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Third Research Report on
the Exploration of Wisdom in Japanese Traditional Cultures
Believed to be Instrumental in Building a Sustainable Society
and Sharing the Wisdom with International Community

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1. Practical Case Studies for Applying Traditional Wisdom of Sustainability in Japan in the Present Context

1-1. Wisdom for survival in an era of turmoil

We at JAES21 focused on the wisdom of sustainability in Japan in an attempt to identify its relevance in the present-day context, partly because we see that “today’s world” finds itself in a significant impasse, as is becoming increasingly apparent in our economy, environment, society and practically all aspects of our lives. The awareness we share – a sense of crisis almost – is that we are entering an era of turmoil.

When we turn our attention to the economy, we are bombarded by daily media coverage of the collapse of global financial markets, which began with the subprime mortgage crisis in the U.S., their repercussions on business and industry, and on the plight of the people who work there. In this era of globalized economy, its effect has not been contained within the epicenter, the U.S., but has spread to other advanced countries like Japan and countries of Europe as well as to other countries and regions like China, India, South America, and Africa, jolting people’s lives and society as a whole. The effect, on the surface, is reflected on the considerable fluctuations in stock prices and currency rates. On the other hand, it has also led to a rapid decline in consumption and to corporate bankruptcies, bringing about confusion and misery to those who have lost their jobs and thrown out onto the streets.

In the past, most workers in Japan could be secure in the knowledge that, unless they commit a serious crime or misdeeds, they could count on working at the same company that hired them until their retirement age. Today, however, even big companies are not immune from bankruptcy and even if the companies did manage to survive, workers could be fired any time with streamlining and corporate restructuring, raising their anxiety level ever higher. In the U.S., the world’s financial superpower, Lehman Brothers, a company with a history of more than 100 years, filed for bankruptcy almost out of the blue, and even big-name companies like GM and Ford, which

seemed impregnable only just recently, face an uncertain future.

Turning our eyes to the environment, the climate change caused by global warming is affecting all living creatures, leaving indelible scars in many parts of the world. There are reports of changes in rainfall patterns with typhoons, hurricanes, and other tropical cyclones getting even more powerful, increase in frequent forest fires around the world triggered by dry conditions and the Arctic ice and glaciers that remain on continents melting at an alarming pace. Japan is no exception. We have heard news on environment problems and global warming: rainfall patterns are changing; the number of deaths from heat waves and the risk of infectious diseases are on the rise; the spring is arriving earlier, as are cherry blossoms; and rising temperatures of Japan's coastal waters are altering the distribution of marine products and causing the whitening and death of corals in Okinawa. This is a country people thought that had always been blessed with plentiful water supply. Now there are concerns over the availability of water resources and the stability of domestic food production.

When we look at our society, we see the rise in the number of the so-called "working poor" at a frightening pace around the world, including Japan. Perhaps for the first time since the end of WWII, economic disparities have widened to an extent as to rock our society. There has always been a gap between the rich and poor, but probably never an era of poverty like the one today where disparities have become structured into the economic system under the banner of neo-liberalism, exposing a large number of people to exceeding difficulties. This issue of poverty and economic disparity is another factor that has shaken the people at the bottom of society like a time bomb waiting to explode.

These cataclysmic changes are upsetting people's values and their outlook on the future. It appears that underlying these changes are market fundamentalism and other similar values that are based on Western logic. We cannot hope to respond effectively to the social turmoil if we continue to stand by idly. Professor Joseph Stiglitz of Columbia University, the Nobel Prize laureate in economics, said: "I think this crisis should prompt an end to neo-liberalism. The notion that deregulation and liberalization will bring about economic efficiency has come to an impasse. As everybody understood

that communism was a flawed ideology when the Berlin Wall fell, most people now understand that neo-liberalism and market fundamentalism are flawed notions. My research has been explaining this, and now it is proven by experience” (“The Future of the Economic Crisis,” *Asahi Shimbun*, November 3, 2008).

In the last three years, we put together the eight-point traditional wisdom of sustainability in Japan, which had evolved over centuries in an environment of confined space and limited resources, and examined ways to make this wisdom known to more people. We also found that such wisdom is not peculiar to Japan but can be found in many parts of the world. We believe this wisdom can help us overcome the difficulties we face as an important intellectual asset that can guide in us in realizing sustainable development for our society.

We have come to this conclusion based on the recognition that the traditional wisdom of sustainability in Japan has been tried, refined, and strengthened over the ages, as something deeply trusted by the people. This may be likened to a deep sense of peacefulness one feels inside a solid, darkly lustrous wooden temple that has stood for centuries and to the pleasant relief one feels when placing one’s hand against its wooden pillar that must have been touched by countless others.

There is also a more constructive reason to this. As already mentioned, the fact that much of this wisdom developed in a semi-closed world during the Edo period enables us to draw an analogy between the Edo period and today’s global world. During the Edo period, Japan adopted a policy of national seclusion in a nation that was geographically separated from and protected from the Asian continent, building a unique world within its borders. This, of course, does not mean that Japan had absolutely no contact with the Asian continent, but compared with today, it was a far more secluded environment. And it was in this environment that the Japanese kept to a sustainable way of life.

On the other hand, we might postulate that today’s world is approaching a semi-closed state. The world’s population, which stood at around 1.6 billion

at the beginning of the 20th century, now exceeds 6.7 billion and is estimated to reach 8 billion at around 2025. And to a large extent, each person making up that population is fervently pursuing the goal of living a more prosperous life, marked by consumption of large amounts of energy and commodities. Forests are being cut, seas, lakes and swamps are reclaimed, cities are expanding, and farmland is being reduced, all in the name of “development.” As a result, we are now living in a world where all frontiers have virtually vanished. We have come to believe that in such a semi-closed world without frontiers, the traditional wisdom developed in Japan will carry a greater meaning.

If we were to see the wisdom of sustainability in Japan simply as a way to return to tradition, that would be nothing but praise of the past. More important, we need to find positive meaning such wisdom for application in today’s world and to spread the centuries-old wisdom to the rest of the world as a guide to overcoming the current crisis and to building a sustainable, eco-conscious society. There are many things we need to do to turn this into reality. As a first step, we believe it will be meaningful to gather and disseminate information on the case studies for applying the wisdom of sustainability in Japan in today’s world.

1-2. Outline of research on case studies

(1) Objective of research

In this research, we gathered and analyzed some case studies in which the participants actually practice and apply the traditional wisdom of Japan in their activities involving community organization, product manufacturing and management. Our aim has been to identify how the traditional wisdom of sustainability is being applied in our modern society and their message sent to the new generations based on our awareness of problems outlined in 1-1.

Looking at the daily life in today's Japan, the traditional wisdom of sustainability seems to have been lost on surface. If we look deeper, however, we find quite a number of instances in which people take advantage of traditional wisdom in their struggle to face up to the present-day challenges. Some of the examples include the efforts to revitalize the local community through nature preservation, passing of traditional skills and development of eco-friendly technology. We believe that the act of identifying and examining such case studies will enable us to give contemporary meaning to traditional wisdom and enable us to reaffirm the value of traditional wisdom in Japan. We are confident that the application of such wisdom in the predicted turmoil of the 21st century should provide us with an opportunity to open up a path to revive our nation and make a global contribution.

(2) Selection of research subjects

We kept the two points shown below in mind in the course of selecting the research subjects:

- * Future-oriented cases that give hope for the world and new generations instead of simply returning to the past.
- * Cases that highlight our idea that traditional wisdom of sustainability in Japan is linked to the creation of a sustainable society.

Specifically, we chose the 13 cases as shown below:

- (1) Reviving traditional culture and nurturing people who will shoulder the future responsibility
 - Attempts to revive the Nakao *kabuki* in Hase district, Ina, Nagano Prefecture
- (2) Promotion of local production and consumption – Challenges of Hyakusai Gekijo
- (3) Residents of Toyooka City taking off with Oriental white stork
- (4) Potential for the future as seen in traditional grazing on Sado Island
- (5) Corporate management with emphasis on sustainability rather than on profits
 - Mukoyama Paint Company
- (6) Eco-friendly farming and pursuit of inconvenience -Mori Farm Services Company
- (7) Integration of the spirit of *mottainai* (waste not) and technology
 - Kawasaki Eco-Town
- (8) New recycling channel created with locally produced wood
 - From “.”(Ten) Pod to eco-town
- (9) Development of a Compact City following the lessons of Shogunate Tokugawa Ieyasu
- (10) Practice of “eco-village” movement - Kobunaki Ecovillage Project
- (11) Applying the traditional handicraft skills in contemporary society
 - NEC access technica, Ltd.
- (12) Challenging the World Skills Competition and passing on cutting-edge skills
 - Hitachi Plant Technologies, Ltd.
- (13) Cultivating a sense of pride among children in the local community
 - Use of locally produced farm products in school lunches prepared at Hase School, Ina, Nagano Prefecture

□

(3) Research method

The case study research was conducted primarily by members of JAES21 (Ms Hisako Ito, Mr. Osamu Jumonji, Mr. Kennichi Narita and Mr. Kazumitsu Matsuo) and the secretariat. Our research was conducted based on interviews and study of various reference documents.

1-3. Observations of case studies

The application of traditional wisdom certainly was not on the minds of people who participated in the case studies surveyed when they began their projects. Most were moved by a sense of mission after they were confronted with challenges in their respective field. Driven by a strong sense of crisis or anxieties about the situation they were in, they embarked on their projects by trial and error and accomplished results. In our analysis of case studies, most participants seem to have promoted their projects along certain values they held dear – values that share a common thread with the traditional wisdom of sustainability, in our view (see the Figure and Table).

The underlying sense of crisis and anxieties, found in the case studies, were wide-ranging. For example, from the perspective of the environment, the project for the preservation of the white storks started out of concern about the deterioration of the local environment. A sense of crisis about global warming was the centerpiece of the Kobunaki Ecomura Village Project. Programs initiated by local communities were often motivated by depopulation and anxieties over the prospects of the survival of their communities. On the other hand, it was uncertainties about the prospects of economic survival that prompted many businesses to embark on their projects. From the perspective of humanity and society, projects developed out of a sense of crisis about eroding ties among people and concern over the

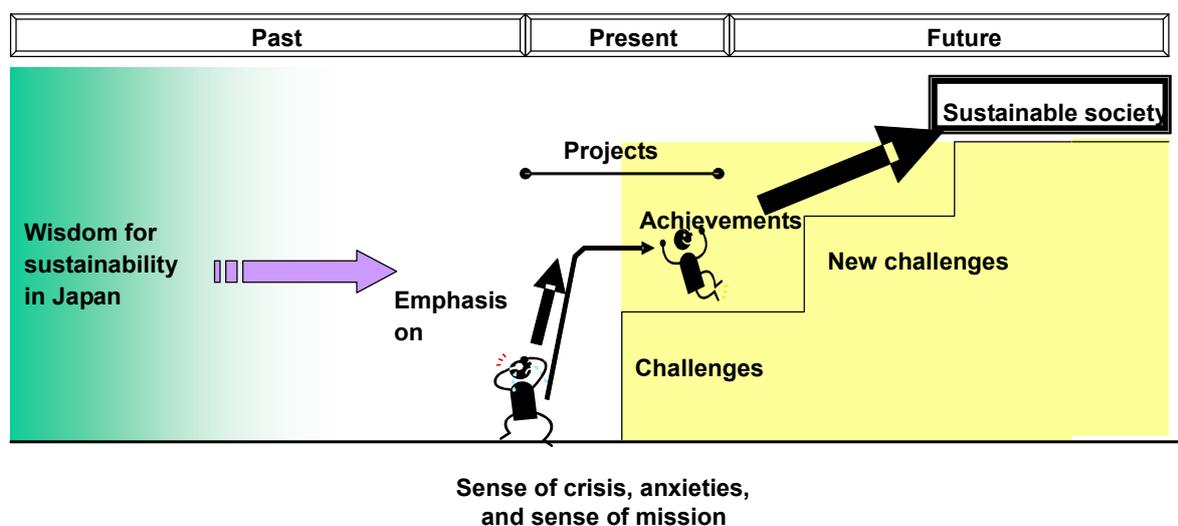


Figure: Relation between the case studies and the traditional wisdom of sustainability

survival of communities and continuation of regional cultures and skills as well as a reaction to the prevailing trend towards excessive pursuit of convenience. A common strand that runs through all of the cases is that in each, challenges are set to correct the distortions in today's world, mentioned in 1-1 as shown above. Instead of returning to the past, forward-looking projects are being carried out to remedy such distortions.

Specifically, in the case of Hase district in Ina, Nagano Prefecture, the local community has worked to revive local *kabuki* and launch a school-lunch project that promotes local consumption of local produce. Their challenge has been to stem the eroding sense of unity within the community resulting from depopulation. On the Hyakusai Gekijo farm, the organizers have tackled the challenge of involving more people in supporting self-sufficient agriculture with the aim of raising the awareness of food as a down-to-earth, real-life issue. In Tomioka City, the project for saving white storks from extinction has resulted in revitalizing the local community. On Sado Island, the local community has explored the potential of traditional grazing in an effort to overcome their dependence on “imported” energy and food. Mukoyama Paint Company and Mori Farm Services Company eventually discovered that business management based on the wisdom of “learning to be fulfilled” was the way to meet the challenge of securing an adequate level of profits while enhancing the satisfaction of employees and other stakeholders. In Kawasaki Eco-Town, a regional material-cycle system was introduced through the cooperation of the industry, government and academia under the banner of building a sound material-cycle society and to meet the challenge of reviving the regional economy. G-PROJECT Inc.’s initiative in restoring self-sufficiency in wood resulted in the construction of an entity named “.(Ten) Pod and in recycling of locally produced wood in Kobunaki Ecomura village. In the case of Shizuoka City, the urban development philosophy of Shogunage Tokugawa Ieyasu has been translated into today’s concept of the Compact City. In Kobunaki Ecomura village, the planners are engaged in locally rooted housing development as they attempt to create new lifestyles under the banner of ideal, sustainable community building. Hitachi Plant Technologies has successfully utilized the World Skills Competition as a means to pass on the skills to the next generation.

If we look closely at the projects' underlying concepts and ideas participants hold dear, we find that the projects generally share the ideas shown below.

(1) Connection

Today, with the proliferation of a visual world represented by cell phones and PCs, our connection with others and with nature seems to be crumbling. As if to counteract such tide, we are witnessing moves by some concerned people seeking to rebuild “real” ties. Many of the cases we surveyed were based on a deep awareness on our connection with nature and others as well as the local climate and culture.

In many aspects of our lives, we receive blessings from nature. In the world of science, these blessings are called the “ecosystem services,” which are categorized into (1) provisioning services: production and provisioning of foods and water; (2) regulating services: control and regulation of climate; (3) cultural services: recreation and other mental and cultural benefits; (4) supporting services: nutrient recycling and production of oxygen by photosynthesis; and (5) preserving services: preservation of diversity and protection of the environment from unforeseen events.

Many of the cases we surveyed sought in particular to build a connection with nature in pursuit of spiritual and cultural benefits. For example, Hyakusai Gekijo farm, which sees their farm as a stage on which living things exercise their creativity, has worked to create a mechanism where people can actually sense their connection with living things through farming that aims to achieve self-sufficiency in food. In Tomioka City in Hyogo Prefecture, the local community has worked to restore a balance in the region's ecosystem by introducing agricultural methods conducive to white storks' development. The community leaders run a project in which they tell children stories on how the white storks were saved and life of local poplar trees, giving them an opportunity to learn about the importance of connection underlying the web of life. These efforts provide a setting for people to reaffirm their ties with nature in the course of community development. The use of locally produced wood in the “.” (Ten) Pod project encourages people to feel the warmth of wood and discover their connection

with local forests and Lake Biwa through events based on hands-on experience. These efforts are valuable in that they encourage people to experience the spiritual and cultural blessing of nature as well as the ecosystem services mentioned earlier.

On the other hand, in the case of the Nakao *kabuki*, ties between people of different ages were strengthened in the course of passing traditional culture down to the next generation. These efforts have spread to the whole community as people worked to restore person-to-person connection both vertically and horizontally. In Kawasaki Eco-Town, their implementation of a regional material-cycle system is based on person-to-person contact. One may get to know others through the Internet, but project leaders believe in the importance of meeting others in person in building a relationship of trust. In the case of Hitachi Plant Technologies, the firm uses such mechanisms as the World Skills Competition to pass on skills and technology from predecessors to their successors. Through these efforts, the company maintains their technological edge, which in turn helps to build a relation of trust among people. In the case of Hase district in Ina, Nagano Prefecture, the passing down of food culture through school lunch project has developed into an inter-generational undertaking involving three generations of grandparents, parents and children. These are nothing but attempts to restore and regenerate connection between people.

In the case of Toyooka City in Hyogo Prefecture, local businesses successfully used the image of white storks and the its traditional bag manufacturing industry as local symbols to promote a shopping district named the “Kaban (bag) street” in their community development. The development of the Kobunaki Ecomura village, while embracing a new lifestyle, is also an attempt to promote integration and fusion with the existing town, accommodating the local climate.

The phrase “Think globally, act locally” has been around for some time now. As the force of globalization becomes stronger, there are active moves to shed new light on our connection with nature and with others as well as the local climate and culture, and act on such newfound resources. In this age of globalization, projects based on such “ties” have become all the more

important.

It can indeed be said that these efforts are today's version of symbiosis with nature, harmony, survival of the community, and respect for the forerunners, embodied in the traditional wisdom of sustainability in Japan.

(2) Consistency with laws of nature

Amartya Sen, who was awarded the Nobel Prize for economics in 1997, called those who depend on economists' assumptions of economic rationality as the "rational fool." It means that "social good cannot be achieved by selfish behavior." If sustainable society is one that strikes a balance among economy, the environment, and the human society, then the humankind needs behavioral principles that transcend economic rationality. Some of the cases we surveyed were not bound by such economic rationality, but instead gave "emphasis" to genuine rationality, in other words, to thoughts and actions consistent with the laws of nature.

In Japan, nature takes two faces: One gives rich harvests through the passing of the seasons, and the other takes on a severe form of typhoons, volcanic eruptions, and earthquakes. In the past, adjusting to this nature's cycle was a way to live congruously with the principles of nature. The progress of modern science and technology, however, allowed us to carry out activities that disregard nature's cycle. Supermarkets stock foods that are out of season; housing development is carried out in once flood-prone areas. All this has been made possible by the cultivation of plants in greenhouses equipped with boilers, long-distance transportation system, and large dams. In return for this convenient lifestyle that relies on the use of massive amount of resources and energy, we now face the critical problems of global warming and depletion of resources. Against this background, more and more people are trying to explore ways to make a livelihood that is more consistent with nature's cycle, while securing a certain level of convenience.

Specifically, Mori Farm Services Company's eco-friendly agriculture, traditional grazing on Sado Island, and " (Ten) Pod's regional recycling of wood are all examples that utilize the nature's cycle. Farming, forestry and

fishery have always been a form of livelihood that deals with nature, and the making the most of nature's cycle is both fundamental and effective in terms of harvests and risk management. In all of the three cases, people are trying to open up new paths by incorporating the wisdom they learned from life and social experiences into that baseline of drawing the best from the nature's cycle. While all of these cases are in the primary industry, there are also moves to grow local foods in season. Others have moved to the countryside after retirement to appreciate the changes of the seasons in a slower lifestyle. What these people share in common is appreciation of typically Japanese sensibilities and valuing a way of life that is consistent with nature's cycle.

In industry, we are witnessing examples of companies that achieved rapid gains in their resource efficiency after originally starting their operations in pursuit of economic rationality – of reducing waste and creating higher value from fewer resources. In the same way that living things in nature sustain life by using resources and energy in the most efficient manner in a finite environment, industrial activities seem to be approaching the law of nature.

For example, in Kawasaki Eco-Town, the community used to pay money to have their waste disposed in the beginning because that was the economically rational alternative. But after their system was reformed to revise the waste disposal law and introduce the recycling law, recycling waste within the region became a more economical option. The review of the changes led to the introduction of a regional material-cycle system in Kawasaki Eco-Town. Other examples include the case of Mukoyama Paint Company, which has worked on cost savings under the strong leadership of the company management, and the case of NEC Access Technica, which has reduced waste in an effort to strengthen competitiveness. In recent years, biomimicry, or mimicry of the natural mechanisms in industrial activities, is becoming active. The book *Natural Capitalism* predicts that “companies will mimic living creatures and the processes of the ecosystem, and chemical products, raw materials, compounds, and, eventually, even microprocessors will be manufactured using methods of production and processing that are consistent with nature.”

Moreover, keeping the size of businesses and business activities moderate is

also consistent with the principles of nature in this finite global environment. Whereas many firms tend to see efficient expansion of business and profits as their ultimate motive, Mukoyama Paint Company and Mori Farm Services Company are, out of their concern for the finite global environment and resources, tackling the challenge of realizing environmental business management that enhances the satisfaction of their employees and customers while making profits sustainably, keeping their businesses in operation, understanding what is appropriate in terms of business size with the “courage not to make their businesses too big.”

Many keen observers now say that both advanced and developing countries cannot maintain social sustainability if people continued to pursue “economic growth” on the basis of quantitative expansion. The above cases, which are nothing but attempts to change the concept and substance of economic growth, show the direction of future business management. Also they are congruous with environmental principles based on the “finiteness” of the global environment and the corporate principles of the “survival” of companies. They are also consistent with the Japanese wisdom of “symbiosis with nature,” “learning to be fulfilled,” and “reincarnation and sustainable material cycle.”

(3) Spiritual abundance

Another point that characterizes these cases is their high esteem for spiritual abundance, with particular emphasis on joy and growth as human beings. William Butler Yeats, the Irish poet and dramatist who received the Nobel Prize in Literature in 1923, aptly noted: “Happiness is neither virtue nor pleasure nor this thing nor that but simply growth. We are happy when we are growing.” Even today, a great number of intellectuals contend that the reward for the work we do is growth, not salaries or revenues. This realization, which has struck a chord in the hearts of many, seems to have been present in the minds of people engaged in our case studies.

For instance, in the case of Nakao *kabuki*, the dedicated efforts to pass on the traditional art of *kabuki* served to provide an excellent opportunity for growth for youngsters who took part in the act and supporters in the local

community. Mr. Nishimura of Nakao Kabuki Preservation Council says, “As we do more and more performances, we can visibly see that participants have grown considerably as actors, as behind-the-scene assistants and as human beings.” World Skills Competition medalists are expected to display leadership qualities in passing the skills on to future generations, in addition to the mastery of skills as individuals. In fact, people have noted that these medalists have exhibited signs of personal growth in the course of their training. The school lunch project at Hase district in Ina, Nagano Prefecture represents a practical case study that helped to uplift human qualities through food preparation. These activities supported by a wide range of people in the community have also helped to enhance people’s awareness as community members.

Also, people feel a sense of joy when they accomplish a challenge after they have invested much time and energy on it. The local-production, local-consumption practice advocated by Hyakusai Gekijo enables people to enjoy enriching moments by carefully and slowly preparing the farm products that have been grown with painstaking care and over long periods of time. Some of the popular events organized by Mori Farm Services are designed to let participants experience inconvenience. Far detached from the daily life based on the pursuit of convenience, the participants seem to enjoy spiritual affluence that can be gained by expending much energy and time on certain projects. The same thing can be said of Kobunaki Ecomura.

In a break away from materialistic and artificial affluence brought by convenience, speed and efficiency, more people are being lured by and find real joy in the abundance than can be gained by personally engaging in and enjoying each of the processes, even if that requires more time and energy. New, unconventional activities borne of such moves are emerging, striking a responsive chord in more and more people. These changes seem to indicate the potential for the resuscitation of the traditional wisdom of sustainability based on spiritual affluence, freedom of the mind and value of education.

1-4. What we can do to accelerate the move

To us, the 13 case studies introduced in the previous sections seem to move in the same direction towards the building of a sustainable, environment-conscious society by the application of traditional wisdom of sustainability in Japan, although they are separate and independent programs. Also, we are witnessing transformations on a level of tectonic plate shift beyond what is represented by the now-popular term “eco.” In addition to programs introduced here, NPOs and social entrepreneurs are gaining ground, a slow way of life symbolized by the word LOHAS (Lifestyles Of Health And Sustainability) is spreading, and substantive CSR (Corporate Society Responsibility) projects – as well as other similar activities -- are under way in various parts of the country.

However, these nascent moves still represent a minority, waging a solitary battle. We will need to identify a clear social vision and launch whatever measures possible to accelerate these moves and develop them into a solid movement. As a step in this direction, this will require: (1) Supporting information-related efforts, for instance, gathering data on best practice cases and communicate them to others, and building data networks; (2) Finding ways to apply the idea underlying such moves at home, school, workplace and at different occasions; and (3) Developing an institutional framework to support such activities.

(1) Information

As noted earlier, people engaged in the case studies did not initiate action with the aim of building a sustainable, eco-conscious society. Most were not even aware of the traditional wisdom of sustainability in Japan, but merely worked to tackle the challenges they faced in earnest. More often than not, a social revolution takes shape after a great number of people expend efforts in a certain direction, without any hint of revolution in the minds of the participants. It is the historians in later days who termed it revolution. Many intellectuals say we are in a transitional period in environmental evolution. The major players of this revolution are ordinary people, battling with challenges at home, workplace, and the local community. It is

important for us to support their efforts in the information arena to shed light on the activities of such people and illuminate the direction in which they are headed.

As an important step in this endeavor, we will need to gather and analyze the Best Practices as we have done for our cases studies this time, and let them be known to the world at large through all media channels including books, magazines and Internet. As seen in the impact of the Japanese magazine SOTOKOTO had on spreading the idea of LOHAS, taking advantage of media in one form or another would be of help in spreading the traditional wisdom of sustainability.

Another powerful tool is the use of awards. An institution framework for awarding individuals and organizations has a great potential to spur promising activities by setting an example for those that follow and encouraging those being awarded. Based on this understanding, JAES21 launched the “Environment Award for Managers” in 2008 to support managers waging a challenge to apply the traditional wisdom of sustainability for the integration of environment and economy. Identifying excellent activities and introducing them through the media and awards will inspire those endeavoring towards the same direction to develop a network.

Qualifications of Managers as Leaders of 21st Century Society

1. Courage to disclose information and stand up for fair competition.
2. Foresight to formulate corporate values with prospects for a 100-year, vision enthusiasm to spread those values, and strategic prowess to accomplish them.
3. Ability to see through and anticipate the trends of the era in Japan and abroad.
4. Willingness to fulfill responsibilities on social challenges in collaboration with other companies.
5. Ability to bring higher motivation towards work to all employees based on recognition of the value of labor.
6. Readiness to value ties with the local community and to respect its tradition and culture.

7. Commitment to integrate economy and environment.
8. Determination to refrain from making business too big.
9. Capacity to understand science and promote the application of traditional wisdom in management.
10. Potential to constantly grasp technological trends and link them with managerial development.
11. A sense of awe towards higher beings and things beyond human intelligence.
12. Faculty to communicate with all stakeholders including NPOs.

Many NPOs have their own networks and links beyond the border, which can be used to introduce programs and projects as outlined above. This may be an effective way to effect change in Japan, a nation often described as being highly vulnerable to and easily influenced by foreign pressure.

(2) Education

Our research done in the past has led us to believe that education that redefines people's values plays the most important role in nurturing and spreading the wisdom of sustainability. For people who have reached a certain age, the traditional wisdom of "learning to be fulfilled" and "*mottainai*" (waste not) represents worn-out values handed down from the old generations. Fortunately, however, these ideas may sound totally new and fresh to children and young people. Depending on how they are presented and communicated, such ideas have a great potential to arouse sympathy among the younger generation.

Education in Japan today has been developed basically with the aim of orienting students to fit a fast-track society based on rapid economic growth in the post-war period. For this reason, it has failed to offer systems or methods that ease our adaptation to the new, 21st century era. There is a need to regenerate our education as a system that responds to the needs of the new epoch, while maintaining its unchanging objective of "perfection of character."

Needless to say, regeneration of education requires a society-wide

commitment. Reforming the current educational system and institutional framework is a must. Redefining our values on education – people’s values and social values – also plays an integral role. As an NPO, we also suggest utilizing the private sector, primarily community power, to provide informal education in various forms in addition to the regular school education. We came to this conclusion following our research on education during the Edo period when *terakoya* schools and private schools were built and run by the private sector. Unlike today’s uniform education, teachers in those days gave one-on-one instruction to their students, teaching the knowledge and skills that are believed to be essential in the future life of each student. It was an unofficial education system where people with high virtue and desire to teach instructed students with passion. This is a far cry from the standardized teachers’ license system in place today.

Also, in today’s Japan, less emphasis is being placed on on-the-job training and education following the erosion of the life-time employment practices. On-the-job training assumes an important role in a different way from school education. The role of NPOs is to communicate to the corporate world, through various opportunities, that the traditional wisdom of sustainability for “nurturing the next generation” and respecting communal ties would help shore up their sustainable management practices, and that these ideas form the real starting point of CSR, or corporate social responsibility. This is more important today than ever, when we are being seriously affected by the financial crisis and accompanying job insecurity. One way for NPOs to support on-the-job training is to introduce and communicate information on companies that emphasize such environmental management.

(3) Institutional frameworks

An effective means of supporting the extraordinary efforts to preserve and pass on the traditional wisdom of sustainability is to build institutional frameworks and mechanisms for such endeavors.

For instance, companies located inside the Kawasaki Eco-Town recycle resources by utilizing wastes and byproducts. This was facilitated by the subsidy system targeted on the construction of recycle facilities based on

recycling laws including the Law for Promotion of Sorted Collection and Recycling of Containers and Packaging and the Eco-Town Policies introduced in 1997. In addition, the pressure of CO2 reduction by the Kyoto Protocol is believed to have induced and accelerated corporate efforts to recycle materials.

The revival of local Nakao *kabuki* in Hase district, Ina City led to the construction of a fine *kabuki* house in a rustic farming village, which was realized by subsidies by the government (Ministry of Agriculture, Forestry and Fisheries). The construction of this facility is believed to have encouraged people concerned and further reinforced the support of village residents.

The project for the protection of Oriental White Stork in Toyooka City also took advantage of subsidy system offered by the national and local (Hyogo Prefecture) governments. Such grants no doubt have served to facilitate and motivate people's protection activities.

As we have seen, the existence of institutional frameworks and mechanisms (including laws and regulations, subsidy systems and remuneration systems) is effective and indispensable in drawing wise thinking and motivation to act from citizens and businesses as well as encouraging and supporting such activities. As the number of such systems in place is still small in Japan, NPOs will need to work on the society to build systems and frameworks to preserve the intangible assets of traditional wisdom and spiritual culture in Japan.

2. Future Challenges and Outlook for Application of the Traditional Wisdom of Sustainability in the 21st Century

This project is beginning to attract attention at a deeper level and wider range than we had expected. However, it is undeniable that the project would involve some challenges if it is to be applied as a spiritual foundation for overcoming the difficulties affecting the world today.

First and foremost, we need to evolve Japan's traditional wisdom of sustainability into a new value system suitable for the twenty-first century by examining the traditional wisdom from historical and scientific perspectives to explore the meaning of the value systems developed in the Edo period (1603–1867) in the current context.

The traditional wisdom of sustainability, which we compiled into eight points, was primarily formed, shared and sustained among people in the Edo period. As such, the wisdom was perfectly adapted to the political, social and economic conditions of the time when people depended on such values. On the other hand, traditional wisdom does not encompass the prerequisites of our modern society, as represented by scientific research, notions of freedom and equality -- which constitute the pillar of democracy -- and the principles of transparent and open governance under the rule of democratic government. These values were neither suited to nor were they necessary under the social, political and economic conditions in the Edo period.

Mr. Shizuka Hashimoto of the National Institute for Environmental Studies argues: "The reason why the Japanese have accepted and maintained their traditional wisdom over a long period of time is because living on the basis of such values was considered a rational and reasonable alternative, given the natural and social restrictions of the time, and not because such values were considered ideal. In other words, people placed emphasis on spiritual affluence and shaped the norm of learning to be fulfilled precisely because they had to devise and develop skills and ingenuity to survive by dealing with nature and because technological standards then were not powerful enough to handle the forces of nature. This also applies to the social tendency to seek harmony. For example, in traditional rice-growing societies in Japan,

villagers worked together to plant and harvest rice, renovate roofs and do other works that required vast amount of labor under a collaborative framework term the *yui*. People valued harmony and maintained it as a social norm because they had to depend on others for mutual support and cooperation to accomplish much of their daily work.”

As we accept these facts of life with all sincerity, we need to translate these words of wisdom into contemporary language to recreate them into a rational value system suitable for the borderless global world of the 21st century.

Second, another challenge we face is to restructure the traditional wisdom in Japan into a global value system of sustainability. To make this happen, we need to start by developing international communication tools to gather, extract and condense such wisdom from around the world, while disseminating information on the traditional wisdom of sustainability in Japan.

We have found that the traditional wisdom of sustainability we surveyed in fact was not something that is peculiar to Japan but one that can be considered to have been shared by many different races and peoples of the world. At our meetings in cooperation with the United Nations University (UNU) and the Institute for Global Environmental Strategies (IGES), participants from France, India, China, Malaysia, Sri Lanka, Britain and other countries examined traditional wisdom in Japan with a critical eye in comparison with that in their own countries. At the same time, many participants noted with much empathy that traditional wisdom akin to that in Japan had also existed in their countries. This suggests that the traditional wisdom in Japan, which developed in the Edo period, is not a product of particular conditions of this country. Rather, the wisdom may represent values many people in the world can share and identify with.

Since what we perceived as the traditional wisdom of sustainability in Japan now seems to have more global roots, we may need to delete the word “in Japan” from our previous expression, “traditional wisdom of sustainability in Japan.” This would enable us to reconstruct the value system as a form of wisdom crystallized by different races and peoples through life experiences

accumulated prior to the first half of the 20th century.

Third, we need to develop effective communication tools to gain a broad public understanding of the traditional wisdom of sustainability and encourage many people to act on its principles.

Most eco-minded, good-natured people approve of the idea of traditional wisdom of sustainability, at least on the surface, but those who actually put it into practice are few. As a matter of fact, most of us know these issues are important but often find it difficult to put them into action. Solving this dilemma may be the key to winning greater acceptance of the wisdom of sustainability among the public. We need to analyze the factors that hamper understanding and obstruct action, and develop more effective communication tools by examining the factors affecting people's understanding and actions.

Based on this recognition, we at JAES21 launched jointly with Waseda University a project this year to globally promote our traditional wisdom of sustainability beyond language barriers and different customs. Our aim is to integrate wisdom that exists in many parts of the world in different forms. As part of this project, we started a self-propagating type of forum as a new communication tool designed to gather and promote the wisdom of sustainability in Japan and the rest of the world. More specifically, we plan to develop web contents that capture the essence of our wisdom in the form of computer graphic animation, *manga* cartoons, digital picture-story shows and other easy-to-understand format. To tap the response to such contents, we will run a forum that calls on visitors to send in their ideas and observations on the subject in their own part of the world. At the same time, we will launch an online questionnaire to gauge how such contents are being understood, how they are being translated into action as well as factors that thwart their action. The data collected through the forum will be examined in the contemporary context from the perspectives of society, culture, custom, social convention (social science), history, technology and environmental behavioral psychology. Our aim is to restructure such data into the wisdom of sustainability with global ramifications and perspective. Furthermore, we will develop environmental education tools in the form of instructional

materials and text based on the wisdom of sustainability for all sectors including schools, companies and families, to prompt people into action.

As it is not easy for our NPO to conduct such surveys and research on our own, we envisage working together with UNU, IGES and other organizations to share the achievements of case study research in the area of the wisdom of sustainability, and if possible, run a joint project to further refine our forum. In addition, we hope to collaborate with universities, other NPOs and research institutions in the compilation of web contents, forum management and development of communication tools. Our vision is to assume a role of a global center for gathering, analyzing and disseminating case studies that show how the traditional wisdom that has been passed on around the world is being applied in present-day living and economic activities.