Methods and Issues of Regional Development Using the "Michi-no-Eki" Model in Growing Countries

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Recently, there is growing demand for traffic and for road infrastructure development in growing countries. Michi-no-Ekis in Japan have gained attention as a way of promoting and developing local society and economy through highways. Roadside facilities similar to Michi-no-Ekis have been increasingly introduced in Asia and elsewhere around the world. However, such facilities do not always effectively promote the development of regions, societies and economies through highways. There have been calls to raise the skills and knowledge that are needed to effectively provide Michi-no-Eki-based regional development in such countries. We have been assisting JICA(Japan International Cooperation Agency) Hokkaido Center with their Michi-no-Eki Training Course, whose target counties are those in Central Asia and in Central America since 2013. Based on knowledge from interactions with trainees from these countries, we clarified the similarities and differences between Japan and these countries regarding expected effects and development procedures of Michi-no-ekis. We clarified issues regarding "collaboration between local communities and stakeholders," "sustainable management and operation," "effective use of local resources" and "public security," and worked to find methods to address these issues.

Key Words: Michi-no-Eki, growing countries, reagional development

1. INTRODUCTION

In Japan, there are roadside rest areas called Michino-Eki (**Fig.1**). Michi-no-Eki is a system that originated in Japan which began in 1993 by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). There are 1,160 Michi-no-Eki stations in Japan (2019.4) and still increasing. 350 million people make purchases there each year.

On the other hand, Recently, there is growing demand for traffic and for road infrastructure development in growing countries. Michi-no-Ekis in Japan have gained attention as a way of promoting and developing local society and economy through highways.

Roadside facilities similar to Michi-no-Ekis have been increasingly introduced in Asia and elsewhere around the world. Complexes called "Michi-no-Eki" are spreading around ten or more nations at 2018. However, such facilities do not always effectively



Fig.1 Michi-no-Eki in Japan

promote the development of regions, societies and economies through highways. There have been calls to raise the skills and knowledge that are needed to effectively provide Michi-no-eki-based regional development in such countries.

Authors have been assisting JICA(Japan International Cooperation Agency) Hokkaido Center with their Michi-no-Eki International Training Course as the instructor to understand "Michi-no-Eki" model, in which the effect of road improvement and road traffic lead to the development of roadside areas. So far, we have performed training for eight countries in Central Asia and the Caucasus area from 2013 to 2015, and from 2017, Michi-no-Eki training for seven countries of Central America and the Caribbean Sea area(**Fig.2**).

Based on knowledge from interactions with trainees from these countries, we clarified the differences between Japan and these countries regarding expected effects and development procedures of Michino-Ekis. We clarified issues regarding establish procedure such as concept, planning, design and management.

2. APPROACHES

(1) Analysis of discussions in JICA trainings

As a beginning, we studied discussions in JICA trainings for the Central America and Caribian Sea area in 2017, 2018 and 2019. The trainings were held for a month, from August to September. More than 30 trainees from 7 countries have been participated in the trainings. They are staff of the national and local governments and in charge of planning, design or management of "Michi-no-Eki".

(2) Field surveys and interviews

The knowledge were collected from field survey and interviews. These surveys were conducted in the Central America and also Kirghiz Republics as JICA survey team.

In Honduras, "Michi-no-Eki" have been started by trainees of JICA and local company since 2019. We had interview to JICA local staff who commit the "Michi-no-Eki".

On the otherhand, planning of "Michi-no Eki" model has been advanced in Kirghiz Republics to promote the OVOP (One Viledge One Product). We visited the proposal site and rute of "Michi-no-Eki" and had interviews to local government and owner of rest area on the route.

3. MICHI-NO-EKI EFFECTS

Direct effects are mainly effects on Michi-no-Eki, and effects on road users. Those direct effects develop propagating effects, such as effects on local communities and effects on roadsides as a whole. Especially in



Fig.2 "Michi-no-Eki" training of JICA in 2019

growing countries, the following effects are expected, promotion of community development, fair trade, improvement of female positions, a decrease in child labor, a decrease in illegal street stalls.

(1) Economic effects

a) Improvement in income and employment

In growing countries, diversity of major industries are not wealthy. They have to work away from their home. By increase of prices of local specialties and acceleration of development of new specialties and new processed goods with "Michi-no-Eki model", improvement in income of local farmers and increase in employment of residents are expected.

b) Increase in sales of local businesses

Local products are sold by employees of "Michino-Eki". Therefore, farmers and producers can spend their time to other economic and social activities, and increase in sales and earnings of local businesses are expected.

c) Increase in market of local businesses

"Michi-no-Eki" leads to road improvement and road traffic, and thereby to the development of road-side areas.

d) Promotion of road tourism

By increase in experience tours and event participants, increase in visitors to tourist resorts and urban areas are expected.

(2) Social Effects

a) Improvement of female positions and decrease in child labor

By increase of income and enhancements of working environment, improvement of female positions and decrease in child labor are expected.

b) Safe and comfortable rest

By decrease risks and illegal street stalls, enhancement of road environmental is expected.

c) Inheriting traditional culture

Based on their traditional , activation of hobbies and cultures of residents are expected.

4. ISSUES AND METHODS IN ESTABLISHMENT PROCEDURE

As a beginning, it is most important to understand "Michi-no-Eki" model, in which the effect of road improvement and road traffic lead to the development of roadside areas..

Differences between Japan and these countries regarding Establishment procedures of "Michi-no-Eki" are follows.

(1) Concept

a) Cooperation of stakeholders and government leaders

In growing countries, stakeholders and government leaders have never seen "Michi-no-Eki". It is difficult to tell them the concept and effects of "Michi-no-Eki" and get them understanding of the scheme and funding plan.

It is considered that discussing with whole stakeholders and government leaders is better than indivisualy.

b) Initiatives by local governments and countries

"Michi-no-Eki" have been started by trainees of JICA and local company since 2019. But in these case, They have not got support from local governments and countries.

On the other hand, in El Salvador, several ministries have initiatives in discussion of "Michi-no-Eki" concept and support local governments and companies. It is considered that shareing these know-how to other countries are helpful.

c) Promotion of "Michi-no-Eki" model

Promotions of concept and effects are nessesary to publicize "Michi-no-Eki" model. Promotion of success stories by government is effective.

(2) Planning and design

a) Location and site

At present, in growing countries, infrastructure facilities such as electricity, water, and toilets are not sufficient.

b) Cost and benefit

In severe financial condition, it is needed to scrutinize prospect of independent profit and period until return of investment. To increase cost effectiveness, it is better to reduce initial investiment espetially the management know-how is not sufficient.

c) Street stall custum



Fig.3 Private fasilities cooperate with local community in Kirghiz Republic

There are custums of street food. It is different from Japanese one which eating inside the store. It is better to planning and design to be able to find local products from outside.

(3) Management

a) Know-how of administrative and private

Some of private fasilities arong road side have been achieved synergies between management and regional revitalization due to utilize local resources to enhance services by cooperation with local communities(**Fig.3**). It is close to the concept and effects of "Michi-no-Eki" model except for function of road informations. Administrative support helps skills of farmers and producers. Also it is effective for economic conditions of them.

b) Cooperation with farmers and producers

To cooperate with farmers and producers, "Michino-Eki" provide space and consider effective promotion to sell their products. At the same time, it is necessary to consider regarding operation and maintenance. Management should be considered with consept, planning and design.

5. CONCLUSION

"Cooperation at the concept", "affordable planning/design" and "sustainable management" are important to be success "Michi-no-Eki". And these point should be discussed to get multiplier effects.

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