# The Kawabekawa River dam [Kawabekawa River of the Kumagawa River water system in Kumamoto Prefecture]

## Masahiko Kunishima\* and Naoki Matsuo \*

Since the decisional system did not function well on Kawabekawa River Dam plan that the former Ministry of Construction released in July, 1966, the Ministry of Land, Infrastructure and Transport would enact the state power such as the application of the expropriation of fishing right without forming the mutual agreement between the State and the nearby inhabitants. But, after the opponents won in the appeal court on water rights on May 16th, 2003, the Ministry of Agriculture, Forestry and Fisheries stopped the irrigation works, and the work of dam main body is not started in present, 2004.

The Kawabekawa River dam construction plan is the public work which plans the multipurpose dam construction for the purpose of river improvement, water utilization, discharge-control, and power generation.

#### 1. Event

Kawabekawa River dam plan which the former Ministry of Construction announced on 1966, but the work of dam main body is not started in present, 2004.

#### 2. Course

The Kawabekawa River dam construction plan is the public work which plans the multipurpose dam construction for the purpose of river improvement, water utilization, discharge-control, and power generation. (figure.1)



Figure 1- The projected position of Kawabekawa River dam construction

(Source: The homepage of the Association of the inhabitant who protects Kawabekawa River which fosters Itsuki)

In 1996, a compromise agreement was made with Itsuki village and Sagara village which would be submerged, but complains and questions about the purpose of the improvement and the irrigation appeared one after another, so it was often said that the sequence and the necessity of the dam should be reexamined.

In November, 2001, Kumagawa fisherman cooperative rejected the compensation plan of the government in the compensatory negotiation of fishery which was a legal procedure of the commencement of the dam construction, so the government applied for the imperative expropriation of fishing rights.

By 2004, Kumamoto Prefecture had held the inhabitant discussion convention 9 times as a forum where scholars, inhabitants, opponents, and Ministry of Land, Infrastructure and Transport openly and fairly argued about the Kawabekawa River dam project. However, the discussion failed to reach an agreement on the investigation, the accuracy of the prediction of change, the value of the evaluations to the environment, etc.

The farmer questioned the way of bringing the inhabitants to agreement of the national project which pulls the agricultural water from the Kawabekawa River dam by the Land Improvement Law, so he litigated against Ministry of Agriculture, Forestry and Fisheries. Then on May 16th, 2003, Fukuoka High Court ruled in favor of the plaintiff. It made a finding of fact that the requirement to change requires the 2/3 agreement of the benefit farmhouse and this was not fulfilled on the project of farm irrigation and land readjustment. (Table - 1).

	The rate of the agreement.
The farm irrigation and drainage project	65.66%
The land readjustment project	64.82 <b>%</b>
The farmland reclamation project	68.84 <b>%</b>

(The rate of the agreement=the member of the agreement persons ÷ the member of the qualified persons for 3 section of Land Improvement Low × 100) The table 1- The rate of the agreement for the change of land improvement plan around

# the Kawabekawa River<sup>2)</sup>

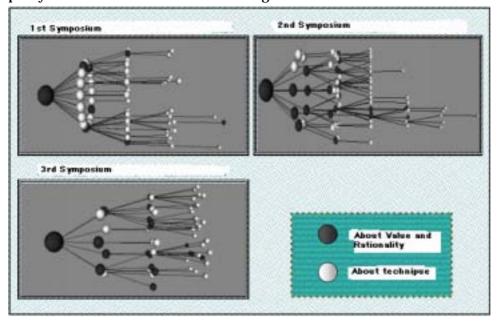
(Source: The homepage of National environmental pollution defense counsel liaison conference)

## 3. Cause

#### ○ The decision system did not function well.

The figure 2 shows the result of the analysis of the discussion in the convention where the citizens and administration discussed the validity of the Kawabekawa River dam plan. Here, we used "CRANES", the visualization technique of the discussion which Masahide Horita (the Univ. of Tokyo associate professor) developed. By CRANES, the discussion is broken down into the subunits and assembled into the nest (or tree) structure, so we can see the structure of the discussion. A theory which we can assume as a single claim (a minimum unit of the discussion) is designated by a sphere. Here, a theory based on the value judgment is shown as a black sphere, a theory based on the fact recognition is a white sphere.

From the result of the analysis, it is proven that there are more white spheres than the black spheres in these discussions (the ratio is 1:3). Although the inhabitant symposium was a precious place where the inhabitant and administration could debate, all the time the discussion remained on the theme not about the values but the technique. With the project the effect, of which spread widely, there are many interested people and the conflict of the value is of great variety, so the consensus building between profits groups becomes very difficult. Most conflict in the policy discussion originates from the conflict of the value, and the solution of it is necessary in order to carry out the public policy decision and to establish the good relations between the connected parties.



The figure - 2 the result of the analysis of the structure of the discussion by CRANES.<sup>4)</sup> (Source: Masahide Horita, Yuki Kanno (2000) "Development of information infrastructure system CRANES for the participation-type public management")

In most meetings to explain to local residents and third-party committee, the whole discussion places a disproportionate emphasis on technique extremely, and they don't discuss about a conflict of the value and the social rationality.

# 4. Immediate Action

After the ruling of accuser farmhouse winning on May 16th, 2003, Kamei agriculture and forestry minister ( those days ) described it as following; Based on the aim of land improvement plan of carrying out by application and agreement of the benefit farmhouse, it is considered that the reason why the claim of the country side was not accepted is related to recognition of fact, and we evaluates it appropriate to carry forward the improvement after the confirmation of the intension of the relation farmhouse about the security of the agricultural water of the area.<sup>5)</sup>

The government of Kumamoto Prefecture establishes the department of the total countermeasure on Kawabekawa River dam, and they worked on general coordination and symposia of the overall development project on the Kawabekawa River. And the expropriation committee decided the trial interruption in October, 2003 after the cancelation of the water utilization project which pulls the agricultural water. It is meant to restart November, 2004, but it is undecided because the drastic reduction of the new water utilization plan and the review of dam construction cost of the large amount are necessary.

# 5. Knowledge

# i . The public work must be carried out in order to make many people happy.

…In this case, the public work confused the local community and the human relations. It is important to establish the forum to ask the opinion of the inhabitants sufficiently and to discuss completely to find the mutual agreement point.

#### ii. We should tell heart to heart.

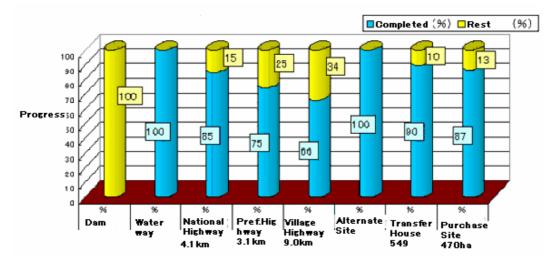
... They intend to ensure neutrality in the justification, so the whole discussion places a disproportionate emphasis on technique extremely.

# iii. Slow and [but] sure [steady] wins the race

...They downplay the work to obtain consensus in order to execute the plan early, so there is the risk of interruption or reexamination of the plan and need of more time and cost because of the repulsion of the inhabitant. They should not begrudge the effort needed for the conversation from the early time.

#### 6. Background

A spread of the nationwide theory that dam is not necessary. Decrease of water demand attributable to aging population combined with the diminishing number of children and decrease of the farming population. About 1614 hundred million yen (about 61%) of whole operating cost, about 2650 hundred million yen, was spent before the end of 2000. (**Figure-3**)



**Figure-3** The advance of main construction of the Kawabekawa River dam, 2001.<sup>6)</sup> (Source: The home page of the sand prevention office of Kawabekawa River dam)

# 7. On the Side

The main body is kept intact, but Aoyama Toshiki Vice-Minister for Engineering Affairs (those days) of Ministry of Land, Infrastructure and Transport said "The Kumagawa River is a difficult river of which midstream is in the basin and downstream is narrow. Even if it is planned from now, the design will be the same."

\* University of Tokyo

< The reference >

1) The homepage of the Association of the inhabitant who protects Kawabekawa River which fosters Itsuki

http://kawabe.technologic.co.jp/kawabe/k\_2.html

2) The homepage of National environmental pollution defense counsel liaison conference

http://www1.jca.apc.org/kougai/sokai33/kawabe\_hanketsu.html

3) Masahide Horita, Yuki Kanno (2000) "Development of information infrastructure system CRANES for the participation-type public management"

- 4) Yohei Inukai (2003) "Structure analysis of the theory on fact recognition and value judgment in the public decision "
- 5) The homepage of loving Kawabekawa River http://www01.vaio.ne.jp/wild/kawabeDAM/justice/keii-risui.htm
- 6) The home page of the sand prevention office of Kawabekawa River dam http://www.qsr.mlit.go.jp/kawabe/qa1-2.html
- 7) The home page Yomiuri Shim bun from Kyushu http://kyushu.yomiuri.co.jp/special/kawabegawa/kawabe/kawabe1211b.htm