

# **Apple Distribution Structure in Terms of Agent' s Marketing Strategies : A Case Study of Aomori Prefecture, Japan**

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This research aims to define the distribution structure of apples by analyzing relevant agents, such as agricultural cooperatives and the marketing strategies of assemblers. The study area is Aomori Prefecture. This research will focus on each agent's interaction with shipping and collection. The study assumes that the quality and quantity of collected and shipped apples vary, and then considers how people manage and adjust those differences between collectors' and shippers' demand and supply. Meanwhile, the relationship between agents' marketing strategy and management of farm households is examined by demonstrating the way agents collect apples.

In Aomori Prefecture, agricultural cooperatives, assemblers, and local markets facilitate the distribution of apples. Local markets are mainly responsible for collecting apples from farm households and then selling these products to brokers by action trading. Thus, local markets are working as a bearer of distribution in Aomori Prefecture. Agricultural cooperatives collect apples from farm households and ship them to markets outside of the prefecture. Assemblers likewise collect apples from farm households or local markets and then ship them to markets outside of the prefecture.

First, this research analyzed the relationships between marketing strategy and agents by focusing on agricultural cooperatives, assemblers, and local markets. Toward this end, the marketing strategy of farm households is examined first. The Tsugaru Hirosaki Agricultural Cooperative, the agricultural cooperative used in this work as example, collects apples in any condition. For this reason, the quality of the collected apples varies. This factor is unfavorable in the distribution of retailers who emphasize uniformity in quality. However, given the overwhelming weight amount of apples collected in any condition, Tsugaru Hirosaki Agricultural Cooperative can secure a certain weight amount of apples in each quality category.

Second, this study examined the marketing strategy of assemblers. A total of 19 companies were used as examples in a model system designed to match the demand of shipping destinations. Assemblers that engage in off-market transactions with retailers have a better collection rate compared with the local market. Assemblers may

also set a quality standard for farm households. In addition, assemblers with a high shipping rate to the wholesale market can select farm households by hiring an intermediary person. Thus, as the weight amount of apples to collect is small, an assembler can establish a distribution system by selective collection.

Finally, Hirosaki Chuo Seika and Tsugaru Ringo Ichiba, used as examples of local markets, deal about 100,000 tons of apples annually. This figure represents about 30% of the apples produced in Aomori Prefecture. These two markets set a tight fruit criteria to control the number of suppliers and maintain action trading to ensure the collected weight amount of apples from farm households.

From the above, the agents are found to have established the flow of apples to an extent. However, assemblers who cannot secure the demand from farm households sustain the distribution by strengthening cooperation with local markets. In addition, local markets can profit from assemblers' offers. Hence, in the collection and shipment of apples, the agents adjust the quality and quantity.

The examination of the relationship between farm households and the marketing strategy of agents revealed the following results. Many of the farm households that own large tracts of cultivated land with a small labor force ship mainly to agricultural cooperatives. Meanwhile, farm households that own a small tract of cultivated land and employ a large labor force tend to ship their goods to local markets. In this scenario, the quality standard of agricultural cooperatives is loose, and consequently, farm households can easily meet the requirements. In contrast, local markets require farm households to meet stringent fruit criteria. Shipping to assemblers is often and mainly handled by middlemen living within the district; farm households may also rely on connections from before. However, many farm households with such connections receive offers from assemblers for the latter to provide the transport labor force from orchards. Thus, farm households can profit by selecting the shipping destination suitable for its business.

Apart from the above, the following results were obtained. Apple distribution in Aomori Prefecture is established by certain degree combined in that. Further, the prefecture has a collection and shipping system in which each distribution entity takes into account the power balance between collection and shipment. The existence of various agents as well as the situation of maintaining the labor force and income to maximize the characteristics of the management of own businesses lead to the maintenance of production. This aspect can be considered to support the core of various flows of distribution. As described above, the mass production and mass distribution of apples are supported by multiple agents in the production area.

Keyword: agricultural cooperative, assembler, local market, marketing strategy,  
Aomori Prefecture, apple