

INFORMATION PROVISION ABOUT THE PUBLIC WORKS AND THE REACTION

Atsushi SUZUKI, Toshiaki AOKI, Shinji YAMAGUCH and Hitoshi NISHINO
Research Center for Land and Construction Management, Construction Management Division,
Ministry of Land, Infrastructure and Transport, National Institute of Land and Infrastructure
Management
1,Asahi,Tsukuba,Ibaraki,305-0804,Japan

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1.INTRODUCTION

Under the present conditions in Japan, such as financial difficulties, diversified needs of people and so on, public works must be done more efficiently than ever.

Table 1 expresses the results of survey on the Web for the image of public works listed in order of the number of times they appeared. These words are hit upon by five hundreds women as subjects of this survey related to the image of public works. These are not a good image, especially expressed in such a word as "waste" or "extravagance". Furthermore, dishonorable words such as "cozy relationship". "corruption", "late" and so on are included within twenty place.

As shown in the previous results, it can be said that the image of the public works recently in Japan is not good. Unsavory image of public works and distrust to the administrator are possible to cause the difficulties in consensus building or efficient execution of projects. For the accountability and the effective execution of public works, it is important to aim at the mutual understanding between administrator and people who are not only the receiver of the public service but also tax payer through a plenty of communication. Moreover, such a sincere process will lead to restore the trust and provide public service from which people can obtain feeling of satisfaction.

Based on recognition of such a present situation, the objective of this research is to investigate the desirable way of information provision for mutual understanding and consensus building. Two types of psychological experiments were carried out to analyze the effect of information provision about a project on the people's attitude forming and trust in the administrative agency in this research.

2.METHODOLOGY

2.1 Psychological Experiment and the Subjects

Psychological experiment¹⁾ with internet was conducted to verify the information effect about infrastructure development. Information about a fictitious flood control project as a scenario was presented to the subjects of the experiment who are the member in the membership web site. Number of the subjects are 500. They are all women, since the membership web site to which they belong is interested for women. Average age of them is 32.2 years old (Max 65, Min 14).

2.2 Procedure

Procedure of the experiment is presented in Figure 1. Before the scenario experiment, evaluation of general image of public works and the trust in administrator who executes it are asked. General image was evaluated by subjects in ten items ,such as necessity, properness, flexibility, transparency, security, cooperativeness, fairness, responsibility, usefulness and convenience. Evaluation on the image of public works and the trust in administrator are rated on 7-points scales.

Table 1 Image of the public works

Ranking	Words	Number of people	% (/500)
1	Tax	103	20.6
2	Road construction	101	20.2
2	Waste	101	20.2
4	Regularly	88	17.6
5	Extravagance	79	15.8
6	Road	76	15.2
7	Politician	68	13.6
8	Construction	60	12.0
9	Government office	57	11.4
10	Environment	55	11.0

Scenario experiment contains 3 steps. In other words, information about the project is presented to the respondents (subjects of this experiment) step by step. On the first step, situation and the outline of the flood control project are presented to the respondents. This flood control project assumes expanding a width of a river. The respondents are assumed to live far from the region where the project is conducted. Therefore this project is assumed to have no direct effect on their interests. After respondents read this scenario, they are requested to decide their attitude toward this project. Evaluation on the attitude is rated on 7-points scales. On the second step, information about the effect and the cost of this project is presented. On the third step, more detailed information about the project is presented. Attitude toward the project is asked to the respondent at the end of each step. This scenario experiment in which gradual information is presented to the respondents is intended to design so as to verify information effect on the recognition of the people about the public works. Information will also effect on trust building in the administrator who executes public works. So, degree of the trust in the administrator after reading this scenario is asked to the respondents. The information effect on the trust building is verified by the difference between this value and the degree of general trust in the administrator evaluated before the scenario.

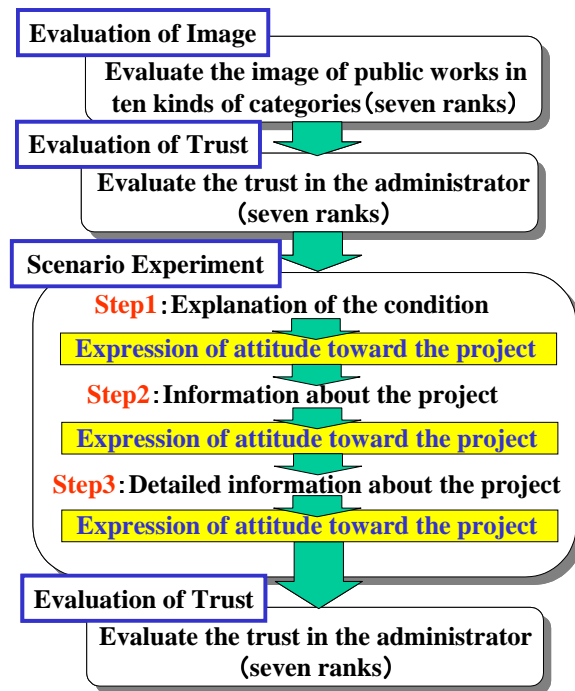


Figure 1 Flow of the scenario experiment

2.3 Applied experiment with various interest groups

In the above experiment, respondents were requested to answer the question about the trust and attitude toward a project under the condition in which they have no direct interests related to the project. In other words, they were assumed to be a third party for the project. This experiment is called as basic experiment from now on. However reaction to the information of the party with some interest in the project will differ from that of the third party. The scenario experiment in which people have some interest in the project is called as applied experiment. This applied experiment will give us useful suggestion rather than basic experiment for the communication in the real project though suggestion from the basic experiment plays an important roll as a benchmark.

Applied experiment sets up the scenario so as to be almost the same condition as the basic experiment in which people have no interest except the differences of interest. On the other hands, subjects (respondents) of applied experiment basically do not accord with the people who cooperated to the basic experiment. However, all of the subjects are the members in the membership web site where the same provider manages, and, moreover, subjects are all women who almost have the same attributions as a group. Therefore, it will be possible to compare results obtained in this applied experiment with that obtained in the basic one. The kind of scenarios assumed in this applied experiment is presented in Table 2. Interest groups is divided into three groups, positive, negative and no interests. Moreover, two kinds of scenarios in which project cost is different are prepared. Therefore, six kinds of different scenarios are respectively presented to each 100 respondents. Each name of the interest group is defined as SHPN (Social efficiency is High and Private interest is Noting), SHPP (Social efficiency is High and Private interest is Positive), SHPPe (Social efficiency is High and Private interest is Negative), SLPN (Social efficiency is Low and Private interest is Noting), SLPP (Social efficiency is Low and Private interest is Positive), SLPPe (Social efficiency is Low and Private interest is Negative).

In each scenario, information about the project is presented to each kind of group in two steps, simple

information and detailed information. Simple information contains an explanation about the fictitious situation in which respondents place. Therefore, respondents should know their interests from the project in this stage of simple information. On the other hands, detailed information contains more detail information about the effect and the cost of the project as well as the interest for the respondents. Questions about the trust in the administrator who executes the project and so on are asked after every presentations of the information. At the end of these scenarios, attitude toward this project, agree or disagree is asked as well as those reasons.

Table 2 Setting of the interest groups

Group Name	Number of respondents	Condition of the project	Condition of the interests	
		Project Cost	Positive	negative
SHPN	100	5 billion yens	-	-
SHPP	100	5 billion yens	Improvement of security	-
SHPNe	100	5 billion yens	Improvement of security	Moving
SLPN	100	19.5 billion yens	-	-
SLPP	100	19.5 billion yens	Improvement of security	-
SLPNe	100	19.5 billion yens	Improvement of security	Moving

*Benefit of the project is assumed 20 billion yens

3.RESULTS AND DISCUSSIONS

3.1 Evaluation on the image of public works

Evaluation on the general image of public works is presented in the Figure 3. Image of the public works was evaluated in ten kinds of categories. The mean value of image evaluation is 4 points since image of public works is evaluated in seven grades (1-7). As the results, marks fall short of the mean value in most of the categories except necessity (4.5). Especially, marks of the transparency and flexibility are very low level. Therefore, it is confirmed that image of the public works is not good and that will be mainly caused by its image of the inflexibility and opaqueness.

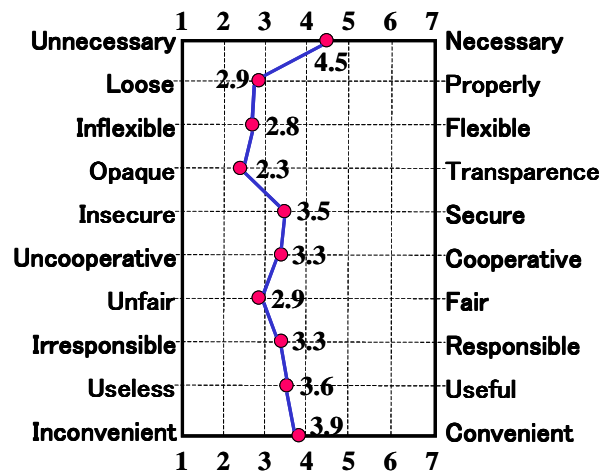


Figure 3 Image evaluation for public work

3.2 Effect of the information Provision

The degree of trust in the administrator evaluated after the presentation of the fictitious public work is compared with that evaluated before reading the scenario to verify the effect of information. Figure 4 expresses the change of the trust in the administrator conducting the public work. In this figure, low, middle, and high trust group are respectively defined as the group whose score of the trust in administrator is respectively under 3, 4, and over 5. As the results, number of the low trust group has drastically decreased and that of high trust group has drastically increased. Mean value of the trust evaluation has also increased from 2.80 to 4.51. This result expresses the effect of information on the trust building. Peters et al²⁾ also suggested that information provision ripens

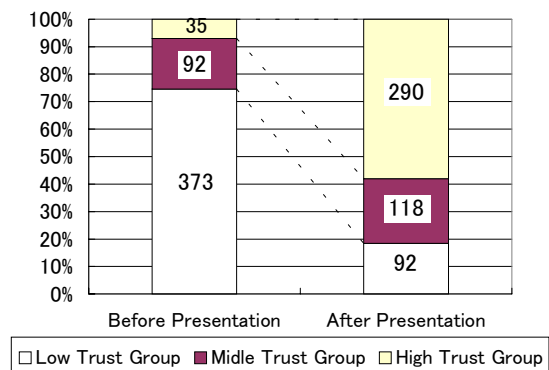


Figure 4 Evaluation for Trust

trust. The result of our research is supposing the suggestion of existing research. One more results should be paid attention in is that people would appreciate just a procedure of providing information rather than contents of information. It is named procedural justice³⁾ in the field of social psychology.

Presenting information has also changed the people's attitude toward the public work as well as the trust. Figure 5 expresses gradual change of the people's attitude toward the fictitious project. Here it is defined that people who evaluated the approval level for the project 1-3(from partially to strongly disagree), 4(neutral) and 5-7(from partially to strongly agree) are respectively named as disagree group, neutral group and agree group. In this figure, it can be confirmed that number of disagree group gradually decreases and agree group gradually increases. The mean value also increases from 3.99 (Step 1) to 4.52 (Step 3). This results expresses that increase of information is likely to alter the people's attitude toward the public work. However, Figure 6 expresses the exceptional case. This figure shows the change in the attitude of high trust group who have had high trust toward the administrator before the provision of information. Number of the agree group in them did not increase with the increase of the information. These results of suggest that the difference in the reaction to the information among individuals is large though the increase of information generally improved trust and attitude.

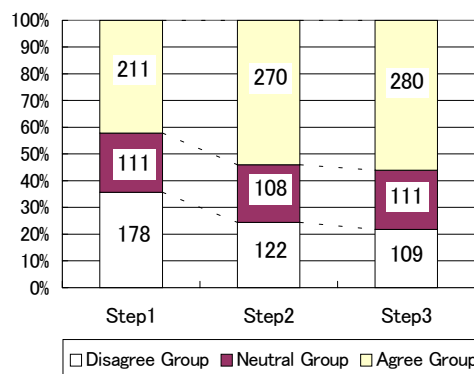


Figure 5 Information Effect on the Attitude

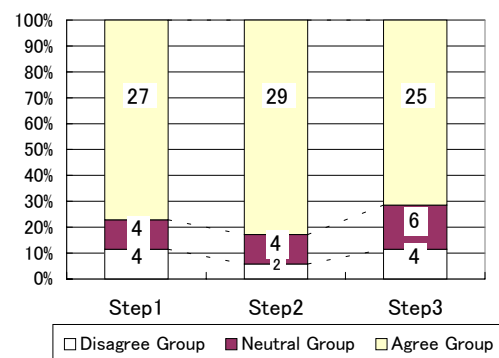


Figure 6 Information Effect on the Attitude (High Trust Group)

3.3 Influences of image on the trust and the attitude building

It is expected that general image of the public work as well as the information about the project has some effects on trust in the administrator and the attitude building of people. In short, people apt to depend on their image that already they has had when they judge on some project especially under the condition of scarce information about it. Moreover, information is expected to alter their way of judgment. Therefore, structural analysis is introduced to verify the above hypotheses and the mechanism of people's judgment.

Figure 7 and 8 respectively express the structure of people's judgment after simple information (Step 1) and detailed one (Step 3). Data of trust used in Figure 7 and 8 were respectively obtained before and after the scenario experiment. Data of the image was obtained before the scenario experiment. In these structural models, arrows express the causal relationship and numbers beside the arrows strength of the relation. As the results, influences of image on the attitude and trust building were diminishing with the increase of the information (from 0.19 to 0.08) as well as trust (0.75 to 0.35). On the other hands, relation between trust and the attitude was becoming stronger with the increase of the information. These results can be interpreted as follows. Decision making of the people toward the project will be based mainly on their general image for the public works when they have little information about it. People will come to judge the validity of the project and decide their attitude rather than the judgment from the image with the accumulation of the information. Whereas results also show that the influence of trust on the decision making is grater with the increase of the information. As shown in Figure 4, procedure of the information provision improved trust in the administrator. Therefore, information provision as a fair procedure will also play an important roll in the formation of the attitude through the improvement in the trust.

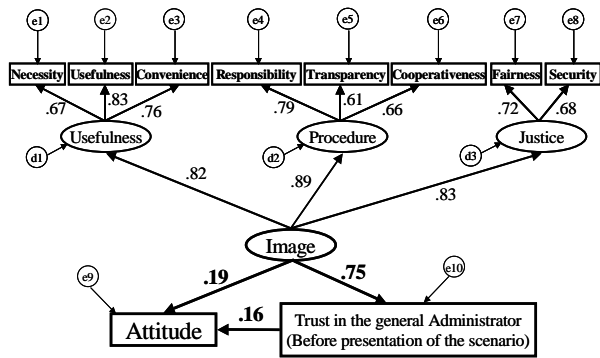


Figure 7 Impact of the Image (Before the presentation)

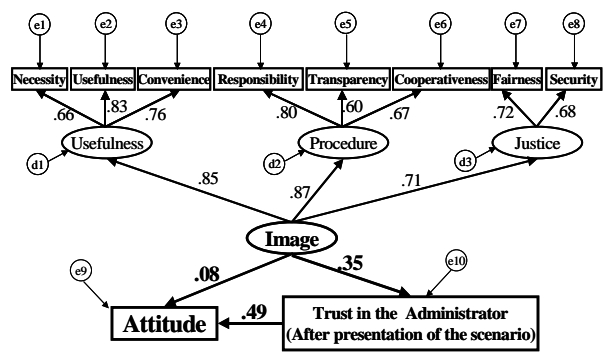


Figure 8 Impact of the Image (After the presentation)

In the situation of actual project, intimate relationship between attitude and trust was reported⁴⁾. Moreover, it is suggested in this existing study that the recognition of the information provision as a fair procedure played an important roll in the trust and consensus building.

3.4 Reactions of the various interest groups

Previous results suggest that providing information about the project has effect on the trust building and decision making under the condition in which people have no direct interest from the project. In this section, the results of the experiment in which people are assumed to have some interest in the project are shown.

Figure 9 shows the degree of the trust in the administrator who conducts the project evaluated by the people who join in the groups divided into six types of scenarios that are different in the interest and the project cost. As shown in the Table 2, people who are assumed to have negative interest (SHPNe,SLPNe) must move for the project. Results expresses that increment of the trust in the administrator by detailed information in case of SHPNe was largest in that of all the groups, though trust of every groups were gained by the provision of the detailed information. Furthermore, the differences in the valuation of trust between groups are not large after the presentation of detailed information.

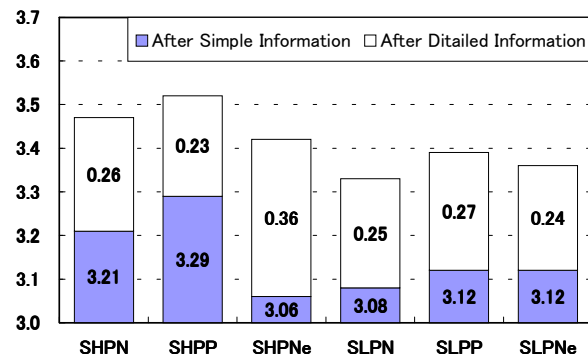


Figure 9 Trust evaluation of each interest group

Therefore, the important suggestion from this result is that information about the project should be actively disclosed to the people even if it includes negative information for the people such as moving. Loss by informing negative information will much smaller than that of being suspected to conceal it.

Table 3 expresses the reasons of the attitude toward the project judged by each interest group after the presentation of the detailed information. It was confirmed that the reasons of agreement are similar to each other. However, the tendencies in the reasons of disagreement are different between each group. Especially, those of the groups who have negative interest in the project (moving) such as SHPNe or SLPNe include the reason "Information is insufficient". This result suggests that the closer people relate to the project the higher request level for the information of the project will be.

Table 3 Reasons of the judged attitude

		SHPN		SHPP		SHPNe	
Agree	Number of the people who agrees	65/100 (Total)		60/100 (Total)		50/100 (Total)	
	1	For the Future	36.9%	For the Future	41.7%	Judging Comprehensively	42.0%
	2	Judging Comprehensively	21.5%	Judging Comprehensively	23.3%	For the Future	32.0%
	3	Considering Environment	16.9%	Considering Environment	16.7%	Large Effects	8.0%
Disagree	Number of the people who disagrees	35/100 (Total)		40/100 (Total)		50/100 (Total)	
	1	Huge Cost	20.0%	Huge Cost	37.5%	Moving	28.0%
	2	Judging Comprehensively	17.1%	Insufficient Information	17.5%	Insufficient Information	14.0%
	3	Environmental Impacts	17.1%	Judging Comprehensively	10.0%	Huge Cost	12.0%
		SLPN		SLPP		SLPNe	
Agree	Number of the people who agrees	59/100 (Total)		56/100 (Total)		51/100 (Total)	
	1	For the Future	35.6%	For the Future	30.4%	For the Future	35.3%
	2	Judging Comprehensively	27.1%	Judging Comprehensively	25.0%	Judging Comprehensively	29.4%
	3	Large Effects	20.3%	Large Effects	17.9%	Considering Environment	13.7%
Disagree	Number of the people who disagrees	41/100 (Total)		44/100 (Total)		49/100 (Total)	
	1	Huge Cost	24.4%	Huge Cost	25.0%	Huge Cost	20.4%
	2	Environmental Impacts	14.6%	Judging Comprehensively	15.9%	Insufficient Information	18.4%
	3	Useless	12.2%	Environmental Impacts	15.9%	Moving	12.2%

4.CONCLUSIONS

The following conclusions are obtained from the results of two experiments in this research.

- 1) Image of the public work is not good. The main reasons of this depend on the opaqueness of the process and inflexibility rather than the contents of the project or ability of the administrator. Therefore, it is necessary to improve the process and procedure more transparent and flexible.
- 2) Under the condition of scarce information, people tend to take negative attitude toward also the individual project. However, with the increase of the information, people's resources for decision makings changes from image (preconception) to the information of the project. In consequence, increase of the information improved trust in the administrator and increased the supporter to the project.
- 3) To deepen understanding of a project can be said the process which clarifies the differences between the individuals in other words. Therefore, increase of information and mutual understanding don't mean the opinion of the people one-sidedly concludes.
- 4) From the results of the analysis that considers the differences of interest in a project, it is confirmed that the people who receives negative impact from the project wants more detailed information about the project. Therefore, it is important to disclose the necessary information and share it even if it includes negative information because scarce of the information can cause to lose the trust and agreement.

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