AGRICULTURAL DEVELOPMENT DURING STRUCTURAL TRANSFORMATION
(Case Study of Hachiman-cho, Gifu Prefecture, Japan)

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Introduction and Focus of Research

The importance of agriculture sector in national development of most country in the world is unquestionable, though it has tended to diminish. The role of agriculture sector is not only to provide food supply for the population; it is also functioned as labor creator and income generator for farmers. In addition, agriculture sector plays essential roles to reduce rural poverty in many developing countries (APO, 1999). Meanwhile, since rapid expansion of industrial and service sector has taken place in many developed countries including Japan, agriculture sector produces less significant performance than the other two sectors. Nevertheless, government and any other agricultural actors should pay proper attention to maintain a stable development of agriculture sector.

Based on the above description, this research will be focused on achieving two basic understandings as follows:

1. To identify the characteristic, trend and dynamics of agricultural development both in Japan and in Hachiman-cho.
2. To identify the government policies and other agricultural actor's actions in order to promote agricultural sustainability during the era of structural transformation.

Background Information on Agriculture in Japan

Generally, rural areas in Japan have experienced a structural transformation from agricultural society to industrial society. It is the fact that the importance of agriculture has rapidly diminished since around 1960s, when the high economic growth (1955-1973) proceeded. This can be seen by the

drop in the percentage of GDP accounted for by agricultural production, which was 9.0% in 1960 to be only 1.3% in 1996. In addition, Japan's food self-sufficiency rate has continued to decline. Using the calorie method, the rate decreases from 79% in 1960 to 41% in 1997 (Asahi Shimbun, 2000, 2002). Previously, Yamamiya (1991) raises the same issue and proposes four reasons for Japan's decline in food self-sufficiency: 1) diversification of eating habits, 2) Japan's food policy, 3) advancing physical distribution technologies, and 4) liberalization of rice import regulations.

Similarly, report from Ministry of Agriculture, Forestry and Fisheries (MAFF, 2002a) states that Japan's import of agricultural products have significantly expanded due to the diversification / advancement of consumer needs under the restricted land conditions. Being the world's largest import country of agricultural products, Japan is vulnerable to fluctuation of international demand and supply and policies of exporting countries.

Some factors might be able to explain the shrinking role of agriculture in Japan. *Firstly*, national budget allotted for agriculture has tended to lessen from time to time. In 1960, government allotted 7.9% of total national budget for agricultural sector, while in 1997 it was only 3.7%. *Secondly*, Japan's farm-workers have decreased in number and have become older. In 1960, the total number of farm-workers was 11,960,000 (26.8% from total working population) and it felt down to 3,080,000 (4.8%) in 1998. At the same time, those aged 65 or older constituted 44.2% of all farm workers (ibid). According to MAFF report (2002), the ratio of agricultural population to total population was 18.3% in 1980, drop to 14.0% in 1990 and 12.0 in 1995. However, agricultural activities seem to be an extra work, or even a sort of hobby, so that about 90% farmers have major income from non-agricultural sectors.

Thirdly, the dwindling area of farmlands as a result of industrial expansion is also a crucial factor. In 1992, Japan's agricultural area was 2.2 million ha, shrinking from 3.3 million ha in 1960 (Hachiman-cho Government Statistics; Kimura, 2002). Provided that the area remained the same until 1998, then on average, a farmer cultivates 0.7 ha. This phenomenon

illustrates very clearly why there are so many abandoned (uncultivated) fields or lands, which is 310.000 ha. Surely, these constitute unproductive fields. Concerning the agricultural area, another report of MAFF (2002b) exposes that the ratio of cultivated land area to total area is decreasing from 14.5% (1980) to 13.9% (1990) and 13.1% (1997). *Finally*, it is the fact that there is a huge disparity of income between agricultural and non-agricultural income. In 1997, industrial wages was ¥ 421,384 per month per worker on average, while agriculture worker has only ¥ 8,644 on average (MAFF, 2002b).

It is interesting to observe what Ogura (1995: 2) wrote to summarize the general decline of Japanese agriculture:

> *Thus, clearly Japanese agriculture has been heading for total recession in recent years. The situation is being further aggravated by the new development of liberalization of agricultural trade … It would appear that the response of the government to these developments has been something like "after death, the doctor*".

According to van Der Meer and Yamada (1990: 9-10), Japan's relatively poor recent performance in agricultural productivity growth can be analyzed from two different perspectives.

First, an analysis focuses on interactive relations between sectors. The post-war pattern of economic development in Japan had a strong impact on agricultural development. Because of rapid industrial growth, structural transformation of the economy and society lagged. Many small farmers remained part-time farmers and became an obstacle for farm-size enlargement. As a result, productivity in agriculture and service lagged and serious sectoral imbalances developed.

Secondly, analysis on intra-sectoral level with emphasis on input-output relations, institutional factors, and policies that affect productivity changes. In Japan, over-protection has contributed to excessive use of inputs and has reduced productivity growth.

Situation Analysis of Agriculture in Hachiman-cho

Hachiman-cho is a good example of structural transformation. This town has experienced the decrease of farmlands and farm-worker as well. Its agricultural area in 2000 is only 561 ha (2.3% of total area). Meanwhile, of total working population, labor force in agriculture declined dramatically from 5,258 (26.8%) in 1970 to 587 (3.4%) in 1995 (Hachiman-cho Government Statistics). These percentages have tended to become smaller and smaller since the young people prefer to go to adjacent cities to get jobs.

Moreover, industrial development is getting more intense so that it needs more land to construct factories or industrial estates. In this sense, additional land should be obtained from opening forest, since it is prohibited to change agricultural land into industrial, commerce or residential areas. Provided that the number of labor force remained the same until 2000, then on average, only around 1 farmer cultivates 1 ha (561 ha: 587 farmers). This is one reason why there are so many unutilized fields or lands in Haciman-cho, which is around 25% of total farming area (140 ha).

Findings

At present, the general decline of Japanese agriculture might not be a serious problem for either Japanese government or people. However, if the situation is continuously worsened, it could produce some potential problems in the future. Two possible difficulties are identified here:

1. *Firstly*, since the unutilized lands constitute 25% of total farming area, it could not able to contribute more to total production, income generating of farmers, as well as to GDP. In other words, if agricultural production is to be intensified and farmers' income is to be increased, then abandoned agricultural lands should be avoided and existing lands should be used optimally. However, overuse of agricultural land is also vicious since it would introduce oversupply of agricultural production

and destruct the market price. Therefore, equilibrium between consumption needs and production capacity is really a crucial matter.

2. *Secondly*, agricultural supply in Gujo Hachiman-cho might continue to decrease, and in that case, the dependency on the other region would increase. In short, Gujo Hachiman-cho encounters great challenges of agricultural development in the future. For illustration, Japan's dependency of food to foreign country is around 60%. Therefore, in order to sustain its recent productivity and to anticipate deceleration trend in the future, some policy actions should be fruitfully formulated and implemented.

In order to foster agricultural development, the implementation of good governance concept is the key policy. This means that agricultural sector should be promoted through participatory policies. In such policies, government is not the central actor of development anymore; social organizations (private sectors, NPOs, JA, etc.) and people should take part actively and play important roles instead. The symbiosis among local development actors reflects the implementation of good governance in development management. This is very essential to produce visible, reliable, effective and good policies on developmental issues. In turn, such policies will lead to better life of people and better future for the whole region.

In Hachiman-cho, the implementation of good governance in agricultural development is quite obvious. In order to prevent the above problems and at the same time to strengthen the existing policies, Hachiman-cho government has implemented policies that required people and private sectors involvement. The following are some policy actions which are being done, and some other policies which need to be considered or formulated.

1. Implementing *mix or cross-sector policies*, that is, integration between two or more developmental sectors such as agriculture and tourism (*agro-tourism* or *green-tourism*), agriculture and industry (*agro-industry*), or tourism and industry (*tourism-industry*). It means that each sector should not be independent; instead it should be

dependent on and support to each other. In this policy, each sector is interlinked with other sectors, and as a result, they strengthen or fortify each other. For example, restaurants for tourists, harvest fair, and foods processing industries from agricultural products are strongly encouraged to be an embedded component of tourism. In other words, one specific characteristics of tourism in Hachiman-cho is food productions (agro-industry). In order to make successful cross-sector policies, effective coordination among institutions is substantially needed.

2. Optimizing the role of agricultural cooperative (JA), especially in cultivating the unutilized lands. In this case, JA can do farming, harvesting, processing, and selling products of unutilized lands based on agreement or contract with the owner. Usually JA will get 10% of total selling of the products as its benefit. In accordance with this policy, lending land for non-agricultural purposes is restricted by the law. Furthermore, changing land use into park, commercial area and other usages except agricultural purposes should also be abolished.

3. Restricting transaction of agricultural land. In order to prevent the decreasing area, the rules provide strict processes or procedures of buying agricultural land. For example, people should have permission from agricultural committee to purchase agricultural land. In other words, any land transactions from farmer to non-farmer is strictly prohibited. However, such procedures do not valid for transaction between farmers. Furthermore, utilizing agricultural lands for new industrial estate is not recommended too, though the procedures are not so strict as in individual transaction. In case that factory or industrial estate will be built, it should be located in unproductive or unutilized areas.

4. Developing human resource in agricultural sector, especially for JA staffs. Although the number of JA staffs is quite sufficient (around 300 thousand full staffs nation wide), they should be trained systematically and professionally. In this sense, in order to achieve costumer satisfaction, training is provided to strengthen the specialties of the staff

or to improve ability to cope with specific jobs.

5. Keeping young generation to stay in the village is also a crucial strategy. Normally, due to lack of job opportunity and socio-economic utilities, people tend to leave their hometown. As a result, depopulation and ageing society harshly take place in rural area. Without good policy, this situation will be more severe in the near future. That is why, narrowing the gap between urban and rural area is becoming one of priorities in policy formulation. Maintaining prices of agricultural commodities, creating job opportunities and building socio-economic infrastructures are some policies to attract young generations to inhabit in their homeland.

Concluding Remarks

It is quite clear that Japan's agriculture is facing dilemma, particularly in the future. Agricultural sector can be seen to be lag far behind industrial and service sectors, although it does not necessarily to make balance among them. However, what Japanese government (including Hachiman-cho government) did was to sustain the agricultural productivity, and at the same time, to reduce the regional disparity.

There are two key concepts that is able to accelerate agricultural development in a time of structural adjustment, they are, integration among actors and integration among sectors. Integration among actors means a synergy among public, private / business and social institution in dealing with any given substance. Integration among sectors means changing from (conventionally) agricultural system to a more incorporated one, both to *industrial sector* connecting with food processing and any other agricultural products, and *to service sector* connecting with tourism, restaurant, harvest fair, and any other services.

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