

ISSN 0285-9637

農業計算学研究

第 25 号

1992年12月

京都大学農学部

農業簿記研究施設

農業計算法研究

第 25 号

平成 4 年12月

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Types of Farm Successions and their Costs of Entrance into Agriculture

Shiro INAMOTO

At Present, the issue of farm succession is one of the most important objectives for Japanese agriculture and farm management. This comes from the fact that the number of farm successors is far less than what is needed and desired. There are many reasons for the lack of farm successors.

Basically, this phenomenon is due to an increasing labor shortage in Japanese economy in recent years. However, we may add to this such reasons as the change in occupational preference among youngsters and various barriers against new entrance into agriculture. Taking into account of such barriers, this paper tries to analyze entrance cost for farm successors and farm management.

In Japanese agriculture, the cost to be borne by the farm successor himself is extremely large. On the other hand, the entrance cost which has to be borne by the farm management to secure such a successor is also large, but this cost has seldom been shouldered by it. In a sense, this entrance cost can be considered to have become such a high level as a private enterprise can undertake. Judging from the view that agriculture plays various significant social functions, a part of such entrance cost should be borne by the local people (region) or the local and national government.

The Optimum Size of Environmentally Oriented Agriculture in a Certain Area

Hiroshi KUMAGAI

Commercial farming sometimes requires trade-offs between food production and environmental degradation. Environmentally friendly agriculture puts emphasis on farming practice which protect and improve the wider natural environment.

The environmental aspects of agriculture have been discussed only in recent years in Japan whereas this topic has been quite popular since the Second World War in the

U.K., Germany, U.S.A. and most other developed countries. In Japan, the adoption of environmentally appropriate practices by farmers relies on financial incentives and encouragement through education. The followings are most important from these points of view :

- (1) To promote public education campaigns.
- (2) To determine the optimum size or scale of the environmentally oriented agriculture in certain geographic areas.

The objective of this paper is to discuss the methods one might use to estimate the appropriate size of the environmentally oriented agriculture in certain areas of Japan. The U.K. is the most developed country for the point of view of environmentally oriented agriculture. So, in this paper, comparative analyses between the U.K. and Japan are emphasized. Many experiences to balance production and environmental objectives in the U.K. during the past two to three decades are reviewed.

The paper's conclusion is that Capability Analysis is best suited for estimation of the appropriate size of the environmentally oriented agriculture in a certain area in Japan. In contrast, Benefit-Cost Analysis, Goal Achievement Method, and Capability Analysis are all very popular in the U.K..

A Theory of Paddy Field Renting Behavior and Tenancy Market, and an Estimation Model

Hiroshi TSUJII

The first objective of this paper is to construct a theory of paddy field renting behavior of the farms in a homogeneous regional market during medium and short time period. The second objective is to present a theory of paddy field tenancy market where the size of the paddy field rented and the rent are determined in the same region by aggregation of the behavior of the farms. These theories complement the theoretical part of my previous paper, quoted in the foot note 1) of this paper, that estimated quantitatively the effects of economic, institutional and social factors to the size of paddy field renting and rent in Japan excluding Hokkaido.

The third objective is to show the gap between these theories and the estimation model used in my previous paper because of the considerable existence of black market

renting of paddy field.

The following new findings are made by this paper.

1. Based on the production economics theory, paddy field renting behavior of rice farmers owning large, medium and small size paddy field respectively is explained in a homogeneous region during the medium and short time period.

2. Aggregating the theory of renting behavior of these rice farms, a theory of adaptive determination of the size of paddy field renting and of rent is constructed in both suppliers' market and demanders' market.

3. Because of the existence of large black market renting, it is clarified that the adaptive adjusting processes in paddy field renting and rent must be specified separately in the market estimation model of this paper.

The Transitions and Present Issues of the Institutional Policies for Farm Management in Japan

Takashi TAKEBE

The purpose of this thesis is to study the transitions of the "NINAITE" policies, i. e. the institutional policies for farm management after World War II, and point out the present issues of those policies concerning agriculture based on land use. We look back the institutional policies for farm management deviding into three periods; i.e., 1) during the 1950's through 1960's; 2) during the 1970's; and 3) during the 1980's through 1990's.

As concerns the first period, owner-farmer, viable farm, agricultural producers' co-operative corporation, and agricultural production legal person are examined. The second period, tenant-farmer, core farm household (farm household which has core male regular farm worker engaged in it's farming), revised agricultural producers' co-operative corporation, revised agricultural production legal person, and collective production organization are examined. And the third period, collective production organization based on agricultural land combination is examined.

We show three issues of the institutional policies for farm management in agriculture based on land use; i.e., 1) developing new ideas of individual farm management; 2) understanding collective production organization; and 3) creating juridical persons.

An Input-Output Structure of the Rice Growing Area in Australia and its Economic Impacts.

Masaru KAGATSUME

The purpose of this paper is to clarify the Input-Output Structure in the rice growing area in Australia and to measure the total impacts of the rice growing on the regional economy as a whole. The rice industry is a minor sector in Australian economy. Its share in total agricultural output is only 1.6%. However, more than 90% of the total rice growing in Australia has concentrated in the Riverina area i.e. the southern plains region of the State of New South Wales. Moreover, the substantial percentage of the rice production has been exported. Therefore, the rice industry is one of the most promising agricultural sector in Australia in the future. So, it is fruitful to discuss on the direct and indirect effects of this sector on the economy as a whole.

The methodology used is the Input-Output table of the rice growing area of the state of New South Wales in Australia. This regional Input-Output table consists of 27 endogenous sectors and 6 exogenous sectors. The endogenous sectors are 18 original sectors (animal industries, other agriculture, forestry & fishing, mining, food manufacturing, wood & paper manufacturing, machinery & appliances, metal products, non-metallic manufacturing, other manufacturing, electricity, gas & water, building & construction, trade, transportation & communication, finance, public administration, community services and entertainment) and 9 rice-industry sectors (rice growing, rice paddy handling, rice processing, rice distribution & marketing, rice wholesale/retail margins, rice by-product, water supply, rice extension, rice research). The exogenous sectors contain 3 value added sectors (i.e. household income, other value added and import) and 3 final demand sectors (i.e. household consumption, investment and export).

The main results are as follows. Among the endogenous sectors, the value added coefficients are high in the rice research sector (0.930), transportation & communication sector (0.909), machinery & equipment sector (0.892) and low in the rice processing sector (0.186), rice by-products sector (0.194) and food manufacturing sector (0.285).

The influence coefficients are high in the rice by-products sector (1.889), rice processing sector (1.580) and food manufacturing sector (1.511), and low in the rice research sector (0.812), transportation & communication sector (0.832) and machinery

& equipment sector (0.844).

The response coefficients are high in the commerce sector (1.764), transportation & communication sector (1.739) and rice growing sector (1.661), and low in the rice distribution sector (0.751), rice margin sector (0.751) and rice extension sector (0.752).

The multiplier effects per unit sale in the rice industry are 1.659, 0.541 and 0.045 for output, income and employment, respectively.

The Agricultural Corporation and Integration in the Food Industry

Yoko NIYAMA

It is known that the firm decides on diversified business as the strategy of growth to get over the limits of the optimum scale. And this firm uses integration with merger and acquisition of business as external growth.

In Japan, since 1960 s the large trading companies, feed manufacturing companies, and meat packing companies have gone into poultry and hog production. It is called Integration in the Livestock Production. These companies have operated the direct management or the production contract with farmers. On the other hand, the farmer has recently organized the agricultural corporation, and used integration for expansion of business. A purpose of this paper is analysis of the motivation and the details of integration of the farmers' corporation.

The following was explained with findings of the mail survey and the exploration in livestock production. Farmers have organized the small grouping of companies. Variety of the company has been feeder cattle production, feeding, feed manufacturing and compost manufacturing in a production area, and processing in a marketing area. Its purpose is growth of business to get over the limits of the optimum production scale.

Estimating Methods of Facility Scale for Wholesale Market

— A Flower wholesale Market Case Study —

Shigeaki ODA

This study intends to study estimating methods of area scale for wholesale market through a case study of a flower wholesale market.

This study was carried out as follows:

First, the general theory of scale planning for marketing facility was surveyed.

Second, this study is to find the problems in the Standard of Scale Estimate which had been suggested by Ministry of Agriculture and Forestry and Fishery of Japan for a flower wholesale market and to provide improving directions of the Standard based on the results of an actual survey assuming the existence of statistical data and of estimation results of the supply zone of a flower wholesale market.

Third, some reasonable methods based on the estimation results of the supply zone of a flower wholesale market, were suggested for estimating methods of facility scale for a newly planned flower market in Kyoto City.

A Memorandum on the Survey, Research and Extension at the Farm Accounting Institute

Toshio KATSURA

This paper describes the survey, research and extension conducted at the Farm Accounting Institute starting from its preceding institute called The Agricultural and Forestry Economics Survey Room.

The following points are especially clarified in this paper.

- 1) The annual execution of farm economy survey based on the farm accounting method is presented starting from 1926.
- 2) The persons mainly involved in the survey, the periods of their involvement and their survey activities.

- 3) The construction of the Kyoto University Farm Economy Accounting Method by Dr. Masao Otsuki in 1934.
- 4) Extension and education of Kyoto University Farm Economy Accounting Method through Farm Accounting Training Courses and teaching students of the Department of Agricultural and Forestry Economics of Faculty of Agriculture, Kyoto University.
- 5) The contributions of Dr. Masanobu Kuwabara for the development of the Farm Accounting Institute.

The Movement of Rush Production Center and its Determinants

Akira YOSHINO

The rush production center had changed from Okayama to Kumamoto during the 1960's. The change, which was a movement from naturally blessed area to unblessed area, stemmed from socio-economic factors. Neighboring the rush production center in Okayama, Mizushima industrial area has constructed and begun operations since the 1960's. It rapidly expanded job opportunities in the area, rush farms gained more part-time job opportunities and more increases in part-time income. Provided this absolutely better alternative than rush production emerged, the downside of profitability in rush production had made many farms give up rush production in sharp response to small damages and price fluctuations, not increase labor productivity by the adoption of machinery. The remainder had downsized the management to the one family labor might operate. Thus, the rush production center in Okayama had recessed.

On the other hand, the new rush production center in Kumamoto, where there were neither alternative farm products and part-time job opportunities, has increased labor productivity and expanded the scale of farmland by the adoption of mechanization. So rush production drastically has increased in Kumamoto. An increase of fixed cost in rush production has made other production areas shut out and the share of Kumamoto be concentrated.

This movement to the unblessed area has caused the deterioration of rush, it has been made possible by the peculiar consumption patter that demands of rush products

has been shifted to low quality products.

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平成 5 年 3 月 20 日 印刷

平成 5 年 3 月 25 日 発行

発 行 京都大学農学部農業簿記研究施設
京都市左京区北白川追分町

印 刷 日本印刷出版株式会社
大阪市福島区吉野 1 丁目 2 - 7

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京都大学農学部農業簿記研究施設

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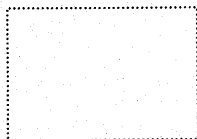
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農業計算学研究 第25号 1部

上記刊行物受領いたしました。

平成 年 月 日

住 所

氏 名



THE FARM ACCOUNTING STUDIES

No. 25 December 1992

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