

Structural Changes of Dairy Production and Development Investment in Grassland Area

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Summary

A large investment is necessary for the machinery, facilities and farmland for the feeding and forage production needed to conduct Hokkaido dairy production and expand the number of head and the area scale. Policy financial support for that is necessary in Hokkaido where the farmer accumulations are scarce. In this respect, Hokkaido dairy farming has a character greatly controlled by how the policy should be and it appears more remarkably in the grassland area.

In the following, section I gives a general view of structural changes in grassland type dairy farming since 1960. As representative cases of grassland type dairy farming in the grassland area, Nemuro and Soya area are examined. Their differences are typical in terms of policy, and the differences in their development are clarified at the area level. In addition, the development difference by the difference at the immigration time with the investment introduction and implications is clarified at the community level of Bekkai-cho in Nemuro area where there had been intensive development investment. Development investment, which is the basis of the dairy farming policy, differs from the boundary of 1980. Then, a regulated factor of the structural change is analyzed in II for the time until 1980, and in III for the time after 1980. The transition of the development investment by which a big influence is produced on a structural change is arranged according to administrative material, and a

structural change of the grassland type dairy farming and the relation of the development investment are analyzed at the area level in II. Then, a general view is given from the aspect of the influence that dairy farming policy and technical improvement, etc. had on the dairy farming management of a regulated factor of a structural change of the grassland type dairy farming for 1980 when it developed after, especially 1990's which should be paid attention, and the factor is analyzed at the community level into which the presence of the investment introduction is clearly divided in III.

The grassland type dairy farming of Hokkaido, representatives of which are the Nemuro and Soya areas was formed as a dairy farming principal occupation zone in 1970. Dairy farming development until 1980 is summarized as follows. Grassland development investment increases rapidly from the latter half of 1960's and begins to decrease from its peak in 1970. As a result, the area of arable land under management kept increasing remarkably until 1980. As for group-run investment by which the center of the grassland development peaked in 1970, Nemuro exceeded Soya in both the business expense and the amount of the business. Moreover, Nemuro greatly exceeded Soya as indicated in "Pilot Farm" and "New Dairy Village" in terms of both government-run and public corporation-run investment. As a result, a big difference was caused between both areas in total reclaimed grassland area. On the other hand, Nemuro exceeded Soya in business expense total regarding agricultural structure improvement projects, but reversed in business expense for one. The base of the

dairy production in Nemuro and Soya was remarkably expanded by development investment until 1980. However, the biased business introduction then became characteristic of the agricultural and structural change in both areas. In short, the differences between Nemuro and Soya grew with the increase in the area of the grassland though a big difference was not seen between the two areas in the expansion of the number of dairy cattle.

The structural change factor of the dairy production after 1980 is summarized as terms of trade conditions for dairy farming management. The first half of the 1980's was a time when the management view easily favored scale expansions. The latter half of the 1980's was a business environment in which management was encouraged to develop according to the purchase concentrates. This tendency was strengthened further by introducing technology that promoted expansion of management scale. However, it developed into a business environment characterized by hesitation regarding scale expansion, according to the situation where the price of dairy cattle dropped sharply and the liberalization of dairy products imports in the 1990's.

The realities of structural change after 1980 can be viewed according to the community type. The community of "Pilot Farm and New Dairy Village" was large remarkably, and in the management scale in 1980, an immigration community before the war and the pioneering community after the war was a scale of the same level. Although the predominancy of "Pilot Farm and New Dairy Village" in management scale does not

change, the immigration community rapidly expanded, then the remarkable difference among two communities which was once is no longer seen, in 1995. On the other hand, the pioneering community outstripped the immigration community, and the difference with community of "Pilot Farm and New Dairy Village" is expanding. And, community of "Pilot Farm and New Dairy Village" was mainly performed in the amount of the investment for one, and it was concentrated on the immigration community in the amount of a total investment after 1980. On the other hand, it was seen that the investment in the pioneering community was extremely undermanned. It is thought that the way of such a development investment greatly provided for the changes in agricultural structure in the respective communities.

It was clarified that the influence of the development investment had acted greatly under the business environment pressing the expansion of the management scale from a current analysis result at the area level and the community level in advancing grassland dairy farming. Moreover, it was confirmed that the influence that the development investment had on structural change was still large even in case of the business environment deteriorated in the 1990's. In the future, it will be necessary to convert to the development investment accurately related from the forecast of the increase of budget restriction, and the limit also of the target number of those who run a dairy for the investment to the development of individual dairy farming management.