Comments on “Inefficiency in Rice Production and Land Use: A Panel Study of Japanese Rice Farmers” by Professor Ogawa

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Summarizing the paper

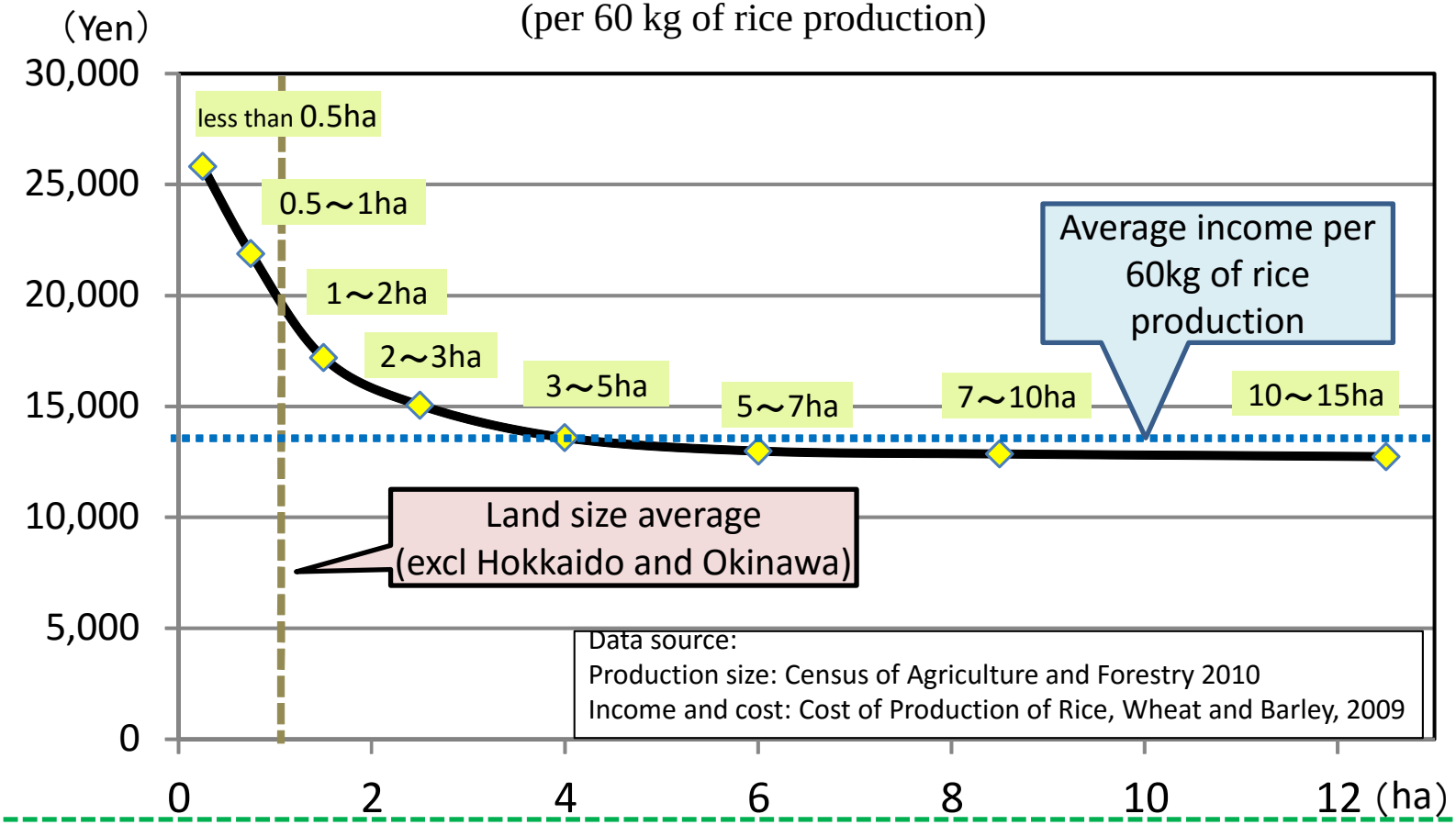
- A good contribution to the literature, where little quantitative work has been done on agricultural sector in Japan.

- The purpose of the paper is to (1) estimate the efficiency of rice production in Japan, and (2) identify the differences between efficient and inefficient rice farmers.
  - The paper identifies the increasing returns to scale of 1.02.
  - Inefficient farmers are found to be inflexible in utilizing inputs.
  - Efficient farmers tend to produce non-rice crops if they have many smaller plots of land.

- Data from 2008 to 2013 on *Rice Production Cost Statistics* with 5453 observations over 47 prefectures.

Average Costs by land size

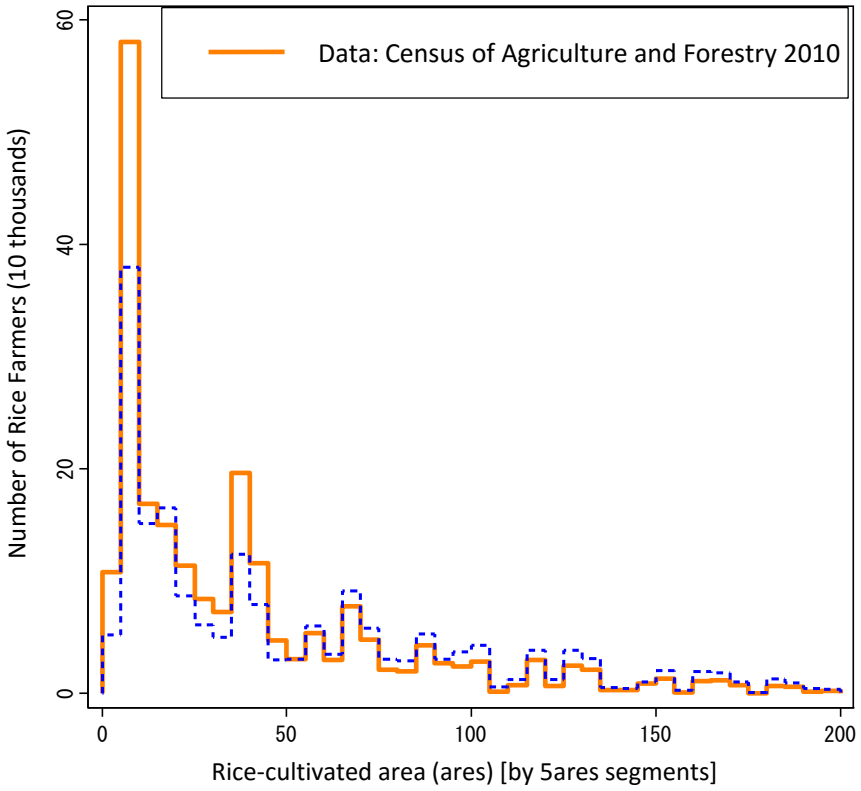
(per 60 kg of rice production)

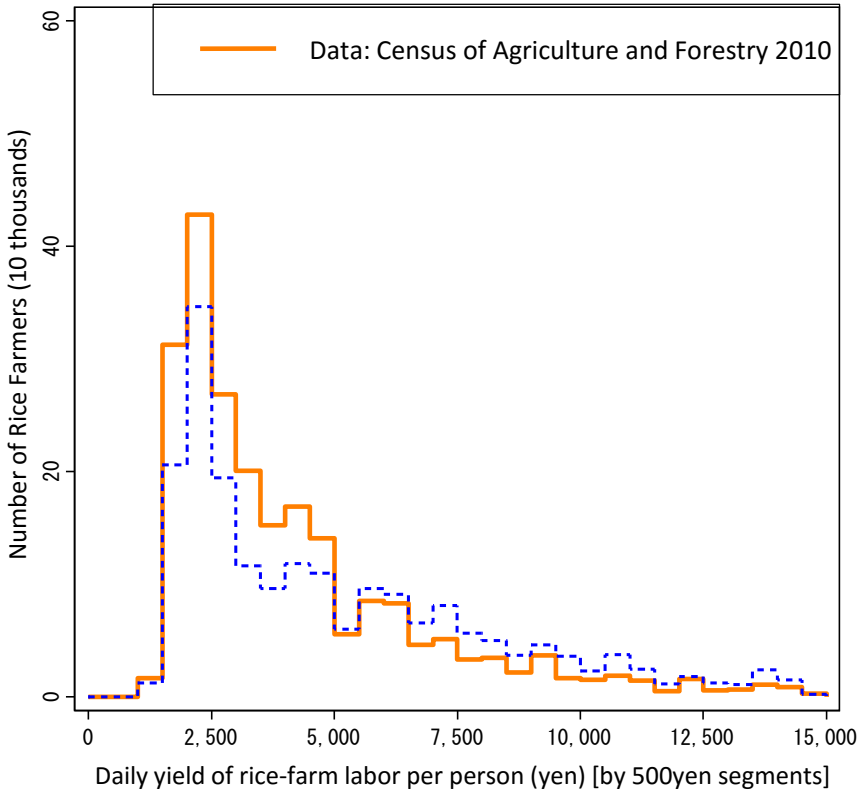


Census 2000: Rice Production

	Total Cultivated area (thou. hectares)	Number of rural communities	Number of rice crop farmers	Number of farmers with income from rice sales	Avg. number of rice farmers in a community	Averages for Rice Farming		
						Cultivated area (ares)	In-house labor hrs. (person, day)	Agricultural machinery cost (¥ ten thousand)
42 prefectures	1,449.4	116,859	1,912,925	1,648,311	16.4	75.8	206.4	395.3

Frequency on Sizes





Comments on Estimation

- Production function; factor demand function; dynamic factor demand function; and land-utilization function are independently estimated. However, they are closely linked, and the estimation can be handled in a unified way.
- Selection bias (exits of farmers; or changes in plot size for a particular farmer)
- Inputs endogeneity

Other Comments

- What lead to the paper's conclusion on the differences between efficient and inefficient farmers?
  - Anticipation on the opportunity to convert farm land to other uses (Saito and Ohashi, 2011)
  - Subsidies on farmers producing feed (not food) rice
  - Eliminating production subsidies on substituting from rice to beans or wheat. Etc
  -
- Welfare analysis is perhaps also possible with external estimates on demand elasticity of food rice (e.g., -3.45 from Arahata, 2010)
- The paper opens up many interesting policy questions to ask on the effectiveness of agricultural policies.