

**Topic-Setting Program to Advance Cutting-Edge
Humanities and Social Sciences Research**

(Responding to Real Society)

Progress Report
(Summary of Final Report)

[Research on the Society with Empathy and Creation of New Industry by
Social Business]

Core-Researcher: Tadashi Yagi

Institution: Doshisha University

Academic Unit: Faculty of Economics

Position: Professor

Research Period: FY2015 - FY2018

1. Basic information of research project

Research Area	Interrelationship between institutions, culture, public spirit, and socioeconomic systems
Project Title	Research on the Society with Empathy and Creation of New Industry by Social Business
Institution	Doshisha University
Core-Researcher (Name, Academic Unit & Position)	Tadashi Yagi, Faculty of Economics, Professor
Project Period	FY2015 — FY2018
Appropriations Plan (¥)	FY2015 2,880,000Yen
	FY2016 3,870,000Yen
	FY2017 3,250,000Yen
	FY2018 1,260,000Yen

2. Purpose of research

In Japan, there is concern that the vitality of society will decline due to the declining birthrate and the aging of society, and construction of a maturing society based on a new concept is getting its importance. The crucial role of social infrastructure in which empathy and trust are fostered is getting its attention in the situation where government functions are facing their limitation because of the budget crisis. In this situation, we need to develop new public nature to promote urban functions and to foster new industries. .

Fostering empathy and trust is not only necessary for nurturing pro-social nature of people but also for improving economic efficiency. The question arises on the mechanism of trust formation. I.e., we need to inquire about the conditions on infrastructure and incentive structure those are required for the trust formation. Paul Zac, a neuroeconomist, insists that human beings have inherent empathic ability, and empathy fosters trust. The essential problem is how trust is formed under what social infrastructure and incentive structure, on the premise that there is empathy as a natural ability of human beings.

After carrying out the theoretical consideration as above, in this research project we presented an implementation scheme for constructing a society based on trust formation with emphasizing the role of empathy. For this purpose, we collaborated with the Kesenuma Chamber of Commerce and Industry, which has been responsible for promoting earthquake reconstruction by activating social businesses. There is great significance in considering the relationship between trust and reciprocity in regional social networks and the mechanism of reciprocity. Especially, designing a social business with incorporating the social networking system has an important meaning for the reconstruction from earth-quake. In this project, field survey of the Kesenuma areas was conducted, and activities to support start-up of social business were conducted. Through this collaboration, it is possible to clarify the concrete process for implementing the research result in the real world, and it is possible to verify the effectiveness of the research outcome.

If the mechanism and the infrastructure for fostering trust are clarified, it is possible to clarify what is necessary to build that foundation. Trust formation is also important not only for economic transactions and economic efficiency, but also for cultural and creative activities. In creative activities it is important that competition is based on trust, and cooperative behavior is expected to be efficient in that case. Trust

formation becomes important in the economy where creative activities become the source of economic competitiveness, and clarifying its mechanism is important for the sound development of the economy.

3. Outline of research (Including study member)

In Japan, there is concern that the vitality of society will decline due to the declining birthrate and the aging of society, and construction of a maturing society based on a new concept is getting its importance. The crucial role of social infrastructure in which empathy and trust are fostered is getting its attention in the situation where government functions are facing their limitation because of the budget crisis. In this situation, we need to develop new public nature to promote urban functions and to foster new industries. .

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The main part of the research carried out was the study on the mechanism of the reconstruction of the earthquake disaster by the formation of social capital using the local art entertainment drama "Kakuwa narrative". It became clear that cultures as a result of life and living can be a source of collapsed community resilience and can be a tool for building new relationships. This research result was presented at Meguro citizen center in Tokyo on March 24, 2018. It was reported that the local performing arts connected various people who were affected, connected the people who suffered the disaster and those who did not suffer, and have various functions such as connecting the people who came to the disaster with those who came to support. We also conducted the field research in Kyoto by taking the Orihime Festival of Imamiya Shrine in Kyoto Nishijin Region as an example. We investigated how the cultural and creative activities in Kyoto

Nishijini area are promoted by the trust formation through the festival.

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Kazutoshi Miyazawa (Professor, Doshisha University, Faculty of Economic)

● Strategist

Mitsunori Matsuno (Contract Researcher, Life Risk Research Center, Doshisha University)

Akihiko Sugawara (President, Chamber of Commerce)

4. Research results and outcomes produced

In this research project, we studied how empathy and trust influence the economy. One of the achievements is a theoretical study on the corruption structure of the organization, which developed the research of Benabou and Tirole (2011). The results of the study is summarized in Yagi (2018).

Considering conscience in the organization, consider how the conscience of the leader of the organization and the conscience of the members of the organization are related. The question is what will happen when the organization's leader lacks conscience. Especially, we consider the mechanism of the influences and clarify the condition for the worst results are derived.

The essences of the mechanism are summarized as follows. Consider a situation where a company leader is authoritarian and emphasizes the leader's personal interests than the organization's interests. There are two types of employees, the first type has an innovative idea and has the idea of giving top priority to the development of the company. The second type is preservative, falls under authority, and is of the type that gains authority.

In many cases, the presence of employees who have innovative ideas with considering the development of the organization is often feel uncomfortable for the leaders who prioritize personal interests. This is because such employee likely to criticize the selfish behavior of the leader. On the other hand, employees who are squatting in authority and easily obey to authority are preferable for pursuing selfish interests of leaders.

This suggests that a leader without conscience would need an employee without conscience. If the organization is inflicted by authoritarianism, the expected gain from taking action with conscience would be low in case when the president directs the fancy settlement to his subordinates. Thus, there is a high possibility of doing fancy settlement. Organizations with prevailing authoritarian mean that many members of the organization unconditionally obey the president who gives instructions against contrition, and there are

few one who resist to him.

In the presence of such a mechanism, the corruption of the organization will accelerate. Increasing authoritarianism in an organization will increase the proportion of employees who easily obey to authority, and employees with innovative ideas will find that it is difficult to propose their ideas in the company. Also, unless the boss accepts challenging ideas with potential for failure, it is difficult for subordinates to present innovative ideas. Thus, authoritarianism within an organization has the danger of reducing innovative employees within the organization, and the increase in authoritarianism has the danger of impeding the development of the organization.

Therefore, in order for the conscience of the organization and the conscience of the organization members to be consistent, the leaders of the organization behave selflessly with considering social interests. In addition, the leaders must be careful about the authoritarianism in the organization, and create the atmosphere for the members of the organization to behave and express their idea freely with their conscience.

This research result has important development possibilities in terms of how trust formation is done and how it affects organization performance in considering the problem of the optimal structure of the organization. The results related to this problem are summarized in Chapter 14 and Chapter 15 of *The Kyoto Manifesto for Global Economy - The Platform for Community, Humanity and Spirituality* published by Springer.

The researches on the first and the second topics were conducted on the development of regional social capital utilizing sports. It is believed that sports can be utilized as a tool for fostering social capital effectively and efficiently. However, there are few empirical studies on the effect of the sports in generating social capital, and in this research project, an empirical analysis was carried out by conducting a survey.

It is thought that sports play a role of enhancing the directionality such as sociality, contributing to the construction of a network within the community, and linking people in different layers in the community. Various hypotheses have been presented regarding the relationship between sports and accumulation of health capital. In this research, we explicitly analyze the effect of fostering social capital by utilizing sports and the health promotion effect of sports by building a model that describes the optimal behavior of determining input time for sports. We clarified the psychological factors those affect the behavioral change. By using the data on behavioral change and the state of social capital, we concluded that the hypotheses derived from the model were supported empirically. As a result, an idealism on social capital and pro-social propensity promote the participation behavior in the event, and these effects are stronger for the group who changed their behavior. These results suggest that a group with behavioral change tends to link the idea and behavior more strongly.

Covariance structure analysis also shows that emotions have a strong influence on the preference formation (ideal on social capital, tolerance to cost bearing, social norm), and that the preferences affect decision making. This result gives us the important suggestions for explaining the difference between the group with behavioral change and the group without behavior change. Behavioral change for socially desirable direction is thought to be likely to occur when preference for the desirable direction is formed through the accumulation of strong emotions for the socially desirable state. These results imply that it is important to provide appropriate information so that desirable behavioral changes can be promoted by

desirable emotions. We believe that our research results contribute to the development of research on clarifying the social capital formation mechanism.

The second research object is the analysis on the effect of utilizing cultural resources in developing local economy. As a case for the study, we investigated the case of the reconstruction of Orihime Tanabata Festival in Kyoto Imamiya Shinto shrine. This festival is promoted by the collaboration with artisans in Nishijin area where textile industry is accumulated. This case is summarized in Chapter 13 of *The Kyoto Manifesto for Global Economy - The Platform for Community, Humanity and Spirituality*. The most important point is that the sacred performance plays an important function in promoting unity in the region, building a flat relationship within the region, and leading a humble attitude towards creative activities.

The third research objective is the study on the implementation of social business in disaster area with focusing on the accumulation of social capital. This study was conducted by collaborating with Kesennuma City and the Kesennuma Chamber of Commerce and Industry.

After the Great East Japan Earthquake in 2011, it was not possible to secure a large land for a temporary housing enough to move in village units in the Karakuwa Peninsula. Thus, local people were forced to live in temporary housing in dispersed unit. In the autumn of 2011, the autumn festival of Hayama Shrine was taken place in a state where the community was facing the risk of collapse. It was said that the festival played the role of connecting the people who were divided. In this area, each local entertainment had been performed on a beach-by-beach basis, and there were few opportunity of playing together. In the community of temporary housing area, there are people who started to enjoy the variety of local folk performing arts. Such activities seemed to foster the establishment of a new relationship in the community.

Based on these movements, the local entertainment drama "Kaguwa narrative" was born. Although it is an amateur theater company, it seems to be a great pleasure for the people to create new value based on the local arts of their specialty.

It became clear that cultures in a living community can be a source of resilience in the collapse of the community and can be a tool for building new relationships. At the timing of the Tokyo performance of "Korakuwa narrative", the results of collaborative research project with the organizations in Kesennuma area was presented on March 24, 2018 at the Tokyo Meguro District Center. At the symposium, Mr. Suzuki, Deputy Director of Meguro-ku, explained the origin of the relationship between Meguro Sanma Festival and Kesennuma City, and the economic and human support from Meguro Ward at the moment of the Great East Japan Great Earthquake in 2011. And it was reported that Meguro's saury was associated with the classical rakugo and strengthened the unity of the community. The report was suggestive in a sense that Meguro's case could be applied to the case of Kesennuma-Shingu's local arts.

Mr. Akagawa, the Deputy Mayor of Kesennuma, reported that the young people from Tokyo etc. helped the people in the Karakuwa district voluntarily, and they worked with the people in the local community through the cultural activities. In addition, it is reported that the young people who were migrated to the area were appointed to the leader of the department of the community development council, and the activities for reconstruction in such a community were quite successful. It would be noteworthy that the fact that reconstruction was promoted through the collaboration with Meguro Ward and Shingu City by utilizing the cultural relations. The discussion in the panel discussion gave us with many suggestions to the way of accumulating social capital for revitalization of afflicted areas.

The related issue with the third objective is the study on the restoration of agriculture in Kesennuma city. The results of the study are summarized as follows.

① The new business on agricultural work has been changed from open-field cultivation (in a plastic house) to high position water cultivation. Specifically, by improving yield by light and computer control of temperature control, work environment was improved and the yield was improved. In addition, the brand value of the agricultural products were improved by natural cultivation without chemical fertilizer. As management reforms, the cost reduction and the sophistication of management by reforming the organization to the incorporation type has been proceeded. The reform of the agriculture has been successful through the improvement of brand value.

We found that improving the brand value by natural agriculture is the key innovation for reconstruction. This provides us with the solution of organizational issues, technical issues, and marketing issues. From a policy point of view, it is indicated that it is necessary to develop a mechanism for compensation for damages. Policies have been introduced to the corporation for purchasing and lending facilities including machinery, for lending and paying down after depreciation (15 years). It is an agricultural version of the so-called public privatization scheme. As a result of incorporation, investments from the agricultural cooperatives (at maximum 49%) could be realized, and it is expected that investment sources will be diversified. From a managerial point of view, in addition to guidance on corporate management such as labor management and counting management, 1) marketing such as product differentiation and brandization, 2) support for nonstandard products processing technology and commercialization are required.

Next, the survey results on the demand structure of "slow city" utilizing local tourism resources will be briefly summarized. As a result of the questionnaire survey, it was shown that the demand group of slow city is centered on middle-income group with high intellectual level and high sensitivity to nature. By attracting such demand groups, businesses with high value-added can be deployed. In conclusion, we expect that businesses by utilizing "slow city" make us possible to achieve a harmonious coexistence with nature, and have high affinity with social business.

The reason why we proposed the partnering with Montbell to Kesennuma city is that this company has rich experiences in promoting nature conservation activities (such as Montbell Club Support Cards, the Genki village 'Nanako Leaf Sapling Fund'), social welfare activities (Activities with "Aoba Hitoshi", Support for Japan Disabled Canoe Association), field experiences and environmental learning (Supporting "Schools in the River"), disaster support activities (Activities in the Great East Japan Earthquake "Outdoor Donation team ", Niigata Chuetsu-oki Earthquake etc), challenge support, challenge award, adventure cram school, Sea to Summit, Japan Eco Truck.

We believe that this paid member of Montbell and the party that appreciates slow city are overlapped, and we decided that we can form the best partnership in promoting city marketing, city brand establishment and town planning in Kesennuma city. Among them, "SEA TO SUMMIT" is an environmental friendly sports event that makes us think of the natural circulation while going from the sea (kayak) to the village (bicycle) with only manpower, and to the summit (mountain climbing).

"SEA TO SUMMIT" is an event that make us possible not only to enjoy outdoor sports but also to reaffirm the natural environment surrounding us by going through the newly developed Kesennuma towns, passing through the calm sea called Oshimaseto and the road of Karakuwa to Kesennuma road and

mountains. We concluded that this event provides an opportunity to learn the charm of nature unique to each region by making use of social capital for regional management.

To promote the development of tourism fields embodying the slow city, it is important for young people in the region to take leadership for the development of human resource. In addition, developing new sports such as kayaks with increasing number of players has a good possibility of developing new business field in the region. Kesennuma city wanted Mont-Bell to invest as a tenant in the commercial area of the damaged area of the Kesennuma side, but Mont-Bell rejected this proposal.

The second collaborative project with Montbell is “Japan Eco Truck”. This suggests a new value created by traveling on its own, and aims to nurture Kesennuma into a city worth traveling by oneself. We are hoping that it will be possible to create a new business led by young people with the provision of Montbell's know-how.

In order to complement the “SEA TO SUMMIT” project, we recommended the “Sacred Kumano Route” with the wider network in Iwate-Ichinoseki/Hiraizumi town to the tourism section of Kesennuma city. “Sacred Kumano Route” is based on the legend rooted to the story of the relation between Karukuwa and Muro of Kumano area in 8th century.

Montbell Corporation promises to cooperate with municipalities. When this is realized, the "Michinoku Sea Wind Trail" connecting the coastline of the affected area from Aomori to Fukushima sponsored by the Ministry of the Environment will be linked with the route of Ichinoseki/Hiraizumi from Kesennuma (Karakuwa). Since Tanabe City in Wakayama prefecture with Kumano Kodo and Ichinoseki City are sister cities, and Shingu City in Wakayama prefecture and Kesennuma City are historical cultural and industrial friendly cities, we judge that it is possible to develop the new travel rout that is expected to attract visitors.