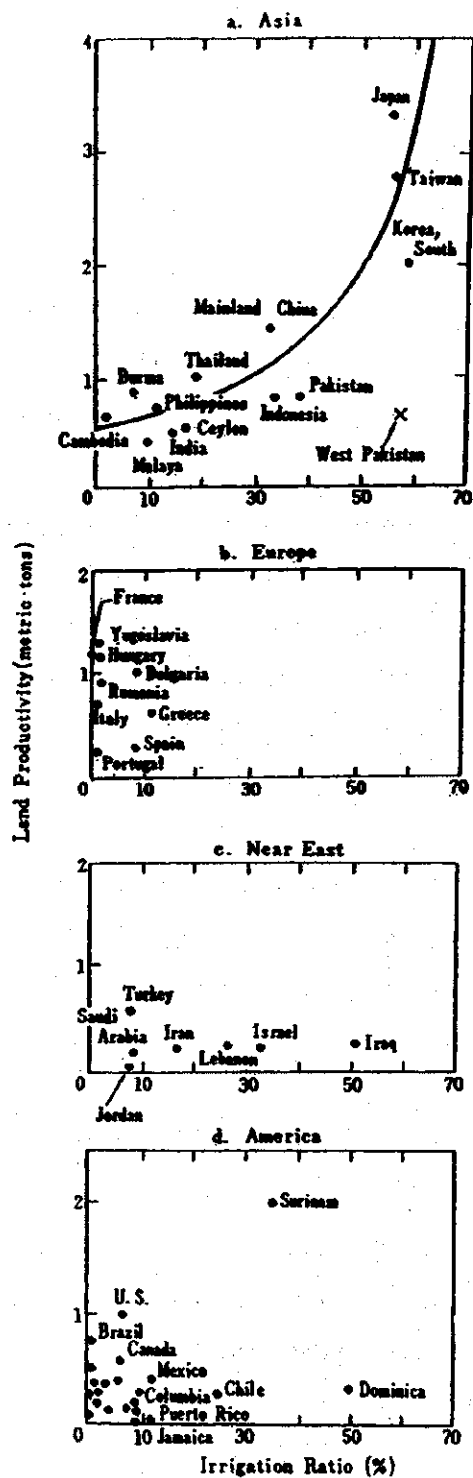
The performance of food grain production seems very good. Already 4 tons of paddy per hectare of cropped area has been achieved through introduction of the Green Revolution. But, despite it, why is the farm economy not progressing? Is the production increase achieved still insufficient?

(iii) An organizational and financial mechanism of agricultural expansion

This mechanism, devised after the dissolution of the existing agricultural cooperatives regime (Degree No.10, 1988) very much resembles the Chinese "two-tier management regime". Namely, the individual farms make cultivation work, and the cooperatives provide agricultural production services. A survey on cooperatives indicates the management capability of cooperatives is generally poor. Financial resources to support the cooperative activities are absolutely inadequate.

[End]

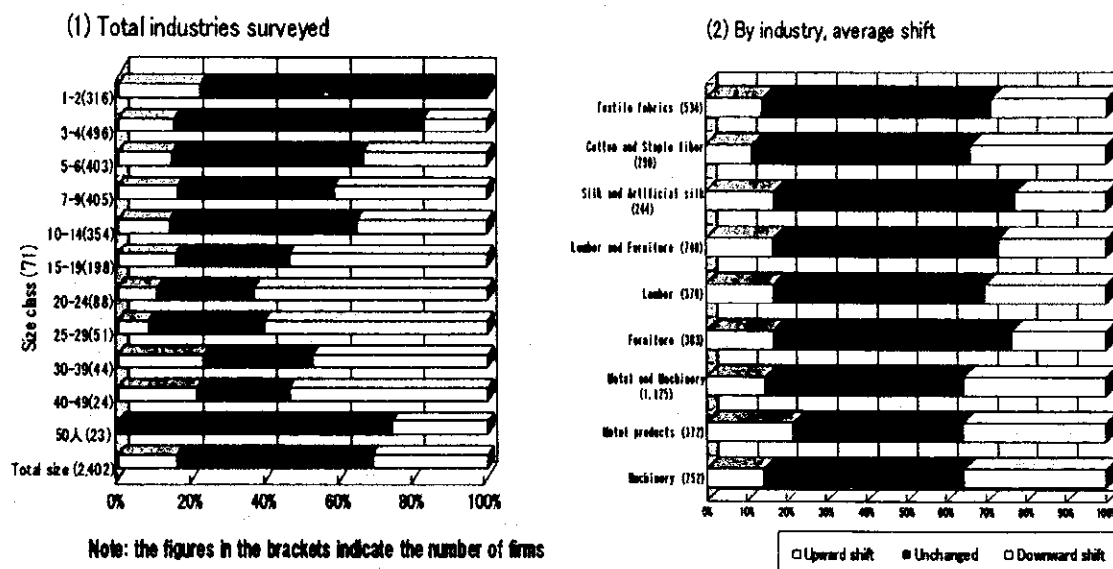
Chart 2 Inter-country between land productivity and the irrigation ratio in Asia, Europe, the Near East and America



Notes: Irrigation ratio = $\frac{\text{Irrigated arable land \& land under permanent crops}}{\text{Arable land \& land under permanent crops}}$
 Land productivity = $\frac{\text{total cereal production}}{\text{Arable land \& land under permanent crops}}$

Source: Ishikawa (1968)

Chart 3 Upward or downward shift in size of the firms in different size classes between 1971 and 1974 —selected areas, Japan



(3) Detailed figures corresponding to (1)

		Size class for 1971											
Size class for 1974		1-2	3-4	5-6	7-9	10-14	15-19	20-24	25-29	30-39	40-49	more than 50	
	2,402	316	496	403	405	354	198	88	51	44	24	23	
1-2	356 14.8	247 78.2	86 17.3	13 3.2	8 2.0	1 0.3	1 0.5	-	-	-	-	-	
3-4	567 23.6	62 19.6	337 67.9	124 30.8	33 8.1	9 2.5	-	2 2.3	-	-	-	-	
5-6	428 17.8	5 1.6	52 10.5	209 51.9	129 31.9	27 7.6	4 2.0	1 1.1	-	1 2.3	-	-	
7-9	337 14.0	1 0.3	14 2.8	42 10.4	171 42.2	89 25.1	16 8.1	4 4.5	-	-	-	-	
10-14	357 14.9	2 0.6	4 0.8	12 3.0	50 12.3	179 50.6	86 43.4	17 19.3	3 5.9	4 9.1	-	-	
15-19	151 6.3	-	1 0.2	3 0.7	11 2.7	37 10.5	61 30.8	32 36.4	5 9.8	1 2.3	-	-	
20-24	80 3.3	-	1 0.2	-	1 0.2	5 1.4	18 9.1	23 26.1	23 45.1	8 18.2	-	1 4.3	
25-29	45 1.9	-	-	-	1 0.2	2 0.6	7 3.5	9 10.2	16 31.4	7 15.9	3 12.5	-	
30-39	37 1.5	-	1 0.2	-	1 0.2	4 1.1	2 1.0	-	4 7.8	13 29.5	10 41.7	2 8.7	
40-49	18 0.7	-	-	-	-	-	1 0.5	-	-	8 18.2	6 25.0	3 13.0	
more than 50	26 1.1	-	-	-	-	-	2 1.0	-	-	2 4.5	5 20.8	17 73.9	
Average persons for each size	8.7	2.0	3.7	5.3	7.6	11.3	15.3	17.5	23.5	30.7	40.2	50.0	

Notes: The figures in the upper line indicate the actual number of firms; the figures in the lower line indicate the % of it to the total number of firms in each size class for the year 1971

Source: K. Fujikawa and et.al., "Size Movement of Small Firms and Their Productivity in Chosa Geppo (Kokumin-Kinyu-Koko), Sept. 1975

Table 1. Penetration of institutions and activities based on "village community"
in pre- and post-WW2 Japan

Economic Activities of Agricultural "Minor Cooperatives" in prewar Japan

	April 1, 1933				January 1, 1941			
	General and Special Minor Coop.	%	General Minor Coop.	%	General and Special Minor Coop.	%	General Minor Coop.	%
1. Total number of Minor Cooperatives	235,036	100.0	131,428	100.0	312,914	100.0	192,562	100.0
2. Number of those having facilities for joint use	55,226	23.50	33,054	25.15	163,440	52.23	116,977	60.75
Joint work places	15,727	6.60	7,528	5.73	46,311	14.80	33,742	17.52
Prime movers	—	—	—	—	54,614	17.45	48,101	24.98
Sprayers	—	—	—	—	113,611	36.31	99,655	51.75
Rice hullers and threshers	15,042	6.40	14,248	10.84	54,417	17.39	50,528	26.24
Pump sets Power tillers	—	—	—	—	15,425	4.93	13,818	7.18
3. Number of those undertaking joint operations	133,176	56.66	85,222	64.84	219,944	70.29	156,068	81.05
Joint pest and insect control	59,035	25.12	49,986	38.03	134,574	43.01	119,190	61.90
4. Number of those engaged in joint financing	67,760	28.83	44,102	33.56	120,550	38.52	89,908	46.7
5. Number of those engaged in joint marketing	123,999	52.76	71,144	54.13	202,940	64.85	132,924	69.0
6. Number of those engaged in joint purchasing	145,966	62.10	91,589	69.69	253,381	80.97	175,979	91.4

Source: Ministry of Agriculture and Forestry, *Noka-kokumiai nikansuru Chosa* (Survey of Agricultural Minor Cooperatives), March 1936.
Imperial Farm Association, *Noka-kokumiai nikansuru Chosa* (Survey of Agricultural Minor Cooperatives), March 1943.

Note: The total number of farm machines in use in Japan as a whole is shown for evaluating the weight of minor cooperative activities in capital formation.

	Nov., 1933	Nov., 1939	Nov., 1942
Prime movers (electromotors and oil engines)	118,352	293,099	461,193
Mechanical threshers and hullers	174,013	356,545	561,677
Mechanical pumps	31,853	83,115	92,512
Power tillers	120	2,819	7,436

Source: Nobufumi Kayo, ed. *Nihon Nogyo Kiso Tokei* (Basic Statistics about Japanese Agriculture). Conference for Raising Productivity of Agriculture, Forestry and Fisheries in Tokyo, 1958.

The Distribution of agricultural *shuraku* (hamlet) according to the method of meeting labor requirement for joint undertakings of *shuraku* --- All Japan excluding Hokkaido, 1970

% of total number of agr. *Shuraku* (135,206)

	A. Maintenance and repairing of ordinary roads	B. Maintenance and repairing of agricultural roads	C. Weeding and mud removing of farm ditches for irrigation and drainage
1. Undertaken by joint operations of the <i>shuraku</i>	73.6	74.0	63.8
a. All the families of <i>shuraku</i> have to provide labor	53.1	52.0	43.6
b. Those which do not provide labor have to pay money for hiring labor	17.7	17.3	14.4
c. Those persons who provide labor are paid wages	1.9	2.7	14.4
2. Undertaken by the <i>shuraku</i> by hiring labor	0.3	0.2	0.3
3. Not undertaken by the <i>shuraku</i>	26.1	25.8	36.0

Source: Ministry of Agriculture and Forestry, *1970-nen Sekai Noringyo Sensasu—Nogyo Shuraku Chosa Hokoku-sho* (1970) World Agricultural & Forestry Census—Report on the Survey of Agricultural *Shuraku*, 1972.

Source: Shigeru Ishikawa, *Essays on Technology, Employment and Institutions in Economic Development*, Kinokuniya Co., Tokyo, 1981, p.p. 328-330.

Table 2. Minor irrigation and large-scale irrigation—relative role of village community

Indicators of capital requirements for irrigation input on a project basis: India, Mainland China and Japan

	$\Delta K/\Delta L$	$\Delta O/\Delta L$	$\Delta K/\Delta L$	$\Delta K/\Delta Y$	
	US dollars per hectare	Kilograms per hectare	US dollars per metric ton	Based on current wholesale price of rice	Base on hypothetical uniform price of paddy: USD100 per metric ton
India	Projects started in 1 and 2FYP's	Net output coefficients used by each FYP	1, 2 and 3FYP projects by average $\Delta O/\Delta L$ for 1, 2 and 3 FYPs		
	Major and medium projects	1FYP 560	Major and medium projects	8.29	4.89
	191	2FYP 300	Minor projects	2.85	1.68
	Minor projects 40	3FYP 783	Minor projects 126		
3FYP					
Major projects	211				
Minor projects	97				
Mainland China	National average for 1953-56	Net output coefficient used by 1956 plan	Major projects	4.65	3.63
	Major projects	750	Medium projects	2.42	1.89
	204		Minor projects	0.60	0.47
	Medium projects				
108					
Minor projects	26				
Japan	Average cost of arable land readjustment projects	Gross output coefficient for arable land readjustment	Based on net output coefficient		
	1898-1922	760	1923-1942	4.67	8.40
	287		1898-1922	7.17	10.89
	1923-1942	Net output coefficient for arable land readjustment	Irrigation and drainage	3.23	4.87
372	456	366			
Average cost for irrigation and drainage arteries improvement projects					
167					

Notes: FYP is the abbreviation of a Five-Year Plan. Net output coefficient denotes the increments in product as an effect solely of irrigation work. The values of $\Delta K/\Delta Y$ are computed by assuming a uniform rate of net income of 75%.

Proportions of major and minor projects in government development outlay on irrigation:

Mainland China and India

	(1) Increase in irrigated land		(2) Government development outlay		(3) Government investment cost per ha.
	Area in million ha.	Proportion in %	Amount in USD million	Proportion in %	USD
Mainland China: 1953-56					
Major projects	.156	1.4	31.8	18.7	204
Medium projects	.869	7.8	94.1	55.2	108
Minor projects	10.110	90.8	44.4	26.1	4
Total	11.135	100.0	170.3	100.0	15
India: 1FYP period					
Major & medium projects	1.174	22.5	630	85.7	537
Minor projects	4.047	77.5	105	14.3	26
Total	5.221	100.0	735	100.0	118
: 2FYP period					
Major & medium projects	2.469	40.4	782	79.7	317
Minor projects	3.642	59.6	199	20.3	55
Total	6.111	100.0	981	100.0	161
: 3FYP period					
Major & medium projects	4.654	47.3	1,259	70.6	271
Minor projects	5.180	52.7	525	29.4	101
Total	9.834	100.0	1,784	100.0	181

Sources: For Mainland China, S. Ishikawa *National Income and Capital Formation in Mainland China*, p.167 (Table II-22). For India, Government of India, *Review of the First Five-Year Plan, and do, The Third Five-Year Plan*.

Shigeru Ishikawa, *Economic Development in Asian Perspective*, Kinokuniya Co, 1967.

Potentialities of Rural Industrialization in Viet Nam: Lessons from China

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I. China's experience in rural industrialization

China started to change from a planned economic system to a market-oriented one at the end of 1978. Since that time, now more than 20 years ago, the country has maintained an average annual economic growth rate of about 9 percent, the highest level in the world. In discussions about the factors behind such rapid economic growth, it is generally accepted that township and village enterprises (TVEs) in agricultural villages have fulfilled the role of a traction engine in the developmental process.

The Township and Village Enterprise Law, promulgated on 1 January 1997, defines TVEs as enterprises invested in mainly by collective economic organizations or farmers in agricultural villages and incorporated by townships (including villages under townships), which are responsible for supporting agriculture (Article 2). More specifically, TVEs include various non-state-owned collective enterprises that belong to townships or villages, private or joint-ventures with foreign capital located in rural villages. They vary in size from very small single-operator farmers' side businesses to large-scale modern enterprises employing thousands of workers with high technological levels allowing them to compete with foreign countries. In general, however, many TVEs use low-level technology and lack rationalized management.

Why have these enterprises achieved such remarkable development? Regarding the factors for development at a micro-level, it is a generally accepted view that sustainable rapid development has been attained by the self-supporting accounting system, principle of self-responsibility for profit and loss, and an enterprise structure adapted to the market economy.

The development of TVEs in China is highly regarded not only for its high growth rate, but also because it has proved the possibility of linking industrialization to the agricultural sector during the development process. Explaining the development of industry in balance with the agricultural sector, the well-known model proposed by Arthur Lewis demonstrates that the modern industrial sector develops by absorbing limitless supplies of labor from agricultural villages. This model explains well the process of industrialization in Japan, Korea, Taiwan, the United States and European countries. After World War II, however, it was frequently noticed that development was achieved in the developing countries while an imbalance remained between industry and agriculture and between cities and rural villages. This was because excess labor from the agricultural sector remained in the informal sector in cities. Labor supply from the agricultural sector had accelerated due

to a population explosion, while the absorption of the labor force by the industrial sector was limited because the latter was capital-intensive.

By contrast, the unique and unprecedented development of TVEs in China presents a case in which of industrial, service, and transport sectors, etc. emerge and develop together in agricultural villages. This new developmental strategy has drawn the attention of the World Bank, and other international financial organizations and scholars all over the world.

The present paper aims at summarizing the development of TVEs in China by focusing on mutual relations between industry and agriculture from the viewpoint of the mechanism of economic development, and by doing so points to the possibility of rural industrialization in Viet Nam.

1. Development process of TVEs in China

This paper first presents an overview of the development of rural industrialization in China and the role that TVEs played in the development of national economy after the country started to shift to a market economy system at the end of 1978.

TVEs in China can be broadly classified into private enterprises and enterprises with collective ownership. Private enterprises consist of those operated independently by one family and those jointly operated by more than one farmer. Depending on the number of employed workers, these independent enterprises can be further classified into private (with more than seven workers) and personal enterprises (with less than eight workers). The collective owned enterprises include township enterprises and village enterprises. There are seven business types of TVEs, including agriculture. In terms of the value added base in fiscal 1998, the shares of these business types were: manufacturing 70 percent, building 8 percent, transport 6.1 percent, wholesale/retail 8.9 percent, travel/restaurant/service 4.1 percent, agriculture 16 percent, and others 1.3 percent. This indicates that the manufacturing industry had the major share in the composition of businesses. (Source: The 1999 Year Book on Chinese TVEs).

Table 1 shows TVE production and share of GDP, according to field of business.

Table 1 Yearly production and share of TVEs

	1978		1984		1998	
TVEs (total)	495/6,846	(7.2%)	1,698/13,171	(12.9%)	22,187/79,396	(27.9%)
Manufacturing	385/4,237	(9.1%)	1,240/7,617	(16.3%)	15,530/33,430	(46.5%)
Building	35/569	(6.2%)	246/1,263	(19.5%)	1,781/5,262	(33.8%)
Transport	19/205	(9.3%)	258/598*	(43.1%)	1,361/5,029	(27.1%)
Commerce/services	19/438	(4.3%)	282/1,202*	(23.5%)	1,970/6,610	(29.8%)

Figures within brackets indicate production ratios, TVEs to the national total, in units of 100 million yuan. Figures for 1978 are those of collective owned enterprises. Figures marked * in the 1984 column are data for 1986.

Table 2 Production of TVEs by industry

(Unit: 100 million yuan)

	1986	1988	1990	1995	1996	1997	1998
Heavy industry	1,084.34	2,178.90	2,916.32	19,961.79	20,715.80	20,805.20	20,497.45
Coal	54.05	77.43	123.55	540.59	645.37	654.68	666.05
Iron ore mining and washing	6.12	11.54	17.46	159.96	192.17	172.15	185.49
Nonferrous ore mining and washing	7.25	17.35	25.04	230.04	249.81	264.57	301.79
Building materials and nonmetal mining and washing	52.13	89.57	124.89	1,027.43	1,093.88	1,051.88	1,069.88
Salt	2.56	4.04	5.92				
Mining and washing of other mineral	0.00	0.71	1.03	50.53	57.84	65.19	59.25
Wood lumbering and transport	0.00	5.81	6.04	48.55	42.09	40.32	45.04
Electric power, steam and hot water	5.44	9.7	16.92	120.27	127.5	154.08	173.14
Water supply						46.38	52.54
Gas						14.08	13.62
Sub-total for resources and energy	127.55	216.15	320.87	2,177.37	2,408.66	2463.33	2,566.80
Oil refinery	0.00	7.29	13.25	125.35	266.72	265.52	237.54
Coke	3.21	9.7	22.21	110.99			
Chemicals	66.85	178.51	270.93	1,729.17	1,842.99	1,852.97	1,880.32
Pharmaceuticals	0	16.82	24.11	255.42	272.03	275.3	290.47
Chemical fiber	0	12.53	22.95	205.84	204.07	231.68	272.28
Rubber products	14.64	34.32	49.71	301.73	357.87	375.99	378.37
Plastics	61.95	141.17	180.46	1,152.14	1,233.83	1,313.96	1,312.12
Sub-total for chemicals	146.65	400.34	583.62	3,880.64	4,177.51	4315.42	4,371.10
Building materials and non-metallic mineral processing	319.11	541.96	664.56	3,966.20	4,047.76	3,754.37	3,631.80
Iron smelting and rolling	37	85.48	126.88	1,435.12	1,449.21	1,396.58	1,282.21
Nonferrous smelting and rolling	23.02	59.56	87.23	847.73	832.59	761.03	715.02
Metal processing	120.02	234.89	322.2	2,290.50	2,341.21	2,368.36	2,277.06
Sub-total for metals	499.15	921.89	910.89	8,539.55	8,670.77	8,280.34	7,906.09
Machinery	198.53	386.48	470.19	2,107.21	2,025.11	2,029.50	1,976.98
Specific-purpose machines				601.99	618.65	590.64	518.76
Traffic and transport equipment	24.02	56.15	74.93	752.36	797.09	863.96	804.8
Electric appliances	65.24	141.05	192.79	1,219.58	1,233.93	1,354.62	1,371.06
Electronic and telecommunication equipment	16.54	43.31	56.33	540.43	635.99	719.81	817.63
Measuring instruments and office supplies	6.66	13.53	16.72	142.66	148.09	187.58	164.23
Sub-total for machinery	310.99	640.52	810.96	5,364.23	5,458.86	5,746.11	5,653.46
Light industry	632.29	1,262.30	1,839.75	14,781.90	11,954.72	12,350.83	11,885.89
Feed processing	7.88	17.39	25				
Food processing	118.4	233	338.5	2,483.08	2,753.69	2,662.23	2,569.85
Food manufacturing				582.59	533.57	623.18	579.12
Beverage processing	32.2	63.3	74.68	471.84	541.07	578.49	579.56
Tobacco	0.38	0.31	0.4	3.29	4.88	5.79	7.99
Marine product processing	0	1.51	2.81				
Spinning	231.25	459.3	660.15	3,481.34	2,872.63	2,918.11	2,639.88
Sewing	59.81	119.35	206.13	1,716.33	1,745.59	1,900.13	1,874.06
Leather/fur	29.96	62.22	94.52	828.5	902.62	916.13	878.7
Wood/bamboo/cane works	25.34	46.58	63.73	591.88	678.62	698.18	670.32
Furniture manufacturing	20.99	40.53	49.51	378.47	409.34	444.07	451.87
Paper making	44.17	93.73	137.81	839.29	909.22	913.05	913.52
printing	17	31.17	45.3	260.73	281.92	323.95	328.68
Stationery and sporting goods	11.41	24.22	37.01	264.47	321.57	367.52	392.34
Artistic handicrafts	33.5	69.69	104.2	546.39			
Others	79.97	125.26	172.39	2,333.70	2,746.42	2,915.10	3,183.61
Total	1,796.60	3,566.46	4,928.46	34,743.68	35,416.94	36,071.13	35,566.95

Sources: Yearbook on Township and Village Enterprises in China, Chinese Statistic Yearbook

The role of TVEs in the national economy has obviously become increasingly important in parallel with the progress of the market economy in general. TVE manufacturing production in particular accounts for approximately half that of the nation as a whole. It is no exaggeration to say that this represents a remarkable industrialization in agricultural villages unparalleled in other countries that have achieved successful industrialization.

Most of the construction industry enterprises, that are promoting the construction of cities in the period of rapid economic growth, are agricultural village TVEs. The transport, restaurants and other service industries are playing a role in compensating for the backwardness of the state-owned sector.

Table 2 shows production in the major fields of manufacturing industry in succeeding years. The manufacturing industry is diversifying: enterprises manufacturing machines and building materials led the industry at the end of the 1970s, clothes, textiles and food processing in the light industrial sector have progressed rapidly since the 1980s; and capital-intensive enterprises, such as those manufacturing electric, electronic and telecommunications equipment have also made remarkable progress.

Table 3 lists the products in which TVEs have high national production shares. TVEs are dominant in light industrial products, building materials and agriculture-related products. In addition, TVEs produce nearly 100 percent of all bricks and other building materials. This is not shown in the Table. As referred to below, TVEs also have a high share of production of some energy-related products such as coal. These are categorized as heavy industry products. As a whole, TVEs and state-owned enterprises (SOEs) do not overlap with each other in their business scope.

Table 3 TVE shares of major national products

Cement (1998)	230.25 million tons (43%)
Chemical fertilizer (1998)	8.77 million tons (29.1%)
Clothes (1997)	10.4 billion pieces (74.9%)
Cloth (1998)	10.8 billion pieces (77.2%)
Cloth shoes (1997)	150,000 pairs (93.2%)
Locally brewed liquor	4.02 million tons (70.2%)
Beer (1998)	2.86 million tons (14.4%)

Another feature of TVE development is that the proportion of private enterprises has substantially increased, while that of collective owned enterprises has decreased, as shown in Table 4. This reflects a process in which private ownership has progressively been encouraged with the implementation of a series of economic reform policies.

Table 4 Amounts and production ratios under different ownership systems

	Unit: billion Yuan (%)	
	1984	1998
Collective (township and village) enterprises	103.5 (82.6%)	3,556.7 (51.5%)
Private and personal businesses	21.8 (17.4%)	3,356.1 (48.5%)

Among the economic development roles played by TVEs, that of providing employment opportunities to absorb labor has attracted the greatest attention of scholars and policy-makers in China and abroad. As shown in Table 5, the ratio of the number of TVE workers to the total number of workers in agricultural villages is increasing every year. In 1998 it was one quarter, or 15.8 percent if only those in manufacturing enterprises were counted.

Table 5 Absorption of labor force in agricultural villages by TVEs
(only collective owned enterprises counted in 1978)

	Unit: million persons (%)		
	1978	1984	1998
Total number of workers in agricultural villages	306.38	359.68	464.32
Total number of TVE workers	22.18 (7.2%)	49.24 (13.7%)	122.63 (26.4%)
Total number of TVE workers in the manufacturing industry	17.34 (5.7%)	36.56 (10.2%)	73.34 (15.8%)

The initial stage of industrialization in developed countries involved labor movements. Farmers withdrew from the agricultural sector, left agricultural villages and migrated into cities. In contrast, the statistics above tell the unique story that Chinese farmers withdrew from the agricultural sector without leaving their agricultural villages, mostly transferring to non-agricultural sectors while remaining at their own living places or in other agricultural areas. It is believed that some farmers did not abandon agriculture completely, but retained it as a side business. The number of TVE workers is now decreasing from a peak of 135.08 million in 1996, to 130.5 million in 1997, and 125.37 million in 1998. This is mainly because collective owned enterprises have more capital equipment and have reduced the number of workers in order to improve business efficiency. In fact the number of workers in collective owned enterprises decreased from 59.53 million in 1996, to 53.27 million in 1997, and down to 48.29 million in 1998, recording a 10 percent drop from the previous year. The reduction in the absorption of labor corresponds to the increase in the capital equipment ratio representing capital per worker. The capital equipment ratio of collective owned enterprises increased from 1,470 yuan in 1983 to 278.4 million yuan in 1998, or by 18.9 times in nominal terms and 5.8 times in real terms. The increase may be even more rapid in the manufacturing sector.

One of the most important roles of the TVEs has been in the exporting sector, leading the export-oriented development of the national economy. Direct exports of the TVEs, 11.9 billion yuan in 1987, or 8.9 percent of total national exports (147 billion yuan), increased to 530 billion yuan in 1998, or 34.8

percent of the total (1,523.2 billion yuan). If the amount of foreign currency acquired by the TVEs in collaboration with foreign capital is included, the total figure reaches 685.4 billion yuan accounting for 45 percent of total national exports.

This remarkable development of TVEs has not been uniform across the country. It has differed by degree according to region. TVEs have developed greatly in the coastal regions, such as Jiangsu, Zhejiang, Shandong and Guangdong provinces. The production of TVEs in these four provinces in 1983 amounted to 35.6 billion yuan, accounting for 50 percent of the total production of TVEs for the whole country. In these provinces, featuring high levels of income, capital formation had already been achieved with collective labor under the socialist planned economic system.

However following the central government's incentive policy to encourage TVEs in the central and western regions, production by the TVEs in the four coastal provinces (805.8 billion yuan) dropped to 36.3 percent of the total (2,218.6 billion yuan) in fiscal 1998.

2. Evolution of policy

The developmental process of the TVEs may be briefly summarized, based on the policies of the Communist Party and central government.

Under the socialist system of economic control, the Chinese Communist Party and central government established an agricultural collective management system for each people's commune to promote the policy on the priority of food production.

To aim at self-sufficiency of food supply within certain agricultural regions, the government encouraged farm land cultivation by collective labor, construction of irrigation facilities and development of the 'five small industries' —for the production of power/coal, cement, iron and steel, fertilizer and agricultural chemicals and agricultural machines (small cultivators and power-driven pumps) — to improve agricultural productivity. This process of industrialization in support of agriculture is called 'walking on two legs', and was promoted by commune and commune and brigade-run enterprises that preceded the TVEs. They were enterprises under collective ownership consisting of (1) commune enterprises owned and managed by the People's Communes and (2) commune and brigade-run enterprises owned and managed by production brigades under People's Communes. The government intended to form an industrial structure that would attain an synergetic effect between industry and agriculture under a socialist collective agricultural system.

Just before China started to shift to the system of a market economy, the production share of commune and brigade-run enterprises was 53 percent in the field of machines and building materials (cement and brick) of the national total and 70 percent when the production of metals, chemical products and coal was included. This indicates that the sectors of input and intermediate goods were already by then the mainstream in the industry of agricultural villages, and suggests that the policy of industrialization in

support of agriculture had already been implemented. It should also be noted that rural industrialization in China progressed without financial assistance or goods provided by the central government.

Since extreme egalitarianism was adopted as a principle for distribution, the central government could not help but rely on subjective activism and political education in order to motivate the farmers to produce. As a result, the government was not able to sustain its policies in the long term.

Moreover it was difficult to procure materials required for industrialization or to sell varieties of them under the centrally planned economic system. This limited the production and sale of agriculture-related products within limited areas and subsequently hindering the linked development of agriculture and industry. Since the central government promoted agriculture in support of industrialization uniformly across the country while almost neglecting the actual conditions of productive factors, such as population/land ratios of different areas, agricultural production unexpectedly stagnated in some regions.

The shift toward a market economy greatly transformed the policy of rural industrialization. The new policy was set out in the 'Ordinance for the Development of TVEs' promulgated in 1979. Its important points are as follows.

One of the major strategies for the development of the TVEs was to support agriculture. However, it was also important to contribute to the improvement of the people's livelihood, support large-scale industries and encourage exports. According to the policy of adopting measures appropriate to local conditions, the management of TVEs were to be based on the self-supporting accounting system with self-responsibility for profit and loss, without intervention by township and village administrations. There were six sectors in which development was encouraged. They were: (1) consumer goods and production goods related to agriculture, processed agricultural products and by-products, small agricultural machines, tools, fertilizers, agricultural chemicals and food, and agricultural machine repairs, (2) industrial production materials, energy, coal and mineral mining, manufacture of bricks and cement, hydraulic power generation, and geothermal power generation, (3) traditional art handicrafts, (4) restaurants, retail shops, barbers, shoe repairing shops and other services, (5) manufactures of parts and intermediate products sub-contracted to large-scale enterprises, and (6) small chemical products, metal products and miscellaneous articles for daily use.

TVEs, permitted to engage in fields other than those related to military purposes, achieved remarkable development centering on the light industry sector. However on the other hand SOEs, bound within the framework of the planned economy, were not allowed to have independent management; full-scale enterprise reform was not realized; and the government maintained various subsidies. In addition, their production was inadequate for satisfying the consumption demands of those with increased income. Under these circumstances, TVEs played a vital role in compensating for the shortcomings of production by SOEs. In other words, the TVEs as a sector supplied consumer goods to complement the efforts of the SOEs. There also emerged TVEs which supplied parts and intermediate products to the large-scale

SOEs, establishing a relationship with them as an affiliated sub-contractor. In such a way, TVEs and SOEs achieved a rational balance as different sectors for different purposes.

To realize this basic policy, the government gradually deregulated the systems of distribution, finance and labor mobility in the first half of the 1980s. Deregulation for manufacturing and commercial activities, which had been approved only locally under the planned economy, was implemented. In the financial sector of agricultural villages, rural credit cooperatives (RCCs), which had been managed directly by townships and villages, were reformed into profit-oriented organizations. People who lived in townships and villages were still prohibited to migrate into large cities without permission, but were permitted to migrate to and work in small cities for industrial or commercial enterprises. Engagement in management of private industrial and commercial enterprises was also legalized.

Motivated by the remarkable results of five years' work, the Chinese Communist Party and central government placed even more emphasis on the TVEs. The 'Report on the Creation of TVEs' distributed to sectors concerned in March 1984 confirmed that the TVEs constituted an essential sector of the national economy, and declared that the management of the TVEs should be completely separated from the administrative authorities. It was also recognized that personal and cooperative businesses should be made legal to become another essential sector.

Since that time the TVEs have developed not only in agriculture-related sectors but also broadly in other sectors. The Chinese Communist Party and central government are creating a 'niche' between TVEs and SOEs in particular.

In 1993 and 1994, after experienced a boom, some TVEs survived but others could not. As the conflict with the SOEs intensified, those TVEs who lacked price competitiveness were forced out. In addition, the conditions for giving loans to borrowers, including the TVEs, became more stringent. This was in order to ensure the independence of financial organizations from government administration and encourage open management, and by way of restructuring to prepare for the arrival of a market economy system.

3. Mechanism of rural industrialization

The most important industrialization issue is capital formation. By what mechanism has rural industrialization been achieved in China? What should be confirmed first is the fact that the policy for rural industrialization was not backed up by clear-cut strategies. A prerequisite for the development of the TVEs was approval of free selection of and deployment and promotion of businesses suited to local conditions (*yindi zhiyi* in Chinese), based on *laissez-faire* principles. In fact, it would be no exaggeration to say that there were such an infinite number of that it amounted to a 'development without a strategy'.

It is necessary, however, to understand the mechanisms of industrialization commonly seen in different agricultural areas in order to apply developmental strategies to undeveloped regions or to use experiences from other countries relating to development economy.

A pioneer model in this field is the 'model of two sectors in agricultural villages' also known as the 'double-layer model with two sectors,' which is an application of the Arthur Lewis model. This model was subjected to heated discussions in the magazines 'Issues of Agricultural Economy' and 'The Economy of Agricultural Villages in China' in the latter half of 1988.

Essentially TVEs in China (1) did not change the traditional framework that prohibited labor movement and migration from agricultural villages to large cities under the stringent family registration system, (2) farming families managed their agricultural activities to improve productivity and caused disguised unemployed to be recognized and (3) developed using an infinite labor supply from the agricultural sector which was absorbed into collective-owned and private non-agricultural enterprises such as those in the manufacturing, building, commercial and service sectors in agricultural villages, (4) prevented the emergence of the informal sector in parallel with the formation and growth of medium- and small-scale cities called xiaochengzhen (county cities and towns).

The following issues were controversial: whether the family registration system that segregated farmers from the people in large cities was appropriate, whether industrialization based on TVEs and xianchengzhen would be able to achieve integration and realize the proposal of a two-sector model connecting agricultural villages and medium-scale cities.

Beyond that, efforts were made to re-evaluate the Arthur Lewis model and address the issue of how to understand the development of TVEs as a developmental strategy within the larger framework of the national economy, featuring a modern industrial sector in large cities and a traditional agricultural sector in agricultural villages.

Essential as a prerequisite for the industrialization of agricultural villages was the fact that it became possible to select freely species for growing according to the natural conditions of respective areas following the transition to a market economy. In 1979 the system of subcontracting management responsibility to individual farmers was started, whereas in the past farmers had been subjected to compulsory planting orders biased toward the production of grains. To increase production, the government also raised the grain purchasing prices. This strengthened incentives for management using the leverage of motivating each farmer to pursue profits, correcting the distribution of resources related to agricultural production, improving productivity and considerably enhancing the income of farmers. Increased income expanded consumer demand, accelerated investment in plant and equipment by the TVEs mainly in the light industry sector, and increased savings as a source of capital formation for the TVEs through agricultural village credit cooperatives, that function as front-line financial organizations.

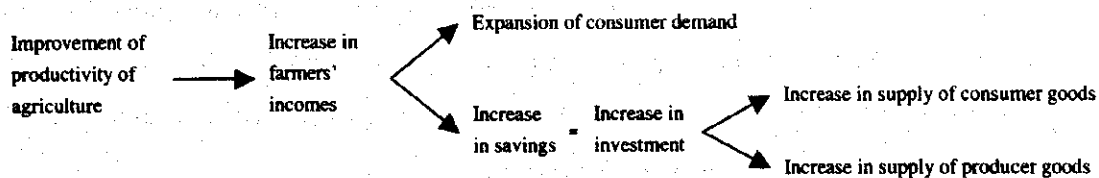


Fig. 1 Mechanisms of rural industrialization

Due to the improvement of productivity in the agriculture sector, disguised unemployment was observed in labor markets to make TVEs play the role to employ them. Under such circumstances, different regions started their own agricultural village industrialization processes adapted to the specific conditions of each region. The following are typical cases.

1) Agricultural production breakthrough

As explained above, the government pursued a policy aimed at creating a favorable cyclical mechanism advancing the mutual development of agriculture and industry in the era of the People's Communes by producing agriculture-related input goods to improve the productivity of the agricultural sector and increase capital formation in the industrial sector.

Although affected by repeated political confrontations and subjected to a number of system-related problems in the organization for production, the grain yield increased at an average yearly rate of 2.4 percent (from 160 million tons in 1952 to 300 million tons in 1978), and the productivity of land at an average yearly rate of 2.5 percent (from 1,322 tons to 2,527 tons during the same period). As a result, surplus resources from the agricultural sector were appropriated for capital formation by commune and brigade-run enterprises; the production of agricultural input goods was expanded; and a favorable cyclical mechanism was created to form a mutually-dependent relationship between agricultural and industrial sectors, in the Sunan area of the southern part of Jiangsu Province and some other areas. Another factor that triggered local production of agricultural machines and tools in agricultural areas was the fact that the manufacturing industries in Shanghai and other cities failed to meet the demand for agriculture-related machines in the villages.

At the end of 1978, the Chinese Communist Party started shifting to a virtual market economy system, dismantling the collective-owned agriculture system and implementing agricultural production under a subcontracting system with individual farmers. In parallel with this, commune and brigade-run enterprises were empowered with independent management and self responsibility for profit and loss in their business operations.

When the People's Communes were dissolved in 1984, the commune and brigade-run enterprises were renamed TVEs, separated from the administrative agencies of townships and villages and given more incentives for management. This in return impelled them to promote their businesses with a sense of urgency. After (at least) officially prohibiting the intervention by municipal administrative bodies in the management of TVEs, the government lifted the regulations on enterprise management relating to the procurement limits, and the manufacture and sale of raw materials at local places called 'sanjiudi'. Thus, the production of agriculture-related input goods expanded; a synergetic effect emerged due to improved management incentives for individual farmers; and the income of farmers was raised considerably to stimulate consumption and savings.

As a result, capital formation accelerated, further developing the sector for the production of goods for agricultural production. On the other hand, increases in consumption and demand for housing, an outcome of increased incomes, triggered the development of relevant sectors. Great development was seen in the building material sector, virtually monopolized by the TVEs, and also in the textile, apparels and food processing sectors which had failed to supply sufficient volume of products in the past, due to the belated reform of the SOEs.

Development through a favorable cyclical relationship between the agricultural and industrial sectors was seen in the suburbs of Shanghai, Suzhou City in the southern part of Jiangsu Province, Wuxi City and agricultural villages under the jurisdiction of Changzhou City. The well-known sociologist Fei Xiaotong called this development in these areas the Sunan Model in publications in China and abroad. Fei Xiaotong and other scholars and policy-makers familiar with the local conditions have pointed out these factors in the development of TVEs in these areas:

- (1) Conditions suiting economic growth, such as high productivity in the agricultural sector due to fertile land, traditional technology in the industrial sector, and the market in the city of Shanghai
- (2) Leadership by collective-owned TVEs, in succession to the commune and brigade-run enterprises of the era of the People's Communes
- (3) Development of the distribution sector previously limited under the system of the socialist planned economy
- (4) Enterprise management and exploration of product selling routes in the nascent market economy by the administrative authorities of townships and villages

With regard to factor (4), Hoaxi village in Jiangsu Province was a special case. This village started managing businesses in different fields, created corporate groups and achieved a promising performance. In areas outside Sunan, similar cases were seen in Nanjie Village in Henan Province and Daqiuzhuang Village in the suburbs of Tianjin City. These are known as the areas with the highest income levels of agricultural villages in China.

2) TVEs and the theory of prototype-industrialization stemming from population pressure

In areas where natural resources are few and the lives of people, relying on agricultural production alone, are extremely difficult as a result of low land to population ratios, there is little opportunity for capital formation for industrializing the agricultural sector. The development of group system enterprises is limited. In these areas, development is led by small-scale private enterprises centering on fields not related to agricultural production.

A typical example is the Wenzhou model named after an agricultural village under the jurisdiction of Wenzhou City in the southern part of Zhejiang Province. This village is well-known for its

development rivalling that of Sunan model. It has become famous for its remarkable success in becoming one of the richest villages in the country, despite being located in one of the poorest areas, lacking development potential.

As indicated by the sayings 'Don't let your daughter marry a wanderer from Qiaotouzhen' and 'Even young children are in business at Xiaojiang', many farmers were unable to live on agriculture alone, and were forced to become migrant workers. During the 1930s they migrated to western Europe and other countries in increasing numbers.

It is said that this area strongly opposed the People's Commune system of collective ownership and collective labor, promoted by the Chinese Communist Party to emphasize the production of grains, as agricultural labor based on a group system caused stagnation of production due to the extremely low land to population ratios.

The present farm subcontracting system, maintained with individual farmers, is the main form of management. A person in charge of agricultural administration in this area proposed this system in the middle of the 1950s. He was severely punished later by the central Communist Party. Nevertheless, there were a number of farmers who cultivated their own lands illegally, working for commercial and industrial enterprises and seeking work in different places. Income levels in this area were among the lowest in the country and the area of cultivated land per farmer was about 353 square meters, only one-third of the national average in 1978, just before the start of the transition toward a market economy. For that reason, therefore, the rapid enrichment of the village caused widespread amazement.

Under the policy of reform and openness, commercial activities by farmers, as individuals or in groups, were progressively liberalized. The farm management subcontracting system prevailed throughout the country. A commodity economy spread across it and the income levels of farmers rose. As a result, demand rose for miscellaneous articles for daily use, housing-related materials, light industry products, and low price, low quality clothing (compared with those manufactured by SOEs).

The farmers in the Wenzhou area boldly undertook business in these products. Those in different areas contributed to the capital needed to start enterprises by saving income obtained from commercial and industrial activities and migrant working, and collecting loans from friends and relatives and private and official financing organizations, also acquiring funds by participating in mutual financing associations.

They manufactured clothing and small goods using waste materials discarded from plants in cities, peddled commodities purchased cheaply, and developed selling routes even to remote places by use of various networks, under the principle of 'small profits and quick returns'. At the end of the 1980s when economic policies facilitating exports they further expanded, selling throwaway cigarette lighters and buttons in foreign markets.

In contrast to the Sunan model, the Wenzhou model drew attention of those concerned as representing

the development of TVEs dominated by individual-management enterprises. The factors behind this development are (1) a tradition of working for commercial and industrial enterprises due to low land to population ratios and unfavorable conditions for agriculture, and the formation in particular of wide-ranging distribution and finance networks, (2) domination of individual farmers and farmer cooperatives rather than enterprises under a vulnerable system of group possession, (3) development of products and services in response to consumer needs, and efforts to manufacture and sell sundry daily-life commodities, and low-price low-quality products that are not in competition with those manufactured by SOEs, and (4) positive support of commercial and individual businesses by townships and village authorities, letting private enterprises use TVE names and providing them with information about national market even before the private sector was legalized.

Although industrial sectors directly related to agriculture did not develop in the process of industrialization in this area, the redundant labor force was absorbed by the developing manufacturing, commercial and distribution enterprises thereby improving the productivity of agriculture. Under the guidance of local governments, land was leased by farmer to farmer to popularize large-scale agricultural management. Thus there were a number of farmers who devoted themselves to commercial and industrial activities, while their own farms were cultivated by others under a subcontract. More rational distribution of land improved the productivity of agriculture and enabled a considerable extent of self-sufficiency in the area.

3) TVEs in collaboration with foreign capital

As indicated by migration abroad during the Ming and Qing Dynasties, land to population ratios were very low and conditions were inadequate for agricultural development in Guangdong and Fujian Provinces. The economy in these provinces as a whole was stagnant, since production was biased toward grains and commercial and industrial activities were restricted under the system of the controlled economy. In these provinces the capital formation required at the initial development stage relied on foreign fund sources.

The economic policy of opening to other countries virtually started in the two provinces in 1979, with the promulgation of four special economic zones, Shenzhen, Shantou and Zhuhai in Guangdong Province and Xiamen in Fujian Province. Expediting the inflow of foreign capital was an important policy of the zones. Since then, foreign capital from Hong Kong, Taiwan, developed countries and overseas Chinese has been invested in the special economic zones following the conclusion of various forms of contracts with the TVEs and other enterprises in the zones, while following the trade policies with foreign countries implemented by the central government in Beijing. The Zhujiang model of Guangdong province adjacent to Hong Kong, and the Jinjiang model of Fujian province facing Taiwan across the Taiwan Straits exemplify the mechanism for the development of TVEs in these provinces.

The development of these provinces features active investment from local people now living abroad (with Hong Kong considered a foreign country) mostly by Hong Kong based enterprises in Guangdong Province and by Taiwan based enterprises in Fujian Province.

There have been various forms of investment. Until the middle of the 1990s, investment was predominantly based on consignment agreements between foreign capital and local enterprises, most of which were in three forms. Chinese enterprises performed (1) 'consignment processing' of raw materials brought in by foreign capital enterprises, or (2) processing following specific samples, or (3) consignment assembling of delivered parts. Another typical form of inflow of foreign investment has been in 'compensation trade' with Chinese enterprises processing products using machines and equipment delivered by foreign enterprises paid for by the sale of the products. After speeches by Deng Xiaoping in the southern part of China in 1992, this form of independent direct investment became popular.

The introduction of foreign capital was closely linked with management strategies of enterprises in Hong Kong, Taiwan, Japan, Korea and other East Asian countries. These countries had lost competitiveness in international markets due to the sharp rise of domestic wages from the middle of the 1980s, and some companies started to actively shift their production bases to Fujian Province and other regions in China. After 1991, the inflow of foreign capital further accelerated. Dongguan City has received foreign capital investment in various forms. It is known for attracting the largest number of foreign-affiliates in China.

Although they promoted collaboration with foreign capital positively, enterprises in the cities in the Zhujiang delta area and Jinjiang City in Fujian Province also promoted self-development by utilizing local resources, avoiding total reliance on foreign capital. In the Shunde City, for example, newly emerged township-owned enterprises produced high-quality household appliances in large numbers, such as refrigerators, electric fans and air-conditioners. These were recognized as the best available in domestic markets and were exported to foreign countries. In 1991 only 7 percent of industrial production in Shunde was funded by foreign capital and private enterprises, collective system and SOEs accounted for 93 percent of the total.

Another feature of the industrialization of agricultural villages in Guangdong Province was the fact that emphasis was placed, in particular at the initial stage, on agricultural processed products. The development of TVEs, as a 'trade-industry-agriculture' model, would not have been possible, if they had been cut off from agricultural development.

The following points are supplemental to the summary about the three types of TVE development explained above.

First, TVEs involve limited labor mobility in agricultural areas, as farmers did not completely withdraw from agriculture. This is different from the Lewis model. All farmers were entitled to have

land to cultivate to secure a minimal supply of food. Essentially TVEs increased the number of farmers with side-businesses. Some Chinese policy-makers valued this system and thought it superior to those in other developing countries. It is true that this kind of labor system is beneficial at the initial stage of industrialization.

Second, multiple types of enterprise groups coexist in most regions in China. Enterprises are broadly classified at the policy level as those that are (1) owned by a group, (2) owned by an individual, and (3) in collaboration with foreign capital, according to the ownership system of the enterprise leading regional development. For example, Anhui Province, represented by the Gengche model, is well-known as an area where different joint enterprise typically coexist, such as those which are township-owned, village-owned, individually managed and jointly managed by several families. Similarly, Nanhai City, known as a Zhujiang model, has enterprises with five different ownership systems.

Third, population explosion has been an important factor common to different regions in stimulating rural industrialization (including the case referred to in paragraph 1 above). The creation of employment opportunities for the increased population by the manufacturing and distribution industries, closely linked by a favorable cycle of mutual dependence with agricultural development, resulted in improved productivity.

Moreover enterprises tend to produce identical products throughout a village or community, a phenomenon also seen in different regions. This caused the development of related tertiary industrial sectors for transportation, telecommunication, hotels and restaurants. So development progressing within individual regions produced an effect of integration.

4. Factors for development

Why did the former USSR continuously suffer from economic stagnation, while China was able to enjoy a high growth rate during the transition to a market economy? With regard to this question, it is accepted that radicalism failed and gradualism succeeded. Jeffery Sacks, who had influence on adopting radicalism for the introduction of the market economy into the Soviet Union and East-European countries, explains to justify himself that the Soviet Union failed to achieve a soft landing because industrialization had progressed to a considerable extent there, whereas China was able to attain a high-rate of development since the emphasis was placed on agriculture as an absorber for various problems specific to the transition period. Although it is not possible to discuss his remarks in this paper, factors involved in the development of TVEs will be discussed below that may give an insight into the solution of this question.

In general, it should not be overlooked that enterprises were able to develop in almost all business fields during the transition to a market economy. TVEs needed management responsive to the market mechanism, even if the mechanism was not in a perfect form. In the areas where TVEs developed, people were keen to become rich, due to experience, in some cases, of extreme poverty. In any event, it

is true that people were inspired by 'xianfunlun', the theory that 'those who can be rich first, should be rich first' as proclaimed by Deng Xiaoping.

1) Differentiation between TVEs and SOEs

The development of TVEs and the industrialization of agricultural villages was not unrelated to the economy of the SOEs, the main part of the industrial sector. It was an important aspect of the development of TVEs that SOEs were not able to supply sufficient goods during the transitional period. TVEs were able to develop by occupying an economic niche. As seen in Fig. 2, the segregation of TVEs from and their complementary relationship to SOEs were a feature of the transition in China and were one of the reasons for sustained long-term high-rate growth.

The production goods produced by TVEs included coal and other energy-related products that were in short supply from SOEs, and crude steel goods of lower quality and at lower prices than those manufactured by SOEs. This is a case where TVEs complemented SOEs. In Dagiuhuang village in the suburbs of Tianjin city, where there was no tradition or experience in steel production, the township created a steel industry anticipating demand for low-quality low-price crude steel materials, and subsequently and rapidly developed a steel and related industries. This is a well-known case of a special niche being occupied by a TVE.

Examples of enterprises developed directly in relation to SOEs are those producing parts and intermediate products subcontracted from SOEs, for example refrigerator parts produced on the periphery of Beijing and bicycle parts produced in the suburbs of Shanghai.

The fields in which TVEs are well differentiated from SOEs are those involving consumer goods. This became possible when consumer demand increased quantitatively due to the rise in average income levels, while the categories of consumer goods in demand have proliferated, corresponding to increased distinctions in income levels. Since SOEs inherently failed to produce sufficient consumer goods, TVEs were able to enter supply markets comparatively easily without competing with SOEs. There was a remarkable increase in the production of consumption goods and services, as summarized below according to different types of consumer goods.

Low-price low-quality products for low-income consumers: clothing, shoes, bags, furniture, stationery and other non-durable consumer goods including those made of waste materials.

Building materials for farmers: bricks, roofing tiles and cement

New products: nameplates, buttons and other decorations, watch straps and cheap cigarette lighters

Traditional handicrafts: silk, ceramics and dolls

High quality products for export: clothes (sample processing), cloth (such as wool), and electric fans

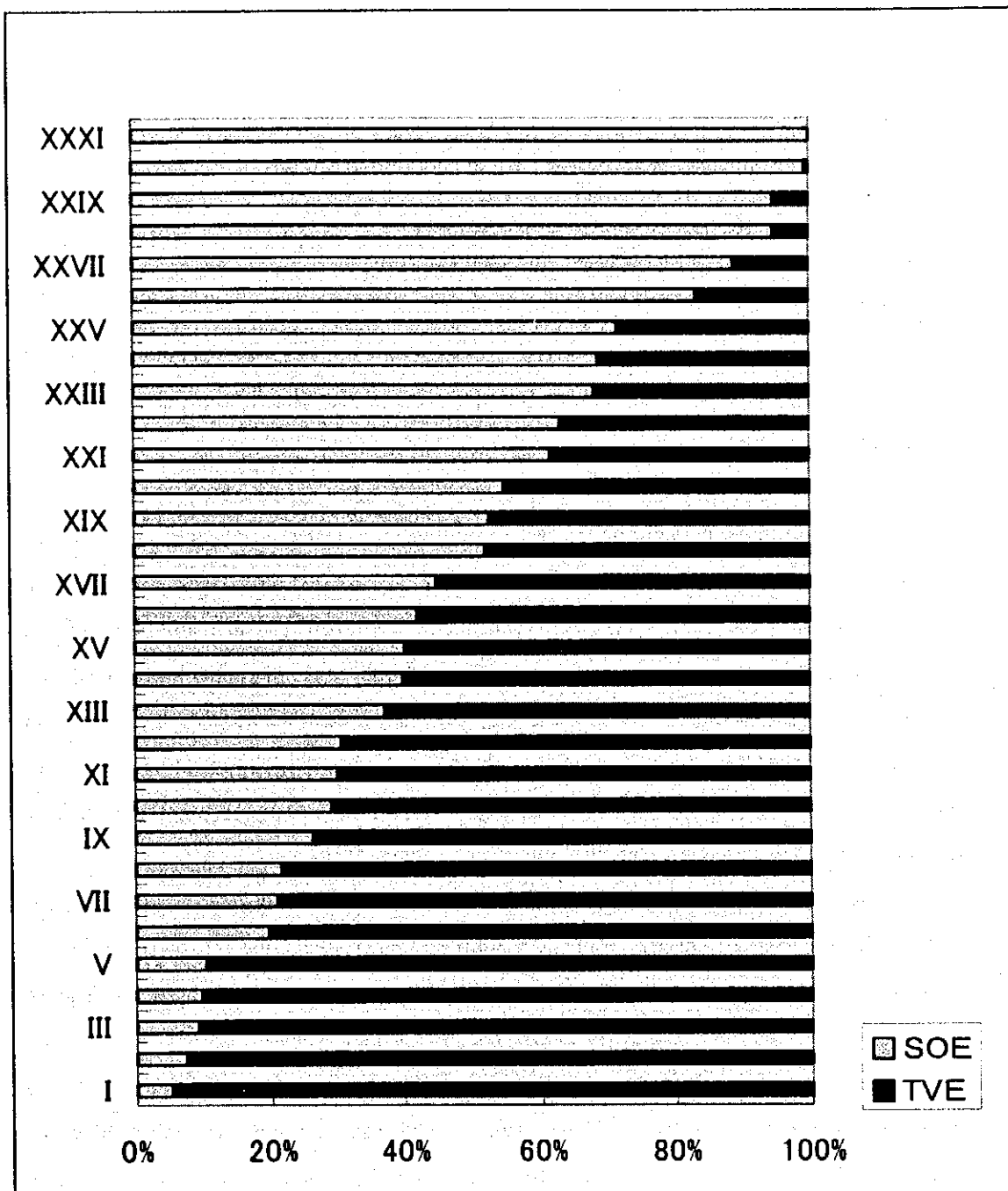


Fig. 2 Share of industry. TVE & SOE (amount of production, 1997)

I	Sewing	XI	Paper printing	XXI	Electronics, telecommunication
II	Furniture, Artifact	XII	machine	XXII	Coal
III	metal	XIII	Textile	XXIII	Traffic, transport
IV	Stationary	XIV	Rubber product	XXIV	Iron refining, rolling
V	Plastic materials	XV	Non ferrous metal	XXV	Medicine
VI	Non metal materials proceeding	XVI	Food processing	XXVI	Water supply
VII	Iron ore	XVII	Chemical fiber	XXVII	Coke supply
VIII	Non metal building materials	XVIII	Non ferrous metal smelting and processing	XXVIII	Electric power, hot water, steam
IX	Instruments 'Office supplies	XIX	Special machines	XXIX	Coke and petroleum processing supply
X	Electrical and mechanical apparatus	XX	Chemicals	XXX	Tobacco
				XXXI	Petroleum

From the above, it can be concluded that the conditions of resources at the site do not necessarily affect the development of industries. The processing of agricultural products is only one business fields in many industries. This is also evident from the fact that a number of enterprises referred to in paragraph (2) of the previous chapter are located in poor resource areas.

2) Formation of networks for distribution, information and finance

Corresponding to the transition to a market economy, markets actively expanded from large cities into remote country areas, and changed from local ones to national. This expansion of market size was largely attributable to the spontaneous development of the distribution, conveyance and telecommunication sectors.

A number of developing countries have experienced the fact that incomplete infrastructures related to distribution, transport and information cause a bottleneck in economic development at the initial stage of industrialization. Since 1979, it has often been the case that food has perished for lack of adequate transport and storage, and because the central government had failed to improve infrastructures.

Moreover the state-owned sector, which virtually monopolized the distribution channels, moved goods following instructions by the government according to the system of the planned economy. Thus they were not able to satisfy distribution needs during the transition to a market economy. Under these circumstances, local governments and distributors in the private sector started their own distribution businesses, thereby playing an important economic role.

For many TVEs of different types, close connections with distribution businesses was an important factor in development, irrespective of the ownership system, whether collective-owned or managed by an individual. In other words, the TVEs were able to transport and sell goods in a timely manner to increase sales, in contrast to the inflexible management of SOEs which were slow in conveying goods to even a limited number of consignees. In this sense, TVEs were 'distribution-led enterprises'. This is a view unanimously accepted by the Chinese economists, with whom the author has exchanged opinions.

In parallel with the expansion of markets, information on consumer needs, production goods, intermediate products and demand trends has become very valuable. The private sector has voluntarily collected and released such information, thereby playing a role in developing markets.

In addition to distribution, raising funds and making them available are also indispensable elements for industrialization. The higher income levels of farmers increased saving ratios. These savings provided the finance for commerce and industry, officially through agricultural village credit cooperatives, or unofficially through mutual financing associations, such as yaohui and chenghui, or financial organizations of the money lender type, such as yinji and siren qianzhuang.

It is noteworthy that—whether in distribution, information or finance—human relations, blood-related or home-town-related, and traditional organizations prevailing in the pre-modern era, have

played a vital role in forming networks, particularly at the initial stage.

3) Role of local governments in the community

As micro-factors in the development of the TVEs, quite a few scholars emphasize the importance of management systems that suit the market mechanism, including independent accounting and self-responsibility for profit and loss, and effective corporate governance for enterprise groups by townships and villages.

Not only for the developmental process but also in reality however, TVE organization is far from rational or adapted to the market mechanism. First of all, the market mechanism is still too underdeveloped to require a fully complementary system. In this context, what is important among other things is the function of local governments to expand the markets of an undeveloped system. This is what is called a 'market substitution function'.

Local governments normally manage group system enterprises directly, whether township or village-owned, and support and work with private enterprises. The roles of local governments are to (1) hold sample fairs and special product exhibitions, as also seen in Japan, (2) collect domestic and international market information to give to enterprises and individuals, (3) encourage technological advance and recruit outside personnel, (4) extend legal protection to the people and enterprises under their jurisdiction, and (5) redistribute income among the community, require and collect tax from TVEs to fund agriculture promotion and welfare. Although a complete legal system is indispensable for the market mechanism to function, this is still incomplete and people lack legal concepts. In this situation, the role of local government in (4) in particular is decisive, in adjudicating community economic-related conflicts and activities of dubious legality.

Nevertheless township and village authorities have not necessarily led the development of TVEs. The right of taxation has frequently been abused to retard TVE development. Irrational practices still continue that are against the principles of the market economy. For example, township and village authorities frequently take advantage of their power to appoint their relatives and friends as officials.

4) Entrepreneurship

Enterprise management requires a minimum level of entrepreneurship. Political leaders rooted in the community have taken the initiative for most of the TVEs. It is often the case that people honored as excellent entrepreneurs do not have a proper educational background or knowledge of enterprise management. A typical example is Ms L, the chief executive officer of enterprise group D, located in a village in the suburbs of D city in the north-eastern part of China. Ms L and most of the excellent chief executive officers of the TVEs all explain that they have achieved success motivated by a desire to improve the income levels and welfare of the community, and that they acquired management skills

on the job.

They regard it as their responsibility to collect and provide information by utilizing widely-ranging political networks and to protect and encourage economic activities in the community. However, they tend to be dictatorial. In one instance, a person who had been regarded at the national level as a superior entrepreneur-come-leader killed a villager and was sentenced to a prison term.

As a factor in the development of the TVEs, some economists attach importance to relationships with Shanghai and other large cities. In the Sunan model area for example, production bases shifted to nearby agricultural villages and engineers moved into the area, when production became impossible at the plants in Shanghai due to political chaos. There are also quite a few scholars who insist that rapid growth since the middle of the 1980s is related more or less to the changes in the export-oriented strategies of other East Asian countries. It is true that development in the framework of 'great international changes' did happen. TVEs and other enterprises in coastal areas of China imported and processed raw materials and exported products for developed countries, at a time when Japan and the Asian NIEs had lost their competitive advantages in labor-intensive sectors.

5. Limit and problems

The process of development of the TVEs has not been perfect or faultless. Excessive competition with SOEs, subsequent waste of resources and energy, and environmental pollution have often been criticized. Even the high rate of growth was overestimated in comparison with value-added type production, since it was expressed according to the material production system (MPS) that duplicated the accounting of intermediate products, as used in socialist countries in the past. Furthermore, townships and villages tended to inflate the production of their enterprises to impress upper organizations. Even now, they are being repeatedly admonished to eliminate such malpractices.

Around 1997, the development of TVEs started to slow down with rumors of their termination. However, they have not lost their function yet as the traction engine of the Chinese economy, since their growth rate is as high as 17.3 percent on a value-added basis, and 16.9 percent in the industrial sector for fiscal 1998, at a time when the national economy is entering a stabilized development stage. Nevertheless, it is undeniable that a number of problems have occurred.

The most important problem is the transition, from a 'shortage economy' caused by the shortcomings inherent in a socialist planned economy system, to an 'oversupply economy' as a result of the encouragement of strong competition. The organization of SOEs has been restructured to a certain degree. This has intensified the competition among enterprises and made product quality increasingly important. Consequently, it is natural that some TVEs, which have stressed quantitative expansion, will fail.

Moreover the issue of the ownership system of collective-owned enterprises is apparently having a

negative effect on enterprise management. At quite a few enterprises ownership is not clearly specified, and the responsibility for management remain ambiguous. At the same time, financial institutions, which are instructed to clarify management responsibilities, tighten the conditions for loans. As a result, it is becoming increasingly difficult for TVEs to raise funds. As an outcome of the expanded and intensified market mechanism, bipolarization of TVEs has started. Some TVEs will be able to transform themselves into rationally organized enterprises (rivalling SOEs in terms of size and technology), and others will be ruined.

Reflecting this tendency, one of the most important functions of TVEs, labor absorption, is gradually diminishing, due to the falling growth rate and a gradual decrease in the labor supply, the result of increased capital equipment ratios. In addition, there more access to the cities for temporary work where wage levels are comparatively high. As a result, there has been an outflow of labor from agricultural villages to the cities making it pointless to attempt to further industrialize agricultural villages.

Under these circumstances, the central government has let some TVEs withdraw according to the principle of market competition and position others as medium to small-scale enterprises. The central government appears to want the TVEs to establish affiliations with large-scale SOEs and to guide them to develop in fields inappropriate to large-scale enterprises. Thus the government has started making efforts to create new niche industries.

II. Overall features of rural industrialization in Viet Nam

1. Present state of rural industrialization in Viet Nam

Village enterprises in Viet Nam may be defined as non-state-owned enterprise groups in various business fields located in agricultural areas. One of the features of the development of existing industries in agricultural villages is that industrial production in rural areas is still only 18 percent of the national total or 17 percent of that in the private sector (UNDP). However this is not less than in China during the transitional period.

Another feature is that the collective sector is weaker. Shares of enterprises by ownership type in terms of gross domestic production (36.1016 trillion dong) during fiscal 1998 were as follows: state-owned sector 40.0 percent; collective ownership sector 8.9 percent; private sector 3.4 percent; family business sector 33.8 percent, mixed-ownership sector 3.8 percent; and foreign capital sector 10.3 percent.

Production shares of different sectors in the manufacturing industry were: state-owned enterprise sector 46.2 percent (central 30.3 percent and local 15.9 percent), non-state-owned sector 22.0 percent (collective ownership sector 0.55 percent, private sector 2.3 percent, family business sector 13.6 percent, mixed-ownership sector 5.6 percent and foreign capital sector 31.8 percent).

The weights of state-owned sector are gradually decreasing in terms of the amount of production,

particularly in the manufacturing sector. In the non-state-owned sector, the private sector and foreign capital sector are comparatively large, and the group enterprise sector is extremely small. Under the collective agricultural management centered on cooperatives in Viet Nam, capital formation by groups is limited compared to that of the People's Communes in China. The reason for this phenomenon will be the subject of future research.

2. Problems in policies concerning rural industrialization

- 1) Where agricultural villages have high unemployment rates, the Vietnamese government appears to stress employment opportunities to compensate for income shortages from the agricultural sector, and rural industrialization is regarded as a means of supplementing the household economy of the farmers. From this viewpoint, the main business fields for industrialization are the processing of agricultural products, traditional handicrafts produced mainly during the agricultural off seasons, and small-scale manufacturing of miscellaneous articles for ephemeral daily use. These businesses are mainly undertaken by farmers. This means that side businesses are the important agents in the industrialization of agricultural villages.
- 2) Few experts have conceptualized the development of rural industrialization in relation to the expansion of agricultural production or the beneficial circulation of products and productive factor between agriculture and industry resulting from the mechanization of agriculture. This seems to be attributable in large part to the situation where land for cultivation is scattered in small plots and the incentive to expand rice production is weak.
- 3) On the other hand, it appears that policy-makers are apprehensive that the gap between rich and poor will widen, if rural industrialization progresses. The difference in income between people and between regions is currently one of the most important of political issues. Policy-makers appear to be fearful of a situation in which the rich, in search of investment possibilities, become richer through rural industrialization and the gap between them and the poor widens.
- 4) Dilemmas relating to 1) and 3) above may be the reason for the hesitation of central government to promote of rural industrialization. The World Bank and UNDP have criticized the Vietnamese government for their preferential treatment of SOEs thereby retarding rural industrialization. However their views have been rejected by the Vietnamese government.
- 5) For industrialization, what is lacking or extremely inadequate are capital, technology, knowledge of market mechanisms, and information and circulation networks. The small size of the domestic market also limits new businesses.
- 6) Relative to the above, industrialists are anxious about the risk of corporate management failure, and a situation in which sales stagnate and business performance declines, even if businesses are temporarily in good condition, because markets have been saturated.

- 7) In contrast to the clear-cut policy in China to place the economy first under the strong leadership of Deng Xiaoping, the leaders in Viet Nam appear to be too deliberate to advance immediately toward a market economy.

3. Viable sectors in Viet Nam and strategies

Even if the main purpose of industrialization is to provide employment opportunities, it is essential to find conditions for sustainable development. It is important not only to concentrate on business fields from which profit can be expected in the short term (though this is admittedly necessary), but also to select those with relatively advantageous positions in the national economy and in particular areas and pursue their development from the viewpoint of creating capital formation.

The development of the TVEs in China demonstrated various features in terms of timing, regions, developmental processes and other factors, and was achieved in segregation from the SOEs. This has lessons for the policies to promote rural industrialization in Viet Nam.

- 1) To improve the productivity of agricultural production, importance should be attached to the industrialization of agriculture-related sectors, in order to pursue a favorable cyclical relationship between agriculture and industry.
- 2) According to experience in China, enterprises should produce parts for the products of SOEs as affiliated enterprises, whether they are collective-owned or family managed, or miscellaneous articles for daily use and other products that do not compete with those of SOEs. Enterprises may develop into niche industries, if they manufacture the above-mentioned typical TVE products in China, such as (1) low-price low-quality products for low-income consumers, (2) building materials for farmers, (3) small articles in response to new demand, (4) traditional handicrafts (already being manufactured in Bat Trang and other villages), and (5) high-grade products for export (clothing and some other products are already being manufactured).

With regard to (3) above, various types of sundry products and small articles sold at Dongxuan, a typical Hanoi market, are mostly imported from foreign countries. Chinese products include clothing, cigarette lighters, umbrellas, adhesive tapes, bags, toys and purses, manufactured at TVEs in Wenzhou and other areas. Enterprises capable of manufacturing these products do not require a large amount of initial capital or a high technical level.

It has been said that in recent years products manufactured in Viet Nam compete well enough to drive out Chinese products. If this is true, Vietnamese products should be developed for foreign markets.

- 3) Local industries can be created and a Vietnamese version of 'yixiang yipin' (one village, one product) campaign could be promoted. In China, each region tends to produce one to three types of products, like in the one-village one-product campaign which originated from Oita prefecture, Japan. Fei Xiaotong

in China noted the Japanese one-village one-product campaign. Chinese people also started to use such terms as 'yixiang yipin' and 'yixiang duopin' (one town, many products).

In the Red River Delta in Viet Nam, one of the most important issues is how to revive the traditions of cotton textile and bamboo handicrafts, popularized in 1936 by the well-known publication 'Les paysans dans delta tonkinois' by Pierre Gourou. If Viet Nam adopts a village specialty system, integration as in the past effect may be expected.

To vitalize local industries, as in the experience of Japan and China, the leadership from the private sector is essential. It would be useful for Viet Nam to make excirculation with model leaders in these countries.

4) Importance of the role of local governments (provincial, prefectural and commune)

It would be no exaggeration to say that local governments are the key to the development of enterprises in agricultural villages. In order to control trading costs when the market organizations have not yet developed, the existence of communal systems are important. Historically the communes in the northern part of Viet Nam appear to have executed its function. As observed in the Sunan model, it is possible for local governments to start collective-owned enterprises and become the main managers. As in the cases of the Zhujiang and Wenzhou models, the role of local governments in backing up enterprises should not be underestimated. The following actions will have practical effects in this regard:

- (1) Government itself undertaking to manage enterprises or associations of local enterprises (creating and managing commune-run enterprises)
- (2) Collection and dissemination of information and to enterprises and individuals, human linkage in administration, utilization of networks (government guaranteeing the expansion of selling routes and margin trading)
- (3) Legal arbitration in business-related conflicts between farmers within administrative districts
- (4) Institutional guarantees for development finance, reserving of profits of collective-owned enterprises at the township or village government, liberalization of deposit interest rates within specified ranges to attract surplus funds from cities (It is essential to reduce taxes for enterprises managed by individuals and legalize private financial organizations.)
- (5) Export-led development strategies, in coexistence with the countries of east and southeast Asia.

Apparently it is important to adopt the above policies to encourage and induce development from a multi-dimensional perspective.

Development of Rural Industry during Industrialization and Modernization in Viet Nam

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1. Nature and actual status of Viet Nam rural industry

(1) Nature and role of rural industry

In the world of scientists and managers, there are different opinions about the concept and existence of rural industry (RI). There exist 5 different ways of understanding of RI:

- RI is small artisanal industry in countryside distributed in craft/ trade villages.
- RI is industry in rural area, regardless of its scale and qualification.
- RI is industry serving the countryside, whether in urban or rural areas.
- RI is an industrial part located in rural areas and associated tightly with agriculture and countryside. It does not include big enterprises serving the whole country and less associated with agriculture and countryside. For example, exploitation enterprises, cement enterprises, military enterprises.
- RI is invested by farmers.

These concepts have common points as follows:

- Not referred to scale in RI concept. Although at the present, RI in Viet Nam mainly includes small -and-medium-sized artisanal industry (SAI). In the future, RI may include large enterprises.
- RI shall be associated with agriculture and countryside in terms of distribution market, raw materials and labor.
- RI is a dynamic concept.

In our opinion, RI is a part of the whole country's industry, distributed in countryside and has a tight relationship with socio-economic development in rural areas, including production and business activities of economic family-households, businesses of various economic entities, whose production and business operations are carried out on a basis of exploiting local resources and serving local, national and international markets.

Others are of the opinion that, RI has not been shaped yet but only small artisanal industry in rural areas. In our opinion, RI has been shaped over some decades and it is truly an economic entity that plays an increasingly important role in rural areas.

Because:

- The key form of RI in Viet Nam at the present is small artisanal industry, an initial form of industrial development, that has existed and developed for many years.
- RI is a large and independent force in the countryside, beside labor and business entities there exists also a large workforce specialized in handicraft and industry in rural areas. RI has created a not small quantity of products for the society, including capital goods and consumer goods to serve production, life and export.

RI exists in a subjective manner, for the following reasons:

- Law on social labor division takes place in the orientation that industry is splitted from agriculture to become an independent sector, at the same time industry, in its turn, returns to combine with agriculture at a new higher level; a part of rural labor is shifted to work in the area of industry and service. The more the industry develops to a higher level, the more the demand for combination is urgent.
- Development of RI in rural areas is also started from a high pressure, that is to settle employment in countryside, a place where land is narrow with a high density of population and labor is in a severe redundancy. According to statistic data, labor redundancy and unemployment in countryside across the country in 1998 numbered about 7.11 million persons, accounting for 25.3% of total persons needed for employment in rural areas.
- Development of RI is due to emergency demand from the very development of agriculture and rural areas. For recent years of renovation, Viet Nam agriculture has developed in the direction of commercial production and diversification. This requires industry for producing capital goods serving agriculture such as fertilizers, insecticides and working tools... At the same time, agriculture also requires the strong development of industry of preservation and processing of fishery, agro-forestry products with a view to raising productivity, improving value of agricultural products and minimizing losses and damages during farm-product harvest and preservation. Thanks to RI, farm-products value over an unit of cropping area has been considerably increased in recent years.

Our country is going upwards from an agricultural country, so RI and its development play a crucial role during industrialization and modernization of the whole country in general and the countryside in particular. This is reflected in two aspects:

- RI development will create more jobs and increase income for rural population. In average, a trade/craft-specific establishment/facility creates stable jobs for 27 laborers, a craft household for 4 - 6 laborers. Besides the number of regular employees, craft households and businesses still involve more idle laborers: 2-5 persons per household and 8-10 persons per facility, particularly trades of textile, embroidery, bamboo-, rattan-wickerworks, a facility can involve 200 - 300 employees. Income from RI usually can be 2 - 3 times as much as compared to pure agriculture, it numbers 70% for

farmer-households doing more than one trade/ profession.

- RI development creates a not small quantity of goods to meet demands of production, life and export. In many provinces, RI accounts for nearly 70% of gross value of local (provincial) industries and generates a lot of products such as processed agricultural products, handicraft articles, building materials to serve production and life at localities and many products that have been exported (handicraft commodities, bamboo-rattan wickerworks).
- RI development contributes to convert economic structure in rural areas. Through development of industry for agricultural, forestry and fishery products processing, industry of producing capital goods for serving agriculture and development of other industries, small artisanal industry that involve many laborers and create more jobs, RI has contributed to convert economic structure in rural areas in the direction: developing commercial agriculture with high economic efficiency, increasing proportion of industry and service in rural areas, converting labor from agricultural production with low income into development of industry with high income. Development of industry of processing longan, litchi, garlic, capsicum... even although at rough processing level (drying...), but it has an obvious impact on economic structure conversion in a number of rural areas.

Role of RI is of historical and stage nature. When the economy in general and urban economy in particular, develop at a low level, RI plays an important role, contributing actively to socio-economic development and structural conversion of rural economy. However, when the economy in general and urban economy in particular have reached a high development level, RI importance will decline, many products and a number of trades/ professions will give up their place and will be substituted by urban industry, such as ordinary textile, metallurgy, mechanical engineering... However, rural industry still necessarily exist and there are many products that cannot be substituted by urban industry such as artisanat (wooden craftworks, wickerworks, embroidery, porcelain, pottery handicrafts).

(2) Actual status of development of RI in the past years

2.1 Situation of development of RI in the past years

From 1990 up to now, Viet Nam RI has seen a considerable development but uneven and unstable. It has been present in almost all fields, with various products and has contributed actively in socio-economic development of rural areas in particular and all the economy in general.

a- Scale and dynamics of development of RI

From 1990 up to now, RI has seen two periods of development in two different directions: In 1990-1993 period, RI has considerably declined. Workforce in RI in mid-1993 remained only about 70% as compared to 1990. In the same period, total output value has been reduced by about 80%. From the midst of 1993, RI resumed its development. Basically, up to 1995, RI has been restored to be equal to its level in 1990. However, its structure has been significantly changed: Most products

produced previously in the centrally subsidized mechanism (for instance, export contracts on a basis of agreements between Vietnamese Government with other countries' governments, contracts for exporting many handicraft articles,...) have sharply declined, not able to be restored or restored insignificantly. On the contrast, many new commodities, designed and produced/ commercialized on a basis of market economy, had been developed rather strongly. Particularly, rapid development could be acknowledged in the industries whose products in a large demand from domestic market, associated with restoration of the economy particularly rural economy, for instance, ordinary construction materials, metal products (particularly in construction), garment, processed food,...

From 1995 to 1998, RI has seen a growth both in number of facilities, employees and results of production and business operations. According to survey data in a number of provinces, growth rates are illustrated in table 1.

Table 1: Growth rate of rural industries in some provinces* (%)

No	Provinces	Units	Labour	Output value	Annual average
1	Phú Thọ	13.9	30.4	40.1	8.02
2	Hoà Bình	27.0	7.5	31.7	6.34
3	Hà Tây	11.6	6.0	84.2	16.84
4	Thái Bình	5.6	22.0	61.1	12.22
5	Hải Dương	1.4	- 4.1	27.6	5.52
6	Dà Nẵng**	-8.6	-1.2	38.1	12.7
7	Daklak	83.1	40.0	46.6	9.32
8	Gia Lai		56.1	784.3	156.86
9	Kiên Giang	4.8*			
10	Tây Ninh	234.7	172.0	964.4	192.88
11	Đồ ng Tháp	29.4	12.5	-4.1	
12	Cá Mau**	-6.1	28.1	46.2	9.24

*During only 1997- 1998; ** During 1996- 1998

Source: Report on the survey of rural industries in provinces, 1999

Data in table 1 show that: Except for provinces in Red River delta, at localities where RI has reached a rather good level and scale of development sine 3 years, growth rate has declined, even sharply declined in some provinces. Meanwhile, in provinces where RI has not developed yet (Gia Lai, Daklak, Tay Ninh) the growth rate has been very high. This indicates that RI is serving mainly local market and there is a spreading from provinces whose RI is developed to provinces whose RI is less developed. It is just this spreading that causes the competition between RI facilities to become more rigorous. Meanwhile productivity, quality, particularly the change of design patterns of products in the "source" facilities is not faster as compared to newly founded facilities and villages, while just the transferrers of trades/jobs face more difficulties, even decline. This phenomena has been also recorded in a number of traditional artisanal villages such as La Xuyen (Nam Dinh), Huong Canh (Vinh Phu), Bat Trang (Hanoi).

Started from awareness of RI advantages in proportion of investment to each facility that is far much lower as compared to big enterprises, most provinces give prior concern to import non-agricultural trades/professions into their local areas to eradicate "trade-white" villages and communes. Many provinces have regarded this as a priority policy to develop RI in particular and industrialization/modernization of agriculture and countryside in general. Provinces in Red River delta are subject to high pressure in terms of labor and employment, as they have traditional artisanal villages, give a particular concern to this policy. It took a couple of years for Thái Bình province to eradicate this situation. Nam Dinh, Hà Tây and Hải Duong are also provinces that obtained good results in this orientation.

Comparison of growth-rates of 3 indexes in terms of output value, number of employees and number of businesses in different provinces has not shown any obvious and common interaction: while in a number of provinces, all 3 indexes are increased together, in other provinces, there is one that declines while others increase. Relation of direct proportion between growth rates of indexes have not been seen as well. This seems as a contradiction with common logic in interactive relationship between number of employees input with production value output and number of production facilities. This contradiction can be only explained by the restructuring of IR products: Due to change of demand, proportion of product output of low value declines, while percentage of products of high value increases. This is also in line with the trend seen in processing industry in rural areas: many agricultural products have been processed with an increasingly higher level.

Another noteworthy point is: in 1997 - 1998, economic crisis happened in South-East Asia. According to common logic, it has to influence our country's economy, of which there is RI, with a certain "delay". However, according to reports of provincial departments of industry in surveyed provinces, this phenomena of decline has not been noted largely in RI of these provinces. In provinces where RI is assessed as declined, output value and product output did not decline or there was only some changes of structure between products and trades.

This is explained because RI only serves basically domestic demand, firstly local demand, but it is associated with really stable and thoroughly investigated demand. Association between RI and urban industry, particularly under the form of processing association, is not common and popular. It is just this absence of association between RI and urban industry, that causes RI to face a danger: many RI products inherently distributed at local market are now substituted by urban industry's products. Typical cases include sweet, cakes, processed products. Economic globalization will make this effect more heavier and stronger.

Comparison of absolute value of said provinces can give a rather big difference between IRs in various provinces. Generally, provinces with high value of IR are those who have small artisanal industries developed for many years. Convenient infrastructure is regarded as a condition urging

forward IR to develop more stronger (but currently, no data have been collected to reflect their interaction relationship). Provinces in delta region generally reach product value of IR far much higher as compared to those in hilly and mountainous region. Value of RI in Red River delta provinces is also higher as compared to other provinces as shown in table 2.

Table 2: Output value of rural industries in provinces (Million VND)

No	Provinces	1996	1997	1998
1	Phú Thọ	166,426	186,835	214,478
2	Hoà Bình	55,520	65,319	68,025
3	Hà Tây	973,500	1,030,400	1,098,300
4	Thái Bình	116,993	110,356	992,116
5	Hải Dương	439,586	510,302	560,800
6	Đà Nẵng	370,937	425,877	512,330
7	Daklak	397,995	445,355	514,000
8	Gia Lai	182,501	200,768	
9	Tây Ninh	324,062	318,346	298,668
10	Đồng Tháp	483,554	550,080	542,114
11	Cà Mau	352,363	393,045	515,000

Source: Report on the survey of rural industries in provinces, 1999

Table 2 also shows that in 3 years 1996-1998, RI is not developed evenly in all provinces. Province that has the largest RI output is Hà Tây. In 1998, output value of RI in this province is 16 times as much as compared to Hoa Binh province (that has lowest output value of RI), nearly 2 times as compared to Hải Dương province (that has output value of RI ranked second after Hà Tây in surveyed provinces).

In some provinces, RI has seen not only no increase but decline both in results of production and business operations and the number of employees involved. Tây Ninh is a typical example. Output value of IR from this province declined in 3 consecutive years. Number of employees involved in this field also declined. The key reason for this situation is the conversion of economic structure in the orientation of expanding service area. Proportion of service industry has been continuously increased from 1995 until now and it has occupied the second position, 1.69 times as much as compared to proportion of industry in GDP of the whole province in 1997.

In economic structure of surveyed provinces, RI has only a very moderate position. Production value generated by RI accounts for only% in industrial product value of the whole province. In GDP of provinces, this proportion is much more smaller. In most localities, it has not escaped from the position as "an ancillary industry" associated tightly with agriculture. Just in traditional-trade villages, where RI generates over 50% of income for the community, agriculture is still regarded as "foundation" and RI as "ancillary trade/ profession" which produces so much whatsoever, is regarded as full of hazard.

Not only small from overall aspect, but also even each production facility/ establishment belonging

to RI and private business, joint-stock company, company with limited liabilities in rural areas also have a small size. According to estimation of State-management officials in many surveyed provinces, over 80% of workforce belonging to RI is operating in production facilities of family-size. With businesses of various kinds (private business, company with limited liabilities, cooperative), number of employees working on regular and stable basis is limited under 100 persons.

Size of average capital of these businesses in provinces surveyed in 1999, fluctuates between VND 60 million to 90 million. If compared to cost of equipment and technology in current market, level of social investment to RI (see table 2) is enough only for rehabilitation of buildings/ shops or procurement of some additional equipment locally manufactured of low or average technological level. With such an investment from provinces, it is able to secure investment to some enterprises and not quite enough for investment to many enterprises with modern equipment, not to mention automatic equipment capable to manufacture products with high precision and homogeneity, enabling to diversify products easily.

Table 3: Investment in rural industries in the surveyed provinces during 1998 (million VND)

	Provinces	Investment capital	Invested units	Investment capital/unit
1	Phú Thọ	35,695	931	38.3
2	Hoà Bình*	2,751	384	7.2
3	Hà Tây	72,114	6,856	10.5
4	Thái Bình	25,580	47	544.3
5	Hải Dương	35,378	2,586	13.7
6	Dá Nang	13,843	109	127
7	Daklak**	59,481	2,310	25.7
8	Gia Lai	43,452		
9	Tây Ninh	100,345	5,214	19.2
10	Đồ ng Tháp	6,293	149	42.2
11	Cà Mau	83,073	3,067	27.1

Source: Reports by Provincial Departments of Industry, 1999

* The first half of 1998

** For 1997

Data in this table also indicate that investment level to facilities at localities differs very much from each other. While output value of RI in Red River delta is higher as compared to other provinces, the investment rate for facilities in this area is lower. This trend enables us to forecast that in some time to come, output value of RI in other provinces is likely to catch up Red River delta. Moreover, it can be expected that with such investment, technical and technological qualification of Red River delta will be improved more slowly than other provinces.

b- Structure of trade/industry and products

According to reports from provinces, in trade/industry and product structure of RI, the industry which accounts for the highest proportion is food processing industry. This percentage reaches the

highest level in Tây Ninh province with more than 77%, Ca Mau with 70% RI output value generated by the food industry and the lowest is in Thái Bình with proportion of 18.8%, Daklak 26.5% (in 1998) respectively.

It is noteworthy that in reports from most provinces, the food industry has been increased in 3 consecutive years 1996 - 1998. However, if looking thoroughly at the situation of this industry, we can infer that it has been developed mainly in an extensive way and almost no change has been made in terms of quality. Its products in this period remained to have no significant change and it was only service of grinding and rough processing of farm products, producing sweet and cakes of low quality and distributed mainly on local markets. In organizational respect, major kind applied in this industry is production from households with basically manual equipment.

One of the factors influencing strongly on the change of industry/ trade and products of RI is the change of tradition and habits of consumption and income of the community. In the past years, average income per capita in countryside has increased, nature of commercial production of agriculture has been raised. Therefore, rural communities have the trend to increasingly use processed products and goods of high quality and higher cost as well.

Deliberation of rural consumers has been more balanced between price and quality. Proportion of goods at average and high price has been slightly increased.

Two other industries which have rather important positions in RI are production of building materials and small mechanical engineering industry (particularly mechanical service of repair). In 9 surveyed provinces taken as a whole proportion of mechanical engineering in total output value of RI in 1998 is 13.38% and of produced building materials is 15.99% respectively. Looking at structure of industry/ product of each province, except for provinces in Red River delta and Dong Thap, where produced building materials accounts for a large percentage, in other provinces small mechanical engineering industry occupies a percentage many times larger as compared to construction materials industry. This reflects partly the actual structure of products of these industries: first and foremost the materials producing industry gives only ordinary materials: (bricks, tiles, lime, sand, pebbles, stones, construction porcelain, ordinary enameled tiles with low quality,...) serving construction works of local communities. In delta provinces, where the population is dense with a large demand for construction and average income capita is not as high as in urban areas, the said products are in large demand and high consumption (4). On the contrast, in other places, demand for metal products (including farming tools, metal goods (ironmongery) for construction...) and mechanical service (especially repair services) is in large demand and has conditions for stronger development.

Industries yet having small size and proportion, but exist in most provinces are textile and garment, leather-shoes, handicraft.

Development of each specified industry or trade takes place in different ways.

In 1998, proportion of textile and garment industry in total RI output value reaches its highest peak in Phu Tho (15.65%), Daklak (13.8%), Hà Tây (13.0%).

Noteworthy are 2 two provinces whose textile and garment industry used to play an important role with a rather high percentage (15-20% of gross RI product), namely Hải Dương and Đá Nặng, this proportion declined sharply (down to 6.2% in Hải Dương and nearly 6% in Đá Nặng). The reason for the sharp decline of this industry in said provinces is due to the loss of link between RI in these provinces with production and commerce facilities of the same industry in urban area (that used to be maintained under the form of processing relationship, including processing relationship which foreign countries). Just in Hà Tây, before 1995, percentage of textile-garment industry always numbered 15-20% of RI gross product value due to maintaining processing relationship with many facilities in Hanoi (among them, Hoa Xa textile village is a typical example). Currently, these relationships are lost, and product value of this industry declines accordingly, that causes their percentage to decline respectively.

From above-mentioned analysis on industry structure and product structure of RI in surveyed localities, we can draw some remarks as follows:

- First and foremost, RI has a change in structure of industries/ trades and products in the orientation of association with market and subject to the market adjustment. The reason is that, production units of RI really operate as per market mechanism. However, changes in industry/ trade structure of RI are not yet basic changes. These are changes in terms of quantity of an industrial entity, that are mainly targeted at product manufacture as on-the-spot service for local demand.
 - In the past years, advantages in terms of on-site resources and natural resources has declined in respect of their role in IR development. Such factors as tradition, production experiences, workmanship have not maintained any longer their determining position for development of each production facility, even of each area. Regarding this issue, relationship of traditional clients, capacity of applying scientific technological advances, capacity of diversifying, renovating and improving products to be in line with consumers' requirements are of increasingly higher importance.
 - Relationship of association between RI and urban industry influences strongly on capacity and orientation of RI development.
- c- Geographic distribution of RI
- RI development takes place unevenly between regions in the country. Areas with strongest development are delta areas and those previously existed rather strong development of artisanal trade villages.

Even in each province, development of each part is not similar to each other. Areas with pace and level of high development usually are: i) areas with high density of population, ii) areas having convenient conditions of infrastructure (particularly road system), and iii) areas with non-agricultural production tradition.

In RI development, handicraft-trade villages are playing an important role. The spread of these trade villages has not taken place as expected both in size and rate. However, they remain as industrial production centers in rural areas. Firstly, provinces in Northern delta, where exists a tradition for artisanal production, have a largest scale of production among all surveyed provinces (table 2). Secondly, even in Red River delta provinces, RI also reaches highest output value in districts or parts where many traditional trade villages exist. Comparizing values of industrial outputs of various districts in Thái Bình province, we found that areas with many traditional trade villages produce more than two times as much as compared to areas without traditional trade villages (see table 4). A similar result is obtained if analyzing data of Hải Dương and Hà Tây provinces. Also in areas with such villages, exist most businesses (private business, company with limited liabilities and joint stock company).

Another study on the trade producing consumers' goods made from rush plant in Kim Sơn district (October 2000) also indicates that in villages where rush commodities are of traditional trade, even in most severe years and months, income of craftsmen is always higher as compared to pure farming laborer. On the other hand, it is just the rust-trade laborers who have found out how to improve design learned patterns and learned models which are in line with requirements, with a view to seeking and obtaining new markets for their own products.

These above remarks show that reality is on contrast to extreme conclusions that trade village, due to the nature of its traditions and conservatism is hampering RI development in these localities.

Table 4: Output value of rural industries in Thai Binh by district (million VND)

No	Districts	1995	1996	1997	1998
1	Township	91.479	115.413	139.650	142.100
2	Vũ thu	55.828	76.728	91.306	91.306
3	Kiên xuong	101.852	90.237	103.000	105.926
4	Tiên hái	76.316	89.028	95.076	98.492
5	Đông hung	82.287	101.180	111.500	114.200
6	Quy nh phu	48.230	69.955	64.500	71.754
7	Hung hà	237.954	311.667	302.025	270.628
8	Thái thuy	52.605	76.900	82.745	87.710
	Total	746.551	931.108	989.802	992.116

Source: Report by the Department of Industry of Thai Binh, 1999

d- Market of RI

Observations made in different localities in all North, Central and South regions, permit to identify key channels and forms of product distribution of RI as follows:

- Processing for businesses in urban areas (industrial production, import-export).
- Selling directly to suppliers/distributors (with various forms of payment such as down payment in-cash, payment in advance or on credit, barter,...).
- Distributing directly on the market.

The two forms of processing for and selling to suppliers are recognized as common. This permit to acknowledge the hypothesis that, labor division has really developed a step, commercial production has been raised up to a higher level. From this, we can see that RI market has been expanded due to having a link that assumes this work, and shared profits from production units.

RI products are mainly distributed in domestic market, of which most are distributed just at the locality or adjacent areas.

A survey in Tu Liem district shows that over 2/3 artisanal households distribute their products just in district area, or bring their products to be sold in the city or adjacent districts in Hà Tây, Vinh Phuc provinces. Most of products belonging to farm-products processing industry, building materials, metal goods-mechanical products, earthenware, are of this kind. It is noteworthy that earthenware (pottery, porcelain) of low quality that had been previously sold to underdeveloped areas of China in a large number (in the early years of nineties) are now absent in the border area. On the contrary, while the trend of sewing clothes by oneself (for use by individual and family) in rural areas has been substituted by the increasing trend of using ready-made clothes, on domestic market, products of textile-garment industry are increasingly subject to competition by Chinese garment products. Just in border area of Ha Giang province, price of a man's suit of China is only equal to 1/3 - 1/2 of that of a suit of the same quality from Viet Nam. This has not only an adverse impact on production of garment industry in urban areas but also in countryside. In the early years of 90's, Co Nhue commune thrived rapidly on goods processing to export to Korea and other countries. Currently, due to competition, the garment trade there has declined by more than one half as compared to peak point.

However, a lot of traditional artisanal products have been exported to other countries, particularly developed industrial countries.

Wickerworks, rush commodities... that have sharply declined to an extent that over 50% of production facilities had to be dissolved previously, have been restored, even resumed their strong development. Their market from the situation that they were only distributed to East-Europe, has been expanded to "hard-to-please" markets such as West-Europe. This indicates that RI products are not unable to be exported to developed industrial nations but the key problem is whether these

products could be recognized as appropriate and compliant with requirements of customers.

In the years the economy is converted into operating in market mechanism, this mechanism is not only applied to products of output but also raw materials and services. Even labor market has been shaped.

e- Technology

Technology of RI is generally assessed as at low-level, despite of some significant renovation in recent years. Surveys carried out in selected areas show that technological renovation has major characteristics as follows:

- Technology and techniques of RI production units are generally assessed as backward. Manual techniques are applied commonly to RI. In Hà Tây, a province with largest product value of RI among surveyed provinces, average capital for equipment per capita reached only VND 3.433 million in 1998 rather smaller as compared to other provinces.

Small mechanical repair industry as best equipped reaches only VND 5.745 million per capita. According to assessment by industry-control authorities (Provincial Department of Industry), technology in industry of small mechanical repair, building materials production, food processing and handicraft is at average level, but in other industries, it is backward as compared to the common level in Viet Nam. Just in Daklak and Gia Lai provinces, where RI output value is not high and workforce is not numerous, their capital for equipment is high. Average capital for equipment in RI of surveyed provinces is collected by just provincial Departments of Industry of surveyed provinces.

Table 5: Capital per head in provinces (million VND)

No	Provinces	
1	Phú Thọ	5.440
2	Hà Tây	3.445
3	Thái Bình	1.395
4	Hải Dương	7.520
5	Đà Nẵng	9.800
6	Daklak	10.951
7	Gia Lai	6.540
8	Tây Ninh	5.825
9	Đồng Tháp	6.387
10	Cà Mau	7.458

* For food processing only

Source: Reports by Provincial Departments of Industry

Data in the above table also enable us to remark that level of capital exploitation and use by various provinces are different from each other. It is just in the places where equipment capital is high, its exploitation and use is not as good as those with low equipment capital.

- Technological renovation takes place intensively firstly in industries whose products are in large demand and common on the market, with high affordability. Spreading, development and

rather high proportion of such industries as food processing, household furniture manufacture, artisanal articles..., constitute typical example for this situation.

- Technological renovation often takes places in a focussing manner, particularly in services for consumers' demand of taste nature. In wooden furniture manufacture, improvements and innovations in recent years are implemented in processes of polishing, paint spray,... which are processes recently concerned by consumers. These innovations are usually associated with product renovation in line with modern trend of consumption.
- Technological renovation has been associated with production mechanization. Manual labor as previously common has been substituted by usual machinery and equipment. In trade villages of food processing, furniture manufacturing, many processes have been equipped with machines. In Dong Ky village (Tien Son district, Bac Ninh province), most families have used machines of small capacity in most processes ranging from timber splitting and sawing, up to product polishing. Local paint and traditional lacquer used previously are also substituted by imported spray-paint, not only to give a high glossiness but also using modern sprayer. Artisanal households manufacturing stone-handicrafts in Non Nuoc (Dà Nẵng province) and Ninh Binh province also apply small machines in stone splitting, surface-grinding, chiseling.

Through survey in these villages and households, proportion of "self-built" machines has declined, and number of machine/ equipment bought from mechanical manufacturers has increased. However, there have not any design and research establishment for these specific equipment to serve RI facilities. In witness, although mechanical enterprises supply equipment to RI facilities, but over 60% of cases are that they implement to users' orders, on a basis of what they have observed or innovate just the equipment that are being used by these facilities. A small proportion (about 10%) of households manufacturing stone handicrafts in Non Nuoc (Dà Nẵng province) still informed that equipment are manufactured as per sample or description given by themselves.

In trade villages of food processing (alcohol distillation, vermicelli, cake and processed food of various sorts...), equipment and tools of production are all manufactured by the producers themselves.

Surveys conducted in Ninh Binh, Dong Anh, Hà Tây, Nam Dinh from June to October 2000 show that at this moment, machinery and equipment used in IR are mainly of origin as discarded from big industrial enterprises in urban areas, another proportion is imported from China and finally, the remainder is self-made machinery, equipment.

Data from surveyed provinces also show that basically, production facilities are very small in size and their technology is backward and old-fashioned. If compared with survey conducted in 1996 in a number of provinces, size of RI businesses has been considerably increased. However, with average capital of each business as at the present, it is not enough for procurement of modern equipment and performing the mechanization.

Another important feature is that, while modernization of RI technology is generally conducted with a slow pace, many areas of agricultural production associated with technology have been applied much more with technological advances, particularly biological technology. Almost all provinces in the delta region (Thái Bình, Hải Dương, Hưng Yên, Hà Tây,...) has introduced many new varieties into production and developed new production orientations (culture of mushrooms, rearing animals of speciality,...). This can be implemented thanks to impacts from local industry and service.

f- Fund for RI

RI requires a large amount of business capital. This funding is usually required for resolving of 3 problems as follows:

- New development of production facilities/units, particularly for business-owners who start their business operations (new business thanks to learning job from other places, separating from old facility to set up a new one, household separation, investment to a new locality,...).
- Maintaining and expanding of existing production facilities, particularly in the case where the facility has a good standing through some years, maintained and stabilized its marketplace, found additional big and reliable clients,...
- Building and upgrading/ modernization infrastructure in territorial area (rural area) to serve the tasks of socio-economic development in the locality in general and RI development in the locality in particular.

To meet these requirements, RI facilities have raised their fund mainly from the following sources:

- Self-owned fund of householders, business owners. Generally, this self-owned fund is still limited because i) initial accumulation of these business owners is small and has been invested mostly into initial business operations ii) profits from business operations and accumulative part for re-investment to production expansion are small (due to small business efficiency and scale), and iii) in some cases for different reasons, so they are really uneasy in mind to put more fund into business and afraid of risks.
- Fund borrowed from idle money of the community through banking system. According to survey conducted in 1998 by the Bank of Agriculture and Rural Development, about 10% of households have average savings-deposit of VND 10 million per annum. Therefore, capacity of involving fund from deposits at Bank for economic development of rural households is still limited because low accumulative capital and population habits in rural areas are unfavorable and banking service is not really good.
- Fund from non-official financial market. According to survey results from the Ministry of Agriculture and Rural Development in 1997, only about 30% of facilities are allowed to borrow capital from banks. This fund resource also meets only 30% demand of rural business households

for capital borrowings. Amount of non-official fund from private loans or other non-official loans accounts for 20% of funding demands of businessmen in this sector.

- Fund from national assistance funds such as fund for poverty reduction, fund from non-government organizations. This resource is not large in number but it has a good effect due to rather easy conditions of loan, favorable for business and production facilities in countryside.
- Fund allocated from the State budget at both local and central level. At the present, development of agriculture and rural areas is a top-priority strategical task of the whole country, given incentives in terms of fund. However, when the amount of fund allocated to localities, the part granted to RI is insignificant.
- Fund from the community for RI. This is always an invested capital indirectly reserved to RI under the form of community's contribution for infrastructure building and development (roads, power-supply system, socio-economic system of service...).

One of noteworthy problem jeopardizing the continued exploitation and mobilization from the outside for RI is that the efficiency of using fund for RI is rather low. Data collected from typical survey show that proportion of profits over investment capital in RI only reaches less than 4% per annum in businesses, companies, cooperatives and less than 30% in individual business households, far much lower as compared to facilities of the same kind of service in countryside.

g- Labor and training for the rural industry

The development of the rural industry (RI) has involved many laborers and created many jobs in rural areas. The rural industry involves laborers of different ages for its production activities. The development of traditional craft villages has created jobs not only for local people but also for ones from other areas.

Along with specialization of commodities production as per traditional craft villages, RI's workers are also specialized as per commodity or component/part of the product.

Laborers of rural industry have various skill levels. They mainly have been in the way of on-job training, on-site training and handing down a trade. Theoretical qualification of laborers staff in RI is usually low. This factor hinders the innovation ability of the RI workers. The commercial and managerial staff of the rural industry also have a lot of limitations. Most of business owners have not been trained systematically in trading and business management. A major part of them are at low education level. Their knowledge of international trade, laws, computer as well as foreign languages are very limited. These limitations cause many difficulties for the production facilities in the rural industry to access to the world market for expanding production activities. They also suffer disadvantages in the transactions with clients from both inside and outside country.

The rural industry workers usually get income 2-3 times more than the pure agricultural laborers.

h- Production organization

The household production still is the main form of the production organization in the rural industry. According to survey results from the selected areas, the household production represents about 90 percent of the rural industry laborers, generates more than 80 percent of product value. The characteristic of these households is the combination of handicraft and agriculture production. So far, the workers of rural industry are not completely separated from the agriculture production. Households whose members do not take part in the agriculture, still keep cropping land and hire laborers from other places for their farming works. In La Xuyen area, the apprentice workers help the masters' families to harvest or come back home on leave during the harvest seasons, only then continue their training.

Businesses of various kinds have been set up in rural area. Its activities partly contribute to the development of rural industry.

The traditional craft villages are considered as an important factor for rural industry development. These traditional craft villages play specific role in the development of the Red River delta. Preliminary statistics show that there are more than 300 traditional craft villages in this area. At the beginning of the nineties, the restoration of these traditional craft villages have contributed fast development for RI as well as made us expect that we already found out the answer for RI development. Over past years, the practice did not meet our expectation. In the majority of traditional craft villages, although there are upscaling, mechanization and variation of household production, the growth is not in line with the potential. There are not households that are big enough to involve other households to form large businesses that they can go out to the world market or run effective competitions with international companies even at home market. The products of Trieu Khuc textile village even have been exported but mainly elbowed their way to "branch market". Almost no long term investment is available.

The kinds of limited and joint-stock companies are also applied in RI. The number of limited liability companies is larger than the number of joint-stock companies because the operating mechanism and the foundation procedures of the formers are simpler. The reported figures from surveyed provinces show that there are only 252 companies of both kinds in 1998, an increase by 62 as compared to 1996. According to these figures, except Hài Duong and Phu Tho provinces, the number of companies in other provinces of these seven provinces is growing continuously. Although there were not official reports and statistics from provinces, following the evaluation of many experts, the number of companies increases not much even after significant simplification of foundation procedures and trade registrations for private enterprises. The main reason is that the owners of rural production facilities still do not perceive the need of enterprise foundation as a business tool. This factor also indicates a simple character, small size and need of cooperation/assignment of

production facilities in RI .

Table 6: Number of private enterprises, limited liability companies and joint stock companies by province

No	Provinces	1996	1997	1998
1	Phú Thọ	30	27	28
2	Hà Tây	30	38	44
3	Thái Bình	12	15	16
4	Hải Dương	56	54	53
5	Đà Nẵng	49	59	82
6	Daklak	7	10	9
7	Gia Lai		12	20
	Total	184	215	252

Source: Reports by Provincial Departments of Industry, 1999

Two provinces of Me Kong delta (Đồng Tháp, Cà Mau) and Tây Ninh, that are not similar to provinces mentioned above, have hundreds of enterprises of these kinds. Those production facilities mainly function in the field of food processing (rice husk and polish). The facilities were set up by business men doing rice processing for export companies coming from big cities, especially Ho Chi Minh city. Moreover, there are big quantities of rice to process, the businessmen need an enterprise as legal instrument to facilitate transactions and organize business activities (particularly for sales contract with other clients).

i- Effect of production and socio-economic impacts

In general, the effect of production and socio-economic impacts of RI can be evaluated as following:

- The RI helps to create jobs for a large number of laborers in rural areas. Particularly in Thái Bình province, in 1995 RI created about 150,000 jobs that involve about 20 percent of laborers in the province. Kiên Giang province has more than 30,000 laborers working for RI that account for 2.8 percent of its rural population; Cà Mau has more than 10,000 people (about 1 percent of rural population). The respective indicators in Đồng Tháp are 35,000 (2 percent), Hải Dương - 36,000 (8 percent, not including 45,000 people working for RI by seasons), Hà Tây- 150,000 (7.1 %), Thái Bình - 143100 (7.9 percent),...
- The RI helps to increase income for the rural laborers. Thái Bình province statistics also show that 20 percent of its total laborers provide 30 - 35 percent of its total income for rural area. It means RI laborers get income 1.5 - 2.0 times as much as compared to agricultural ones. The practice indicates that the living standard in those areas that have non-agricultural jobs is usually higher than the living standard in pure agricultural areas. The living standard of non-agricultural households is higher than the living standard of pure agricultural households. The practice occurred

in contrast with the farmers' calculations: the living conditions of the farmers who possess cropping land are not more stable than the living conditions of the craftsmen who have no cropping land. In contrast, because agricultural production is unstable, it depends much on weather conditions, the different levels of price between raw agricultural products (especially rice) and industrial-handicraft products become bigger and bigger, the living conditions of the farmer, especially the living conditions of those people who grow rice, become unstable compared with the craft workers.

- The RI and its development contribute to change the rural economic structure. This change of the structure first is due to fast growth of RI. The proportion of agricultural products in the total products is intensively declining although its absolute value is increasing. Moreover, the RI has an impact on trade structure and variation of products in the agriculture: the monoculture was changed by a wide variety of plants and home animals; Extensive farming was changed by intensive farming,... In many areas, professional business services with big size and large area have been also established due to fast development of RI. Chau Giang district (Hung Yen province) that was a pure agricultural area, runs business from the North to South with hundred trucks.

- The RI intensively contribute to the urbanization and modernization of rural areas. Many townships and concentrated population points have been set up in those areas that developed RI. In most rural areas, the living custom has been changed under RI production or its infrastructure. On the other hand, RI in the process of its development, provides more completely necessities and industrial products for rural people. Small mechanical engineering industry not only repairs production means but also produces and supplies to local people simple production means fitted to local characteristics.

- An important part of RI that functions in the field of processing agricultural products, is located just in the rural area. These production facilities have many impacts: on the one hand, they improve the value of raw agricultural products, then increase the effect of agricultural production. On the other hand, they help to minimize the losses after harvest, subsequently increase agricultural productivity, create premise for reducing necessary cropping land and keep it for other purpose. Finally, these production facilities allow to increase their productivity in the field of processing themselves by reducing transportation cost and using scraps from food processing industry for agricultural purpose (produce microorganism fertilizer from scraps of food processing industry,...).

2.2 General assessment of the RI development over recent years

We can come to conclusion on general assessment of the RI development as following: over recent years of renovation, the rural industry has developed openly and effervescently under the impacts of such policies as the rural development and multi-sector economy. The RI has obtained essential results and achievements as following:

a) **The RI has been developed both extensively and intensively, especially extensively.** From extensive approach, the RI has been developed in productivity, size and good growth rate. Period 1986 - 1990: the RI generally developed well; 1990 - 1993: the RI developed slowly because it could not succeed in reorientation and restructuring when the national economy shifted intensively to the market economy; 1993 - 1997: the RI developed better. The growth rate of RI in many areas got 7-9 percent, especially the Southeast region got more 15 percent; 1998-1999 the RI development stopped. Generally speaking, the RI has seen a growth over recent years.

From intensive approach: the RI development shifted to the needs of the market. Which items of product? How is the quality? The production facilities should meet the requirements of the market. Many traditional villages changed their items of product to meet the market needs. The pottery villages shifted from making popular pottery to art pottery. Da Hoi village shifted from making agricultural mechanical tools to making consumer mechanical goods and construction mechanical tools. A majority of production facilities invested and renovated their technology (although it was at low level) for increasing productivity and improving the quality of products.

b) **The traditional craft villages as a main force of RI has been developed well.** In the whole country, there are about 1000 traditional craft villages. These villages are mainly located in the Red River delta. The traditional craft villages have long history of development and prove its strong vitality. Many traditional craft villages obtained growth rate at 20 percent per year. The strong development of traditional craft villages and appearance of new traditional craft villages by expanding mode have promoted RI development in many rural areas. If in 1995, there were 493 traditional craft villages in the region of Red River delta, then after three years (1998) the total number of traditional craft villages in this region increased to 731. It accounts for 70 percent of total traditional craft villages in the whole country. The traditional craft villages become backbone and motive force of RI development.

c) **It appears some new factors in the RI development as following:**

The average and small industrial areas have taken shape during the RI development. In Ha Tay and Bac Ninh provinces, some traditional craft villages have been expanded and became small and average industrial areas. These areas are separated from population areas and do not cause environmental pollution and the problem of infrastructure for RI development can be solved there.

- In rural areas of traditional craft villages, businesses have been developed, mainly private businesses and limited liability companies. These facilities contribute to production expansion, trade development and goods production in rural areas. There are more than 50 limited liability companies and cooperatives for furniture manufacturing in Dong Ky village (Tien Son district, Bac Ninh province); Dinh Bang (Bac Ninh) commune has more than 10 limited liability companies, one enterprise in joint-venture with Taiwan producing fashion shoes for export, one facility for

processing agricultural products, four facilities for casting non-ferrous metals, five cooperatives for producing hygienic papers.

- However, there are some limitations in the RI development over recent years:
- The RI is still small and backward, it is not strong enough to change economical structure in provinces. In many local areas, the RI still is considered as " the side profession". The total product value of RI number only 10 percent of total product value of the province. Proportion of industrial households is very small. The 1999 statistics show that proportion of industrial and construction households in the whole country occupies 2.7 percent, for the red river delta, the figure is higher and occupies 3.69 percent. Production means industry is very small, processing industry for forestry, agriculture and fishery is not big and has backward technology. That is why the RI development do not influence much on the change of economical structure of the province.
- The RI development is unstable because of the market difficulties and low competitions of the RI.

The RI and Viet Nam industry face the same difficulties as market availability. On the other hand, because of backward technology and equipment plus limited fund, the RI products have low and unstable quality. The products undergo high cost-price and have low competitiveness. Then, the production facilities don't like to invest and expand its activities.

- The RI development bring about serious environment pollution (air, water...) in many rural areas. Because the technology is backward, it has no processing equipment for industrial waste, the production facilities are usually located near by population residence, the more the RI develops the more environment pollution is serious. The temperature at Huong Canh village (producing brick, tile) and Bat Trang village (producing pottery) is 2-3 °C higher as compared other villages; the water at Duong Lieu, Lang Van (produce foods) undergo heavy pollution.
- There is an uneven development of RI among provinces. The RI developed well where it has traditional craft villages. The Southeast provinces have RI more developed than other provinces. Ha Tay province got highest product value (in 1998 - 1,098,300 million VND) and it is 16 times more than Hoa Binh province (68,025 million VND) and it is 2 times more than Hai Duong province (1998 - 560,800 million VND).

The reasons of weaknesses mentioned above are: a) The government has no plan of RI development, and the RI has developed spontaneously. The government also has no complete set of policies for encouraging RI development; b) The endogenous ability of RI is low.

2. Environment and conditions for RI development in Viet Nam

The RI development is not separated from the common environment of national economy. However, the RI environment includes specific factors affecting the RI development in different ways. Every component environment factor for RI development also undergoes influence of many other factors. The characteristics of the component factors that affect the environment and conditions for its development, are shaped and changed during long periods. These factors are interrelated. The influence of every factor on RI is not similar in provinces. Then, every local area needs specific study on the impacts of every factor in order to make suitable interventions.

(1) The impact of socio-political environment on RI and its development

The socio-political environment has enormous and decisive impact on orientation and development of RI. There have been many policies for agriculture and rural development issued after the 5th conference of Central Committee of Party (7th congress). These policies encourage fast and sustainable development of RI in order to urge on socio-economic development in rural areas. In many provinces, the local authorities issued specific policies of industrialization, modernization, and RI development. There are not only policies from the central government but also local policies of industry and small artisanal industry development. For example, Hoa Binh province had two decisions, one from Party Committee (Decision N 33 CT TU issued on 04.01. 1995) and another from the people's committee (Decision N 76 QD/UB-CN issued on 18.01.1995), that were related to small artisanal industry development. Thai Binh province also had decisions from Party's Committee and People's Committee (Decision 09) related to economic development programs. Besides provincial decisions, many districts made its decisions about policies on trades and traditional craft villages development in the areas. However, many other provinces were passive and had no decisions and policies on industry and small artisanal industry development. These provinces were also passive in orientation and management of this economic field.

One very important factor for RI development is the perception of the ownership in this sector. There are different perceptions of this concept as mentioned above. The survey results from 12 provinces showed that the officials of industrial departments of all 12 provinces considered RI as only small artisanal industry (SAI). The policies of RI development only oriented to SAI development. That is why the focus of these policies emphasized on providing credit for people, trade introduction and training, conditions for production places..., investment for road and electricity development was also paid attention in many areas (in rural area, the way is that the government and people together do invest). Then, the local authorities could not issue long-term consistent policies for the local RI development. The policies of market, integration,...., related to indirect policies for economic regulation by economic levers, were not specified in detail and applied commonly in provinces.

Besides Party's and government's policies of RI development, other social factors also have active impacts on the RI. Of which two primary factors are:

- The custom and tradition to help each other in rural area, especially the relations of family line and worker classmates in some traditional craft villages. This has positive impact on RI development because it creates favorable condition to mobilize initial fund for those people who want to start business, able get training and necessary experience to run business. In many cases, the support includes shift of clients or "business tips", or agreement on the market division, competition control, or at least excluding competitive practices that could bring about common losses for the trade. In La Xuyen (Nam Dinh), Dong Ky (Bac Ninh) when the adult children set up separate households, most parents provide them with initial fund (the amount of money is different, it depends on each family, but the fund is usually enough to start business), transfer/assign some contracts/orders (it is usually the case of clients previously known to the employer/householder), share necessary experience. In some cases, the old parents help to manage business for new households for the first period until the activities become normal. These phenomena were observed in most traditional craft villages in provinces Hà Tay, Thái Bình, Hưng Yên, ...However, this relation has a limitation that it is only for the members of family line and it is not popular. In particular, the trade secrets, know-hows are not disseminated largely on a disinterested basis.
- The role of some mass organizations in the RI development. Women union (in programs of poverty reduction) and the professional associations have special role. In every area, these organizations, on the one hand, try to import new profession (organize training on new profession, mutual assistance to learn new profession in other places, self training among their members,...), on the other hand, to find out the funding source, introduce clients or help to advertise the products, ... to help the producers to distribute their products. These organizations also play an important role, despite of its ephemeral nature, in supporting producers with marketing their products, training and upgrade knowledge of business management, ... The consideration of activities of related agencies in the long term program of these organizations is necessary in the upcoming period.
- One important factor concerning socio-political environment is the attitude towards and settlement of concrete problems arising from every area. In the local area, where the authorities pay attention to helping the production facilities to overcome their difficulties, the business activities could develop well. Stability and consistency of the local authorities officers (concerning all organization, policies and specified personnel) also play an important role in RI development.
- Among the factors that hinder the RI development, this is the overlap in the state management for some RI aspects, at the same time, omission of other aspects, especially in resolving or supporting to resolve completely the local difficulties. The coordination in activities of state management system for the RI is also considered as the second weak point in the state management and its role for the RI

development. These two points were mentioned in 8 of 12 provincial survey reports. Moreover, some provinces emphasized two other points as i) There is not an appropriate law corridor in which the production facilities can actively explore resources for business development, and ii) Control and supervision works should be done properly in order to help them adjust their mistake on time, avoid conflicts and disadvantage subsequences. What concerns the second problem, there is an opposite opinion from the production facilities: the enterprises always complain that there are too much unnecessary procedures and papers. At the same time, they undergo a lot of inspections, repeated inspections, inspections without complete conclusion,...

(2) The impact of economic environment on the RI development

The economic environment has impact on the RI and its development as following:

- The market and demand of the RI products. In general, the RI products are mainly sold in rural area market. However, all provinces have the RI products exported. For example, the furniture of La Xuyen (Nam Dinh), Dong Ky (Bac Ninh) are sold even in Taiwan, China, Hong Kong, Southeast Asia, West Europe,... Many textile garment products have ever been exported to Europe. The value of exported RI products has achieved USD millions every year. However, on the other hand, on the spot market is the essential market for the RI products. The characteristics of this market are low income, limited purchasing capacity. The common custom of the consumers is that they like to make products themselves to meet their needs following a self-sufficient way. Over about ten years, this custom started to change into direction of commercial production. The farmers intensively make various kinds of commercial products (including agricultural products) with high productivity for selling. They buy necessary products in the market (including agricultural products). Consequently, the change of income of the farmers leads to the change of the size of the market and influences the RI development. This negative impact can be observed in the regions with high rate of population growth and low rate of economic growth. In this case, consumption structure is not good for the RI products. The additional income firstly is for the necessities as foods and not for other industrial products.

- Economic growth rate and the RI development. This is an interactive relationship: those areas that have high rate of growth, have a developed RI. At the same time, those areas that have the RI with big size and high rate of development, have more favorable conditions for high rate of economic growth. The most important impact of the fast economic growth is that it creates many opportunities for the RI production facilities.

- Rural population and motive force for RI development. Population and labor are considered as resources for the RI development. In practice, not every region with high density of population has the RI developed. However, high density of population and numerous labor press on the development of RI. That explains why many populous regions in Hà Tay, Hung Yen, Thái Bình, could easily accept non-agricultural professions faster than others. The people here are easy and active to seek and import

handicraft professions faster than the people of Mekong delta. This is a basis for two ways of formulation of handicraft trade. This influence on directions of RI development in two major deltas in Viet Nam: in the Red River delta, the producers import any trade as practicable as possible. In the Mekong delta, people import only trades that they need most. These characteristics require different directions of RI development for different regions. The intervention measures must be different accordingly.

- Private investment and the RI development. Theoretically, the more investment fund (accumulation) is available, the more investment can be allocated for the RI development. However, when the proportion of investment is high, it remains limited resources for consuming, purchase capacity declines and adversely affects the market of RI. And the local market is the essential market for RI. Then, where the provinces are richer, the people have higher income, the RI develops more strongly. On the contrast, in those provinces where people have low income, the economy is underdeveloped, the RI develops slowly. It is difficult to compose the RI into the production structure in those provinces. If we look at statistics for the whole country, it can note that, the role of private investment is declining in rural areas. Because, while the proportion of private investment from the total investment was declined significantly over four years (from 29.4 % in 1995 to 21.3 % in 1998, see table 7), it concentrated in the urban areas. If there are not strong regulations, the fund that are allocated for underdeveloped regions, will run to the regions with the higher level of development.
- The investment from Government and the RI development. This is an additional fund for private investment. These funds are usually allocated for infrastructure constructions, primarily for roads, electricity system, irrigation system and some constructions of social infrastructure (school, system of rural markets). According to statistics (see table 7), the proportion of the government fund is very small in the total fund of the whole society. In which, the proportion of fund from the local budgets increases a little, but continuously during four consecutive years. Looking at this structure, it can estimate that the total fund for economic development will increase both in quantity and proportion. However, if we look at uneven investment among regions, we can see that, in general, disadvantaged regions often are rural areas.

Table 7 Breakdown of Viet Nam's investment during 1995-1998 (%)

	1995	1996	1997	1998
State investments	38.3	45.2	48.1	53.5
O/w: State budget	19.9	20.8	21.2	21.5
o/w : Central	11.5	11.3	10.2	9.3
Local	8.4	9.5	11.1	12.1
Credits	4.5	10.4	13.1	15.4
State-owned enterprises	13.8	13.9	13.7	16.7
Non-state investment	29.4	26.2	20.6	21.3
Foreign investment	32.3	28.6	31.3	25.2
Total	100.00	100.00	100.00	100.00

Source: Statistical Yearbook 1998, Statistical Publishing House, Hanoi, 1999, page 227

Capacity of ensuring the supply of on-site material inputs and services. A major part of rural industry State managerial officers in different localities affirm that one of the advantages allowing the smooth development of this economic sector is the local availability of main raw materials. It is estimated that, in Daklak province, up to 85% of raw materials may be locally supplied for rural industry, whereas Đà Nẵng city may locally supply 60% of necessary raw materials. This may be assessment for industries that are considered as "spearheads" localities, not for rural industry in general. In the reality, despite the on-the-spot availability of raw materials, production and business enterprises still need a lot of services which are not locally available and are to be purchased or imported from other provinces. Gia Lai province's conditions are similar to those of Đà Nẵng city; the rural industry's structure of both localities is almost the same, but in the former's locality, the value of locally exploited raw materials as inputs of local processing industry of agricultural, forestry products fluctuates between 75 and 90% whereas in other sectors, imported materials and materials purchased from other provinces amount to 80-90%.

(3) Impacts of institutional environment upon rural industry and its development

Institutional environment is understood as the general system of legal regulations and the institutional system which ensure the activities and effects of the regulation systems, the mechanism and effects of the regulations as well as the organs enforcing these regulations. At present, another issue to be addressed is the effect of all systems on the socio-economic development. A lot of studies in the past considered that the mechanism environment is the same and unified nation-wide. However, in the reality, dealing with the human factor and localism of localities, it is observed that the homogeneity likely exists only in some legal documents (Laws, ordinances and other legal regulations issued by institutions of national level) and in the general institutional structure for the enforcement of laws. The enforcement, the mechanism for enforcing legal regulations, statutes, regimes ...are, in fact, not the same in various localities. This leads to different conditions for the development of rural industry in different provinces and to the different development scale of different provinces. Moreover, even in a same province, the development of rural industry of different areas is also different. This originates from the non-uniformity in the

enforcement of general regulations of the central Government and the provincial administrations.

Beside the absence of a legal corridor for the enterprises to take the initiative of doing their production and business, authorities of many localities think that there exist also the incompleteness/non-orchestration between different elements of the institutional environment. This is shown in the fact that the policy is not correctly understood by responsible, managerial and operational officers; the policy becomes irrational right after its promulgation, resulting in bad effectiveness of implementation; the same subject is treated by different institutions through different ways and different regulations stipulated in different documents. A general situation at present is that the regulations are formulated and promulgated following the "vertical line"; after the issuance of a legal document, there is often another document of lower legal value for "guiding" the enforcement, and the institution which issues the guiding document is just the enforcing, supervising and inspecting the implementation of a higher ranking institution's legal regulations. Therefore, these documents tend to explain the general regulations in a way more favorable for enforcing institutions, creating easier conditions not for enterprises, for the grass-roots facilities, but for enforcing institutions. Because of limitations in information system in rural areas, many policies stipulated by the State cannot be disseminated to rural people. Surveys conducted in Vinh Phuc province and Hanoi city's suburban areas have showed that information is mainly received by rural people through radio, TV and news paper which are not really a concrete, detailed source of original policies and legal regulations. Through these sources of information, can only understand the essentials of legal documents, and concrete, detailed regulations must be caught from other sources. Moreover, the contents of legal documents published in mass media are often not complete; auditors, viewers and readers are often inattentive and cannot grasp well the contents of regulations; or they forget immediately after receiving information, and they wrongly remember when they have to implement these regulations. Thus, it is necessary to strengthen the information systems, the introduction of legal documents, governmental policies and regulations for rural areas.

One of elements constituting the mechanism environment is professional organizations and their activities. Efforts have not yet been adequately made for studying, drawing experience and taking appropriate measures in this matter. Field surveys carried out in Huong Canh have showed that, the "club of kiln owners" established since 1993 have positive effects. This club, originated in its initial step from the communal structural organizations, subsequently acts as a professional club with its members who are owners of brick kiln, tile kiln in the commune. The club meets once per month or a couple of months for the members to discuss together how to solve difficulties and issues related to their production. Many solutions for problems, new projects, investment programs for building local infrastructure have been firstly proposed by the club and effectively supported and carried out, If this form of organization is really effective, before launching a movement or activity, it is necessary to carefully study in details for identifying the mood and action which are applicable as a "frame" mechanism for similar clubs.

The mechanism environment of rural industry is strongly influenced by the contingent of State managerial officers in the locality, especially grass-root officers. These officers are elected by the people; a part of them have completed their secondary education. The recent field surveys have showed that in a lot of communes, a number of officers have been graduated from in-service colleges, mostly in agronomy, economic management. Not any officers is graduated from the formal higher education; and almost not any officer has been thoughtfully trained in laws. Therefore, one of important and urgent tasks for improving the mechanism environment for RI development is the constant training and heightening the capability of grass-roots staff.

3. Some basic viewpoints and measures for developing rural industry in coming years

(1) Basic viewpoints to be permeated in developing rural industry in coming years

Rural industry development represents one of important tasks in the socio-economic development of the country in coming years. For an effective development of rural industry in a close connection with the country's politic tasks, it is necessary to thoroughly grasp the following viewpoints:

Firstly, the development of rural industry must be in a close relation with the development of agricultural production, trade and services. But, at present, the relationship between these branches is still somewhat incoherent. Rural industry's raw materials are mainly locally produced agro-products. But the supply of these raw materials is not enough; the scarcity of raw materials and the raise of price of these products occur in many localities. The supply of services in loaning, in technology transfer, in information ... is still underdeveloped. The trading system for supplying materials inputs and selling final products is of spontaneous characteristic. For an effective, sustainable development of rural industry, which in turn positively influences the transition of economic structure, it is necessary to build the organic relationship between the development of rural industry and that of agriculture, trade and services. Chinese experience in enriching farmers' property which is essentially commercialization of agro-products, is an useful lesson for us.

Secondly, it is necessary to bring into play the factor of tradition in the development of rural industry. Some people assess the tradition as an obstacle in the process of industrialization and modernization of agriculture and rural areas. This assessment is somewhat excessive. The element of tradition must be brought into play because:

- Bringing into play the tradition is bringing into play the nation's cultural identity.
- Bringing into play the tradition is to exploit the potentialities, develop our internal strength. With the development of traditional professions, marketing and investment, the localities may raise and develop production.

Of course, the modern life-style requires materials and commodities which are closely related to the

up-to-date socio-economic conditions and modern technology and purely traditional materials and commodities may not fully satisfy the taste of all people. An important thing is to modernize the traditional technology for meeting the requirements of the markets.

Thirdly, the goal of development of rural industry is to produce sellable commodities. This is a vital matter of rural industry; it decides the effective competitiveness, hence the sustainability of rural industry.

The market-oriented rural industry development means:

- The identification of species of commodities, price of items ... must be prompt from the market demand. It is necessary to strive to satisfy the market demand, but not to start from the existing items of rural industry, from the traditional commodities.
- Each professional village or locality should concentrate its efforts in developing the professional qualification and the commodities with advantageous conditions in the availability of skilled labour force and raw materials.
- Rural industry products must be highly competitive with domestic and imported commodities. This is a difficulty; but for the survival of rural industry, the commodities must be competitive in quality and in price.
- What is the form of production and business for rural industry to develop and to be competitive? Maybe, the way for rural industry to develop must be mainly on the basis of rural household, then to establish rural enterprises and to build the cooperation between rural enterprises and urban enterprises. Only by this way, can rural industry expand the production scale, heighten the production skills and competitiveness and develop the markets.

Fourthly, rural industry must cooperate with urban industry. Rural industry is part of the whole country's industry. Moreover, rural industry faces much more difficulties in technology, management capability, skill, marketing ... compared with urban industry. Therefore, rural industry in the Red River Delta must both compete and cooperate with urban industry. The cooperation and linkage between rural industry and urban industry may be realized under the following forms:

- Primary processing is undertaken by rural industry, and urban industry is responsible for finishing.
- Rural industry performs as satellite of urban industry in the processing of products.

The cooperation and linkage as above mentioned will create and develop the markets for rural industry, and lead to a scientific and rational distribution of work between different industrial forces. Thus, urban industry may concentrate its efforts in solving difficult, complicated in technology and production.

Fifthly, the role played by the State for the development of rural industry must be strengthened. It is correct to say that due attention has not yet been made by the State to this aspect. Therefore, the development of rural industry is still of spontaneous characteristic, meets with difficulties and obstacles. The State's role of encouragement, support and management constitutes an objective prerequisite condition for rural industry to develop.

- First of all, the State institutions of national and provincial levels must identify a strategy and planning for the development of rural industry as part of the general development plan of the country and province.
- The State encouragement, support and management should focus on the supply of information, technology transfer, scientific research, training, advertisement and marketing;
- The State should promulgate a supportive policy in land allocation and low-cost renting and in the development of medium and small-sized industrial zone for rural industry.

(2) Some basic measures for developing rural in the period 2001 - 2020

2.1 Development of markets for rural industry

The markets for rural industry include the markets of inputs such as information, science and technology, labour force and raw materials ... and the markets for consumption of rural industry's products. At present, the markets for rural industry remain neglected by State owned enterprises for private merchants to have their own swaying way. It is necessary to develop the activities of all economic sectors in these markets, among which the role of State enterprises must be emphasized in the supply of inputs (information, technology...) and the consumption of rural industry's products.

Through the forms of placement of orders for processing and production and business cooperation between enterprises of urban areas and rural areas, a spectacular perspective for large and sustainable markets for rural industry may be created.

2.2 Strengthening the application of scientific and technological progresses in rural industry

In recent years of the renovation process, rural industry's production and business enterprises have made a lot of progress in the introduction of advanced technologies such as the mechanization for raising the productivity, the gradual modernization of some traditional technologies ... But, in general, rural industry's technological level remains backward; the renovation of technology is likely slow and at a low extent. It is necessary to strengthen the application of science and technology in rural industry, the modernization of traditional technology, the introduction of modern technology in processing agro- products for supplying domestic and foreign markets with high-quality products of high competitiveness. For this end, it is necessary to supply rural industry with scientific and technological advances. The State should ensure a supportive mechanism in granting credits for the renewal of rural industry's technology, in the supply of consultation services, rural industry's technology, in the supply of consultation services, training and setting up demonstration pilots, in the research and application of modern machinery and equipment in rural industry.

2.3 Development of medium and small-sized industrial zones for rural industry

Rural industry's production and business activities are in general carried out on the basis of household economy; the farmers' house is for both purposes, dwelling and production, hence the space for

production is too narrow and environment is polluted, no capability is available for enlarging production and infrastructure conditions can not be ensured for the development of production and business. In a near future, rural industry must develop and be separated from dwelling quarters, with adequate environment-friendly infrastructures. The development of medium and small-sized industrial zone in rural areas represents one of positive and effective measures for smoothly solving the above mentioned problems.

2.4 Development of medium and small-sized enterprises of rural industry

As above mentioned, rural industry's production and business is generally carried out by the households. This production and business form accounts for 98% of production and business enterprises in rural areas. The strong points of this form are: all types of labour force may be absorbed, all idle capital in the countryside may be mobilized thus creating a motive force for pushing up the development of rural industry. But there exist a lot of limitations in different aspects: in the renewal of technology, in the expansion of capital investment for expanding production and business activities, in marketing. It is necessary to develop medium and small-sized enterprises of different economic entities in rural areas for rural industry to develop the production of commodities. These enterprises may be established following 2 forms:

- The household enterprises are gathered into medium and small-sized enterprises this may be a principal form.
- To establish new medium and small-sized enterprises in rural areas by calling for capital from investors who live in the cities or other provinces.

2.5 Strengthening the policies of comprehensive incentives to rural industry

Compared with agriculture, forestry and fisheries, the State promulgates fewer policies which are concrete, consistent and comprehensive for promoting the development of rural industry. Rural industry's internal strength for the development of itself is still weak and limited and it can not develop well in the competitive conditions. Therefore, the State support and management seem very necessary and may be realized under the following forms:

- The State must identify and practice a strategy and planning for the development of rural industry for each province, especially the strategy and planning for the production of exportable fine handicraft products, agricultural, forestry and maritime products.
- The State should allocate or hire land, exempt/reduce taxes, and grant long-term credits for the renewal of technology, for supporting the development of rural industry.
- The State should encourage and support the development of consultancy, training, technology transfer organizations to supply services for rural industry.
- The State should recognize and encourage artists in the preservation and development of the nation's cultural identity through rural industry's products.

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