

# On the newly established code of ethics for Japanese rural development engineers

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## Summary

This commentary is intended to introduce you to our newly established rural development engineers' code of ethics and to offer you a brief account of the backdrop to its establishment as well as of what aspects of ethicality it covers.

We (the Society of Irrigation, Drainage and Rural Development) have decided to institute an ethics code of our own, for one thing, in order to catch up with other engineering organizations that already have theirs. Our primary reason, however, is because we realize that the rapidly changing times and society demand that we reexamine our professional attitudes toward our engineering, and thereby confirm the ethical values or principles we should cherish as rural development engineers.

*Key words:* multifunction of agriculture, ethics code, rural development engineer, disclosure of information, recycling-oriented society

## 1. The backdrop to the establishment of our code of ethics

As a review of post-war agriculture alone would amply show, we rural development engineers have zealously devoted ourselves to the enhancement of agricultural infrastructure and to the improvement of the rural environment.

More specifically, so as to meet the changing needs of the times, we have flexibly taken one appropriate measure after another, including step-ups in rice yields during the period of food shortage and, with the advent of high economic growth, enhancement of productivity, selective cropping expansion and improvement of the rural living environment. Through all these efforts, as we might pride ourselves, we have more or less successfully contributed to the maintenance of a stable food supply

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and to the generation of pleasant rural spaces. Fortunately, never during this period have there been any projects we have undertaken that have adversely affected the safety, health and welfare of the public.

These days, however, there is growing concern over those global issues concerning the greenhouse effect, the loss of biodiversity, starvation, energy, cloning and so forth; issues that might affect people's trust in science and technology. Additionally, we have had a succession of scandals involving technology and industry that we cannot but attribute to deficiencies in moral principles. It is basically these occurrences that account for why we realize we must pay more attention to the ethicality of our own engineering practice and research.

Of no less importance is education in engineering ethics. In many advanced countries nowadays, such is the importance attached to the ethicality of

engineering that engineers no longer qualify as such unless they are well equipped with engineering ethics. In fact, education in engineering ethics is already becoming a major feature of higher education.

Locally, to keep up with the internationalization of technology, JABEE (Japan Accreditation Board for Engineering Education) has started to take action with a view to being accepted as a signatory to the Washington Accord. Likewise, among the APEC countries an agreement has been reached to mutually recognize professional engineers' licenses. Obviously these developments make it urgently necessary for us also to actively strengthen education in engineering ethics in our own academic institutions.

It is against the backdrop of these developments and in light of the perceived necessity of providing ourselves with a frame of reference to look to for judgment on the ethicality of our engineering that we have formulated our code of ethics the way we have. Certainly the realistic aim of our code of ethics is to confirm practical obligations we must fulfill as rural development engineers. But no less emphasized are fundamental moral values or principles we are expected to act upon, since these are deemed to be a prerequisite to the enhancement of our ethical awareness.

## 2. Code contents

The Preamble clarifies the background that has given rise to the need to establish an ethics code of our own, and it calls particular attention to the global issue of development and sustainability as well as to the challenges that the issue has thrust upon us engineers.

The fields for our professional practice and research are in rural areas, still rich in the beauties of nature compared with urban areas, and our target entities are water, soil, and greenery, the three main

elements of the rural environment. Working close to nature in this way, we cannot avoid being saddened by tangible changes in the rural environment, changes adversely affecting the biological world above all. The urgent challenge facing us, then, is to devote ourselves to rehabilitating and conserving the deteriorating environment and to protecting the ecosystem.

Attainment of these goals, however, cannot possibly be hoped for unless we manage to build a recycling-oriented society and restore real symbiosis with nature. This is why we have stressed the importance of eco-friendly and sustainable technology and engineering practice in both the preamble and the canons.

The Canons suggest values or principles we rural development engineers are expected to act upon and practical obligations we are required to fulfill. The headings over the canons represent the categories of ethicality and are each meant to allow the reader to anticipate the gist of the guideline provided in the main body of the canon. Canons 1 and 2 constitute the keynote of our code and they stipulate fundamental values or principles that it is deemed imperative for us to set great store by. These canons especially emphasize the indispensability of attention to the public good, to friendliness to the environment, and to the multifunctionality of farming, which is nowadays looked upon as an important part of its *raison d'être*. Canons 3 to 6 suggest practical requirements or obligations involving our actual engineering practice. Canon 7 stresses the need for improvement of each individual engineer's expertise and for efforts to elevate the profession as a whole.

In all likelihood, the framework and the details of the present code will require amendment in the not so distant future in keeping with global and local changes that might affect our profession. On the other

hand, some readers might think of situations on which the present code has not specifically provided guidelines for professional conduct. However, ethically proper responses to such situations could hopefully be extrapolated from the seven canons provided. At any rate, let us for now regard our present code as a starting point for constant reexamination and amendment.

### 3. Target engineers of our code

Obviously, the members of our society should be the first to embrace this code of ethics, all the more so in view of the fact that Art. 11 of our society's articles of association stipulates that *any member who compromises the honor of our society or goes against its objectives can be dismissed from membership subject to the decision of the board of directors*. On the other hand, the spirit of the present code, assumably, is actually accepted and lived up to by thousands of rural development engineers in their routine practice. Then, its targets should not be limited to the members of our society alone. Our code should rather be regarded as being intended for rural development engineers in general. After all, the more engineers who subscribe to this code of ethics, the more securely can our profession command the respect and trust of the public.

We members of the society in particular, and rural development engineers in general, are expected to keep in mind the spirit of the code when daily engaged in improving our expertise, attending to our academic research or actually conducting our routine engineering work. Last but not least, we eagerly look forward to whatever frank comment our readers might be kind enough to offer us on our code of ethics.

## Code of Ethics for Rural Development Engineers

### Preamble

Our rural development engineering has striven for years to improve agricultural infrastructure with a view to enhancing the efficiency and stability of food production. Importantly, in pursuing this objective it has never failed to accommodate itself to changes involving production and consumption of food as well as to changes in the nature of our farming communities. Just as important, it has always sought to promote the principle that this infrastructure improvement should contribute to generating ever more pleasant rural spaces.

On the other hand, recent years have seen the general public's increasing awareness that any human activity can have negative impacts on the non-renewable global environment as evidenced by, among others, global warming and the loss of biodiversity. Hence the urgent challenge for mankind is to realize sustainable development through pushing ahead with the creation of a recycling-oriented society.

Therefore, when conducting engineering jobs as professionals, we rural development engineers should bear in mind that our individual work is inseparably related to the global need to create and preserve a sustainable living environment for mankind. We should also be well aware that it is the maintenance of our self-discipline and integrity that is essential to elevating our engineering profession as a whole, and to putting our achievements to good use for the benefit of the public.

On this account, we rural development engineers are expected to abide by the following Canons. The members of the Society of Irrigation, Drainage and Rural Development should be the first to do so.

**Canons****〈Contribution to the safety, health and welfare of the public〉**

1. Besides making constant efforts to elevate themselves intellectually and morally, rural development engineers shall make the most of their expertise, skills and experience to help promote the safety, health and welfare of the public and ultimately of mankind, and shall thereby contribute to the sustainable development of society.

**〈Attention to the environment and the multifunction of agriculture〉**

2. Rural development engineers shall make much of harmonizing their technology implementation with the sustainability of the environment. They shall also set great store on taking full advantage of the multiple function that agriculture and farming areas are supposed to perform, ranging from preservation of the environment to conservation of land, development and maintenance of water sources, generation of beautiful landscapes and even transmission of traditional culture. With this multifunctional role of agriculture well in mind, they shall always take up multi-oriented and comprehensive approaches to their work and endeavor to research, and flexibly utilize, not only cutting-edge technology, but also traditional technology as and when the occasion demands.

**〈Disclosure of information〉**

3. Rural development engineers shall correctly evaluate and understand the significance of the professional service they offer. It is their responsibility to provide the public with an accurate account of what they perceive their work to be and also to do their best to respond sincerely to criticisms of their explanation.

**〈Fulfillment of contracts〉**

4. When providing their professional service, rural

development engineers shall act as faithful agents or trustees for their employer or client they are under contract to. If the information they have obtained as a result of the conclusion of a contract reveals that it involves something that they believe might adversely affect human society or the environment, they shall make sure that the parties to the contract take some appropriate action to deal with the problem.

**〈Avoidance of dishonest acts〉**

5. On no account shall rural development engineers commit any dishonest act, and they shall refuse any form of unjustifiable remuneration in return for their professional service.

**〈Maintenance of impartiality〉**

6. When offering professional service, rural development engineers shall take into account regional peculiarities and cultural differences, and they shall treat people fairly without discriminating against them for any of their personal attributes such as race, religion, sex and age, and thus respect their freedom and personality.

**〈Improvement of expertise〉**

7. Rural development engineers shall always endeavor to enhance their expertise and assiduously attend to their academic research. They shall also seek to share ideas and information with other engineers and exchange proper evaluation of each other's professional work. Thus, through all these efforts they shall contribute to the elevation of the engineering profession as a whole, the propagation of technical ideas, the fostering of a new generation of able engineers, and to the promotion of international academic and technological exchanges.

## 農業土木技術者の倫理規程について

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筆者(広瀬)は農業土木学会に設けられた技術者倫理検討小委員会の責任者として農業土木技術者倫理規程の制定(平成14年6月)に参画したので、その経緯と内容について述べる。まず倫理規程の制定に至った技術者をとりまく時代背景に言及する。次に技術者の基本的な倫理的価値観ないしは原則について述べた規程の前文と、我々技術者がそれに従って行動することが求められる実務上の義務を示している7条からなる規範について解説する。最後にこの倫理規程の対象者は、学会員のみならず全ての農業土木技術者とする根拠を紹介する。末尾に倫理規程の本文を掲載する。なお、英文での記述にあたって、カリフォルニア大学元教授ケネス・K・タンジ氏、富山県立大学教授バデューチ・ドミニク氏、SFHL法律事務所(オハイオ州)所長ジョン・W・ホッパー氏の3名の貴重な意見を参考にした。ここに感謝申し上げる。

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