

# Suitability of Companies when Introducing Distinctive New Vegetable Varieties

## - A Case Study of New Varieties of Sweet Potato -

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### Summary

The aim of this paper is to offer suggestions for policies on popularizing new vegetable varieties by using case studies from projects that aim to promote the use of distinctive new sweet potato varieties.

Agricultural experiment stations aim to promote agriculture by encouraging the production of high added value produce through the development of new varieties, not only with a distinctive taste but also distinctive colors or textures. However, as a general rule, even if vegetable farmers are able to grow such varieties it is often difficult to find a distributor willing to make active purchases of new varieties prior to consumers and users becoming widely aware of a variety's characteristics.

Efforts have been made to foster growing regions for such distinctive new varieties, to promote their use and to encourage the development of new products that use such varieties under the leadership of public institutions, including the agricultural experiment stations that developed the varieties. When doing so, it is more efficient to ask suitable companies to participate in these projects. From the companies' perspective, the need for investment makes it sensible to limit participation in such initiatives to low risk cases. However, in reality many projects are launched without sufficiently examining the suitability of the companies taking part.

In this paper, we have checked the suitability of companies working to promote the diffusion (processing, distribution and sale) of distinctive new varieties and used this to consider policies on spreading new varieties. Specifically, we have examined conditions to narrow down the recipients of support for such efforts and used Rogers' innovator theory to confirm the validity of our findings by applying our findings to real cases.

In this paper, distinctive new varieties are regarded as new technologies that bring about innovation. The innovative effects obtained through unique colors or textures are used by consumers. Accordingly, we looked at applying the innovator theory by considering consumers as the target for the spread of innovation. There are numerous examples of the commoditization of agricultural produce, and we arrived at a hypothesis that it is the following four conditions that promote the popularization of distinctive new varieties, based on the assumption that initial users are people that enjoy the differences between varieties.

The four conditions are as follows: (1) Whether or not the company handling the distribution, processing or sale of a variety makes direct and specific suggestions to users concerning the methods for using new products; (2) Whether or not there is somebody in the distribution process to fill the role of communicating methods of use; (3) Whether or not the differentiation of a new variety makes it economically advantageous for manufacturing or sales companies; and (4) Whether or not there is a large number of existing customers to become early adopters.

In this paper, we have established standards for assessing whether or not the above conditions have been satisfied. For the first condition, the standard is consumers' willingness to purchase. When consumers were unhappy after carrying out a suggestion made to them, the assessment was downgraded. When no suggestion was made regarding the methods of use, we regarded it as a failure to satisfy the condition.

For the second condition, the assessment standard is whether the communication of information on methods of use to consumers in stores has been achieved. In order to achieve this, manufacturers, who are unable to give in-store explanations, need to carry out processing or packaging that allows consumers to understand such information simply by looking at the product.

The third condition was set out because many agricultural products have become commoditized so that the variety and growing region are not considered to be important. Handling distinctive new products can adversely affect the

profits of companies specialized in commoditized products in terms of their pursuit of economies of scale and the need to explain products. Thus, the presence of any economic advantages in a small-volume multiple-variety product line-up was selected as the standard to assess the third condition.

The standard for the fourth condition was set out because it is impossible to recognize value unless the consumer understands the differences between the new variety and existing varieties. It is preferable to have a high ratio of existing customers who already pay attention to the differences in varieties of raw materials.

After assessing whether the four conditions have been satisfied by companies participating in projects to promote use of distinctive new sweet potato varieties, a trend became obvious whereby the more a participating company satisfied the four conditions the greater the level of success.

Company A distributed raw materials of Quicksweet (name of the variety) and leased sweet potato ovens to supermarkets. However, the company experienced difficulties in making the business distinct from existing products and consequently failed in its efforts as a result of a total failure to satisfy the four conditions. Meanwhile, dried steamed sweet potato producer Company C already had a preference among existing customers for purchasing diverse varieties and had built its own links between raw materials production and retail accordingly, thereby satisfying the four conditions and enjoying good sales as a result.

However, there was an exception to the application of the four conditions. Food product manufacturer Company D switched to using Okikogane (name of the variety) as a raw material from the perspectives of taste and regional revitalization. However, Company D simply switched raw materials in an existing potato croquet product and tried to manufacture the product so that it tasted the same as before. This meant that the business continued to sell exactly the same croquets to existing customers. As a result, there was no need for initial users among existing customers or a need to communicate to consumers the effects of using a new raw material. Consequently, it became evident that exceptions to the four conditions can occur when consumers regard new products as exactly the same as existing products, even when a distinctive new variety is used.

The results show that the more a participating company incorporates the retail side of the business the more successful the business appears to be. It goes without saying that communicating new usage methods for a new variety in order to promote use becomes easier when a company has its own retail division. The fact that retailers such as supermarkets have a lower ability to explain a product is one reason why it is better for manufacturers to carry out retail business themselves.

There is no need to incorporate a retail division if the question of communication can be overcome by other means, such as product labeling or advertising, but the fact that a retail space offers an easier opportunity to attract initial users explains why success is easier for companies that do incorporate a retail division.

While these points need to be considered, four conditions can serve as a guide to assessing the suitability of companies when launching the handling new varieties. Promoting initiatives that seek to popularize new varieties in consideration of this point may be effective in the future.