

Graduate School of Frontier Sciences, The University of Tokyo

Graduate Program in Sustainability Science

2009-2010

Master's Thesis

Endogenous Education for Sustainable
Development :
Creative Dynamics at the Crossroad of
Tradition and Modernity

Submitted in February, 2010

Supervisor: Professor Shuichi Kitoh
Advisor: Professor Tsuneaki Yoshida

(76961 Reiko Iwasa)

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Acknowledgements

First and foremost, I would like to thank Professor Kitoh who is my supervisor and has patiently led me until the completion of my master's thesis. Although the injuries I had to bear last year were unfortunate, which eventually resulted in a half-year extension of the master's course period, I now feel I was fortunate as it gave me ample time to expand the scope of the study as Professor Kitoh kindly suggested. Without his advice based on his knowledge and deep insights on the words and deeds of former Town Mayor Gohda, my study could have remained at a very shallow level.

I feel very much indebted to Professor Yoshida, who is my second supervisor and has keen interest in and support for my research topic, which gave me great encouragement to persevere during the long process of writing this thesis. I would like to express my sincere appreciation for the guidance provided by the core teaching staff of the GPSS, Professor Mino and Associate Professor Yarime, and to Project Associate Professor Onuki for his manifold help and technical support for my research. Equally, I sincerely thank my colleagues in the GPSS and Kitoh Seminar who gave me frank and useful comments and opinions to stimulate my thinking.

I am indebted to Professor Kitoh for another reason, too. He suggested Aya Town to me as the case study location, which critically influenced the quality of my study. In this regard, I am so grateful to the residents in Uwabata Ward, especially over fifty people with whom I carried out interviews for the period of almost one year. Notwithstanding the fact that I am a complete stranger to them, I am so thankful for their friendly and heart-warming welcome and hospitality whenever I visited Uwabata. As the representatives of Uwabata residents, I would like to express my sincere gratitude to Mr. Yukio Yokoyama, the former Uwabata ACC Director and Mr. Shunichi Konishi, the current Uwabata ACC Director for their unstinting support for my field research in Uwabata as well as in Aya Town.

Besides the people in Uwabata, I am deeply indebted to a number of ACC Directors in other wards, especially in Kohgeh, Miyabaru, Nitanno, Mokudoh, and Takeno, who spared no efforts to provide me with information despite their busy schedule. I also am grateful for the information provided by the staff at Aya Town Municipality and Aya Education Board as well as by the principals at Aya Primary School and Aya Junior High School. I am deeply thankful to Mr. Tamotsu Eifuku, the chief priest of Aya Shrine who allowed me to participate in numerous official functions at the Aya Shrine, which gave me important insights on the role of the shrine in the life of Aya Town residents. I am equally grateful to other priests serving Aya Shrine for their kindness.

I am also grateful for the information provided by two wise persons in Aya, namely Mr. Tadami Ikegami and Mr. Suteo Matsumoto. I cannot forget the stories of *Yui* told by Mr. Ikegami, which were so vividly described and so touching. Unfortunately I would like to express my deep condolences for the death of Mr. Matsumoto last autumn. I was so privileged to have had the last opportunity to listen to the master of local history, as he was called by Aya residents. I would like to thank Mr. and Mrs. Nagayama who are running the guesthouse in Miyabaru Ward in Aya. They provided me with not only wonderful breakfasts and comfortable service but also logistical support and care for me to properly manage my research schedule.

I shall not forget how lucky I am that Peter Ninnnes, my former UNICEF colleague in the East Timor office, generously agreed to do proofreading of my thesis to ensure its English quality. Knowing that he used to be a professor in Australia, I am so grateful and honored for his help.

Lastly but not least, I thank my mother and my brothers who gave me moral and logistic support for my research. My youngest brother gave me many free tickets using his mileage points for me to go back to my hometown in Oita so that I could proceed to Aya in Miyazaki by driving my mother's car. Almost half of my field research, therefore, depended to their support.

Abstract

The conceptualization of “Education for Sustainable Development (ESD)” was necessitated as a result of the need for reorientation of education discussed at the Rio Earth Summit in 1992 in order for learners to acquire not only knowledge through environmental education but also the skills, capacities, values and attitudes required to ensure sustainable development that is linked with quality of life. Since 2005, a ten-year programme to promote ESD has been implemented globally. However, since the concept and content of ESD were brought into Japan from outside through such exogenous processes, even if ESD is promoted at the grass-roots level, it still remains an exogenous entity.

In Japan, nevertheless, there exists learning that fosters values and attitudes of respect for the environment (UNESCO 2006). While the stakeholders of the ESD programme recognize such learning as ESD, no efforts are being made to date to explore what qualifies such learning as ESD.

This study, therefore, aims to elucidate, through the lens of exogenous ESD, the inner structure and the mechanisms of learning embedded in the daily life of people who endeavor to achieve quality of life in the community where they live. Based on the concept of endogenous development envisioned by Tsurumi (1989), that is, the development of sustainable self-reliance based on local natural and human resources, tradition and culture, , a hypothesis that endogenous development has a close link with autonomy was made. A rural community called Uwabata Ward in Aya Town in Miyazaki Prefecture, known for its unique “autonomous community center (ACC) system”, was identified for a case study.

By examining the links among and interactions between nature, local autonomy, labor, life, tradition and culture, six categories of communal learning were identified, namely “family and community life”, “childhood play”, “organic agriculture”, “minor subsistence”, “folkways”, and “the management of the autonomous community center”. The analysis of the six categories of learning highlighted three attributes: spiritual, natural and social, and the broader framework of development behind the case in Uwabata was illuminated. The system originated from the efforts of the former Town Mayor, who succeeded in revitalizing Aya Town, which was once plunged into a serious recession, by passing down his visions and values of endogenous development to town residents through the ACC system, which could be considered as a form of endogenous ESD.

The case study argues the real meaning of human/social development and the

possibility of an alternative approach to ESD, namely endogenous ESD, as a way to build a sustainable community through the re-creation of tradition in the process of local autonomy based on the “capital of relationship” that nurtures the sense of solidarity and mutual-help among the residents. Endogenous ESD requires strong contextualization within the “place” and “natural environment” where people live, work, and self-rule to achieve quality of life, and where tradition and modernity cross and creative dynamics emerge. Such cases demonstrate “education for sustainable development” in the true sense of the term.

Introduction: Searching for the Freedom out of the Locked-in Loop of Labor and Consumption

The concept of sustainable development has entered into the limelight especially since the World Summit on Sustainable Development in 2002. However, how it is connected with human development, that is, the maximization of human capability and the fulfillment of one's quality of life, has not yet been thoroughly argued.

When looking at our modern societies in industrialized countries, people live in the world of convenience. Basic needs such as access to water, electricity and fuel are fully met and people can use them as much as they want. Products of all sorts are available and people may have a problem of choosing what they want from a variety of choices at department stores and supermarkets. The same can be said for the choices of means of transportation, health care, and education. Even for recreation, all one has to do is to visit amusement parks or simply purchase toys or computer games someone has developed on a commercial basis. To organize important ceremonies like wedding and funeral, people can simply call a company of their choice from hundreds of companies listed in a telephone book.

However, such convenient products and services are not free. You are expected to pay for them. People pay directly for those provided by the private sector. For those provided by the public sector, people pay indirectly as tax to administrations to maintain such services and again make a payment when actually accessing such services. It is highly convenient to live in a society with abundant products and services but since people are expected to pay for them, people have to work to earn money. So, the rule of a capitalist society is that people must spend quite a significant part of their time for labor so that the money they have earned through such labor enables them to access products and services which someone else provides.

In fact, such labor, in turn, is linked with the production of products or provision of services and therefore, one's life as laborer and consumer become inseparable and locked in a loop of labor and consumption. This looped structure enables stable tax revenue for the government, and budgeting and implementation of development plans. In this way, Japan, for example, achieved a rapid economic growth after World War II and became the member of the developed and industrialized countries.

However, most of industrialized countries that have achieved economic development like Japan are now facing two major serious challenges; an environmental challenge to significantly reduce CO₂ due to global warming which actually includes the issue of

mass production, mass consumption and mass disposal, and a financial challenge given the fact that the level of public debt outstanding against GDP in 2008 estimated by the IMF (n.d., p. 1 of 1)¹ among seven industrialized countries, i.e. Canada, France, Germany, Italy, Japan, U.K., and U.S. ranges between 43-198% (Japan as the worst with 198%). It is evident that such development is no longer sustainable. In this context, institutional education including its system and structure that has contributed to such unsustainable development of industrialized countries deserves criticism.

Rosalyn McKeown (2002, p. 4 of 7)² a professor at Portland University in the USA, in the author's note of the ESD Toolkit she has developed, points out the gap between the degree of education people receive and the sustainability of their society.

Unfortunately, the most educated nations leave the deepest ecological footprints, meaning they have the highest per-capita rates of consumption. This consumption drives resource extraction and manufacturing around the world. The figures from the UNESCO Statistical Yearbook and World Education Report, for example, show that in the United States more than 80 % of the population has some post-secondary education, and about 25 % of the population has a four-year degree from a university. Statistics also show that per-capita energy use and waste generation in the United States are nearly the highest in the world. In the case of the United States, more education has not led to sustainability. Clearly, simply educating citizenry to higher levels is not sufficient for creating sustainable societies.

McKeown hints that education always has purposes and values behind its system /structure or those who provide educational inputs. In the case of industrialized countries, institutional education has been backed up by a national value of economic growth so that it has aimed to develop human beings as capable human capital to be efficient in providing labor for commodity or service production, which contribute to economic growth. This labor, for the purpose of efficiency, needs to be exchangeable or interchangeable. Therefore, people as laborers are not indispensable. If one gets sick, someone else will cover the job. If one gets fired, someone else will take the post and the

¹ IMF n.d., *Report for selected countries and subjects* from the World economic outlook database, October 2008. Viewed 19 January 2009, http://www.imf.org/external/pubs/ft/weo/2008/02/weodata/weorept.aspx?sy=2004&ey=2009&ssd=1&sort=country&ds=.&br=0&pr1.x=59&pr1.y=16&c=193%2C542%2C122%2C137%2C124%2C181%2C156%2C138%2C423%2C196%2C128%2C142%2C172%2C182%2C132%2C576%2C134%2C961%2C174%2C184%2C532%2C144%2C176%2C146%2C178%2C528%2C436%2C112%2C136%2C111%2C158&s=GGD_NGDP&grp=0&a=

² McKeown, R 2002, 'Introduction', in McKeown, R, *ESD Toolkit*, version 2.0, Viewed 4 June 2009, <http://www.esdtoolkit.org>

work continues as if nothing has happened. Shuichi Kitoh (1999, pp. 46-47)³ expresses his concerns on this phenomenon in the following phrases.

The exchangeable system of modernization has made our life convenient and affluent to a certain extent. While it not realistic to completely deny such a system, we should pay due attention to the way it determines the essential structure of our society through excessive application of market-based principles and realize the need to bring changes to the current situation. In the course of endeavors to bring such changes, the most impending challenge now seems to be “how to recover in-exchangeable and indispensable values.” [Translation by author]

When development is viewed from this angle, one would question whether such a state of development is really convenient for human beings or not. In a sense, while we are benefitting from the freedom of the market economy in terms of earning as we like and spending as we wish, we are in fact locked in the loop of labor and consumption and deprived of the freedom to be out of such a loop and to think, create and act on our own to achieve our own objectives in life. Takashi Uchiyama (1999, p. 215)⁴, a Japanese philosopher, describes this from his own angle.

What you can find in the center of urban life is the purchase of convenience, in other words, the consumption of convenience or convenience of consumption. However, you will find skills to create convenience in the centre of rural life. The former can be illustrated as freedom of the market economy and the latter, freedom in the activities of non-market economy.[Translation by author]

The above question further leads us to three other questions. To begin with, when people spend most of their time in the accumulation of wealth, become highly dependent on the convenience of products and services the others provide, and leave the improvement of people’s welfare and well-being entirely to the government and/or private sector, if we call this development, is this what humanity has been sought through its millions of years of history? The fact is that this development is environmentally and financially unsustainable. Then, when one gets out of the locked-in loop of labor and consumption and manages to gain freedom to be the owner of one’s own life, what form does development take, and is such development sustainable?

³ Kitoh, S 1999 ‘Inochi to kankyo no “kakegaeno nasa” to shijyo keizai’ [“Indispensability” of life and environment in relation to market economy], in Kitoh, S, Shinmura, J, Okuma, T, Uchiyama, T, (eds), *Shijokeizai o kumikaeru* [Recalibration of market economy] Nousangyoson Bunkakyokai, Tokyo.

⁴ Uchiyama, T, 1999 ‘Shijoh keizai to jiyu’ [The market economy and freedom], in Kitoh, S, Shinmura, J, Okuma, T, Uchiyama, T, (eds), *Shijokeizai o kumikaeru* [Recalibration of market economy] Nousangyoson Bunkakyokai, Tokyo.

1 A Human Capability Approach to Achieve Quality of Life

To find reasonable answers to the previous questions, it is necessary to obtain a broad view of development from key areas of literature.

Caring for the Earth: a strategy for sustainable living, co-published by IUCN, UNEP and WWF (1991, p. 9)⁵ argues that sustainable development stems from the realization of one's own potential to improve the quality of human life, and that economic growth is not the goal of development.

The real aim of development is to improve the quality of human life. It is a process that enables human beings to realize their potential, build self-confidence and lead lives of dignity and fulfillment. Economic growth is an important component of development, but it cannot be a goal in itself, nor can it go on indefinitely. Although people differ in the goals that they would set for development, some are virtually universal. These include a long and healthy life, education, access to the resources needed for a decent standard of living, political freedom, guaranteed human rights, and freedom from violence. Development is real only if it makes our lives better in all these respects.

The above definition draws a clear line against the one that pays attention to the position of industrialized countries which place an absolute value on economic growth while acknowledging the necessity of environmental conservation by saying "wise use of natural resources" in the name of poverty eradication, as propagated in the mainstream reports on sustainable development such as *the World Conservation Strategy* by IUCN and the Brundtland Report. The transition of the definition of sustainable development will be treated in more detail later in this chapter. However, special notice should be taken of the definition provided by *Caring for the Earth* in light of the questions previously discussed.

A glimpse of the answer to the previous questions can be found in the well-articulated summary of the frame of the thinking of Amartya Sen, which Sato (1997, p. 11)⁶ provides.

The wealth represented by income and services are by themselves merely "means", for the evaluation of development depends on whether or not one realizes one's acts and states by making use of such "means". Because of the diverse nature of personal and social conditions that surround individuals, too much focus on the evaluation of "means"

⁵ IUCN, UNEP & WWF, 1991, *Caring for the earth: a strategy for sustainable living*, IUCN, UNEP & WWF, Gland.

⁶ Sato, J, 1997, 'Kaihatsuenjo ni okeru seikatsusuijun no hyoka – Amartya Sen no houho to sono hihan [The evaluation of living standards in development assistance: the methodology of Amartya Sen and its criticism], *Keizai Kenkyu [Journal of Economic Research]*, Vol.43, No.3, 1-31p, Tokyo

eliminates the space to identify the ability to transform “means” to “purpose”. In other words, what matters here is to focus not on the “utility” derived as a result of the use of “means” and primary goods⁷ but on the “freedom” that creates potential from the use of such wealth, that is to say, the “freedom” that links “means” and “purpose” .[Translation by author]

The emphasis Sen (1992)⁸ makes in general is the criticism against the irrationality and aggressiveness of the approach to measure development by using quantitative indicators such as level of income and wealth, as such an approach does not take account of the diverse and complex nature of human beings and societies surrounded by different environmental conditions. Instead, he argues that by placing human beings in the center of development, we should envisage the development of human capability⁹ which enables the realization of the states one wishes to be, or the acts one wishes to do by struggling to make a maximum use of one’s own knowledge, wisdom and skills through the use of resources or wealth. The resources, in this context, mean mostly natural resources and this is where the aspect of the relationship between human beings and nature comes in. The concept of development Sen embraces goes beyond that for developing countries. It is universal and equally applicable to industrialized countries.

Now, Sen’s concept of “functioning” seems to be the key for development in terms of expanding human capability. The definition of functioning by Sen (1992, p. 1) is:

Functionings represent parts of the state of a person - in particular the various things that he or she manages to do or be in leading a life. The capability of a person reflects the alternative combinations of functionings the person can achieve, and from which he or she can choose one collection. The approach is based on a view of living as a combination of various “doings and beings”, with quality of life to be assessed in terms of the capability to achieve valuable functionings.

Sen further stresses the instrumental role of capability expansion in bringing about social change (going well beyond economic change) and argues that capability serves as the means not only to economic production, but also to social development by indicating

⁷ Resources such as incomes, wealth, opportunities, the social bases of self-respect, etc. according to the definition of Rawls. (Source: Rawls, J 1971, *A theory of justice*, Harvard University Press, Cambridge, Mass.)

⁸ Sen, A. K, 1992, *Inequality reexamined*, Oxford University Press, New York.

⁹ Sen calls the acts and states a person fulfills (doings and beings) “functionings” and names the expansion of various functionings potentially achievable as “capability”. He argues that human capability is the evaluative space which best reflects living standards and that its expansion is the purpose of the public policies and development. (Source: Sen, A, 1997, ‘Editorial: Human capital and human capability’, in *World Development*, Vol.25, No.12, pp. 1956-1961. Elsevier- Science Ltd, London.)

the following three aspects of human capabilities: their direct relevance to the well-being and freedom of people; their indirect role through influencing economic production; and their indirect role through influencing social change (Sen 1997, p. 1960).¹⁰

My hypothesis is that when we seek alternative development and a quality of life liberated from the locked-in loop of labor and consumption, two types of ability are potentially involved. One is the individual ability to deal with nature in the process of achieving personal functionings, and the other is the collective ability of human resources development required for the achievement of community functionings. Interestingly, these are the abilities which the central government seems currently to emphasize. For example, the Ministry of Education, Sports, Culture, Science and Technology (MEXT) is actively promoting a project, called “Community School Project”¹¹ as well as the joint project of three Ministries (i.e. Ministry of Agriculture, Forestry, and Fisheries, the Ministry of Internal Affairs and Communications and the MEXT), though such inter-ministerial collaboration is quite unusual, called “Children’s Exchange Project in Rural Villages”.¹²

So, in the context of modern society, how can one develop the ability to achieve the functionings one wishes for, and expand human capability which leads to improved quality of life? What conditions and what types of education are required to develop such abilities? The ultimate objective of this study is to find answers to these questions.

In the following sections, I will explain, first of all, how the concept of “sustainable development” was conceived and how its definition went through changes. Then, I will contrast sustainable development with the concept of endogenous development to link with the endogenous ESD on which I will focus in this study. Thereafter, I will articulate the differences between the ESD that UNESCO and the Government of Japan promote and the endogenous ESD I support.

¹⁰ Sen, A, 1997, ‘Editorial: Human capital and human capability’, in *World Development*, Vol.25, No.12, pp. 1956-1961, Elsevier Science Ltd, London.

¹¹ The Community School (School Management Committee System) was introduced as the new way of public school management since September 2005. The Community School System directly reflects the voices of parents and community members to its school management and aims to develop better schools through collective efforts among parents, community, school and Education Board (Source: MEXT home page, <http://www.mext.go.jp>)

¹² The project period is between 2008 and 2013. (source: MEXT home page, http://202.232.86.81/b_menu/houdou/19/08/07090405.htm)

1.1 When and How “Sustainable Development” was Conceived

1.1.1 The First Appearance of the Term “Sustainable Development”

The term “sustainable development” first appeared in the subtitle and the content of the report entitled *The World Conservation Strategy* published by International Union for Conservation of Nature and Natural Resources (IUCN) in 1980. It defines “development” as “the modification of the biosphere and the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of human life.” The definition of “conservation” deserves attention as it became the basis of the universally accepted definition of “sustainable development” by the Report of the World Commission on Environment and Development.¹³

Conservation is defined by the IUCN as “the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations” (IUCN 1980, p.16).¹⁴

The Strategy sets the major premise that “development” is an absolute imperative for humanity. In this context, conservation can be interpreted as “wise use” of natural resources to ensure sustainable economic gains, and to avoid destructive use of natural resources and the environment. Here, the stress is laid on the major premise of human use, and it alleges the necessity of conservation of nature as the resource base for development. The idea underpins the standpoint of utilitarianism (Inoue 2005, p. 57).¹⁵

Albeit confined with environmental and conservation education, *the Strategy* (1980, p. 46) was quite explicit about the role of education in achieving conservation objectives.

Ultimately, the behavior of entire societies towards the biosphere must be transformed if the achievement of conservation objectives is to be assured. A new ethic, embracing plants and animals as well as people is required for human societies to live in harmony with the natural world on which they depend for survival and well-being. The long term task of environmental

¹³ Alias the Brundtland Commission, known by the name of its Chair, Gro Harlem Brundtland

¹⁴ IUCN 1980, *World conservation strategy: living resource conservation for sustainable development*, IUCN, Gland.

¹⁵ Inoue, Y 2005 ‘Jizokukanousei’ gainen no keifu’ [Lineage of the concept of ‘sustainability’], in Imamura, M (ed.) 2005 *Jizokukanohsei ni muketeno kankyo kyoiku* [Education for sustainability], Showa Doh, Kyoto.

education is to foster or reinforce attitudes and behaviors compatible with this new ethic.

The importance of education to deal with attitudes and behaviors is reiterated in two landmark documents, namely the Brundtland Report and *Caring for the Earth*, that advanced the issue of “environmental, economic, and social sustainability”. The details of these reports are examined in the following sections.

1.1.2 Poverty as the Underlying Issue of the Brundtland Report

The term “sustainable development” became well-known after the release of the Brundtland Report (WCED 1987, p. 43)¹⁶ and was defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. However, not many people read the original report and proceed to the next paragraph which reads “the concept of needs, in particular the essential needs of the world’s poor, to which overriding priority should be given.”

This illustrates that the issue of “poverty” was central to conceptualizing “sustainable development” in the Brundtland Report. At that time (the 1980s), the debt problem of developing countries and the economic and social impact of the Structural Adjustment Programmes (SAPs)¹⁷ of the International Monetary Fund (IMF) and the World Bank imposed on many developing countries was a serious concern of the international community. This vicious circle in which loans to promote economic growth to get out of poverty were hindered by the conditionalities imposed by the SAPs, which resulted in accumulating debts (poverty), was a newly emerging issue in the North-South problems that originally came up during the 1960s.

Concomitantly with such a debt trend, the downward trend of oil price in the early 80s caused lowering price of primary products, which triggered a debt

¹⁶ World Commission on Environment and Development 1987, *Our common future*, Oxford University Press, Oxford.

¹⁷ SAPs policies reflect the neo-liberal ideology that drives globalization. They aim to achieve long-term or accelerated economic growth in poorer countries by restructuring the economy and reducing government intervention. In health, SAPs affect both the supply of health services (by insisting on cuts in health spending) and the demand for health services (by reducing household income, thus leaving people with less money for health). Studies have shown that SAPs policies have slowed down improvements in, or worsened, the health status of people in countries implementing them. The results reported include worse nutritional status of children, increased incidence of infectious diseases, and higher infant and maternal mortality rates. (Source: WHO homepage, <http://www.who.int/trade/glossary/story084/en/index.html>)

crisis in Latin American countries. The issue of debt accumulation by developing countries further provoked a great deal of anxiety in the global financial market. In Africa, people of drought-and-conflict-ridden Somalia and Ethiopia greatly suffered from hunger. In 1983 alone, twenty two countries in Africa required food aid.¹⁸ These overlapping events caused serious concern in the international community and resulted in the UN Resolution 39/29: Critical Economic Situation in Africa issued on the 3rd December 1984.

This historical background of the world scene in the 1980s which reveals the critical economic situations in developing countries may explain the emphasis on the issue of the poverty as a key issue underlying the development of the concept of “sustainable development” in the Brundtland Report. The inequity in the distribution of wealth in the world had to be addressed on behalf of the majority of the countries under development (the South), while the voice of industrialized countries (the North) that firmly believed themselves as the driving force of global economic growth also had to be heard. One can catch a glimpse of the compromise of these in the following paragraph.

Many critical survival issues are related to uneven development, poverty, and population growth. The downward spiral of poverty and environmental degradation is a waste of opportunities and of resources. In particular, it is a waste of human resources. These links between poverty, inequality, and environmental degradation formed a major theme in our analysis and recommendations. What is needed now is a new era of economic growth that is forceful and at the same time socially environmentally sustainable (WCED 1987, p. 14)

Notwithstanding the failure of the SAPs that deepened the poverty of developing countries rather than stimulating their economic growth, and the fact that the slump in the oil price in a liberal market was the origin of the Latin American economic crisis in 1980s, the Brundtland Report placed its hope in economic growth to overcome poverty in the South. While addressing the South-North issue and giving high priority to the issue of poverty in the Report deserves recognition, by remaining almost silent about the responsibility of the culture of mass consumption in the North, the Report gives an impression of being deliberately ambiguous (Inoue 2005, p. 61) and implies that environmental degradation is caused mostly by population growth

¹⁸ Haruhiko Tanaka Laboratory (Rikkyo University) Homepage. In an article based on Tanaka, H 1994, *Nanboku mondai to kaihatsu kyoiku* [South-north issue and development education] , Aki Shoboh, Tokyo, <http://www.rikkyo.ne.jp/web/htanaka/98/Aki-sengoshi.html>

in the South.

Finally, to remove the ambiguity and uncover the bottom line of the Brundtland Report, it is useful to look at the *Tokyo Declaration* issued just before the publication of the Brundtland Report. The *Tokyo Declaration* consists of eight articles, the first of which is summarized as follows.

- Poverty is the main cause of environmental degradation, which is a threat to sustainable development of the global community.
- It is necessary to stimulate economic growth while enhancing the natural resource base in the developing countries.
- Industrialized countries are able to and expected to contribute to the revitalization of global economic growth.
- It is essential to take immediate actions globally to solve the debt crisis, significantly increase the flow of development funds, and stabilize the level of foreign exchange of the low-income countries that export primary products (WCED 1987, p. 1).¹⁹ [Translation by author]

Inoue (2005, pp. 62-63), therefore, points out the hidden belief of the Brundtland Report. It is the belief in engineering and technocracy which will help humanity make wise use of natural resources and lead to sustainable economic growth led by industrialized countries, which will realize a wealthy and convenient society in the end. Hence the Brundtland Report gives an impression that its target readers are the specialists such as policy-makers, scientists, technocrats for development funds, and engineers, and not ordinary people per se. Indeed, the content²⁰ of the last section of the Brundtland Report, entitled “Towards common action: proposals for institutional and legal change” undergirds Inoue’s view as such.

With regard to the role of education, what is envisaged in the Brundtland Report is rather limited and summarized in the 5th last paragraph of the Chairman’s Forward. Calling for a common endeavor and for new norms of behavior at all levels and in the interests of all, it reads “the changes in attitudes, in social values, and in aspirations that the report urges will depend

¹⁹ WCED 1987, *Tokyo Declaration*, prepared at the 8th official meeting of WCED in Tokyo from 20 to 27 February in 1987.

²⁰ For example, the Sub-Section 4: Making informed choices under the section II: proposals for institutional and legal change, has two subtitles: 1) Increase the role of the scientific community and non-governmental organizations and 2) increase cooperation with industry.

on vast campaigns of education, debate and public participation.” This new educational approach has been concretized step by step through debates and consensus building in successive international forums by multi-national stakeholders with diverse interests in education and sustainability (See Annex 1 for the Chronology of Key International Milestones for Global Sustainability and Education).

1.1.3 Shifting from “Sustainable Development” to “Sustainable Living”

We are now living in the early 21st century. The Brundtland Report was published more than 30 years ago. The world scene has changed significantly since, and especially the issue of global warming addressed by Intergovernmental Panel on Climate Change 21 (IPCC) has impacted fundamentally the way humanity deals with economic growth. In terms of a new global strategy for human sustainability, the conceptual shift to “sustainable development” was made just before the end of 20th century. It is found in the report called *Caring for the Earth: a strategy for sustainable living* (that is, New Strategy) as previously mentioned (p.11).

The World Conservation Strategy (that is, Old Strategy), promoted rational and scientific management of natural resources to ensure long-term economic benefits for the humanity. In contrast, what is remarkable is that the New Strategy stresses “quality of life” which questions people’s values at ethical and philosophical levels (Inoue 2005, p. 63). The term “sustainable development” no longer appears in this strategy and instead “sustainable living” became the key word.

The Brundtland Report, by using the term “sustainable development”, made an appeal to specialized groups such as policy-makers, engineers, technocrats, and scientists to change their policies, technologies, and approaches to make sustainable economic growth through wise management of natural resources. The New Strategy, by using the term “sustainable living” appeals equally at individual level to redefine the quality of life and transform attitudes and practices of people so that society will shift to a sustainable one.

²¹ The IPCC is a scientific intergovernmental body set up by the World Meteorological Organization (WMO) and by the United Nations Environment Programme (UNEP) in 1988. The IPCC was established to provide the decision-makers and others interested in climate change with an objective source of information about climate change. (Source: IPCC homepage, <http://www.ipcc.ch/about/index.htm>)

Here, “quality of life” is being used to override the connotation of “poverty” in the Brundtland Report. That is to say, “poverty” is strongly associated with economic concepts and to tackle poverty, the simplistic approach was to increase GDP with various institutional and legal means. The “quality of life”, on the other hand, cannot be achieved by simply raising GDP.

1.1.4 The Return of “Sustainable Development”

The New Strategy to stress “sustainable living” in lieu of “sustainable development”, however, was never mainstreamed at the level of UN forums, namely the UN Conference on Environment and Development in Rio de Janeiro (Earth Summit) in 1992 and its follow up event, the World Summit on Sustainable Development (Johannesburg Summit) held in Johannesburg in 2002. The Earth Summit officially introduced the term “sustainable development” and it became part and parcel of its official plan of action called Agenda 21. Ten years after the Earth Summit, “sustainable development” even became the title of the Summit in Johannesburg. Thus, “sustainable development” became the mainstream concept at the level of political forums which UN organizes. At the Johannesburg Summit, the Plan of Implementation was formulated and the Plan came up with the three key components of sustainable development, which are frequently quoted as the definition of “sustainable development”.

The plan was to promote the integration of the three components of sustainable development – economic development, social development and environmental protection – as interdependent and mutually reinforcing pillars. The major change of definition of “sustainable development” in the above-mentioned global events can be described as a shift from depending solely on economic development as a way to eradicate poverty to the inclusion of social development to tackle poverty at the level of people (e.g. human development) and society (e.g. social services). Behind this shift, there is a common recognition of the issue of economic and social inequity, not only in terms of the South-North issue but also in terms of the economic disparity within rich countries, linking with the issue of socially vulnerable groups. In the same way, it was now recognized that poverty is not the sole cause of environmental degradation, but the western life-styles based on mass-production, mass-consumption and mass-disposal common in the

industrialized countries also contributes. Clause 11 of the *Johannesburg Declaration on Sustainable Development* (UN 2002, p. 2) ²² states that “[w]e recognize the poverty eradication, changing consumption and production patterns and protecting and managing the natural resource base for economic and social development are overarching objectives of and essential requirements for sustainable development.”

This shift indicates that the efforts for sustainable development have to be made globally regardless of the stage of development of each country. Both industrialized and developing countries have a role to play in making the world sustainable.

Better still, by adding the perspective of social development, the concept of “sustainable development” has been broadened to incorporate the concept of “human development” which has a close linkage with “sustainable living”, “quality of life” and “well-being”. The *Johannesburg Declaration* in clause 34, clearly declared that “[w]e commit ourselves to act together, united by a common determination to save our planet, promote human development and achieve universal prosperity and peace” (UN 2002, p. 4).

With the addition of social and human development to economic development, the definition of sustainable development seems to be settled at this stage. Nevertheless, challenges still remain for humanity to figure out how to bring about sustainable development.

The following section deals with the concept of endogenous development which originally was conceived an alternative approach to the issue of “how to develop”, as counter to approaches from conventional economic development.

1.2 Endogenous Development: alternative development with a pluralistic approach

1.2.1 Defining Endogenous Development

Endogenous²³ is a term originally used for biology. It means something

²² UN 2002 *Johannesburg declaration on sustainable development*, issued at the World Summit on Sustainable Development in Johannesburg, South Africa, from 2-4 September 2002.

²³ Endogenous means a) growing or produced by growth from deep tissue <endogenous plant roots> b) produced or synthesized within the organism or system <an endogenous hormone>. (source: Merriam Online Webster Dictionary Homepage, www.merriam-webster.com/dictionary)

produced within the organism or system. According to Nishikawa (1989, p.3)²⁴, its use in terms of social context first appeared in the text of *What Now* (Dag Hammerskjold Foundation 1975, p.34).²⁵ The report provides the definition of endogenous development as follows.

If development is the development of man, as an individual and as a social being, aiming at his liberation and at his fulfillment, it cannot but stem from the inner core of each society. It relies on what a human group has: its natural environment, its cultural heritage, the creativity of the men and women who constitute it, becoming richer through exchange between them and with other groups. It entails the autonomous definition of development styles and of life styles. This is the meaning of an endogenous and self-reliant development.

The report postulates “another development” as a counter-concept of the Western-model “development” which is itself value-loaded with the orientation towards economic growth, which categorizes the Third World countries as “underdeveloped”. On the contrary, the concept of “another development” is significantly environmentally and sustainability oriented. It refers to key events and publications linked with environment such as *Limits to Growth* by the Club of Rome published in 1972, the UN Conference on the Human Environment in Stockholm in 1972 and the Cocoyoc Declaration²⁶ in 1974. Notably the concept of endogenous development linked with self-reliance was originated from this Declaration (UNEP & UNCTAD 1974, p. 4)²⁷ as below.

It (i.e. national self-reliance) does mean self-confidence, reliance primarily on one’s own resources, human and natural, and the capacity of autonomous goal – setting and decision-making. Above all, it means trust in people and nations, reliance on the capacity of people themselves to invent and generate new resources and techniques to increase their capacity to absorb them, to put them to socially beneficial use, to take a measure of command over the economy, and to generate their own way of life.

In line with the *What Now* Report, in the publication of *Another Development: Approaches and Strategies* (Nerfin 1977)²⁸, “another development” is succinctly

²⁴ Nishikawa, J 1989, ‘Naihatsuteki hattenron no kigen to konnichiteki igi’ [The origin of the theory of endogenous development and its significance today]. In Tsurumi, K & Kawata, T, (eds) *Naihatsuteki hattenron* [The theory of endogenous development], Tokyo Daigaku Shuppankai, Tokyo.

²⁵ Dag Hammerskjold Foundation 1975, *What now: Dag Hammarskjold Report on development and international cooperation* prepared on the occasion of the Seventh Special Session of the United Nations General Assembly in December 1975, New York.

²⁶ A declaration is the formal statement issued by the symposium of experts organized by UNEP and the United Nations Commission on Trade and Development (UNCTAD) in 1974 in Cocoyoc, Mexico.

²⁷ UNEP & UNCTAD 1974 *The Cocoyoc declaration*, Cocoyoc, issued on 23 October.

²⁸ Nerfin, M (ed.) 1977, *Another development: approaches and strategies*. The Dag Hammerskjold

phrased as need-oriented, *endogenous*, self-reliant, ecologically sound and based on structural transformations. Endogenous, in this respect, is expressed as “stemming from the heart of each society, which defines in sovereignty its values and the vision of its future” (Nerfin 1977, p. 10).

While both reports indicate “endogenous development” as part of “another development”, Kazuko Tsurumi (1999, p. 329)²⁹ who also had an identical inspiration of the concept of endogenous development in 1976, just one year after the *What Now* report was released, prefers refraining from using “another development” as it implies dualism which legitimizes western-model development as a counter-concept of another development. She insists on using the term “endogenous development” independently and claims that there is no dualistic development but pluralistic development. In other words, there should be many types of development as each society has its development based on its own tradition, culture, and ecosystem as well as the demands of local residents.

In fact, Nerfin, in the *Another Development* report, rightly states that since development is not a linear process, there could be no universal model, and only the plurality of development patterns can answer to the specificity of each situation (Nerfin 1977, p. 10). This sentence is of significance as it is almost identical to sustainable development. Sustainable development does not have a universal model as every corner of the world is different in terms of geography, climate, natural environment, natural resources, social, economic, and political systems, culture, faith and so on, so that such diversity itself conditions “sustainability” in specific areas. There should be no “one size fits all” model of sustainable development. However, the current “development” is typically driven by Rostovian take-off model of economic growth (Rostow 1960)³⁰, a deterministic model where every country in the world should aim to reach the final stage of industrial development symbolized by the USA.

Tsurumi (1989, pp. 49-50)³¹, then, has conceived her own concept of endogenous development, which is explained as the following.

Foundation, Uppsala.

²⁹ Tsurumi, K 1999, *Tsurumi Kazuko Mandara: Naihatsutekihatten-ron ni yoru paradaimu tenkan* [A paradigm shift through endogenous development], Vol.IX, Fujiwara Shoten, Tokyo.

³⁰ Rostow, W.W 1960, *The stages of economic growth*, Cambridge University Press, London.

³¹ Tsurumi, K 1989, ‘Naihatsuteki hattenron no keifu’ [The genealogy of the theory of endogenous development], in Tsurumi, K & Kawata, T (eds) *Naihatuteki hattenron* [The theory of endogenous development], Tokyo Daigaku Shuppankai, Tokyo.

Endogenous development can be explained in terms of its objective which is universal for humanity, and in terms of its process to achieve the purpose and the social model that enables such achievement, which is actually the process of highly-diverse social changes. The universal objective refers to the fulfillment of basic needs of clothing, food, housing and health care by all the people and groups on this planet, and the creation of conditions where the potential of every individual human being can be maximized. This, in turn, means the transformation of the structure that causes disparity at country and international levels through collaborative endeavors of people. The process that will lead the purpose, and the shape of the society and the lifestyle of people, which will achieve the purpose, will be autonomously-generated by the people and groups of every local region through adaptation to the local ecosystem and the collation of exotic knowledge/technologies/institutions based on their cultural heritage (or tradition). If such endogenous development evolves at the global level, it will become pluralistic development. Regardless of the order of evolution, such development becomes interchangeable in its model on an equal basis.[Translation by author]

In addition to her mention of pluralistic development, special attention should be given to the sentence, “The universal objective refers to ... the creation of conditions where the potential of every individual human being can be maximized.” This echoes the statement of *Caring for the Earth* as well as Amartya Sen’s concept of “human capability”.

Yet, Tsurumi’s concept of endogenous development is much more far reaching than these two. She reached the realization that endogenous development is identical with biodiversity and humanity can only survive with the diversity of development just like living species on this planet earth have managed to survive through fighting and supporting each other for billions of years (Nakamura & Tsurumi 2002, p.42).³² Moreover, after the recovery of her sickness, she began to feel the depth of the concept of endogenous development. During the dialogue with Keiko Nakamura who is a specialist of bio-history, Tsurumi indicated the following analogy.

My concept of endogenous development is based on the unit at the level of region, not state. A state consists of a number of regions. In other words, a region is a smaller unit than that of a state. In this case, we need to define the region. My definition of region is a unit with the same ecological characteristics ... If you want to know what in the region becomes endogenous, you need to consider the region as a cell. Then you may wonder what, in this case, is made of a genome. To start with, a culture is being inherited there. The culture which has been passed down to the generations, becomes a genome. The most basic element of a culture is a language, isn’t it? But what I mean, in this context, is the culture inherited by the people living in the region, that is

³² Nakamura, K. & Tsurumi, K 2002, *Yonju-okunen no watashi no inochi* [My life as long as 40 billion years], Fujiwara Shoten, Tokyo.

to say, the culture inherited in the region based on the local ecosystem, which, in my view, becomes endogenous (Nakamura & Tsurumi 2002, pp. 104-105).[Translation by author]

After I fell sick by cerebral hemorrhage, I have experienced a sudden outburst of songs from inner part of me, which made me realize that endogeneity is generated from one's inside. So, what is generated from an individual, when aggregated, becomes a region. Then we can further create from what is generated from the people in the region through interchange or clash, like the Mandara model. I became aware of an individual's own endogeneity by lowering the level from region to individual. So, this time, I put the purpose as the realization of every individual's potential (Nakamura, Tsurumi 2002, p. 107) . [Translation by author]

To summarize the above dialogue of Tsurumi, she has envisioned a local society that is naturally made up of individuals, consists of diverse systems (e.g. economy, culture, mutual-help) as a result of complex relationships among individuals, human capability and local ecosystem. Before an individual dies, his/her social roles and relationships as well as certain local knowledge will be passed on to successors (e.g. descendants, friends, colleagues) so that the local systems are being sustained. Such local society obviously holds a self-identify like a cell and shares an invisible border with the society and people in other region.

Conversely, the real endeavors for sustainable development should take place at the local level. Therefore, the concept of endogenous development is quite identical with that of sustainable development in terms of actual application of its concept. To a certain extent, endogenous development can be ascribed as localism which is a counter-concept of globalism and primarily appeals to an environmental argument and local autonomy, self-reliance and identity.

In the following section, the background history of the evolution of environmental education to ESD will be described in the course of global-level discussions which are closely connected with the milestone international conferences on development and environment to date.

1.3 The Background of ESD in Relation to Sustainable Development

1.3.1 The Shift from Environmental Education to ESD

The concept of “Education for Sustainable Development (ESD)” literally has an inseparable tie with the concept of “Sustainable Development”. The concept and the definition of Sustainable Development has been debated and polished over 40 years since the UN Conference on the Human Environment in Stockholm in 1972 (See Annex 1 for the Chronology of Key International Milestones for Global Sustainability and Education).

The bedrock of ESD, originally conceived as environmental education, was laid on the concept of “sustainable development” in the first two key documents (i.e. the World Conservation Strategy and the Brundtland Report) which had strong correlation with economic growth. In other words, the reason why “environment” was attached to the naming of education was because it was a counter-concept of “development” which these documents emphasized. For the realization of sustainable development, managing the “environment” within the limit of its natural resources, in other words, “wise use of natural resources” was considered essential. The emphasis on educating children and adults on “the issues of environment” is highly visible in the guiding principles of the Belgrade Charter³³ and those of the Declaration of Tbilisi³⁴.

A major turning point in seriously examining the substance of education that promotes sustainable development came with the release of the *Caring for the Earth: a strategy for sustainable living* (New Strategy) in 1991 where the focus was shifted from “sustainable development” to “sustainable living”. This shift implies that the aim to attain sustainable living in search of one’s own meaningful life is paramount and this overrides the value that places well-being in the accumulation of material and monetary wealth to overcome poverty, which has been the driver of human society since the industrial revolution. This shift of value redefines the way society works and how people live in search for “quality of life”, and makes headway towards social transformation as a corollary.

³³ The Charter was prepared at the International Workshop on Environmental Education in Belgrade in 1975.

³⁴ Officially called ‘The Declaration and Recommendations of the Tbilisi Inter-governmental Conference on Environmental Education’

Consequently in the following year, 1992, the Earth Summit and its official document, Agenda 21 recognized the need for reorienting environmental education in the light of such a shift, and as follow up, the *Declaration of Thessaloniki* in 1997 was launched to critically reflect that “insufficient progress has been made five years after the Earth Summit in Rio as it had been recognized by the international community”, and clearly indicate how education should be reoriented. The quote below reflects the broad-based approach originally conceived in the ECO-EDO conference in 1992.

The orientation of education as a whole towards sustainability involves all levels of formal, non-formal and informal education in all countries. The concept of sustainability encompasses not only environment but also poverty, population, health, food security, democracy, human rights and peace. Sustainability is, in the final analysis, a moral and ethical imperative in which cultural diversity and traditional knowledge need to be respected (UNESCO 1997, p. 2).³⁵

In recognition of the inseparable links between society, the economy and the environment from which the key concept of sustainability was conceived, simply promoting “environmental education” therefore no longer made sense. In this regard, UNESCO (2006, p. 17)³⁶ differentiated ESD from environmental education as follows.

ESD should not be equated with environmental education. The latter is a well-established discipline, with focuses on humankind’s relationship with the natural environment and on ways to conserve and preserve it and properly steward its resources. Sustainable development therefore encompasses environmental education, setting it in the broader context of socio-cultural factors and the socio-political issues of equity, poverty, democracy and quality of life.

Finally the Johannesburg Summit made an official proclamation of ‘education for sustainable development’ emphasizing the inclusion of ongoing global efforts of ‘education for development’ such as Education for All and the Second Millennium Goal of achieving universal primary education.

³⁵ UNESCO 1997, *Declaration of Thessaloniki* at the international conference: Environment and society: education and public awareness for sustainability, Thessaloniki, Greece, 8-12 December. (UNESCO-EPD-97/CONF.401/CLD.2)

³⁶ UNESCO 2006, *Framework for the UN DESD international implementation scheme*, UNESCO ED/DESD/2006/PI/1, UNESCO, Paris.

In conclusion, up to the stage of the Johannesburg Summit, on one hand, the terminology varied between different naming of “environmental education”, “education for environment and sustainability”, “education for sustainability”, and “education for sustainable development”. On the other hand, the concept of such education has been consistently refined and fine-tuned thanks to painstaking debates and discussions with strong involvement of citizens held on manifold occasions at local, regional and international levels in association with key UN milestone Conferences.

Now the discrepancy between the global political agenda (that promotes “sustainable development”) and the global civil agenda (that promotes “sustainable living”), was settled in the concept of ESD by integrating the two major definitions from *Our Common Future* and *Caring for the Earth*. In other words, ESD “underlines the importance of concerted action to ensure that patterns of sustainable development offer a high quality of life to all, both to present and future generations”(UNESCO 2006, p. 13).

The major significance of the Johannesburg summit was also to reconcile the above discrepancy by building the concept of “sustainable development” on three interdependent and mutually reinforcing pillars – economic development, social development and environmental protection – which must be established at local, national, regional and global levels (UN 2002, p. 1).

Yet, the core element must be “quality of life” which should be laid at the centre where the above three fields (pillars) overlap. The concept of ESD, therefore, is fundamentally different from that of conventional education, especially the institutionalized form of education that played a significant role in the economic development in all industrialized countries that eventually became unsustainable.

With the aim of promoting ESD at local, national, regional and global levels, the Decade for Education for Sustainable Development (DESD) was recommended at the Johannesburg Summit and adopted by the resolution 57/254 at the UN General Assembly in December 2002. DESD is a complex and far-reaching undertaking. The overall goal of the DESD is to integrate the values inherent in sustainable development into all aspects of learning to encourage changes in behavior that allow for a more sustainable and just society for all (UNESCO 2006, p. 4).

Thereafter, the International Implementation Scheme (IIS) set out a broad framework for all partners to contribute to the Decade. It is a strategic document that focuses primarily on what nations have committed to achieve through the DESD and under UNESCO's leadership. It summarizes the goals and objectives of the Decade, and its relationship to other key education movements. It emphasizes the importance of partnership in the eventual success of the Decade and outlines how these might contribute at all levels – community, national, regional, and international. It outlines UNESCO's leadership tasks, as well as key milestones for the DESD (UNESCO 2005, p. 5).³⁷

Shifting the focus to Japan, in 2005 when the DESD was launched, the government of Japan established the Association of Concerned Government Ministries to formulate national plan for DESD. In the following year, 2006, the Implementation Plan (IP) of the government of Japan for DESD was formulated.

Thus various activities to promote and implement ESD have been taking place under the IP by the government of Japan. Generally speaking, thanks to the funding provided by the government of Japan (through various ministries involved in the Implementation Plan), various stakeholders such as schools from primary to higher education, NPOs, enterprises, local administrations, and communities have been implementing activities and networking with each other so as to go beyond organizational boundaries and make coordinated and concerted efforts to promote ESD in a much wider area.

1.3.2 The Criticism of the Approaches to Promote ESD

Viewing the goals, objectives and strategies of DESD, IIP, and IP, it is evident that these schemes are top-down because ESD is a policy-oriented global initiative. Nevertheless, ESD is fundamentally about values (UNESCO 2006, p. 4), to promote sustainable development. When looking at what values ESD promotes, one might question if such values are all new and need to be created and promoted through such global and top-down schemes. In the International

³⁷ UNESCO 2005b, *International implementation scheme*, UNESCO Education Sector, Paris.

Implementation Scheme, UNESCO (2005, p. 8) describes the values of sustainable development as follows.

United Nations history carries with it a host of values related to human dignity and rights, equity, and care for the environment. Sustainable development takes these values a step further and extends them between generations. With sustainable development comes valuing biodiversity and conservation along with human diversity, inclusivity, and participation. In the economic realm, some embrace sufficiency for all and others equity of economic opportunity. Which values to teach and learn in each ESD programme is a matter for discussion. The goal is to create a locally relevant and culturally appropriate values component to ESD that is informed by the principles and values inherent in sustainable development

The above sentence also emphasizes the “creation” of locally relevant and culturally appropriate values. However, has humanity never valued biodiversity and conservation in its history? We might not have used the scientific terminology of “biodiversity” but certainly some people have respected local nature and conserved it as per local wisdom, just like Japanese people who used to preserve *Okuyama* [the mountainous interior] as part of animism, the value of which is “locally relevant and culturally appropriate”(UNESCO 2005, p. 8).

In the same manner, the value that embraces “sufficiency for all and equity of economic opportunity” must have existed in a certain self-sufficient community and might still exist in remote corners of the world.

In fact, Fien (1996, p. 19)³⁸ gives an answer to the above queries in his paper entitled *Teaching for a Sustainable World*.

The conclusion of the World Commission was that humankind requires new, more ecologically sustainable and socially just, approaches to development. In fact, many of these approaches are not “new” but are to be found in the wisdom and values that inform the principles of living sustainably that have characterized indigenous and farming peoples in many parts of the world for thousands of years.

In conclusion, there are three points of my criticism regarding the ESD UNESCO promotes.

- Firstly, the argument Fien made above has an important implication for the strategic approach of ESD UNESCO promotes. The UNESCO

³⁸ Fien, J (ed.) 1996, *Teaching for a sustainable world*, Australian Association for Environmental Education Inc., Australia.

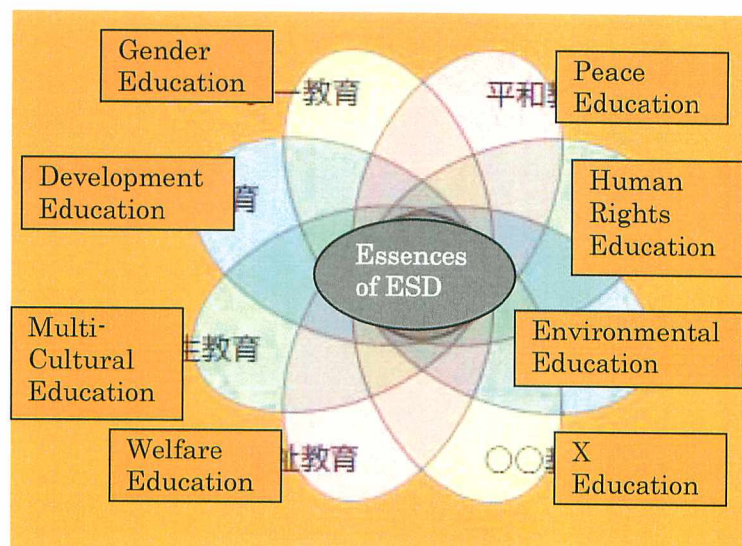
Executive Board paper (UNESCO 2005, Annex I p.3)³⁹ specifies the goal of ESD as “to create locally relevant and culturally appropriate values component to ESD that is informed by the principles and values inherent in sustainable development.” What matters in ESD is not merely the creation of the values of sustainable development but also the succession and/or re-creation of those already existed in the culture and wisdom of specific local communities. This perspective is not explicitly indicated in the UNESCO documents on ESD. The approach to identify sustainable values in the local culture and tradition has an affinity with the analogy Tsurumi made about local culture as genome and its endogeneity.

- Secondly, one has to recognize the obvious limitation in the policy-oriented and top-down project-based approach in promoting ESD at global, country and local levels. To put it simply, these are time and budgetary limitations. The implementation of ESD activities by many schools, NPOs, local administrations and communities depend on the budget available only for a few years provided by the central Ministries. Despite the goodwill and efforts of these actors, the change of people’s values and behaviors will not happen in such a short period, not to mention the problem of the succession of the culture of sustainability to the next generation as Tsurumi envisioned. Budget-based activities only benefit a limited number of people who are often gathered on a random basis, and who hardly develop ownership that links with the objectives of the community, or a society where they live. True sustainability will not be generated from the dependency on the inputs from outside that are basically beyond the control of the concerned community or society. As per Tsurumi’s view, development must be generated from the culture, resources and systems (such as ecosystem and social system) of the community of its own.
- Thirdly, the fundamental bottleneck of the concept of ESD UNESCO provides to the public is its multi-disciplinary, holistic, diverse and broad-based approaches and principles which draw people’s attention away from its core element of “quality of life” and disperse all educational efforts to fragmented topics and subjects such as human rights, gender,

³⁹ UNESCO 2005a, *Report by the Director-General on the United Nations Decade of Education for Sustainable Development: international implementing scheme and UNESCO’s contribution to the implementation of the Decade*, at the hundred and seventy-second session of the Executive Board, 172 EX/11, Paris.

peace, energy, global warming, and so on. In the case of school education, it is rather questionable to promote ESD as if its purpose is to gain knowledge of such various new subjects without contextualization with the real-life situations of students.

Figure 1.1: Essences of ESD



Source: ESD-J

In relation to this, ESD-J⁴⁰ developed a graphic called “Essences of ESD” that shows various types of education such as gender education, development education, peace education, human rights education, environmental education, and so on (Figure 1.1).

This, in my view, is misleading for teachers. They might well feel threatened when introducing ESD in their school curriculum if it means teaching so many educational subjects and they are not specialists of these subjects given competing priorities such as improvement of academic achievements.

⁴⁰ A NPO called Japan Council on the UN Decade of Education for Sustainable Development. Founded in June 2003, ESD-J is a networking organization dedicated to promoting ESD in Japan and overseas through partnerships. ESD-J has formed a network of 100 organizations including NGOs/NPOs, educational institutions, enterprises, and other groups active in such fields as environmental education, development education, human rights education, and youth development and is currently engaged in such efforts as policy proposals, training, information dissemination, and international networking. (Source: Cabinet Secretariat 2009, *UNDESD Japan Report*, Tokyo) [Translation by author]

In my view, it is important to grasp the intrinsic purpose of ESD, which is to provide education that allows learners to acquire the skills, capacities, values and knowledge required for positive societal transformation to ensure sustainable development (UNESCO 2006)⁴¹.

Therefore, the purpose of this study is to search for the endogenous mechanism that expands human capability to enable people to lead quality of life, as well as to find out the education/learning that supports such mechanism.

To look for such education with an attempt to contextualize it with a human capability approach and endogenous development in real settings, the case of a rural community of a town situated in a typical intermediate and mountainous area in Japan will be presented in the next three Chapters. Chapter 2 provides introductory background information, actual findings of the research in the community and the analysis of the findings. Then in the Chapter 3, the scope will be broadened to town level to capture historical, political, and social context that adds substantial qualitative perspectives to the analysis done in Chapter 2. Finally, Chapter 4 provides the synthesis of the theories (Chapter 1), the case findings and analysis (Chapter 2), and the broadened perspectives (Chapter 3) to lead the final conclusion of the endogenous ESD taken from this case study.

⁴¹ UNESCO 2006, *Education for sustainable development information sheet* based on the theme of “Education for sustainable development” developed during the 39th (05-11/06/2006) of the 60th anniversary of UNESCO

2 The Case Study: Discovery of Endogenous ESD in a Rural Community of Aya Town

To find out and examine endogenous ESD in a real case, the community of Aya Town, a rural town situated in a typical intermediate and mountainous area in Miyazaki Prefecture was identified. While such typical rural towns are numerous in Japan, the key reason to have chosen Aya was its unique and well-known autonomous system called the Autonomous Community Center (ACC) system. Assuming that in the rural communal life, personal functionings are closely connected with collective functionings, my assumption is that there is a possible linkage between the achievement of collective functionings and the autonomous system, the interface of which the human capability approach may be applied to, and as a result, learning related to such capability may also be involved.

2.1 Background Information on Aya Town and Uwabata Ward

2.1.1 General Information about Aya Town

Figure 2.1: Location of Aya Town⁴²



Aya belongs to Higashi Morokoshi County in Miyazaki Prefecture, one of seven prefectures on Kyushu Island located in the southern part of the Japanese

⁴² Source: Google Map 2009 provided by Zenrin, viewed on 20 January 2010.
<http://maps.google.com/maps?rls=gm&hl=ja&tab=w1>

archipelago. Three sides of Aya are surrounded by the steep mountains of “Kyushu Central Mountain Land National Park” which is well-known for evergreen broadleaf forests, and Aya has only one opening to Miyazaki plain in its eastern side. It is 30km from the center of the prefectural capital of the City of Miyazaki to which it is linked by roads without railway access. However the southern part of the town shares the border of the City of Miyazaki (Figure 2.1).

The center of Aya is a triangle-shaped plain formed by two rivers, Aya-Kita (North) River running north and Aya-Minami (South) River running south of the town. This region is known for temperate and pluvial climate with an average yearly temperature of 17 degrees and an annual amount of precipitation of 2,373mm.⁴³

The total town area is 9,521 ha and about 80% is occupied by mountain forests and 7.8% (739 ha) is cultivated area (The Ministry of Agriculture, Forestry, Fisheries, 2006 cited in Aya Town Municipality n.d., p. 1).⁴⁴ The main industry is agro-industry. The main sources of income are cucumber, pork, beef, rice, Hyuga-oranges, flowers, and trout. Other industries are forestry and tourism which brought an average of one million tourists every year between 1996 and 2005 to Aya (Aya Town Municipality n.d. p. 1 of 4).⁴⁵

According to the Aya Population Survey Report (Aya Town Municipality 2009: April)⁴⁶, the town population is 7,292, which indicates a slight increase from that (7,261) in 1980 (Figure 2.2). The total number of households is 2,914. (Aya Town Municipality 2009: April)⁴⁷ The town consists of 22 wards. Figure 2.3 shows the population distribution of Aya in four age groups. It demonstrates an obvious acceleration of the demographic aging pattern, which is quite typical in rural areas in Japan, though it has not yet reached an extreme level.

⁴³ Source: Inaka [Rural] Style Homepage, viewed 28 October 2008, <http://inaka-style.net/towns/1784.html>

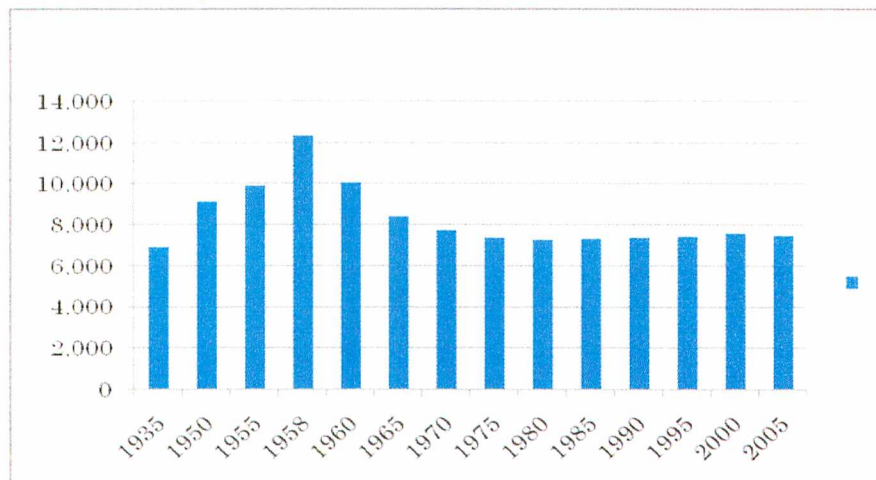
⁴⁴ The Ministry of Agriculture, Forestry, and Fisheries 2006, *Annual census report of agriculture, forestry, and fisheries*, Tokyo, cited in Aya Town Municipality n.d. *Aya cho purofihru* [Aya Town profile], Aya Town Municipality, Aya.

⁴⁵ Aya Town Municipality n.d. *Shiryō* [Material] Homepage viewed on 2 February 2009, <http://www.town.aya.miyazaki.jp/ayatown/online/material/population.html>

⁴⁶ Aya Town Municipality 2009 *Aya jinkoh dotai tohkei shiryō* [Aya population survey report], Aya Town Municipality, Aya.

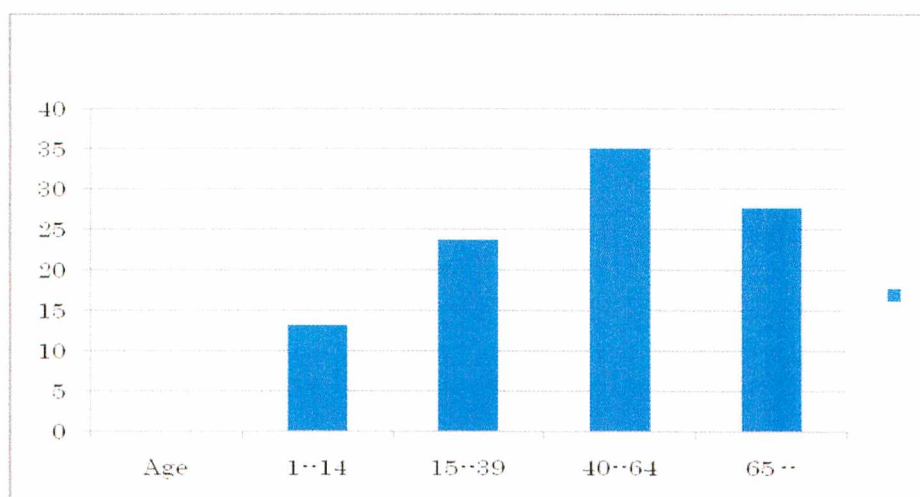
⁴⁷ Aya Town Municipality 2009 *Kohoh Aya* [Newsletter Aya] No.86., issued on 27 April 2009, Aya.

Figure 2.2: Aya Town Population Transition



Source: National Census cited in Ikeda 2006, p. 170⁴⁸

Figure 2.3: Aya Town Population Distribution by Age Groups



Source: National Census in 2005 cited in Aya Town Municipality n.d. p. 1 of 4

About 20% (1,446) of the total population is engaged in agriculture which is generally known as organic agriculture. (Aya Town Municipality n.d. p. 2 of 4)⁴⁹ There is one primary school and one junior secondary school but no high school in the town.

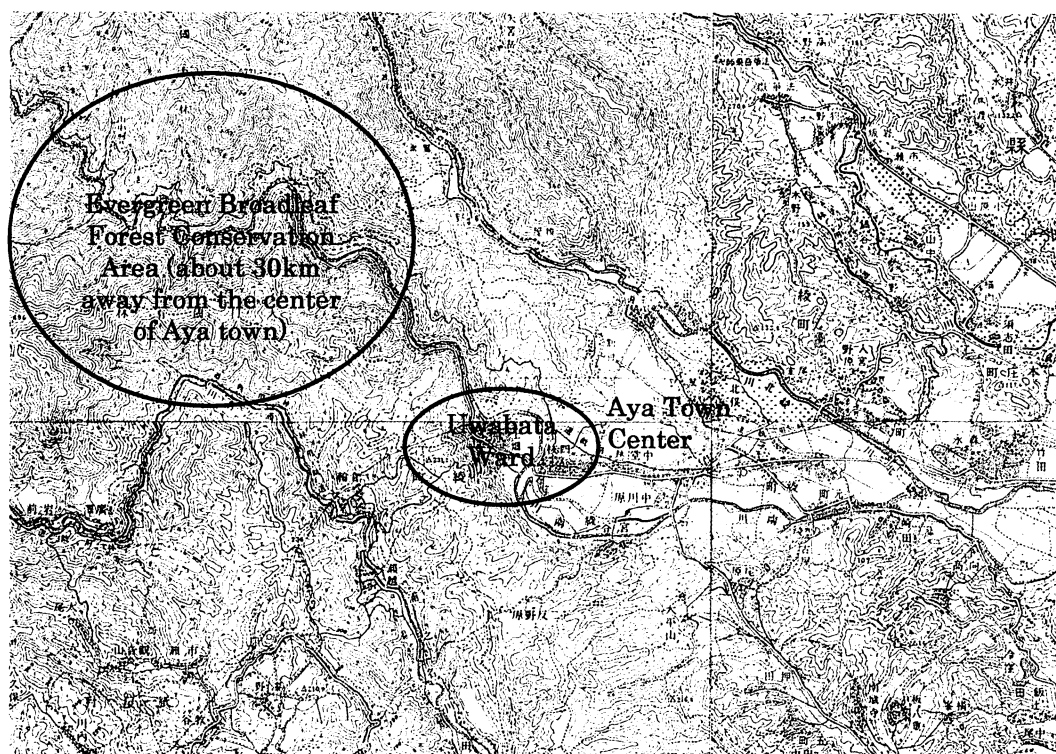
⁴⁸ The National Census figures were obtained from Ikeda, K. 2006, *Sohzohteki chihohjichi to chiiki saisei* [Creative regional autonomy and revival of regions] Nihon Keizai Hyoron Sha, Tokyo.

⁴⁹ Source: National Census Report in 2005. Aya Town Homepage, <http://www.town.aya.miyazaki.jp/ayatown/outline/intoro/index.html>

2.1.2 General Information about Uwabata Ward

Located in the western part of Aya, Uwabata Ward⁵⁰ has 92 households in 65 houses with a total population of 250 (Aya Town Municipality 2009: February). The Uwabata Ward used to belong to Irino Village which was merged to Aya Village in 1889 [Meiji 22]. Later Aya Village was upgraded to Town status and now though being part of Aya Town (Aya Kyodoshi Hensan Iinkai 1982, p.119)⁵¹, the Uwabata Ward still maintains a certain degree of physical independence by being separated from Aya Town center by the Aya-Minami River (Figure 2.4). Such physical condition seems to have influenced the culture and attitude of autonomy of the residents in Uwabata, more detail of which will be provided in the latter part of this Chapter.

Figure 2.4: Map of Aya Town⁵²



Regarding demographic composition, 108 people are over 60 years old which

⁵⁰ Ward is the lowest level of administrative boundary in Japan.

⁵¹ Aya Kyodoshi Hensan Iinkai [Editorial Committee of Aya Local History Book] (1982) *Aya kyoh-doshi* [Aya local history book], Aya Town, Aya.

⁵² The Map of Aya 1953~54 on a scale of one to 50,000. Viewed on 3 December 2009 <https://www.webfile.jp/dlm.php?i=33143&s=c83ca790115a8fe569f4>

occupies 43% of the total population of the ward (Aya Town Municipality 2009: February).

The ward was further divided into four clusters called *Han* in Japanese, namely Minami (South), Higashi (East), Nishi (West), but as part of autonomous clusters and not as administrative units. For the detailed composition of house-level occupation per cluster, please see Table 2.1.

Table 2.1: Composition of House-Level Occupation per Cluster

Cluster Name	Full-Time Farmer	Part-Time Farmer ⁵³	Other Occupations ⁵⁴	Total
East	5	11	4	20
West	4	13	1	18
South	3	12	2	17
Sakashita	2	2	6	10
	14	38	13	65

Source: Interviews conducted by author to cluster members in 2009

Figure 2.5: Aerial View of the Central Location of Uwabata Ward



Source: National Land Web Mapping System⁵⁵

⁵³ Includes many elderly people living on a pension.

⁵⁴ Details of other occupations: East (2 wage workers, 2 commercial business), West (1 wage worker), South (1 lacquer craft, 1 woodwork), Sakashita (1 school teacher, 1 bakery, 4 commercial business)

The majority of Uwabata residents live by agricultural farming. In the ward, there are only four shops, namely a food store, a bakery, a lacquer craft atelier shop, and a wood-crafting atelier shop that are quite visible among the view of typical agricultural lands and houses. To the west of Uwabata, lays the evergreen broadleaf forest conservation area and Uwabata can be considered as the entrance to the forest conservation area as the road to the forest conservation area goes right through the middle of Uwabata (Figure 2.5).

2.1.3 Data Collection Methodology

Books, documents and other secondary materials were collected through libraries and internet search. First-hand data were collected through visits to Aya Town library, Aya Town Hall, and the Education Board. A total of 52 residents⁵⁶ of Uwabata Ward, 29 residents⁵⁷ from other wards and 12 civil servants⁵⁸ in Aya, and two civil servants of Kiyotake Town⁵⁹ were interviewed through six visits⁶⁰ between September 2008 and October 2009, totaling 52 days. Additional telephone interviews were conducted in December 2009 from two Aya Town Municipality staff. Questionnaires regarding individual social activities in relation to social capital were collected from 36 residents belonging to the Men's Association and the Women's Association of the Uwabata ACC. Participant observation was carried out at the time of various seasonal activities and regular meetings at Uwabata ACC (See Annex 3 for the Annual Plan of the Autonomous Community Center in Uwabata Ward: Calendar Year of 2008).

⁵⁵ Aerial photo taken in 1976 [Showa 51] on a scale of one to 15,000. (Source: Kokudo Joho Web Mapping System Homepage, viewed on 10 November 2009 http://nrb-www.mlit.go.jp/cgi-bin/WebGIS2/WC_AirPhoto.cgi?IT=p&DT=n&PFN=CKU-76-9&PCN=C12&IDX=18)

⁵⁶ Including 12 primary school children, 8 junior high school children, 23 residents, 9 executive members of the Autonomous Community Center. The age breakdown of the 32 adults are 1 (90's), 3 (80's), 4 (70's), 5 (60's), 6 (50's), 12 (40's), and 1 (30's). The gender breakdown is 19 males and 13 females.

⁵⁷ 6 Autonomous Community Center Directors and 23 residents from other wards.

⁵⁸ 5 members of Aya Town Administration, 2 Educational Board staff, 4 principals of Aya Primary School and Aya Junior High School, and 1 Aya Primary School teacher.

⁵⁹ Kiyotake Town is about 30km from Aya Town having equally a border with Miyazaki City. Known as a Miyazaki City's bed town as well as university town, its population is 27,801 as of October 2009.

⁶⁰ The first visit from 24-26 September 2008, the second visit from 7 – 17 November 2008, the third visit from 6 – 19 January 2009, the fourth visit from 9-19 March 2009, the fifth visit from 2-7 August 2009, and the sixth visit from 12-18 October in 2009.

2.1.4 The Autonomous Community Center System

Before touching on the actual findings of the case study, it is critical to explain the background information of the ACC system which plays an important role in the life of the people and community in Aya.

Chiba (2006, pp. 66-67)⁶¹ provides a brief history of the community center system in Japan.

Right after the end of the World War II until the 1950s, community center activities took place based on the unit of village or community (as per former administrative demarcation) and these were cultural and autonomous activities directly related to people's rural life. However, after the period of rapid economic growth, urban lifestyles became widespread and highly popular in Japan, which has weakened the community building mechanisms that existed within each community. Construction of urban style community centers further accelerated such weakening of community building. The trend at that time was to value the concretization and structuring of its social educational functions based on school education models, instead of valuing regionality or the livelihood-centered approach that the village community centers had promoted. In this way, the village community center was reduced and dismantled, resulting in the decline of local tradition, festivity, and handing skills which were the crystallization of the accumulated shared experiences of a community... However, given the trend of decentralization and municipal merger in these days, more proactive participation in community building efforts by local residents is being expected, which sheds new light to the village community center/school zone community center/autonomous community center⁶² the activities of those had long been ignored. In other words, a "small autonomous organization" having a unit of community, school zone, or former village, became recognized as a source to generate community strength in sustaining the collective relationships in the local area.[Translation by author]

⁶¹ Chiba, E 2006, 'Nohson ni okeru shuraku/jichikohminkan katusdo to chiiki zukuri' [A study about the educational roles of independent community centers in Japanese rural societies], in Nihon Sonraku Kenkyu Gakkai [Japanese Association for Rural Studies], *Chiiki ni okeru kyoiku to noh* [Education and Agriculture in Rural Area], Nenpoh Sonrakushakai Kenkyu [Annual Bulletin of Rural Studies] Vol. 42, Tokyo

⁶² The village/autonomous community center is called "analogous facility of the public community center" and is not considered as the public community centers which the municipality runs, including staffing. The total numbers of public community centers and analogous facility of public community centers in Japan was 18,819 in 2002, 40% (about 7,500) of which belongs to the latter. Contrary to the public community center that has municipality staff such as director and manager under the "ordinance", the director or manager of the autonomous community center is generally selected from the local residents and its activities are integrated in those of residents' association or neighborhood association. In sum, the village/autonomous community center has continued with its multi-faceted functions that are closely connected with the life of local residents. Those functions are not only those as a social education facility but also as terminal functions of municipality and of collective labor for the production and life of local residents and maintenance of local cultural events. (Chiba 2006. P.69)[Translation by author]

In Aya, since 1906 [Meiji 36], the ward system as administrative unit coupled with the Ward Head system was introduced. Pushed by the national movement to promote the public community center system based on the instructions to local governments by the Ministry of Education in 1946 [Showa 21] as well as the Social Education Act issued in 1951 [Showa 26], Ward level efforts were made to establish ACCs at a very early stage. Followed by the first one in Yotsue Ward established as early as 1948 [Showa 23], the ACC was established in another five wards, namely Uwabata, Mokudo, Miyanotani, Ageh, and Waritsuke (Aya Kyodoshi Hensan Iinkai 1982, pp. 801-803). From 1961 [Showa 36], the Ward Head also served as the ACC Director. In 1965 [Showa 40], the Ward Head system was abolished to promote grass-roots autonomy through the ACC system. The tasks of the Ward Head were handed over to the town municipality and thus municipality staff started to cover the tasks such as delivery of administrative letters and notices of meetings, and distribution of voting tickets for elections. This enabled ACC Directors to concentrate on the autonomy of their ward, and at the same time, the ward was expected to run independently from the administrative work of Town Municipality (Gohda & Gohda 2005, p.74).⁶³

In general, doubling as the Ward Head and the ACC Director is practiced quite commonly in Japan, which often causes confusion between administration and autonomy. For example, the following is what the civil servant of Kiyotake Town Municipality describes.

“Kiyotake Town has a quite solid Ward Head system and most of the Ward Heads double as the ACC Directors. However, there seem to be no clear line between the job of the Ward Head and that of the ACC Director. So, when we tell them ‘you must be so busy because you have double jobs’, they don’t know what to respond because they are not so sure which tasks belong to which post. There is no regulation that lays down clearly the terms of reference of both jobs or roles. For example, when they officially attend the ward events and ceremonies, they are not so sure if they are attending as the Ward Head or the ACC Director. There is no obligation for them to submit an annual ACC plan to the Educational Board like Aya Town.” (Mr. S.H. The Chief of Life-Long Education Section, Kiyotake Town Municipality on 10 March 2009) [Translation by author]

Through the ACC system, ward residents creatively carry out various activities so that they make endeavors to build a better community by, for example, strengthening people’s ability for autonomy and increasing the feeling of

⁶³ Gohda, M & Gohda, M 2005, *Yui no kokoro [The spirit of Yui]*, Hyogen Sha, Tokyo.

connectedness among them. It is the ward residents who make a decision on what to do as ACC activities and contribute the costs concerned⁶⁴. Every year, the ACC in each ward submits to the Education Board, an annual ACC plan prepared by the executive committee and discussed democratically among residents and approved by the Ward General Assembly Meeting in March. Moreover, the ACC is managed by 16 executive members who are democratically selected by the ward residents themselves. The ACC system includes ward level sections (i.e. Administration Section, Industry Section, Public Health, Traffic, Sports and Recreation Section) as well as associations and a club (i.e. Children's Association, Women's Association [under 50-year-old females], Men's Association [over 30-year-old males], Club of the Elderly). (See Annex 2 for the organigram of the ACC system). The construction of the ACC building is handled by each ward according to their financial level and its maintenance is undertaken by the ward residents⁶⁵ (Aya Kyoiku Iinkai 2008, p. 3).⁶⁶ The following are four definitions of ACC system given by the Aya Kyoiku Iinkai [Aya Education Board].

The ACC system is the organization as well as the facility:

- 1) that is autonomously managed for the local residents and by the local residents by consensus;
- 2) having an objective to build a people-friendly and comfortable community through improvement of living conditions of local residents and their ability in autonomy;
- 3) as the heart and soul of local residents and the place of learning and interchange as well as the hub of locally-based activities; and
- 4) that aims to be a social and reconciliatory gathering, to increase mutual-understanding and local solidarity, and to deepen communication among them. [Translation by author]

⁶⁴ In the case of Uwabata Ward, annually 12,000 yen per household (the head of the household is under 80-year-old) except the household whose head is over 80-year-old for 8,000 yen, is being collected for the contribution to the ACC system. Education Board also provides subsidies to the ACCs based on the number of houses and other calculation base of each Ward and the running costs for lifelong learning classes are also subsidized separately. (Source: email from the Uwabata ACC Director on 18 January 2010)

⁶⁵ Aya Education Board also provides subsidies to cover the costs of ACC construction under certain conditions.

⁶⁶ Aya Kyoiku Iinkai [Aya Education Board] 2008, *Kenkyu shiryō* [Study material] : *Jichikohminkan katsudo to shogai gakushu* [Activities of ACC and lifelong learning], Aya.

The coordination body of the ACC system at town level in Aya is the Autonomous Community Center Liaison Council consisting of 22 ACC Directors of 22 wards. The Council was established in the same year, 1965 [Showa 49], when the Ward Head system was abolished. The Council has monthly meetings with the Town Municipality and the Education Board to exchange information and progress of activities between town and ward levels and discuss cross-cutting issues needing decision-making at the Council level.

While the ACC system is a rather common grass-root autonomous system and found everywhere in Japan, what is probably unique in Aya is that the abolishment of the Ward Head system was done as early as 1965, which is probably the pioneer case in Japan.⁶⁷ In general, both systems co-exist in most of municipalities in Japan. The following is a comment given by a civil servant in the Aya Town Municipality about the change that occurred after abolishment of the Ward Head system.

“I think the amount of work to manage the ACC system is no less than that in the time of the Ward Head system. But one thing I believe that has definitely changed was at the level of the forum of discussions. Under the Ward Head system, municipal administration made decisions and passed them on to the Ward Heads for implementation. Now, we (municipal administration) don't have to do it as the discussions take place at the ACC level.” (A 59-year-old male civil servant J.H. on 11 December 2009)[Translation by author]

2.2 A Wealth of Learning in Uwabata

2.2.1 Key Categories of Learning

The in-depth interviews with 52 Uwabata residents (children and adults) mainly focused on the content of their learning in their daily living and communal life, in the hope of obtaining some clues about the linkages among the learning and the ACC system and human and collective capability.

As a result, a wealth of learning was identified, which can be categorized mainly to six areas: 1) learning (for children) related to family and community life; 2) leaning through childhood play in natural settings (e.g. forests, farming fields and river); 3) learning related to organic farming, 4) learning related to

⁶⁷ Much later than 1965, the movement to shift from the Ward Head system to more autonomous system has been happening. Some examples of the municipality that has abolished the Ward Head system are Yoron Town (Yoron Island) in Kagoshima in 1984 [Showa 59], Maikata City in Osaka in 1988 [Showa 63], Dazaifu City in Fukuoka in March 2009 [Heisei 21] and Kasuga City in Fukuoka in April 2009 [Heisei 21]. (Source: Homepages of Yoron Town, Maikata City, Dazaifu City, Kasuga City)

minor subsistence, 5) learning related to folkways (e.g. traditional events, dance and ceremonial functions); and 6) learning related to the ACC management. The details of the above 6 categories of learning categories are the following.

2.2.1.1 Learning Related to Family and Community Life

Through parenting, children learn disciplines, appropriate behaviors vis-à-vis others especially adults, essential manners such as greetings and bowing. In Uwabata, given its origin as an agricultural community⁶⁸, a typical house setting is to have one head of family house surrounded by branch houses within the same site. Children in this extended family environment, are being raised by not only parents but also elder brothers and sisters, grandparents, uncles, aunts and neighbors.

“I warn children if they are ill-behaved. I even warn children of tourists walking in the Ward, if they are ill-behaved. I believe adults are responsible for disciplining any children.” (A 53-year-old male resident K.S. 12 January 2009) [Translation by author]

They are expected to greet parents and relatives as well as any neighbors they meet in the ward. Nevertheless, there are some voices of concern about the weakening of parenting skills of younger generations.

“I warn not only children but even adults who do not greet in the ward. Greetings should not be the town motto (author’s note: promotion of greetings for the year of 2009). If parents greet, their children naturally learn to greet. Because parents do not do what they are supposed to do, the town has to flag such motto.” (A 57-year-old male resident K.M. 12 January 2009) [Translation by author]

Before mechanized farming and home appliances became widely used, children were given daily chores such as helping hands for farming work including taking care of chickens and cattle, fetching water from a well, heating a bath, house cleaning, washing, cooking rice, and preparation for seasonal traditional events. In this way, children learned the “ABC” of farming work, basic life skills for living in rural settings, and family rules and tradition. Even now, some families seem to have children do

⁶⁸ According to Aya Kyodoshi Hensan Inkaï (1982, p. 121), there were 33 houses in Uwabata in the 10s (1887~1886) of Meiji Era.

housecleaning as part of the family tradition and training.

“In our family, the end-of-year housecleaning is meticulously done by my grandchildren. They have been raised to do house chores such as house cleaning as that was the only way to get their pocket money. Since we have trained them so well in housecleaning, anyone who sees it gives highest praises to my grandchildren.” (A 74-year-old male resident T.E. on 14 January 2009) [Translation by author]

Such learning at the level of the minimum unit of society helps the formation of an individual who has basic skills, knowledge of daily living and socialization, which becomes the basis of human relationship building of a ward community.

However, interviews with 20 Primary and Junior High School children in Uwabata indicate that currently, only about half of them do household chores such as shopping, dish washing, washing the bath tub, taking care of pets, and cooking. The rest rarely do such chores. They seem to be very busy not only with school study or homework but also sports activities. Therefore, the interface and interaction between the communal education and school education seems to be a critical issue today.

2.2.1.2 Learning through Childhood Play in Natural Settings

Thanks to the location of Uwabata the borders of which are surrounded by river and forests, up to the 40s of Showa [1965-75], children used to enjoy playing in such natural settings. For children, certain plays were linked with hunting to get food. For example, they set up small traps to hunt wild birds such as thrushes, bamboo partridges, woodpeckers and turtledoves, sometimes singing a traditional hunting song. They learned how to make a trap from other seniors using natural materials like bamboo. They also learned trout fishing and catching eels in the river by using bamboo traps from their seniors or fathers. They also collected bamboo shoots in spring, and plant leaves to make tea. In the summer, boys did camping by themselves for a couple of nights in the forests. They even managed to build a small hut with bamboos, shrubs and wood as a secret base of their territory. In this way, children naturally learned basic survival skills and knowledge.

“Even if a big disaster strikes and the lifelines are cut, if I have matches and salt, I know I can survive without any problems.” (A 53-year-old male resident K.S. on 14 March 2009) [Translation by author]

Other typical plays involved *Kan-Keri* [can kicking] to kick a can to fight for territory, *Koma-Genka* [*Koma*⁶⁹ fighting], *Pat-Chin*⁷⁰ to fight by slamming Pat-Chin against the ground, *Mizu-Deppo Gokko* [water pistol game], *Ishi-Keri* [play hopscotch], *Tonton-Pa* to skip according to various round figures drawn on the ground, and *Lemonehdo* to hit marbles from a lemonade bottle on the ground to fight. Boys loved such fighting games but girls also joined boys in games like stone-kicking and *Tonton-Pa*. Girls loved to do *Mamagoto* [play house] pretending to be a mummy. Children also made toys by themselves such as *Take-Uma* which are stilts made by bamboo and *Take-Tombo* which is a dragonfly-shape toy made of bamboo. Between the page 1142 and 1156 of the Aya Kyodo Shi [Aya Local History Book] (Aya Kyodoshi Hensan Iinkai 1982), the categories of children's games in old days are listed and the total number of games is 96, which illustrates amazing richness in children's creativity. According to the interviews, in those days, parents who were so busy with their farm work did not bother about children playing outside until around 8 pm.

During such group plays, children learn relationship-building skills; and elder children took leadership and taught younger children rules and how to make toys and tools. In sum seniors took good care of juniors. Children who were taken care of by their seniors, when they became seniors, did the same things for their juniors. Succession of such relationship building skills has occurred in this way. The fathers of certain children also took care of children in the community especially during the swimming season in the river.

“We did not need any adults to supervise children's swimming in the river. Children about the age of 12-13 took good care of younger children. But Uncle Hiko, Uncle Yoshio, the Dad of Tomoko who were around late twenties and early thirties, did quite spartan swimming training of children at the time. I recall, Uncle Seguchi threw boys into a muddy stream of the river right after the typhoon. Though they were tied with a rope, they had no choice but to swim by their own to the shore” (A male resident M.E. on 15 January 2009) [Translation by author]

⁶⁹ A *Koma* (a spinning top in English) is a traditional Japanese toy, having a round piece of wood with an axis-rod pierced through the middle.

⁷⁰ A *Pat-Chin* is a round-shape palm-size cardboard papers printed with comic characters

“At that time, children were taken care of by our community. Mischievous children got yelled at by adults. Before the dam was constructed⁷¹, senior children taught juniors how to swim. We never had a drowning case. The hierarchy among children naturally existed. Of course, they were absolutely obedient to the boss, but the boss took good care of juniors.” (A 84-year-old male resident F.O. on 17 January 2009) [Translation by author]

In Uwabata, children learn senior-junior relationship, responsibilities, rules of play, and skills to make toys, traps and tools for games which require local knowledge of natural materials and animals (e.g. which type of bamboo is suitable for which toy, which bird likes which kind of fruit and nut).

Such senior-junior relationships as well as “uncle-children” relationships are still maintained among the adults doing farming in Uwabata. Especially when they live in the same cluster, it is also linked with mutual-help support.

It should be noted that when Gohda was the Town Mayor, he established a Children’s Association, the activities of which became the part of the ACC calendar. Thus, learning among children was enhanced not just by spontaneous plays but also in the structured activities such as making bird-houses, participating in a swimming competition at the town level, and collecting used materials for recycling.

The parents in Uwabata, in the 1960’s and early 1970’s, gave children freedom to play around after school. Gradually, the school education system became very competitive and parents became much more involved in controlling children’s daily schedule to make them spend most of their time on school work. One recent phenomenon is parents’ enthusiasm to put their children in private sports clubs at primary school level, which did not exist before.

2.2.1.3 Learning Related to Organic Farming

The most of farmers in Uwabata, either full-time or part-time, practice organic farming or farming with low-level pesticide. Either way, such farming methods are highly demanding in terms of time and effort (labor hours) because of its trial-and-error nature. For example, a farmer who is

⁷¹ Before 1960.

running the biggest farm in Uwabata figured out, after many failures, the best mix of manure that is made by rice bran and fermented horse manure provided from a horse farm in Nishikibaru Ward in Aya.

These farmers, who have the knowledge accumulated from their own experiences or the knowledge their body acquired which cannot be explained verbally or in writing, frequently exchange information on their farming methods and techniques. The exchange of information is based on the relationships often built through the childhood games as previously indicated.

“You need to grow vegetables by making a seasonal variation for the sake of soil. If you continue to grow the same kind of vegetable with the same soil, it is no good. For example, if you grow ginger, you need to space the time at least for 4 years. This, I learned from my own experience. I made mistakes too. There is also wisdom of predecessors which I learned from my parents and farmers in my neighborhood. Such old wisdom does make sense, which I often am so impressed by. Besides, I get advice from the elders at the social gatherings of the ACC. I seek advice only from the elders I trust. Then, they tell me the information such as so and so is the best person to ask about growing this and that. While they may not do farming for a commercial purpose, but just as a home garden, they are absolutely the real masters.” (A 57-year-old male resident K.M. on 15 March 2009) [Translation by author]

2.2.1.4 Learning Related to Minor Subsistence,

According to the 84-year-old elder whose grandfather was a hunter, people in Uwabata had been eating the meat of deer and boar and he believes the tradition of hunting in Uwabata can be traced back as long as 850 years ago.

Currently there are no professional hunters in Aya. However, a local hunters association exists in Aya consisting of 30 part-time hunters. Two members are from Uwabata. One of them had hunting skills passed down by his father who was highly respected and called the master by other hunters. But the master has passed away last year at the age of 81. According to his son, newcomers learn from their seniors special local knowledge for hunting such as specific hunting jargons, for example, *uji* [animal trail], *hego* [shrub of ferns which boars use as a bed], *mabushi* [a hunter who ambushes the prey], *seko* [a hunter with hunting dogs] as well as specific marks in the mountains (e.g. trees, rocks, clay pipes with special names, small valleys with special names, miniature shines of

mountain gods, religious stone monuments, abandoned charcoal burner's huts). Knowledge and senses required for hunting include memorizing the position and the height of the sun throughout the day that differs in autumn, winter and spring, as hunting season runs from 15 November to 15 March, not to mention memorizing the shapes of mountains and hills, and identify animal trails. All rules and traditional practices of hunting are passed on from generation to generation.

Likewise, fishing is a very popular minor subsistence activity in Uwabata and there seem to be a number of masters of trout fishing. Some have already died but their sons have succeeded them and also become the masters. One old master already passed away actually was such an expert that he had earned a living with only trout fishing and raised 4 children. These masters took their sons trout fishing to teach them how to do it. Gradually, the sons started to do fishing by themselves through the development of crafting skills.

"I cut bamboo by myself and burned it to get rid of bamboo oil and made a fine pole." (A 64-year-old male resident T.U. on 17 March 2009) [Translation by author]

"I did trout fishing using a pole. I made its fishing line with a horse tale hair and I put a locust as a bait." (A 84-year-old male resident F.O. on 17 January 2009) [Translation by author]

Through trout fishing, one gets very familiar with not only trout but also the river; its flow, its depth, and its water quality and one becomes aware of the gradual changes, such as degradation of the quality of the river and the trout. The current master of trout fishing in Uwabata complained with anger.

"The Aya-Minami River is dead! It's because of a dam! Up to 10 years after the construction of the dam, it was ok. But then, sludge accumulated in the dam started to spoil the trout... But now, if I dive in the river, the water is clouded with sludge which is unbearable! ... When you fish a trout and open its abdomen, it stinks. So I no longer want to do trout fishing!" (A 64-year-old male resident T.U. on 17 March 2009) [Translation by author]

Minor subsistence highly depends on natural resources and the above case of the trout fishing master implies that once such blessings of natural resources are lost, the local knowledge and skills developed in the relation

to the natural resources may disappear.

2.2.1.5 Learning Related to Folkways: Traditional Events and Dance, and Ceremonial and Religious Functions

● Traditional Events

The cluster in Uwabata is the unit consisting of 10 to 20 houses. It is also a unit for carrying out traditional events. For example, *Shanichi*⁷²-*Koh*⁷³ ⁷⁴ which is the celebratory event for *Ta-no-Kami*⁷⁵ [God of Rice Fields] takes place in the form of organizing a feast with home-made dishes to host all the members of the cluster by one *Yado* [house] in the cluster during *Higan*⁷⁶ seasons twice a year. Such event can be considered as the way to build mutual-help relationships symbolized by *Yui*⁷⁷, as well as a ritual to pray for a good harvest before rice planting in spring and express thanks for god's blessings after the harvest in autumn. In this way, the residents of the cluster assure their spirit of mutual help or *Yui* and the spiritual relationship with local nature (god). Although the *Yado* is given a heavy burden in terms of time and labor to prepare dishes for a big number of guests, this system is based on the spirit of "give and take" given that the *Yado* rotates (usually once in every 5 to 10 years) and people are the guests most of time.

The major players of this traditional hospitality event at cluster level are the women in *Yado*, involving the transmission of knowledge about

⁷² *Shanichi* is the date identified by Oriental Zodiac (12 animals) and fixed to the date of "dog" which is closest to *Higan* days that are the Spring Equinox Day and Autumnal Equinox Day.

⁷³ In general, *Koh* (講) is a system that set a precedent for professional associations or guilds, and banking and insurance systems in Japan, and has supported the vast membership of many religious organizations. It is possible to maintain a community through the *Yui* system but *Koh* was considered as a flexible organization to deal with uncertainties. Because craftsmen who travel around Japan were considered vulnerable without a material base, they preserved craftsman skills, ensured human resources and encouraged mutual-help through *Koh* and embedded it in the core of traditional festivity of their guardian gods. [Translation by author] <Source: Kaneko et al. (eds) 1998, *Borantarih keizai no tanjoh* [The birth of voluntary economy], Jitsugyo no Tomo Sha, Tokyo. Pp. 225, 228>

⁷⁴ *Shanichi-Koh* is a traditional festivity to receive *Ta-no-Kami* and pray for a good harvest at the *Shanichi* in Spring and see it off at the *Shanichi* in Autumn to express thanks for the good harvest (Aya Kyodoshi Hensan Iinkai 1986:1031).

⁷⁵ *Ta-no-Kami* is the god seen everywhere in (Aya) town and has been a very popular god for farmers. In the old days, when a rice field was completed from waste land, people worshiped *Ta-no-Kami* to pray for a good harvest. Because farmers deal with nature which is filled with uncertainties such as disasters, they have prayed for the protection from disasters by worshiping the god closest to their daily life (Aya Kyodoshi Hensan Iinkai 1982, p.1000) [Translation by author]

⁷⁶ See the footnote 70 for the explanation.

⁷⁷ A traditional mutual-help system in Japan. More details on *Yui* will be dealt in the section 4.1.1.1.

local dishes, such as *Nigomi*⁷⁸ as well as procedures and manners of traditional hospitality, from mothers to daughters and mothers-in-laws to wives. Nevertheless it is inevitable for such folk traditions based on people's lifestyle in a certain socio-economic context to change over time. This will be discussed in section 4.1.1.3.

- **Traditional Dance**

Although the traditional dance called *Tawara-Odori*, is known as male dance, it was revived after many years when young male dancers were lacking in the ward. Now both boys and girls are involved in dancing to ensure its transmission to the next generation.

“Most of people in the ward used to dance *Tawara-Odori* but somehow the number has gradually decreased and eventually only the members of Y. Family were left. So we decided to include children at the time of revival...While adults have weak memories, children remember the dance even after a one year gap. The eldest group of children is at the third year of Junior High School but they may be better than adults in dancing. They can even coach younger children.” (A 53-year-old male resident S.K. on 13 January 2009) [Translation by author]

While quite invisible, a particular skill for *Tawara-Odori*, besides the dance itself, is also being passed down on a voluntary basis.

“I can make the straw bags for *Tawara-Odori*. I learned it from my senior in the ward.” (A 64-year-old male resident T.U. on 17 January 2009) [Translation by author]

The learning of traditional dance has been passed on from adults to adults, adults to children, and children to children. The coaching of *Tawara-Odori* is done on a voluntary basis without any gratuity. Although coaches are children's neighbors, once they start coaching, they are no longer friendly relatives, but strict coaches. Through the learning of traditional dance, children also develop a new type of relationship with their neighbors who have expertise of which they were not aware. As a consequence, through which children also develop a sense of respect for their neighbors. The child-to-child coaching also develops senior-junior relationships among children, which rarely takes place at school.

⁷⁸ A local dish of boiled vegetables and chicken.

In many parts of rural Japan, many folkways cease to exist due to the changing social environment (e.g. lack of implementing people). Nevertheless, when there is a strong will in the community, a folkway can revive or continue by modifying some of its hardware (e.g. physical forms) or even software (substance) (Please refer to the detail case of *Tawara-Odori* in section 4.1.1.3). In this sense, “tradition” should not be understood as a rigid concept but rather a flexible and dynamic concept.

It is normally difficult to measure qualitative indicators such as the will of the community to continue tradition but a comparison can be made in the case of *Tawara-Odori*. In Aya, Kogeh Ward is the largest ward in town in terms of population because of the many municipality-run housing complexes built in the ward. According to the Kogeh ACC Director, the current population is 959. Kogeh claims that the *Tawara-Odori* has originated in Kogeh and that the form practiced in Uwabata is their descendant. Notwithstanding such a large population, the continuation of *Tawara-Odori* is not an easy task as they barely managed to get 12 adults and 12 children to dance. They have also started to include children to ensure the transmission of *Tawara-Odori* to younger generation. The Kogeh Director confessed that it was a huge challenge for him to persuade parents to bring their children to learn *Tawara-Odori* as many of them consider participation in such a traditional activity is disadvantageous for their children’s school performance. There are more than 120 children in Kogeh in contrast with 28 in Uwabata. In Uwabata, however, six out of 28 children learn *Tawara-Odori* in contrast to Kogeh where 12 out of 120 children do. Proportionally, Kogeh should get many more children to learn *Tawara-Odori* but the authorities have failed to obtain the consensus of parents.

In general, the reason for the extinction of tradition is often considered as lack of successors mostly caused by population decrease. However, the above case illustrates that even with an adequate number of people, if not for strong will of the community or the people concerned (in this case, the will of parents) to support a tradition, its continuation is at risk.

Then why in Uwabata, parents are more supportive of traditional dance? According to the current director of Uwabata ACC, the parents do value the traditional folk art and support its transmission. It is possible that the strong human relationships nurtured by various activities, including those

of learning in Uwabata, might have increased people's sense of belonging to the community, and hence they value the tradition of their own community.

- **Ceremonial Functions**

Weddings and funerals, though carried out on a commercial basis these days, used to be done by the ward residents. They helped each other to make traditional tools and carry out ceremonial functions based on the one's age, experience, and proficiency of skills in the community. Thus, ceremonial functions are rich in learning elements in terms of basic craftsmanship, traditional cooking, and traditional practices.

For example, with regard to traditional home funerals, the members of the cluster to which the host of the funeral belongs prepare and perform the ceremony through a division of labor. A person called *Nushi-Dori*, often a highly respected elder in the ward, plays a role of the ward master of ceremonies who is responsible for ensuring smooth organization of the funeral from the beginning to end in close coordination with every cluster member concerned. This involves the men's role of making a coffin with pre-cut wooden boards which are already stocked in each household, ropes with rice straws, and other ceremonial tools from locally available bamboo trees. Men's basic crafting skills using bamboo trees were developed in their childhood through children's play. Specific crafting skills for funeral tools are passed on from seniors to juniors in the community. A typical ceremonial tool made of bamboo is a *Zenikago* [coin basket] which contains coins and a man in a procession holds the *Zenikago* and shakes it to scatter coins on the ground. Local people will then pick up the coins as a lucky charm for long life.

To support the family hosting the funeral, women (housewives) in the cluster are expected to prepare local dishes for the visiting mourners using locally available ingredients. Such cooking was normally done by experienced housewives and young wives who lacked such cooking experience were given a role to serve food to the visitors. *Nushi-Dori* is a prestigious role in the community but it is unpaid just like the coaches for *Tawara-Odori*. The current *Nushi-Dori* who has been in this position for more than 20 years explains some details.

“The dishes for the funeral are identified by some executive members of the ACC the night before. I write down how many carrots, fried tofu, etc., etc., required for the dishes. I give the ladies directions to cook rice for about 100 to 150 people with a huge kettle and serve it in a dinner box. For the soup, I have them make soup stock properly and put ‘So-men (Japanese vermicelli)’ in it. Then I taste the soup before serving and if it does not taste good, I have them re-do it. I was quite strict about it.” (A 73-year-old male resident S.U. on 17 October 2009) [Translation by author]

● Religious Functions

In Uwabata, people worship *Yama-no-Kami* [god of mountains], *Mizu-no-Kami* [god of water], *Uji-Gami* [guardian god], and *Ushi-Gami* [god of oxen]. Such gods symbolize the relationship between nature/the place and the people. Hunters especially worship the god of mountains to ask for protection and a good hunt and thus a ritual is performed at the beginning of hunting season every year. The continuity of such spiritual relationships with god is assured through the rituals and formalities traditionally embedded in hunting calendar.

Uji-Gami, a guardian god is a place-based god and in the case of Uwabata, the god is enshrined at Ikusago Shrine located on a small hill that has a good view of farming fields in Uwabata. Many families in the Ward traditionally worship the guardian god and most of them have a mini-shrine in the house site. Children learn family rituals through preparation and participation in every occasion.

“In Uwabata, the extended families get together to do *Mochi-Tsuki* [pounding of rice-cake] on the 30th of December at the house of the main branch and on the 2nd of January, they give offerings to *Uji-Gami*, *Yama-no-Kami* and *Kama-no-Kami* [god of oven]’. They set rice, salt, water, dried sardines, and vegetables on a tray as offerings and pray for good harvests. Of course, the chief of Ikusago Shrine is invited to do the prayer.” (A 42-year-old female resident M.E. on 11 January 2009) [Translation by author]

Moreover, the worship of the guardian god is embedded in the ACC calendar activities just like the hunters’ calendar. On the 1st of January, residents, young and old, men and women, get together in the open space in front of the ACC building after the visit to Ikusago Shrine, light a bonfire, and sing a traditional new-year song while watching the first sun rise of the year. This is a routine ACC activity followed by eating *Nabe* [Japanese stew] cooked with the meat of a boar hunted by one of the

residents. In April, at the General Assembly of ACC, a prayer for the guardian god takes place by the chief of shrine before the opening of the Assembly. In November, Ikusago Shrine festival is the main ward level activity of the ACC. Every year on the second Sunday of December, each cluster takes a turn to make a new *Shime-Nawa* [straw ropes to decorate the shrine] to prepare for the New Year worship. Despite the ACC system being a modern system, it is quite amazing to see such very traditional religious rituals and practices being integrated in it in a taken for granted. This interesting integration of local religion in the ACC system will be discussed again in section 4.1.1.2.

2.2.1.6 Learning Related to the Management of the ACC

The autonomy of the ward is based on the mutual relations of both the participation of ward residents in the ACC activities as well as the non-remunerative work ⁷⁹ contributed by the executive committee members of the ACC. Such relations are also supported by the human relationships built at family, cluster and ward levels through various activities including learning activities as previously described. In addition, various ACC associations and club activities develop horizontal relationships among their resident members.

Those who become executive committee members for the first time, carry out responsible tasks through “learning by doing”, and seek advice from the former executive members whenever necessary. At the monthly meetings of the executive committee, enthusiastic members sometimes stay after the meeting, sometimes until midnight to discuss the issues they felt were not thoroughly discussed at the meeting or other informal topics that could not be dealt with in the meeting. From time to time, heated discussions and quarrels take place between the seniors and juniors who have different views and perspectives about the management of the ACC.

“Since we have long-standing relationships, we feel free to speak very frankly among us. That’s why we can also ask favors each other. But we do

⁷⁹ However, annually 200,000 yen is paid to the ACC Director from the contributions of the residents. In the same manner, 60,000 yen for the Deputy ACC Director, 40,000 yen for the accountant, 20,000 yen for the Head of each club and cluster, and 5,000 for the auditor are paid. In addition, 50,000 yen per year is provided to the ACC Director by the Educational Board. The ACC budget needs to be approved by the ward residents. (Source: email from the Uwabata ACC Director on 18 January 2010)

use respectful expressions to our seniors. It is important to be careful about our language for the hierarchical relationships. But normally, we call the first name of the closest brothers with *chan*." (A 62-year-old male resident S.M. on 9 March 2009) [Translation by author]

A new Director when he goes through the candidates of the new executive committee members for appointment, sometimes selects juniors whom he considers have the potential to be the future leaders of the ward and give them light roles to start, and he will attentively train them throughout his term.

2.3 Analysis of the Learning and Its Implications for the Quality of Life and Sustainability

2.3.1 Basic Analysis of the Learning

Learning in Uwabata can be summarized as comprising the following three areas.

- **Learning content**

Rich and diverse content was found in the learning in Uwabata. These are 1) basic life skills in childhood, 2) knowledge of general/local/social rules and norms 3) local knowledge related to nature and environment, 4) local knowledge related to people/family and places, 5) craft skills mostly using local natural materials, 6) local norms, rules and values, 7) interpersonal skills including leadership and debating skills, and 8) spiritual relationship with local nature/gods.

- **Learning mechanisms and methods**

The learning mechanism employed varies according to the category but it can be roughly divided in two. One is self-learning and the other is face-to-face learning. The acquisition of the knowledge of local nature is, in most cases, done by self observation and self experience through frequent and intimate contact with local nature. Even if learning craft skills may be taught by others to start with, gradually one shifts to self-learning through trial and error (learning by doing) to improve craft skills.

Face-to-face learning occurs mostly in two styles: individual (teacher) vs individual (learner) or individual (teacher) vs group (learners). The method

used is verbal and non-literate⁸⁰ communications. Non-literate communications include modeling and teaching by showing good examples or how to do a task, or even correcting the learner's body movement. Typical examples are teaching *Tawara-Odori* and showing how to make crafts with bamboo materials. The physical contact and verbal communication are indeed the essential element of building human relationships just as mothers do to their children and babies. Moreover, the non-literate method stimulates the development of human senses such as sense of smell, sight, touch, taste, and hearing. Ultimately, this method may help one develop a sixth sense, or tacit knowledge like that of a well-experienced master of hunting.

- **Effects of learning**

Effects of learning, in the context of this study, do not deal with the personal evaluation of the learning such as how the performance of a learner was improved after the learning. It rather looks at the changing relational dynamics between the learner and the teacher as well as the learner and the community during and after the learning. From this point of view, the effects of learning can be summarized in two areas. One is the effect on the strengthening of human relationships and the other on the development of sense of belonging to local community and nature.

The most probable reason for its role in human relationship building is because the learning takes place through dominantly verbal and non-literate communications. It should be noted that the organic farmer in the section 2.2.1.3 mentioned that he had sought advice from seniors at the social gathering of the ACC where food and drinks were served. Learning while building human-relationship in such a relaxed and convivial setting is probably the very feature of communal learning.

Another possible reason is the nature of teaching as unpaid labor in communal settings. Contrary to school education where school teachers receive salaries, such teaching in the community is a neither professional nor remunerable activity. It is unpaid labor because the aim of teaching in the context of community is not the remuneration but the mutual-support based on human relationships. Moreover, through teaching and learning,

⁸⁰ In Japan, non-literate culture and oral tradition became known by the research of Junzo Kawada on Moshi Tribe in the West Africa. (source: Kawada, J. 2001, *Mumoji Shakai no Rekishi* [The History of Non-Literate Society], Iwanami Shoten, Tokyo.)

such human relationships eventually get enhanced.

In addition, the learning of organic farming illustrates the extension of human relationships through introducing local experts to the farmer. This is based on the trust developed between the elder and the farmer as well as between the elder and the experts. In other words, these experts are also expected to spend some time advising on useful skills and knowledge to someone they may not know well, without payment, and thus the farmer has to be vouched for by the elder, whose judgment the expert and farmer trust. In this way, the farmer can build another human relationship as an extension from that with the elder. In sum, the trust developed through good human relationships is a prerequisite for a teacher to introduce other teachers in the community. Given that learners in Uwabata are so numerous, such extension of human relationships becomes complex and can be illustrated like a web in a community.

In summary, communal learning has an inseparable link with human relationships in Uwabata. The non-literal teaching as voluntary and non-remunerable labor contributes to enhancing trust among the residents. As some learning is linked with communal activities, learning and activities have a mutually enhancing effect in human relationship building as well.

With regard to the development of a sense of belonging to local community and nature, it commonly occurs through learning to share the same spiritual values (e.g. the worship of the god of mountains). In its essence, local nature becomes part of their life. It provides a sense of belonging not just to the community where people's houses are but also the community blessed and protected by local nature and local natural gods. Likewise, carrying out collective functionings such as folkways contributes to the enhancement of the feelings of solidarity among the residents. Through communal activities, the residents learn to share the same norms and rules, which strengthen the sense of solidarity among them.

These effects become possible because the nature of communal learning is "learning by doing", often involving personal responsibilities to play a certain role in the community. Thus, evaluation of the result of one's learning, like school education, is not really the purpose of communal learning. Rather, any mistakes or weakness of personal performance will be supported and covered by others through mutual-help (human

relationships) in order to properly achieve collective functionings, which is the objective of the community. Such a process eventually strengthens one's sense of the belonging to the community as well.

2.3.2 Detailed Analysis of the Learning

2.3.2.1 Childhood Play: A Foundation of Relationship Building with Local Nature and People

It is quite remarkable to see that the childhood play category covers many learning elements. These elements have in fact, a close linkage with adult learning.

- **Norms and rules:** Children learn the rules of the game, an essential entry point of the learning of social life that is full of rules and regulations. The rules of a game are not written but have been passed on from previous generations of children and widely accepted and agreed among children. These can be considered as essential norms which include “no cheating” to teach fairness, and “making rules flexible for younger children who are physically underdeveloped” to teach seniors to be kind and fair to much younger ones.
- **Interpersonal Skills:** Senior children learn how to take care of younger children through plays. Seniors also learn how to teach rules to younger ones, how to supervise them, and how to settle quarrels between children. However, seniors were not just nice and kind *Sempai* [seniors]. Juniors were sometime afraid of them as *Sempai* was quite strict in disciplining them and forced them in many ways.

“I feel very privileged to have good neighbors and *Sempai* around me, who got angry and disciplined me when I was a primary school kid... I remember fearing *Sempai*... They took us to so many adventures.” (A 53-year-old male resident K.S. on 22 April 2008) [Translation by author]

Eventually, juniors also follow the path of the seniors and do the same to juniors when they grow older and become seniors. This is an essential human-relationship building skill that will be further

developed as one grows to adulthood and is required for local autonomy, and more generally in a society.

- **Knowledge of Local Nature:** Through play, children get very familiar with the local natural settings where they play. In the woods, they become familiar with the topography, trees, and plants. They may be passionate about collecting insects and trapping birds in the area. In the same manner, through swimming, catching weatherfish, eels and crabs, children know the river, in terms of the flow, river bed, currents, water temperature, and its drastic changes after heavy rains or typhoons. Such essential knowledge helps children find local materials for craft and do recreation such as swimming, fishing and trapping birds, which will be further deepened in their adulthood linking to traditional craft, minor subsistence, irrigation and disaster preparedness.
- **Craft Skills:** The craft skills acquired during childhood last for a lifetime.

“With no problem, even now, most of the men in Uwabata who are over 60’s can still make *Take-Tombo*, *Mizu-Deppo*, and *Take-Uma*.” (A 63-year-old male resident K.U. on 15 January 2009) [Translation by author]

These are the skills expected in the preparation and implementation of traditional events and ceremonies.

- **Leadership Skills:** Among children, a leader or a leading group was formed when they played together to do games, swimming and activities of Children’s Association. Leaders are seniors and especially since Aya has no High School, Junior High School children were very active in showing leadership.

“Around that time⁸¹ when the total number of children in Uwabata was around 70 and Junior High School kids were more than ten, with their leadership, children in Uwabata were especially active.” (A 46-year-old male resident M.S on 14 January 2009) [Translation by author]

⁸¹ Late 1960s to early 1970s.

It is quite indicative that two children from the above active group of children became ACC Directors in their 50's. In both cases, they were the youngest directors in the history of Uwabata ACC.

- **Lore and Legend:** Uwabata is rich in lore and legend for children. For example, there is a stone named *Shaberi-Ishi* [talking stone] just alongside a local road. The legend is that the talking stone will call passer-by children “hey!” and if the children look back at the stone, the stone will swallow them. Knowing this legend, children will pass the stone in a hurry to go home. The story may be derived from the wisdom of predecessors for children to avoid making a side trip on their way home. Without knowing that they are disciplined by legend and lore, children learn and believe them and enjoy their imaginative world.

In sum, childhood play in Uwabata is more than play. There is a Japanese saying, “Play is the job of children”, which is quite indicative especially in light of the case in Uwabata. The analysis portrays that the knowledge and skills of local nature gained through highly intimate contacts made by such play, resulted in a firm foundation in developing practical abilities to lead community life in adulthood. Building human relationships among children is also an essential element, if they remain in the community in the future, to link with community organization like the ACC system or *Yui* in the old days.

These days, “Kindergarten in the Forest”⁸² became quite popular in Japan as well as in Europe. Though the context may quite differ from the case of Uwabata, acquisition of the six key learning elements through play in natural settings enriches and broadens children’s knowledge, skills and abilities in different ways to those who play entirely in a room and in the play ground of a Kindergarten.

⁸² Originally started in Denmark and now quite popular in Germany as well. In Japan, different styles of the Kindergarten in the Forest exist but what is common is the early childhood education and child-care in the natural environment. Many Kindergartens in the Forest try not to force intentional interventions by adults but believe in children’s feelings and senses so that they can bring out the full potential out of these.(source: Home page of ‘Morino Youchien’ [Kindergarten in the Forest in Japan], <http://www.morinoyouchien.org/modules/tinyd01/>)

2.3.2.2 Folkways: Its Significance Beyond Learning

The learning category of folkways has quite comprehensive learning elements such as local knowledge, craft skills, interpersonal skills, and knowledge of norms and rules, which actually are strongly associated with those of childhood play, indicating that childhood play is possibly a prerequisite for the preparation and implementation of certain traditional ceremonies such as the communal funeral.

The youth of Uwabata, who have never learned bamboo craft in their childhood, will have difficulty in taking the role of craftsman at communal funeral which suddenly takes place. While funerals in these days take place at private funeral homes, if the chief mourner wishes, he/she can request the ACC Director for a communal funeral. The issue is that in this case, the will to practice traditional ceremonies may exist among the ward residents but the skills pooled in the community to make it happen may not be sufficient. Two possible reasons are 1) the adults having knowledge and skills of communal funeral practices are aging and became scarce; and 2) for the last several decades, children have hardly played in nature and the transmission of the above mentioned learning elements to the younger generations has not taken place.

Nevertheless, the tradition, whether its hardware (e.g. physical forms) or software (e.g. substance), can be modified over time as earlier mentioned. The ways and means to revive communal funeral practices can be adapted to the modern context of an aging population and lack of childhood play in natural settings. If there is a strong will in the community, they can devise whatever ways to fill in the gaps through very deliberate training and education to the youth in the community.

Now, this category of learning can be considered as life-long learning from childhood until one becomes an elder in the community. This is mainly because traditional events involve all residents, children and adults, in the community.

As is the case of *Tawara-Odori*, children are given a role in a communal society and develop a sense of responsibility to carry out the role given to meet adults' expectations. When they finish their performance, they receive praise from the residents. Becoming the top of one's class in school

performance is merely a self-achievement for a child, while carrying out a communal performance contributes to the achievement of community objectives, which increases the sense of belonging of the child to the community. A child can hardly develop such a sense from school education. The parents who allowed their children to perform *Tawara-Odori* also receive recognition from the community as well and receive praise for their children's good performance. Even when children have no role to play in a traditional ceremony, such as a communal funeral, they see and learn how it takes place by being present in their real life setting.

The same can be said for adults. The community consists of a mixture of various age groups and thus according to the age hierarchy, juniors are given certain roles in traditional events and ceremonies. When their performance meets expectations from their seniors, they are recognized as *Inichin-Mae* [fully grown up or mature] in the community. This is part of the process of one's social integration in the community.

To summarize, life-long learning embedded in the folkways provides rich and varied opportunities for the socialization and integration in the community for both children and adults.

2.3.2.3 Local Knowledge and Skills as the Common Resources of the Community

From a series of interviews, the presence of the masters was identified in particular categories of learning, namely organic agriculture, minor subsistence and folkways. The Uwabata residents commonly call them *Meijin* [master] to show their respect for their local knowledge and skills in a particular field. The residents have several perceptions about the masters.

- Firstly, it seems everyone in the Ward knows the names of the masters. They are well known in the community.
- Secondly, the residents rely on the masters' local knowledge and skills whenever required for both private purposes and communal functions.
- Thirdly, they are the sources of reference for when specific knowledge, skills and experience are requested both internally and externally. For example, when I asked the ACC Director to whom should I ask about trout fishing, he immediately told the name of the master of trout

fishing in Uwabata.

- The residents consider the masters as indispensable for the community. Some of the masters are over 80's. When I asked a few residents what if the X master dies, they all told me it would be a great loss for the community.
- However, the residents seem to keep distance from the topic of the succession of the mastership as they consider it as a family succession issue. Still, traditional events, dance and ceremonies in Uwabata are now part of the ACC activities and the succession of mastership has become more than a family issue.

Essentially if we consider the ward organization as a form of social capital, the masters are their common resources of local knowledge and skills to which every resident has access. While one cannot deny that outsiders can also have access to such common resources, like I did, it is evident that such information will not be given to a total stranger but only to those vouched for by the people with a recognized position such as the ACC Director. The presence of such masters is a source of communal pride as well as the barometer indicating the sustainability of local traditional culture and/or local natural resources in the community and the maintenance of a knowledge transmission.

However, an important perspective is that since local knowledge and skills have an inseparable link with local natural resources, only sustainable use and preservation of local natural resources can ensure the sustainability of local mastership. Given the complaints of the trout fishing master in the section 2.2.1.4., degradation of the quality of river water threatens the sustainability of trout fishing itself.

Furthermore, through the interviews with the ACC Directors in other wards, it became evident that in every ward, certain masters exist. Some are recognized at town level, which is also an honor for the ward where the masters live. The implication is that Aya is very rich in human resources with in-depth local knowledge and skills that are very much beneficial to the life of Aya residents. This is part of the richness of Aya which is invisible for outsiders such as tourists.

2.3.3 Implications of the In-Depth Analysis

Now, an attempt for more in-depth qualitative analysis will be made to develop a much more thorough understanding of the implications of communal learning in relation with the concept of quality of life.

Before making this in-depth analysis, I would like to refer to the three ecological domains, namely environmental (physical), social, spiritual/mental domains Felix Guattari (1993)⁸³proposed, to recover the holistic ecological balance in this world where the setup of the ultimate goal of social labor is controlled one-sidedly by the profit-based economy and power-relation. (Guattari 1993, pp. 9, 27) Guattari's searching critique of the efficiency-driven modern society shares the same concerns as this study. He ironically indicates that thanks to the "sustainable development" of mechanical labor and advancements from the information revolution, productivity is ever increasing free time for people. He, however, questions "free time for what?" "Is it to cause the phenomenon of solitude, idleness, anxiety, neurosis, or rather for the culture, creation or research, restructuring environment, or diversify lifestyle or increase one's sensitivity?" (Guattari 1993, pp. 8-9)

Thus, the methodology of the in-depth analysis is to use these three ecological domains that are associated with the quality of life which Guattari might have implied in the latter part of his question above. To make a deeper qualitative analysis, each domain is further divided into two statuses; static and dynamic.

I define "static" in the light of consistency, such as the knowledge, rules, and values that basically remain as they are, or are carefully being maintained in their original forms to serve certain purposes of the people and a community. On the contrary, "dynamic" is defined as a status with potential for change and adaptation by integrating exotic knowledge and factors from the external world, which often involves human creativity.

Table 2.2 below shows the attributes of six communal learning categories followed by the in-depth analysis based on the Table 2.2 according to each domain.

⁸³ Guattari, P 1989, *Les trois ecologies*. Translated from French to Japanese by Sugimura, M 1993, *Mittsu no ekolojij*, Ohmura Shoten, Tokyo.

Table 2.2: Attributes of Six Communal Learning Categories
in Three Ecological Domains
(Note: Including examples of learning elements)

	Environmental (Physical) Domain		Social Domain		Spiritual/Mental Domain		Total
	Static	Dynamic	Static	Dynamic	Static	Dynamic	
Daily Family and Communal Life	○ Local Knowledge		○ Basic Life Skills, Norms & Rules, local knowledge	○ Interpersonal Skills		○ Religious Rituals	4
Childhood Play	○ Local Knowledge	○ Crafting Skills	○ Norms & Rules, local knowledge	○ Interpersonal Skills	○ Lore and Legend		5
Organic Farming	○ Local Knowledge	○ Organic Farming Techniques		○ Interpersonal Skills		○ Spiritual Relationship with nature	4
Minor Subsistence	○ Local Knowledge	○ Crafting Skills, Minor Subsistence Techniques		○ Interpersonal Skills	○ Religious Rituals	○ Spiritual Relationship with nature	5
Folkways	○ Local Knowledge	○ Crafting Skills	○ Norms & Rules, local knowledge	○ Interpersonal Skills	○ Religious Rituals	○ Religious Rituals, Folk Performance Art	6
ACC Management	○ Local Knowledge		○ Norms & Rules, Local Knowledge	○ Interpersonal skills and Leadership & Debating Skills	○ Religious Rituals		4
Total	6	4	4	6	4	4	

Source: Based on the interviews of Uwabata residents and the records of *Fureai-Chosa*⁸⁴

● Learning Balance by Domain and Category

At the vertical level, relatively good balance of the distribution of learning elements is seen in all three ecological domains. In fact, the status of “religious rituals” indicates its dualistic nature as it can have both statuses

⁸⁴ An interactive survey to see the nature-people relations conducted by the Nihon Shizen Hogo Kyokai [Nature Conservation Society of Japan (NACS-J)] and the Universities of Hokkaido and Tokyo along with other environment-related NPOs in Uwabata Ward since April 2008.

even in one learning category, which rather makes the analysis complex in the spiritual/mental domain. In general, religious rituals are considered as static. Surely these are traditional functions symbolizing the spiritual values the ancestors/predecessors have shared for the sake of the sustainability of local nature (in this context) and the proceedings of which they have deliberately formalized or fixed to ensure its continuity. Nevertheless, a ritual has much more social significance which Michael Polanyi (1958, p. 211)⁸⁵ describes as follows.

Every ritual act of a group is to this extent a reconciliation within the group. It affirms the convivial existence of the group as transcending the individual, both in the present and through times past. The occasions for these emotional reaffirmations are anniversary dates or the recurrent changes by which the group undergoes reconstitution. Its coherence is renewed ritually to the annual rhythm of the seasons, or else when the occurrence of death, birth, marriage, or other alternations of status, are solemnly consecrated in traditional terms.

The social dynamics embedded in a ritual, which Polanyi indicated above, brings in a new perspective of the interface between the spiritual/mental domain and social domain. If the significance of a religious ritual is, therefore, meant for the worship of the natural gods, there is little space for people to violate the sanctuary of gods. The static status of religious rituals under the category of minor subsistence (e.g. hunting ritual) and the ACC management (e.g. the opening ceremony of the annual ACC assembly meeting) supports this view. Conversely, the religious rituals accompanied with social dynamics as indicated by Polanyi above do have space for adaptation based on people's culture and lifestyle that vary across the ages. Thus, traditional ceremonies done at family level can be gradually adapted to the changing culture and lifestyle of people over time. In this respect, adaptation occurred to *Tawara-Odori* and *Shanichi-Koh* that are also closely related to people's culture and lifestyle, and will be discussed in detail under the section 4.1.1.3.

At the horizontal level, the distribution of the learning element in the three domains in each learning category is also well-balanced. Folkways especially demonstrate their comprehensiveness in learning at both status and domain levels. It is therefore, important to recognize the folkways from this new

⁸⁵ Polanyi, M 1958, *Personal knowledge: towards a post-critical philosophy*, The University of Chicago Press, Chicago

perspective of learning, which illustrates rich and comprehensive learning closely linked with local nature, local society and local culture and lifestyle. Maintaining folkways, thus, is of significance in maintaining local identity for the people in the community.

Moreover, the childhood play tends to be ignored in the context of school education or even considered as an obstacle for school study. However, it actually demonstrates a well-balanced and holistic approach to learning across all three ecological domains, like the rest of the learning categories do. This signifies that childhood play does have a useful role in a communal life in terms of preparation for leading a good quality of life in adulthood.

In conclusion, the learning elements across domain, status and category are relatively well-balance in Uwabata. This may account for the reputation of Uwabata as having strong solidarity and being active in the ACC activities. My interpretation of generally inbalanced communal learning, on the contrary, concluded from the analysis of the case of Uwabata is as follows:

- a) Concentration on the environmental domain: learning at only this domain could remain at very much individualistic and bi-lateral levels. Such an approach is akin to environmental education that encourages acquisition of personal knowledge on nature and certain craft skills using natural materials. However, such learning does not link with one's social life, and its influence on social change, which is the main purpose of ESD, is very much limited.
- b) Concentration on the social domain: Learning with too much focus on the social domain ignores the perspective of people's linkage with the natural environment and its connection with people's spirituality. Such imbalance might lead to degradation of the natural environment.
- c) Concentration on the spiritual/mental domain: Without the linkage with the social domain, such learning remains at an individualistic level. Searching for personal spiritual fulfillment without the actual linkage with local knowledge of nature and local traditions or culture, even if it is concerned with nature, becomes abstract and universal faith or philosophy of human-nature relationship like deep ecology. (Naess 1989)⁸⁶ Therefore, such spiritual or mental apprehension of nature has a

⁸⁶ Naess, A 1989, *Ecology, community and lifestyle: outline of an ecosophy*, translated from Norwegian

tendency to be connected with the universal or global environmental protection movement. In this respect, Gattari actually critiques the ecologists in France, who immersed themselves in the world of discourse at environmental and political levels and have no interest in the issue of the homeless in their neighborhood. (Gattari 1993, pp. 160-161)

- d) The above three cases, in turn, infer that lack of, or weak linkage in one particular domain is equally not desirable. Good balance in three ecological domains is what Gattari contended. Gattari warns that it is not right to separate the actions for environment, society and spirituality and affirms the necessity to gain proper understanding of the world through the three lenses with mutual compatibility that are the components of three ecological perspectives (Gattari 1993, pp. 27-28).
- e) In the same manner, the learning that has a strong static attribute and a weak or no dynamic attribute suppresses human and social creativity. Such learning becomes typically a top-down, rule or knowledge-focused approach to learning. The desire of people as social beings requires the dynamics that links static knowledge/norms with the dynamics of thinking, emotions, and actions linked with their reality like livelihood, culture and lifestyle. As Polanyi (1958, p. 211) described earlier, “convivial existence” of the group to which one belongs seems the key especially in the context of community development.
- f) On the contrary, learning emphasizing the dynamic attribute and weak in static attribute, will lack the contextualization from which creativity should emerge and be connected with social actions. Especially, any creative skills and human relationship building without the context and framework of the local society such as local history, culture, and social norms, dynamic learning remains merely as club activities of a particular group involved in the learning, as quite typically occurs in workshop settings.

- **Strength and Weakness of the Learning in Uwabata**

Across all six communal learning categories, socially dynamic elements, particularly interpersonal skills are noteworthy in the case of Uwabata. This indicates explicitly the strength of the learning in Uwabata, indicating the fact that learning in Uwabata has an inseparable link with the social

dynamics of human relationships. The highlight should be the socially dynamic learning under the ACC management along with the leadership and debating skills that are required for autonomous activities. To avoid getting into an old routine of the ACC management, able leadership of the ACC Director is critical. Frequent debate and discussions among the executive members of the ACC is equally the key to generate creative ideas to activate autonomous actions by the residents. Without the dynamics of autonomous learning, rules and knowledge-based management of the ACC is no different from the Ward Head system which is top-down and rigid, and with which Gohda made a clean break 44 years ago. The challenges remain, however, with many other wards that might be weak in social dynamics in their ACC management.

Now, local knowledge which appears in all six categories in the environmental domain is also strong in Uwabata. This demonstrates how closely the residents are connected with local nature. This is probably the fundamental basis of knowledge which runs through all three ecological domains and helps achieve quality of life in a holistic manner in Uwabata.

Finally, this in-depth qualitative analysis will be fed into the thinking to define endogenous ESD in Chapter 4. Additionally, from a methodological point of view, this type of in-depth analysis enables the identification of uniqueness and commonality of learning dynamics from the three-dimensional perspectives (i.e. category, domain, status attribute) which has great potential for application to the in-depth analysis of endogenous learning in any community in the world.

3 Endogenous Visions Behind the Communal Life in Uwabata

In the previous Chapter, the content and the categories of learning in Uwabata were described and the analytical findings and implications of such learning revealed the richness in its diversity not only in terms of categories but also content, mechanism, method, effect and dynamics but in terms of sustainability as well. Such rich diversity of learning actually is closely interlinked between natural environment (i.e. local nature), economy (e.g. local livelihood such as organic agriculture and minor subsistence), and society/culture (i.e. the ACCS and ACC activities). Every case of learning is indigenous to Uwabata. However, are those three frameworks (i.e. natural environment, economy and society/culture) purely indigenous to Uwabata? When looking at those three frameworks from a broader perspective of Aya Town, a new dimension started to surface, which are the visions of the former Town Mayor Gohda. To understand his visions in depth, one has to start from understanding the history of Aya.

3.1 Failure of Exogenous Development: The Aya Comprehensive Development Project

The political career of Gohda started as the Deputy Mayor of Aya Town in 1954 [Showa 29] at the age of 37. The very following year, the Miyazaki Prefecture launched the Aya Comprehensive Development Project (CDP), the objective of which was to commercialize the rich natural resources (i.e. forests and rivers) as economic resources and make use of them as energy sources for the heavy industry outside of Aya (Ikeda 2006, p.169)⁸⁷. In his oral biography, looking back on that time, he wrote that “I found that the Aya CDP of Miyazaki Prefecture that started in 1955 [Showa 55] was excellent in terms of the solution of the problem of locational conditions⁸⁸. So I strongly suggested the Mayor to proactively accept the project” (Shiragaki 2000, p. 70).⁸⁹ [Translation by author]

The persuasion of Ghoda actually worked. Nishida, the Town Mayor at the time,

⁸⁷ Ikeda, K 2006, *Sohzohteki chihohjichi to chiiki saisei* [Creative regional autonomy and revival of regions] Nihon Keizai Hyoron Sha, Tokyo.

⁸⁸ At that time, Aya had poor road access to Miyazaki with only one road. It was geographically formed between two rivers with no dykes and thus houses suffered from frequent flooding. The conditions of farming land were no good. Affected by flooding one after another, the yield of rice was only 50% or 1/3 of the average (Ishigaki 2000, p. 69)

⁸⁹ Shiragaki, T 2000, *Inochi o mamori kokoro o musubu* [Protecting life and linking hearts] Jichitai Kenkyu Sha, Tokyo.

launched the Aya Town Development Plan (the Basic Plan) in 1954 [Showa 29], which had a strong connection with the Aya Comprehensive Development Plan adopted by the Miyazaki Prefectural Assembly in 1951 [Showa 26]. What Nishida explained to the town residents about the plan can be summarized as follows: that the foundation of the development of the town should consist of 1) the establishment of good locational conditions, 2) the increase of productivity and 3) administrative streamlining, which are the key factors of industrial development, as well as 4) the establishment of economy, in addition to 5) the promotion of education that aims to improve socio-cultural and daily life of the communities that has been governed by feudalism and other obsolete customs, which eventually will lead to 6) the improvement of socio-cultural life that develops a healthy environment for rural life (Aya Kyodoshi Hensan Iinkai 1982, p. 273).

Contrary to such ambitious objectives and expectations of the town, the Aya CDP not only destroyed the local trout fishing industry but also failed to increase income per capita of town residents, and eventually triggered a significant change of the population structure of the town. (Ikeda 2006, p. 170) For example, as indicated in Figure 2.1 (section 2.1.1), the town population reached at its peak of 12,322 in 1958 and then rapidly decreased to 7,748 in 1970, which resulted in receiving the designation of Depopulated Municipality Requiring Improvement based on the National Act of Emergency Measures concerning the Depopulated Area issued in 1970 (Ikeda 2006, p. 170). This indicates that the rapid increase of town population was artificially made by the temporary employees who came from outside of the town for construction activities. Likewise, many town resident did benefit from the temporary jobs related to the Aya CDP especially logging of forests but obviously when the Aya CDP ended, such jobs were gone together with an immense loss of forests and hence the problem of unemployment and a recession.

Depopulation of Aya Town became mercilessly visible. Around the year 1960 [Showa 35] when the Aya CDP has ended, many shop owners abandoned the shops and left. Youth became migrant workers to urban cities and hence, no more summer and autumn festivals. Having no doctors in town, people had to visit clinics and hospitals in far away towns (Shiragaki 2000, pp. 77-78). With all these negative consequences of the Aya CDP, Town Mayor Nishida had a breakdown and fell sick. Gohda later reflected on this period and confessed.

At that time, to establish locational conditions for Aya, I have welcomed the construction of a dam and dykes. But now I wonder if such project actually was the means to cut down the forests of *Okuyama*. ... Despite frequent flooding by

typhoons and heavy rains, people would manage to continue their livelihood and life but now, people cannot live without high dykes because the river water level almost reaches the height of the dykes. This is because the forests of *Okuyama* had been destroyed. People cut down the forests without bothering about flooding thanks to the construction of the dam and dykes. In the past, by protecting the mountain forests, people prevented disasters and even when a typhoon hit, the size of damage was not so big. But now, disasters became so serious. when I became the Town Mayor, I regretted immensely what I have done given the seriousness of the fact the damage to local nature was so much (Shiragaki 2000, pp.70-71).[Translation by author]

It is rather strange that Gohda's reflection did not touch on economic consequences but on the damages to local forests. In fact, later he became known as the proponent of evergreen broadleaf forest conservation located in *Okuyama* in Aya. According to a leaflet from the Aya Evergreen Broadleaf Project, as of 2005, the size of protected forests is 2,000 ha.⁹⁰ However, the fact is that over 4,000 ha of forests were cut down by the Aya CDP (Ikeda 2006, p. 169) which Gohda personally pushed and promoted. It is probably this huge and irreversible loss of local forests by the Aya CDP that convinced Gohda not to repeat the same mistake. In 1966 [Showa 41] when the Aya Regional Forest Office proposed the plan to cut down more forests based on the Evergreen Broadleaf Forest Logging Plan, Gohda aggressively fought against the Plan. The details on this issue will be dealt in section 3.2.2.

To summarize, the Aya CDP was a typical exogenous development project which brought hardly any benefits to the people of Aya notwithstanding the fact that it was the forests and the river of Aya that the Project made use of. Relying so heavily on the exogenous factors of the Project such as capital, finance, technology, expertise, and employment, there was no space for developing the capacities and abilities of local industries, people and systems within Aya.

3.2 Awakening of Endogenous Development in Aya

Since the Aya CDP also brought modernization in terms of mechanization in lieu of manual labor to cut trees and improved transportation by trucks in lieu of the use of horses, the local forest industry in Aya was devastated. After Gohda took office as the Town Mayor in 1966 [Showa 41], he started to carry out various innovative policies. Given the tough lessons learned from the Project, his policy directions were focussed on the development of the life and livelihood of people and the protection of natural resources of Aya. While his innovations were numerous, three major and

⁹⁰ Issued by the Teruha no Mori no Kai [Group of Evergreen Broadleaf Forest] in Miyazaki City.

fundamental changes he brought to the people and the local nature of Aya were 1) the ACC system, 2) organic agriculture and 3) the protection of evergreen broadleaf forests. His philosophy and visions of the development of Aya was nothing but endogenous. This Chapter will explain this in detail.

3.2.1 Yui: Social Capital as the Core of Local Autonomy and Culture

3.2.1.1 The Spirit of Yui: What Gohda saw in the ACC System

At his first policy address to the Town Council, Gohda declared his policy to abolish the Ward Head system. In his book entitled *The Spirit of Yui* (結)⁹¹, Gohda (Gohda & Gohda 2005, pp. 75-76) explained why he has supported the abolishment of the Ward Head system to strengthen ACC system instead.

Until the 20s and 30s of Showa era, town people have kept the spirit of autonomy and *Yui* in their daily life. They complemented each other to fill in gaps, were creative and found ways to improve their living environment through mutual-help. However, due to liberalization of agricultural land, land-owning farmer system was established which had led town people to establish a modest but stable life along with the rapid economic growth, and people started to have more materialistic desires and lose the spirit of autonomy or *Yui*, without recognizing it. I felt the tendency of people to think “why bother caring for others if I can live on my own” and “we do not need to rely on others as long as we have money”, and thus, the *Yui* spirit has disappeared... Then people’s dependency on administration has begun and they started to demand us (i.e. administration) to do this and that, without their taking own actions, and ended up in criticizing administration and saying ill-words about the Town Mayor, which, I felt shocked, was even considered as the exercise of democracy and liberalism. The spirit of *Yui* is the same as that of autonomy. If people do not work together to fill in the gaps mutually, you cannot call it autonomy. [Translated by author]

Yui is a system of mutual-help being maintained in Japan and its history even goes back before the medieval centuries in Japan. *Yui* continues to exist in many rural communities in Japan. It had an original rule based on the exchange of equivalent labor in terms of man-days. Agreement of *Yui* formed rules, and the relationships that led people to obey the rules, led to the concept of contract. The concept of contract in *Yui* is not a vertical contract as is formed in the modern societies, but a horizontal contract

⁹¹ 結(yui) originated from the verb “*musubu* (to bind)” in Japanese.

based on mutual relationship exchanges (Kaneko et al 1998, p. 221).⁹²

In the history of rural life in Aya, as Gohda has reflected, the presence of *Yui* was quite strong. The 84-year-old former Deputy Town Mayor who has served both for the former Town Mayor Gohda and the current Town Mayor Maeda gave the description of an example of *Yui* in Aya.

“I was born in Gohshigi⁹³ in 1925 [Taisho 14]... There used to be a community of about seven houses. At that time, there had been frequent flooding and everyone was so poor. When I became a primary school kid, the number of houses has increased to 11 belonging to Shinrui-Koh⁹⁴. Koh has a meaning of ‘fellowship’. It is the origin of *Yui* based on the mutual-help among 11 houses to work out festive occasions (e.g. weddings, delivery), funerals, problem solving together as if they are relatives... Rice planting was done by everyone, young and old, including children. A few houses got together to do it because it was hard work requiring several horses provided by these families... We built a fixed weir as irrigation for rice fields. Together, people stopped the river current at one spot, and worked on piling, which was such a tough job. While the water was still running, we made the weir by setting bamboo nets tied to the piling... In autumn, the water level would get lower and we made another weir with shovels, boards, bamboos, and sandbags. Children tried to help without success because it demanded physically tough labor. Everyone in the neighborhood was mobilized to take water pooled between the weirs out. Then we could get fish like *Makomo* and *Gamatsu* which was distributed to all 11 households equally. In case the parents of the household could not participate, their children replaced the labor and they received the equal share.” (A 84-year-old male T.I. on 13 January 2009) [Translation by author]

Yui, as a mutual-help organization among farmers no longer existed in Aya after the modernization of agriculture in terms of independent farming (which used to be tenant farming) and mechanization. Nevertheless, according to young farmers in Uwabata, the spirit of mutual-help still exists among the farmers to set up plastic greenhouses together.

This study makes an assumption that *Yui* is one form of social capital which plays a critical role in local autonomy that is currently represented by the ACC system in the case of Aya. As previously described, it was the spirit of *Yui* which Gohda wanted to see and recover in the ACC system. By interpreting *Yui* as social capital, one can have a new look at the interface between *Yui* and the ACC system, and find the reason why Uwabata Ward

⁹² Kaneko, I, Matsuoka, S & Shimokobe, A. (eds) 1998, *Borantarih keizai no tanjoh* [The birth of voluntary economy], Jitsugyo no Tomo Sha, Tokyo.

⁹³ Gohshigi is a small part of Kohgeh Ward now.

⁹⁴ *Shinrui* means relatives in Japanese. .

is often described as “well-organized” or “having strong solidarity” by the staff of Aya Town Municipality who, by the nature of their job, have an overview of the characteristics of all the wards.

3.2.1.2 Concept and Definitions of Social Capital

To begin with, to interpret *Yui* as social capital, the concept and definitions of social capital needs to be understood. The originality of the concept of “social capital” lies on the perspective that an informal social institution, which had long been considered to belong to the debating field of sociologists or anthropologists, came to possess a characteristic of “capital” that belongs to the concept of economics and that it also contributes to economic development (Sato 2001, p. 11).⁹⁵

While numerous papers now exists on the theory of social capital, many papers refer to the work of leading researchers such as Pierre Bourdieu (1986)⁹⁶, Robert Putnam (1993)⁹⁷, Francis Fukuyama (1995)⁹⁸, James Coleman (1990)⁹⁹ and Nan Lin (2001)¹⁰⁰. Nevertheless, the very origin of the idea of social capital can be found in a paper written by L. Judson Hanifan who worked in a rural school system as a young progressive educator in an impoverished state in Appalachia in 1916 (Putnam 2002, p. 4).¹⁰¹ In the book entitled *Democracy in Flux*, Putnam made an indicative quote indicating what Hanifan (1916 cited in Putnam, 2002, p. 4)¹⁰² meant as social capital as follows.

In the use of the phrase social capital I make no reference to the usual acceptation of the term capital, except in a figurative sense. I do not refer to real estate, or to personal property or to cold cash, but rather to that in

⁹⁵ Sato, H (ed.) 2001, *Enjo to shakaikankei shihon : social capital riron no kanohei sei* [Aid and social capital – the possibility of social capital theory] Asia Keizai Kenkyujo, Tokyo.

⁹⁶ Bourdieu, P 1986, ‘The forms of capital’, in J. Richardson (ed.) *Handbook of theory and research for the sociology of education*, Greenwood Press, Westport, Connecticut.

⁹⁷ Putnam, R, Leonardi, R & Nanetti, R 1993, *Making democracy work: civic traditions in modern Italy*, Princeton University Press, Princeton.

⁹⁸ Fukuyama, F 1995, *Trust: the social virtues and the creation of prosperity*, Free Press, New York.

⁹⁹ Coleman, J 1990, *The foundations of social theory*, Harvard University Press. Cambridge.

¹⁰⁰ Lin, N 2001, *Social capital: a theory of social structure and action*, Cambridge University Press, Cambridge.

¹⁰¹ Putnam, R (ed.) 2002, *Democracy in flux*, Oxford University Press, New York.

¹⁰² Hanifan, L.J 1916, ‘The rural school community center’, *Annals of the American Academy of Political and Social Science* 67: 130-38, quotation at p.130, cited in Putnam, R (ed.) 2002 *Democracy in Flux*, Oxford University Press, New York. P.4

life which tends to make these tangible substances count for most in the daily lives of people: namely good will, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit... The individual is helpless socially, if left to himself... If he comes into contact with his neighbor, and they with other neighbors, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of living conditions in the whole community... When the people of a given community have become acquainted with one another and have formed a habit of coming together occasionally for entertainment, social intercourse, and personal enjoyment, then by skillful leadership this social capital may easily be directed towards the general improvement of the community well-being.

This description by Hanifan, does not specifically refer to mutual-help like *Yui*, but it has significant meaning to this study which also seeks to find a mechanism in the daily lives of people to improve the community well-being.

According to Ishida (2008, p. 319)¹⁰³, contemporary studies on social capital can be broadly categorized into two types: personal goods and collective goods, which is to say, the attribute as personal goods that influence personal educational and employment opportunities and educational achievements, and the attribute as collective goods that exist within a specific society/group/ organization.

Studies dealing with social capital as personal goods, whether the subject is a person or a group, focus on the relationships between the “individual” and its surrounding social relationships and networks, and discuss the benefits which the latter brings to the former. (Ishida 2008, p. 319) Bourdieu and Nan Lin are considered as the leading researchers in this field. The definitions of social capital by these researchers are the following.

Social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group – which provides each of its members with backing of the collectivity-owned capital, a ‘credential’ which entitles them to credit, in the various sense of the word (Bourdieu 1986, p. 248).

¹⁰³ Ishida, M 2008, ‘Exposition’, in Lin, N 2001, *Social capital: a theory of social structure and action*. Translated from English to Japanese by Tsutsui, J et al. 2008, *Soshiaru kyapital: shakai kozo to koki no riron*, Minerva Shobo, Tokyo.

... Social capital, as an investment in social relations with an expected return in the marketplace, should be defined as resources embedded in a social structure that are accessed and/or mobilized in purposive actions. In this definition, three critical component present themselves for analysis: (1) the resources, (2) being embedded in a social structure, and (3) action (Lin 2001, p. 29).

The studies that focus on the effects of social capital as collective goods capture social capital as goods shared among the members who belong to a particular group, region and nation. These studies have a standpoint that the networks, norms and trust contribute to the development of the members as well as the increase in the effectiveness of group. (Ishida 2008, p. 320) The leading researchers in this field are Coleman and Putnam. They define social capital as follows.

...social capital is productive, making possible the achievement of goals that could not be achieved in its absence or could be achieved only at a higher cost... as a form of social capital is a system of mutual trust (Coleman 1990, p.302, 307).

Social capital here refers to features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions (Putnam, Leonardi & Nanetti 1993, p.167)¹⁰⁴.

... connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them (Putnam 2000, p. 19).¹⁰⁵

This study has the standpoint of the latter and thus *Yui* is regarded as social capital based on the above three definitions.

While debates on social capital are taking place at the international level, there are some attempts among Japanese researchers such as Kaneko et al (1998) to study certain traditional Japanese network systems and rotating credit associations such as *Yui*, *Koh*, and *Za*¹⁰⁶ in relation to social capital. Other literature such as Okada (2006)¹⁰⁷ refers to such traditional

¹⁰⁴ Putnam, R, Leonardi, R & Nanetti, R 1993, *Making democracy work: civic traditions in modern Italy*, Princeton University Press, Princeton.

¹⁰⁵ Putnam, R 2000, *Bowling alone*, Simon and Schuster, New York.

¹⁰⁶ *Za* was originally developed as a voluntary mechanism to carry out Shintoh festivities in a rural community, which has emerged as the system of local autonomy between 11th and 12th centuries in Japan. (Kaneko et al 1998, pp. 232-233)

¹⁰⁷ Okada, M (ed.) 2006, *Chiiki o hagukumu netto warku* [Networks that nurture regionality], Showa Doh, Tokyo.

Japanese social networks as well as modern technologies such as social networking systems (SNS) as a tool to develop social capital. These literatures have identified new implications in the traditional network systems and gave them added values so that traditional systems are no longer regarded as fixed or rigid ones but are viewed as dynamic and adaptive ones in relation to contemporary changing social environments, which eventually become “sustainable” over time. In the case of *Yui* in Aya, I found the same implications in this traditional social network in relation to a modern institutional network called ACC.

To confirm *Yui* as social capital, the followings are the attributes taking account of the *Yui* story in Aya on page 76, that could be considered as those of social capital as collective goods.

- Reciprocity: *Yui* is based on the mutual exchange of labor.
- Trust: The members of *Yui* trust each other like relatives. Also in relation to reciprocity, what matters in *Yui* is the trust in the rule that the labor one contributed to the group will be by all means returned to one’s own rice fields. (Sato 2001, p. 8) This may be also related to the strong feeling of moral obligation (義理) to pay debt (恩) common in Japan.
- Norms/Rules: In addition to the rule as above, other examples of rules/norms are fair distribution of natural resources (e.g. fish), and assuming obligations by playing the roles in carrying out the folkways such as *Shanichi-Koh* and home funerals.
- Achieving the same goals: through labor exchange, *Yui* members work together on a communal irrigation system, obtain harvests, and carry out festivities. In former times, *Yui* was possibly a way to overcome extreme poverty in a rural life in Aya. Modest as it was, *Yui* members shared the joys after hard labor. If not for *Yui*, the well-being of the community was probably unachievable.

These attributes are akin to those of the “Spirit of *Yui*” which Godha wanted to see in the ACC system. In the next section, the relations between *Yui* and the ACC system will be discussed based on the theory of “Institutional and Relational Capitals” of Anirudh Krishna (Krishna

1999).¹⁰⁸

3.2.1.3 Is the ACC system the institutionalization of *Yui*?

To find out possible answers to the question of the title of this section as above, it has to start with figuring out the implications in the conversation between myself and a housewife living in Uwabata. The conversation took place in a vehicle. After attending a small communal gathering in the evening at the Uwabata ACC, a wife of a local resident whom I was acquainted with for some time, gave me a lift to the guesthouse I stayed. While talking trivial matters in the beginning, one story she talked struck me so much.

“I feel so comfortable and happy living in Uwabata, although I came from another ward in Aya. You know, we had a fire at our house.”

“Oh, I did not know! When?”

“It happened in Heisei 12 years [2000]. It was quite a serious fire. But I was touched so much when almost 150 people came, one after another, to our house and helped us after the fire.”

“One hundred and fifty people?!”

“Yes. Some did cooking for us. Some helped us clean up. They were not only the people from Uwabata but also from other wards.”

“Was it the ACC Director who has mobilized such help?”

“No, not at all. They helped us voluntarily. So, having experienced such amazing kindness of neighbors and friends, I am willing to do the same, anyone at anytime. It is the spirit of reciprocity, isn't it?”¹⁰⁹ (A 57-year-old female resident K.M. on 16 January 2009) [Translation by author]

I was struck by her story not only because of the kindness of people in Uwabata and other Wards but also because I had just read the paper by Krishna (1999) about the analogy of a house fire to explain the differences between the Institutional Capital and the Relational Capital.

Krishna, giving an example of a house fire at night, for which people of the neighborhood came together the next day to help the afflicted family rebuild the structure, set up two possible explanations of the causal force that leads people to behave in this way. One is a well-recognized

¹⁰⁸ Krishna, A 1999, 'Creating and harnessing social capital' in Dasgupta, P & Serageldin I 1999, *Social Capital – A Multifaceted Perspective*, The World Bank, Washington D.C.

¹⁰⁹ It is also very interesting to compare what this resident said with the following sentences of Coleman. “Whatever the source, however, individuals in social structures with high levels of obligations outstanding at any time have more social capital on which they can draw. The density of outstanding obligations means, in effect, that the overall usefulness of the tangible resources of that social structure is amplified by their availability to others when needed.” (Coleman 1988, p.S103)

leadership within the neighborhood that directs community members to gather at the site, bringing along whatever tools and implements and building material they might possess. Alternatively, without any clear roles for organizing such actions, motivated by norms of what is appropriate behavior – that it is only right and proper and that one is expected to help out anyone of their community who is faced with a similar situation – people collect spontaneously and assist with the rebuilding. In the first case, the basis of collective action is institutional: persons who are acting in accepted and well-recognized roles of leadership direct the community to act together. Krishna calls this “Institutional Capital”. Collective action in the second case is based on norms and beliefs; it has a relational, and not an institutional, basis, which he would call “Relational Capital” (Krishna 1999, pp. 76-77).

The real house-fire story in Uwabata clearly demonstrates that Relational Capital exists in Uwabata. This collective action has happened outside of the institutional framework of the ACC system. In fact, for the home funerals, the ACC system does have a focal point called *Shiboh* [demise] designated in each cluster, who is responsible for immediately informing the ACC Director if a member of his/her cluster passed away so that the ACC system can proceed to the next steps of funeral preparation.

The ACC system as social capital provides the members who provides an annual contribution access to resources embedded in the ACC network such as information, learning opportunities, and festivities, while setting the rules and expectations to the members to achieve common objectives of communal well-being through the implementation of various social activities.

Table 3.1: Two Forms of Social Capital

	Institutional Capital	Relational Capital
Basis of collective action	Transactions	Relations
Source of motivation	Rules and procedures, Sanctions	Beliefs, Values, Ideology
Nature of motivation	Maximizing behavior	Appropriate behavior
Examples	Markets, legal framework	Family, ethnicity, religion

Source: Berman (1997) cited in Krishna (1999, p. 79)

Thus, considering the ACC system as Institutional Capital within the structure of which rules and procedures exist to guide individuals' behavior, supervised by people acting out well-recognized roles (Krishna 1999, p. 77), Table 3.1 above provides a comparison between Institutional Capital (the ACC system) and Relational Capital (*Yui*). Although the source of motivation for *Yui* may be livelihood (farming), the value behind it can be described as reciprocity or mutual trust.

Krishna, by differentiating these two types of social capital, explains the complementarity of the two.

Clear rules and procedures, devised to deal with one issue area, do not necessarily work when tackling other problems. In all cases, purposeful efforts will be required to re-craft rules and procedures, more particularly when substantially dissimilar organizational responses are needed to deal with the new area. If norms of diffused reciprocity are practiced in the community, then the process of working out new rules becomes so much easier. Institutional capital works best, thus, when it goes side by side with Relational Capital, a vice versa. People in a community may share strong feelings of trust and mutual goodwill, but structures and roles may be required to translate individual attitudes and values into coordinated, goal-oriented behaviors. These structures may not always be formal or even readily visible, but some agreed-upon commitments, explicit or implicit, are usually necessary for individual actions to add up to collective results (Krishna 1999, p. 77).

Sato (2003, p. 13) points out that the characteristic of social capital as public goods has a certain vulnerability. Public goods provide certain space for free riders. If the number of the member who benefits the shared resources in the network does not invest in the network (e.g. do not practice reciprocity) increases, the investment in the social capital decreases and so does its stock. Other "faithful" contributes to the social capital, seeing the social trust getting weakened, feel pointless to further invest, and thus the decrease of stock accelerates. The end result of this vicious circle is one state of social equilibrium. The opposite direction is the other state of equilibrium where the network and cooperation based on reciprocity shifts to the stage of mutual-enhancement and forms social relations with high

efficiency based on high level of cooperation and trust.

If I attempt to explain what Sato described above in light of the theory of Institutional and Relational Capitals by Krishna who draw the Table 3.2 below, the case of southern Italy illustrates Institutional Capital with very weak Relational Capital, corresponding to (3) or (4), while the case of northern Italy illustrates that both Institutional and Relational Capitals are strong, corresponding to (1).

Table 3.2: A Classificatory Scheme

		Relational Capital	
		Strong	Weak
Institutional Capital	Strong	(1) High Social Capital Task: extend scope of activities	(2) “Strong” organizations Task: legitimation, intensification
	Weak	(3) “Traditional” associations Task: introduce rules, procedures and skills	(4) Anomic, atomistic or amoral Task: assist development of structures and norms

Source: Krishna (1999, p. 79)

In the case of Uwabata Ward, from the numerous interviews I have conducted, I can infer that their status of social capital corresponds to probably (1). The former ACC Director of Uwabata told me the following.

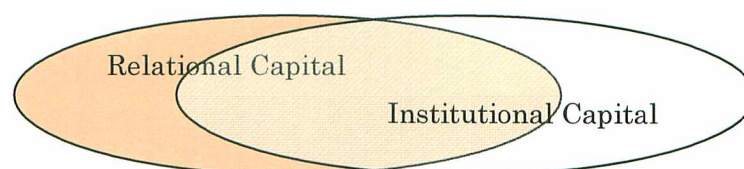
“I believe human relationships in Uwabata are good. Everyone knows each other as they have graduated from the same primary and junior high schools in Aya. But they do not have a competitive spirit. Everyone gets together in time for the ACC activities without my giving orders and we finish the job on time. I don’t know if you can call it social capital or not but I am sure that tacit consent does exist among us.” (A 67-year-old male resident Y.Y. on 13 November 2008) [Translation by author]

In conclusion, can we consider that the ACC is the institutionalization of *Yui*? Based on the above analysis of Institutional and Relational Capitals, the answer is no.

While Gohda reflected his ambition to recover the spirit of *Yui* in the ACC system, two conclusions can be drawn from the analysis.

- The ACC system and *Yui* are different types of social capital, namely Institutional Capital and Relational Capital. The formation of each of these Capitals obviously was made quite differently. *Yui* was developed through people's daily life in relation to local nature such as farming, irrigation and traditional events. The ACC system is an institutional organization that can be established anywhere, and in fact, the ACC system exists in many parts of Japan including urban cities.
- Yet, in the case of Uwabata, the ACC system works very well because it goes side by side with the Relational Capital which has been nurtured in the daily life of the Uwabata residents. The effectiveness of the ACC system in Uwabata is probably the result of the richness of the Relational Capital that supports the ACC system in terms of trust, reciprocity, shared norms and values, and so on. The extent (e.g. the number of member involved) and the depth of Relational Capital may influence the effectiveness of the ACC system.

Figure 3.1: The Interaction between Institutional Capital and Relational Capital in the Uwabata Ward



Source: Drawn by author

Therefore, if this can be visualized, the bigger overlapping space between the Relational Capital and Institutional Capital (the ACC system), the more effective the ACC system is as illustrated in the Figure 3.1 above. One another thought is that the Relational Capital and Institutional Capital might have mutually-enhancing effects. However, facts that support such hypothesis did not surface clearly to date.

In sum, local autonomous system supported by the local social capital is

the very first model of endogenous development originated from Gohda's vision.

Now, if the non-overlapping space of the Institutional Capital expands, the vulnerability of the ACC system as public goods will increase as previously described by Sato (2003).

As if to confirm the above, interviews revealed that the ACC Directors from other wards with bigger population in Aya are struggling with the lack of interest in and cooperation from the ward residents for the ACC system. Like the example of Kohgeh Ward under the section 2.3.2.2, since the majority of the population are young couples who have moved into the Ward from elsewhere and are currently living in the housing complex, the level of Relational Capital is quite low.

With the leadership of the Director and the hard work of the ACC executive committee and some residents who are very active in the ACC activities, the overall performance of the ACC system in Aya is still considered as good. However, taking a closer look, the sustainability of ACC system in certain Wards is at risk.

The case of Takeno Ward is ironical. It is situated in a rather isolated location deep in the mountains with only 20 residents. 85% of them are over 60 years old and the Ward suffers from serious depopulation. Within the life among this small number of people, the community has a strong sense of solidarity and helps each other to form a strong Relational Capital. Yet, it is hardly possible to effectively run the ACC system efficiently due to the lack of people and aging population. The roles and responsibilities as well as activities of the ACC system put too much burden on the local residents.

Finally, the primordial question arose from the above analysis of social capitals in Uwabata is, then, whether or not the variety of learning identified under the Chapter 3 are linked with the Relational Capital, and if so, how? How, then will it be related to the quality of life in Uwabata? The Chapter 4 will make an attempt to find answers to this question.

3.2.2 Evergreen Broadleaf Forest Conservation: Protecting the Value of Aya

3.2.2.1 Evergreen Broadleaf Forest as the Source of Life

The second vision of Gohda was to preserve remaining Evergreen Broadleaf Forests (EBFs) in Aya after the devastating loss of forests caused by the Aya CDP described in detail in section 4.1. Two months after his appointment in July 1966 [Showa 41], a request by the Head of the Regional Forest Bureau came to Gohda to log the national forests of *Okuyama* in the area of Kawanaka Shrine. This was based on a deal made between the Regional Forest Bureau and a paper-manufacturing company that owns a deforested mountain fully logged and ready for planting commercially valuable Japanese cedar. Gohda politely refused to accept the request giving as his reason a piece of old local wisdom of “no wooded area in *Okuyama*, no golden trout of Aya”. However, the Head of the Regional Forest Bureau was not easily convinced by such a reason and insisted on handing over the forests to the Bureau (Shiragaki 2000, p. 89).

Gohda reasoned that since 78%¹¹⁰ of the land of Aya is occupied by the forests and most of them are publicly owned (e.g. national forests, prefectural forests), logging those forests hardly brings any profit to Aya Town and local workers can only get paid for their labor. Therefore, dependency on the forestry would not be sustainable for Aya (Shiragaki 2000, p. 90).

To make a long story short, he succeeded in protecting the *Okuyama* forests using all his political connections as well as support by Aya Town residents. Against all odds, Gohda pushed the establishment of the “Ordinance to protect the nature in Aya Town” in 1975 [Showa 50], which eventually resulted in the designation of the “Kyushu Central Mountain Land National Park” in 1982 [Showa 57], to which the current EBF Conservation Area in Aya belongs.

Gohda, to back his arguments with convincing scientific knowledge, read many books and learned about ecological system in the nature as well as about the evergreen broadleaf forest culture. Such scientific knowledge was later linked with his last vision on organic agriculture and the

¹¹⁰ Probably based on the statistics in 1966. The current percentage is 86% according to the National Census Statistics.

promotion of local culture in Aya as endogenous ESD.

As a result, the protection of *Okuyama* forests to a certain extent, has also protected the Aya Minami River from which Uwabata residents have been benefitting in terms of irrigation, fishing, and recreation.

3.2.2.2 Scientific Knowledge (Environmental Education) vs Local Knowledge (ESD)

In 2005, the protected broadleaf evergreen forests in the *Okuyama* of Uwabata entered the limelight when the Kyushu Forestry Bureau, the Miyazaki Prefecture, the Aya Town Municipality, the Nature Conservation Society of Japan (NACS-J), and Teruha-no-Mori-no-Kai (Group for the Evergreen Broadleaf Forests: GEBF)¹¹¹ concluded an agreement to work together in the protection and recovery of the EBFs in Aya, which is called the “Aya Evergreen Broadleaf Forests Project” (called Aya-Pro for short). For better coordination, a Coalition Committee consisting of the above five actors was established.

To actively involve the general public in the above process, a working group called “*Chiiki Zukuri* [Community Building] Working Group” was established. The secretariat of the Working Group is the GEBF. The nine members of the Working Group were locally designated and meet monthly and are expected to submit their suggestions for the protection of Evergreen Broadleaf Forests to the Coalition Committee. The first meeting took place on 20 June 2008. Through monthly meetings, concerns were raised about lack of interest of Aya residents in the Aya-Pro. One member of the Coalition Committee, as if talking to himself, said the following.

“I wonder why the local people are passive about participating in the Aya-Pro activities. This issue was discussed in the last Coalition Committee meeting. Maybe the residents are no longer in close contact with the nature... We have to think about how to actively involve them. Maybe we have to find ways for them to know Aya better. Maybe they do not know how to get involved in such activities.” (A 61 year-old male civil servant K.K. on 7 November 2008) [Translation by author]

As for the local people, one Uwabata resident once mumbled the following

¹¹¹ The GEBF was established as an umbrella NPO in the private sector to link the Aya-Pro with grass-roots activities and projects by people and firms.

words.

“You know, the forests have been here for long time. Having forests always around us is just part of our life and *Atarimaeh* [nothing so special or ordinary] to me.” (A 67-year-old male resident Y.Y. on 14 November 2008) [Translation by author]

Does what the farmer said indicate the difference in the degree of interest in the Evergreen Broadleaf Forests between the people involved in the Aya-Pro and the ordinary residents in Aya? Having talked to the residents not only in Uwabata, but also other wards in Aya, my interpretation is that *Atarimaeh* does not necessarily mean “disinterest”. As Mr. Y.Y. rightly expressed, *Atarimaeh* for the residents, means indeed, “part of their life”. Since the Evergreen Broadleaf Forests are not *Satoyama*¹¹² but *Okuyama* where even Uwabata residents rarely set foot, *Atarimaeh* might sound strange. However, *Atarimaeh* as being part of local people’s life was explained by a local farmer.

“Because of Aya, doing organic farming makes sense. For me, organic farming in urban area is unthinkable, because, in many ways, it is not natural there, like air pollution. People’s life in Aya is built on the forests, rivers, earth and air of Aya. Such relationships with the local people and local nature, such as the forests of Aya are *Atarimaeh*, which have continued since our ancestral time. Doesn’t matter how we call it, *Yama-no-Kami* [god of mountains] or *Mizu-no-Kami* [god of water] or whatever.... So, why in the world, can they criticize us that local people are not interested in the protection of the Forests or do not understand the value of the Forests?” (A 57-year-old male resident K.M. on 12 January 2009) [Translation by author]

The frustration expressed by the above farmer well illustrates that the difference in framing the value of the forests in Aya probably comes from the difference in one’s relationship with the forests. The GEBF members are mostly non-Aya residents and many are living in Miyazaki City. For them, the EBFs in Aya are something very special and visiting the forests provides an extraordinary experience. The GEBF is very enthusiastic about raising public awareness on the conservation of EBFs in Aya by

¹¹² The definition of *Satoyama* is “a forest around inhabited area, which was formed by artificial destruction of natural forests and has been maintained by people to obtain fuel essential for human life and organic fertilizer to be used for agricultural production, such as fallen leaves and humus soil.” <Source: Numata, M (ed.) 1998, *Shizenhogo Handobukku* [Natural Conservation Handbook], Asakura Shoten, Tokyo.>

means of providing scientific knowledge and frequently organizes conferences and lectures in Aya Town by ecologists and other experts on the preciousness of the biodiversity of the EBFs in Aya. Yet, the participation of Aya residents in such events has not been so enthusiastic. Both recognize the value of the EBFs in Aya but each frames the value differently. Most of the “outsiders” like GEBF members frame its value using scientific knowledge like “biodiversity” while local people frame it using local knowledge like *Yama-no-Kami*.

UNESCO, in its official document entitled “Framework for the UNDESC International Implementation Scheme” (UNESCO 2006, pp. 14-15) reflects that ESD embraces cultural aspects and underlines the importance of the following perspectives.

- Growing in respect and tolerance of difference: where contact with otherness is enriching, challenging and stimulating;
- Acknowledging values in open debate and with a commitment to keep the dialogue going;
- Using local indigenous knowledge of flora and fauna and sustainable agricultural practices, water use, etc;
- Recognizing and working with culturally specific views of nature, society and the world rather than ignoring them or destroying them, consciously or inadvertently, in the name of development;
- Employing local patterns of communication, including the use and development of local languages, as vectors of interaction and cultural identity.

Through Environmental Education especially at school, natural conservation has been taught in scientific language. Receiving such education thus influences people’s way of framing the value of Forests like the case of the members of GEBF. By contrast, people in Uwabata, despite possible influence from scientific education, have nurtured cultural views and values of local nature in a more holistic manner through their daily experiences in childhood, family and community life and their agricultural work. This is the very aspect with which ESD underpins its difference from the Environmental Education which places more emphasis on the scientific knowledge.

Then, from the above perspective of ESD, how can the natural conservation of the Evergreen Broadleaf Forests in Aya, be promoted among local people in Aya who are not so enthusiastic in attending the conventional scientific lectures of specialists at town level? For example, several gatherings at the ACC level can be organized. Such gatherings can feature story-telling of key local people who have their own stories about their relationships with EBFs. It may be about trout-fishing or hunting, or organic agriculture. It is highly likely that such stories stimulate empathy among local audiences who would have similar experiences and might trigger other spontaneous story-telling from the side of audiences. Through such interchange of empathic communication, local people can reaffirm their own views and values of the EBFs for the sake of not only the conservation of the EBFs but also the protection of their lifestyle which is inseparable from the EBFs. Therefore, the objective of conserving the EBFs can be equally achieved with ESD approach.

The vision of Gohda to protect and sustain EBFs has been maintained and sustained both institutionally (e.g. Aya-Pro) and culturally (e.g. worship of *Yama-no Kami*) in Aya, which gave a new perspective to the GEBF members as well. The differences in both approaches do not mean a conflict but they need to be perceived as enriching, challenging and stimulating as previously expressed by UNESCO (2006). Gohda himself started his action to protect the EBFs originally from his cultural connection with them touching on his personal affection and feelings but later strengthened his conviction in continuing to do so through accumulation of scientific knowledge on the ecosystem.

When I was a soldier¹¹³, I have encountered so many life-or-death moments. At such moments, what I recalled were the forests and rivers of Aya, my childhood memories of fun like fishing and collecting *Akebi*¹¹⁴ and the views and sights related to such memories. (Shiragaki 2000, p.40)
[Translation by author]

I read so many books, though I must confess I understood not all of them. I lost track of the content of some books and gave up in the middle. But I did it because of my determination to protect the forests. The more I study,

¹¹³ During the World War II, Gohda was drafted into the Japanese Military and posted in the South of China.

¹¹⁴ The scientific name is *Akebia quinata*.

the more my conviction to protect the forests gets stronger. (Shiragaki 2000, p. 106) [Translation by author]

The protection of EBFs in Aya initially started by the personal action of the Former Aya Town Mayor Gohda in 1966. Thirty nine years later in 2005, the Aya-Pro was established as the tripartite effort among Miyazaki Prefecture, Aya Town Municipality and the general public. Therefore, the value of the Forests of Aya has expanded beyond Aya and is perceived equally as valuable at the prefectural level. Discussions are currently ongoing among three groups working on the protection of EBFs, namely the group of Aya-Pro, the group in Kagoshima Prefecture¹¹⁵ and the group in Yakushima¹¹⁶ to jointly organize a Summit on the protection of EBFs in connection with COP 10¹¹⁷ expected to take place in Nagoya in October 2010. Thus the value of the EBFs of Aya is now entering the international forum.

From the above, it can be seen that while the EBFs in Aya are always there and the same, it is the people who project their own value onto them. Each value reflects the relationships of each actor to the EBFs. Based on such relationship-based value, people's approaches and actions to protect the EBFs become different. All actors are aiming at the sustainability of the EBFs in Aya. However, the less direct the relationship with the EBFs is, the more dependent people become on the universal knowledge (e.g. scientific knowledge, literal information) due to their lack of local knowledge of the EBFs in Aya.

In conclusion, for the sustainability of the EBFs in Aya, it is important to have a balanced approach to use both local and scientific knowledge. Especially when the stakeholders to protect the EBFs in Aya are ever expanding outside Aya, it is all the more important for all the stakeholders to respect and understand the ways local people value the EBFs and consider it as one of the most critical elements of the protection of the

¹¹⁵ Ohsumi-Shohyoh-Jurin-Genseimura-no-Kai [Group of the Village of Indigenous Evergreen Broadleaf Forests in Ohsumi].

¹¹⁶ Yakutane-Goyoh-Chosatai [Yakutane Goyoh Research Team]. Yakutane Goyoh is a kind of pine tree designated as endangered species and belongs to pinaceae family and pinus genus.

¹¹⁷ The 10th Conference of the Parties to the Convention on Biological Diversity scheduled for October 2010

EBFs.

3.2.3 Organic Farming as Lifestyle in and Culture of Aya

3.2.3.1 Gohda's Philosophy of Organic Agriculture

As described in the previous section, Gohda's passion to protect the EBFs in Aya motivated him to read many books on ecosystems. This eventually led him to his third vision of promoting organic farming in Aya.

Besides the protection of the EBFs, the real achievement after my continuous all-night-long studies was learning about the natural ecosystem, co-existence and co-prosperity (author's note: of nature and the humanity), and the Evergreen Broadleaf Forests Culture¹¹⁸. I learned the selfishness of human beings who do nothing but exploit all the blessings of nature. It is unacceptable to care only about human life, which will definitely lead humanity to perish, I thought. (Shirogaki 2000, p.119) [Translation by author]

In his realization of the ecosystem, he started to promote town people to make genuine and healthy vegetables as a strategy to revitalize the town. He explains what "genuine" means in a simple manner.

It is the vegetable made without destroying nature and without polluting the earth. It is the vegetable that appeals to your own conscience and you are proud of, or that does not cheat people.(Shirogaki 2000, p.121) [Translation by author]

Based on the above philosophy, Gohda's focus of the revitalization strategy of Aya town was not on "economic growth" as typically set in many local revitalization projects in Japan, but on the "healthy nature and healthy people". This is the spirit of "Co-existence and co-prosperity" or what we might call a "win-win" strategy.

During his term as the Town Mayor, Gohda implemented a series of policies to promote organic farming. In 1967 [Showa 41], he initiated *Hito Tsubo*¹¹⁹ *Saien Undoh* [Movement for One *Tsubo* Vegetable Garden] by distributing free vegetable seeds to all households in the Town to promote

¹¹⁸ Gohda refers to the book of "Saibai Shokubutu to Nohkon no Kigen [The Origin of Cultivated Plants and Agriculture]" (1966) written by Nakao Sasuke, published by Iwanami Shoten.

¹¹⁹ *Tsubo* is a Japanese traditional measurement unit for approximately 3.3m² of space.

the production of organic vegetables for self consumption. He also encouraged the town people to sell some home-made organic vegetables at open markets supported by the Town Municipality.

To protect the economic viability of organic farming from damages by diseases and pests, a remedy fee system was introduced by the Town Municipality in 1974 [Showa 49]. In 1978 [Showa 53], a Municipality-owned factory to produce liquid fertilizer using night soil, cattle manure and raw garbage was established, the idea of which came from Gohda's learning about the natural cycle of composting. These steps were ways of crystallizing his vision of "healthy nature and healthy people".

As more people became interested in selling home-made organic vegetables, the market expanded to outside Aya, such as to Miyazaki City. To ensure the credibility and the safety of organic vegetables of Aya, the "Ordinance related to the Promotion of Ecological Agriculture" was issued in 1988 [Showa 63], which was the first certification system of the quality of the organic farming products established by a Municipality in Japan. This was a landmark system in the history of Japan as the national certification system for organic farm products did not exist at that time.

In 1989 [Heisei 1], a public center called *Tezukuri Honmono* [Hand-made and Genuine] Center (THC) was constructed in the centre of town to sell organic farm products as well as crafts hand-made by local people. As of 2001 [Heisei 13], 705 names (including firms) were registered to sell their products at the THC (Masugata 2008, p. 269)¹²⁰ Notwithstanding the criticism to construct such a center for a town with only about 7,500 people, the establishment of the Center is now regarded as a success story thanks to almost one million visitors annually from outside Aya including those from outside the Miyazaki Prefecture (Masugata 2008, p. 270). As a consequence, such successive steps to promote organic farming in Aya have fostered the branding of organic farming products of Aya and the profits of the Center continuously increased from 83 million yen in 1993 to 381 million yen in 2001 (Masugata 2008, p. 265).

¹²⁰ Masugata, T 2008, *Yuhki nohyoh undoh to teikei no nettowarku* [The network of movement of organic Farming and affiliation], Shinyoh Sha, Tokyo.

3.2.3.2 What Really Matters for the Sustainability of Organic Farming in Aya

Influenced by the high degree of media coverage on Climate Change since around the turn of the new century, people's consciousness about environment and health has been drastically increased globally and domestically. Nowadays, organic farming is no longer a new subject but rather it is getting better recognition and status than before.

However it was only in 2001 that the Ministry of Agriculture, Forestry and Fisheries bestirred itself to establish the national inspection and recognition system of organic farming products by making amendments of the Law of Japan Agricultural Standards (JAS). As of 2009 [Heisei 21], the organic farmers in Aya who have obtained the Organic JAS Certification number only 10¹²¹. Given 413 farmers in Aya as of 2005 [Heisei 17]¹²², only 10 farmers having Organic JAS Certification is surprisingly few. There are several possible reasons for this.

- Since Aya established its own certification system in 1988 [Showa 63], farmers are much more used to it. Besides, contrary to the very strict regulations of Organic JAS Certification, the Aya certification system for organic farming products has three ranking of Gold, Silver, and Copper, according to the level of usage of pesticide and chemical fertilizer. It is, therefore, up to the farmers either to be perfectionists to meet the Gold level or to compromise at Silver or Copper levels. In this respect, the Aya certification system did not function as an incentive to improve the overall quality of organic farming products. Moreover, inspection and certification was not strictly controlled in terms of properly labeling the certified rank on the products (Masugata 2004, p. 105).¹²³
- Known as the pioneer town of organic farming, vegetables and fruits sold in Aya, even without the label of the certified rank, are very

¹²¹ Based on the information on the website of "Aya-Cho Yuhki Nohgyo Suishin Kaigi [Aya Town Organic Farming Promotion Committee]"
<http://www.town.aya.miyazaki.jp/ayatown/organicfarming/jas/index6.html>

¹²² Based on Agricultural Census (Source: Aya Town Profile Leaflet printed by Aya Town Municipality)

¹²³ Masugata, T 2004, 'Gyohsei shudoh ni yoru yuhki nohgyo no machi zukuri' [Revitalization of the town of organic agriculture by the initiative of the local government]. In *Shukutoku daigaku shakaigakubu kiyou* [Bulletin of Shukutoku University Faculty of Sociology] Volume 38. pp95-124.

popular thanks to its established image of Aya organic branding. This popularity of Aya organic brand possibly has discouraged Aya organic farmers to make increased efforts to obtain Organic JAS Certification or Aya Gold level certificate.

- In terms of business, organic farming in a strict sense does not bring the benefit worth its risk. The followings are the responses of organic farmers to the interviews conducted by the students of Chuo University in 2006.¹²⁴

“It is very difficult to make cucumbers with perfect organic farming. If you make them in open culture for a small quantity, it may be possible. But cucumbers made in such a way differ in shape and size, though good taste, and do not sell on the open market.”

“To be realistic, I cannot make a profit for my living without using the minimum level of pesticide. Some people manage without pesticide or plastic greenhouse but as you get older, it becomes impossible to continue doing so.”

Likewise, an organic farmer in Uwabata considers himself not doing organic farming in a strict sense. He can do it partially but not entirely. According to him, it is not possible to earn one’s living with perfect organic farming and most of products sold at the THC are the left over from small-scale farming originally meant for self-subsistence. However, doing organic farming as business is another thing. He cannot make a living with 100% organic farming.

The above facts and personal stories give us an impression that the organic farming in Aya is not thoroughly controlled or regulated and that consumers may be having the illusion about Aya organic farming products. Does it mean that organic farming in Aya does not bring any added value? Is there any real difference between the organic farming in Aya and the ordinary farming elsewhere?

In response to these questions, the study done by Nakaguchi

¹²⁴ Nanase, N. et al. 2007, *Aya kara ima: Aya ga hanatsu messehi o saguru kiroku* [Now from Aya: record to search for the messages sent by Aya] Heisei 18 Seminar dissertation of Ishikawa seminar. The Ishikawa seminar, the Faculty of Letters, Chuo University, Tokyo.

(2005)¹²⁵ provides interesting analysis comparing the data of organic farming in Aya with that of the average of ordinary farming in the middle region of Miyazaki Prefecture. The analysis is based on 496 samples of the records of cultivation management held at the Organic Farming Development Center which is the organization that conducts organic farming inspection and certification in Aya.

- The average quantity of the chemical fertilizer containing two components out of three (i.e. Sodium: Na, Phosphorus: P, Kalium: K) used per 10 a is 113.4kg in Aya and 179.1kg in the middle region. This indicates that the use of chemical fertilizer is about 40% less than that in the middle region. This is due to the guideline of Aya Municipality to discourage the use of the chemical fertilizer in which the proportion of the three components is over a certain level. Moreover, by using liquid fertilizer made from raw garbage, night soil and cattle manure, the use of the fertilizer in appropriate quality and quantity is promoted.
- Regarding the use of pesticide, three types of pesticides are commonly used. The first type is chemical pesticide, the others are trace-element pesticide and the pesticide made from plants and animals. Nakaguchi calls the latter two, supplementary medications instead of pesticide as they are made of soil improvement agents and ecology-friendly natural ingredients. In the case of Aya, except for tomato and pumpkin, chemical pesticide of the first type is hardly used for other types of farming products. Likewise, except for the large scale plastic greenhouse farms that use a minimum quantity of chemical pesticide, other types of cultivation indicated little or no use of chemical pesticide. When looking at the total quantity of pesticide used in Aya, it was close to zero while the middle region demonstrates remarkably large quantity in use. The rough ratio of the chemical pesticide quantity used in Aya and that of the middle region is 1 to 146.

The findings and analysis of Nakaguchi indicate that the organic farming practices in Aya, when compared with those of other ordinary farming, still

¹²⁵ Nakaguchi, T 2005, 'Kankyo fuka teigen kohka no ookii Miyazaki ken Aya cho ni okeru yuhki mohgyo' [Organic farming with high effectiveness in the reduction of environmental load in Aya town, Miyazaki] In *Arsu · Chikyu Kankyo* [Earth · Global Environment. Vol 32, Ashita-no-Nihon-o-Tsukuru-Kai [Institute to Create Japan for the Future]. Internet Source: Homepage of the Institute to Create Japan for the Future, viewed on 20 December 2009, <http://www.ashita.or.jp/publish/earth/earth23/earth23-2-1.htm>

stand out in their consideration for the ecosystem. It is true that such practices could still improve under conditions in which consumers gradually give up their strong preference for pretty looks and shapes of vegetables and fruits and rather prioritize the taste.

The uniqueness of organic farming in Aya, notwithstanding the existence of universal standards set by the Organic JAS Certification process, lies not in the business-base perspective to be eventually mainstreamed by such a universal system but on the quality of life perspective to ensure the healthy life of the local people and a healthy natural environment in Aya. In other words, Organic JAS Certification is for any farmers and agricultural firms to adhere to as quality assurance for their business, while Gohda's vision was not focused on such business level but on the cultural level. Therefore, organic farming has to be part of local people's lifestyle.

As symbolized by the promotion of "One *Tsubo* Vegetable Garden" by Gohda, his philosophy of organic farming was originally focused on the self consumption of town people. If one makes vegetables and fruits as food for family consumption, one would not consider using chemical pesticide and chemical fertilizer because the former harms family members' health and the latter harms soil and make farming unsustainable. Gohda appealed to farmers' conscience not to discriminate consumers from their own family by selling farming products made by practices harmful to people's health and the local environment. Such people's conscience should be nurtured in their everyday life and culture:

The meaning of the word *Bunka* in English is culture. Culture means to cultivate land and to soften the soil by mixing it with air and oxygen. This is wonderful culture. What we call culture now often means music and art but when people were living in the mountains about 12,000 years ago, the most important thing was food and therefore the culture of the earth... Making vegetables, *Miso* [fermented soybean paste], *Shoyu* [soy sauce], *Tofu* [soybean curd] and *Natto* [fermented soybean] is the real culture. You can sense the fragrance of the local place when people make the culture by mobilizing their brain, hands and feet, and people pass it on with joy and fun. (Shirogaki 2000, pp.141-142) [Translation by author]

Probably most of the organic farmers in Aya are more or less struggling to make a living. Yet, a substantial majority of them do small-scale farming as an extension of their home vegetable gardens, enjoy the farming work

itself, and are satisfied with the small profit made at the THC.

What really matters for the sustainability of organic farming in Aya seems to be the viability of a healthy and environmentally-friendly lifestyle and of the culture of local people. Gohda's efforts as the Town Mayor at that time, however, were directed to support mostly the production (farmers) side. The struggles of organic farmers in Aya with high awareness of health and environmental issues therefore, have roots in the lack of such a lifestyle and culture on the side of consumers. Dealing with the lifestyle and culture of consumers goes beyond the organic farming issue of Aya Town. It is about changing the value and behavior of consumers, in the direction of ESD. This is the great challenge the organic farmers in Aya are now facing.

3.3 Endogenous ESD in Aya: Supporting Visions Yesterday, Overcoming Challenges Tomorrow

Two studies already have considered that the way Aya Town has revitalized since the end Aya CDP is a form of endogenous development. Hobo (1996)¹²⁶ and Ikeda (2008), both refer to the following four principles of endogenous development set out by Miyamoto (1989)¹²⁷ from economic and policy perspectives. Based on local technologies, industries and culture, local people:

- 1) learn, plan and manage targeting the market within the region. This, however, is not regionalism as a region cannot be independent without its relationships with urban areas and the central government.
- 2) conceive the development within the framework of environmental conservation and set a comprehensive objective that seeks to establish amenity, welfare, culture, and human rights of the local residents.
- 3) base industrial development on complex industrial fields instead of limiting it to a specific field and take measures for regional inter-industrial relationships the added values of which will benefit the region in every stage.
- 4) establish a system for resident participation so that the municipality embodies the will of residents and has the autonomous right to regulate capital and land use in accordance with its plan (Miyamoto 1989, pp. 296-300). [Translation by

¹²⁶ Hobo, T 1996, *Naihatsuteki hatten to nihon no nohson* [Endogenous development and Japanese farming villages], Iwanami Shoten, Tokyo.

¹²⁷ Miyamoto, K 1989, *Kankyo keizaigaku* [Environmental economics], Iwanami Shoten, Tokyo.

author]

The first principle defines endogeneity in terms of development by stressing that the core of endogenous development is made up of the local residents themselves. The second indicates such development should be comprehensive. To be more specific about its process, the third argues how industries should operate, and the fourth about how the system should work (Ueda 2000, p. 51).¹²⁸ In this respect, the ways Gohda worked for the people in Aya Town seem to fit these four principles of endogenous development.

With regard to the third principle about complex fields of industries, while the primary industry in Aya is quite visible and looks dominant, the actual percentage by the number of worker among the primary, the secondary and the tertiary industries are 25.1%, 26.8% and 48.1% respectively as of 2005 [Heisei 17]. To name but a few, apart from promoting organic agriculture, Gohda took various incentive measures to encourage migration of craftspeople like potters, woodworkers, glassworkers, and textile workers to Aya. He also invited a sake brewery to establish a factory as well as an outlet. The construction of a suspension bridge in 1983 to show the EBFs for tourists became well-known not only because of the EBFs but also because it was the world's highest (142m) pedestrian-type suspension bridge at that time. These various measures dramatically increased the number of tourists most of whom ended up buying local organic farming products at the THC, and thus immensely benefitted the local economy. While such measures seem to have no clear relationship, most of them leverage local natural resources such as groundwater, natural ingredients and materials and forests.

Looking at the success of Aya as a result of endogenous development from the standpoint of an administrator or politician like Miyamoto (1989), Hobo (1996) and Ikeda (2008) seems logical. A common conclusion is that the success of Aya owes mostly to a single person's leadership, techniques and skills as a politician who happened to use an endogenous development approach and therefore without such leadership, Aya is not sustainable. Yet, the work Gohda has done goes beyond such a standpoint. It goes back to the concept of endogenous development that Tsurumi (1989) deepened at philosophical level.

Gohda's thinking was always at the level of local people and life, and not that of

¹²⁸ Ueda, K (ed.) 2000, *Jyunkangata shakai no sensin kuhkan* [The advanced space of cyclical society] Nohsan Gyoson Bunka Kyokai, Tokyo.

an elite or high status person. For the sustainability of the well-being of the local residents of Aya, he wanted them to learn from him, his ideas, his visions, and his philosophy, which were actually nothing new but originated from the very people and nature of Aya, and were hence endogenous. In other words, these are based on his own life experience and knowledge acquired in Aya, which is a collection of local knowledge and skills, local wisdoms, local culture and tradition, as well as local organizations like *Yui*, that are inseparable from local nature. He then transformed these endogenous elements to adapt to the actual socio-economic context. He wanted to demonstrate a working model so that local residents (and not just administrators or politicians) could learn and follow his model even after his retirement. What he wanted to demonstrate to local people was his attitude to learn from local tradition and recreate these for the sustainability of both local residents and nature.

Tsurumi (1999, pp. 32-33), in her theory of endogenous development, emphasized the importance of the “re-creation of tradition”. She defines “tradition” as a “form” or structure which is passed on from generation to generation. More precisely, tradition is the “spiritual and cultural heritage and customs formed and accumulated historically and passed down for generations by a certain group or society.”¹²⁹ The other definition of tradition Tsurumi (1989, p. 58) refers to emphasize “the accumulation of collective knowledge which is embodied in the tradition of a specific group”(Gould & Kolb 1965).¹³⁰ She roughly categorizes tradition into three dimensions.

- 1) The first is the form of consciousness such as religion, value, and ideas that have been passed on from generation to generation.
- 2) The second is the social form succeeded from generation to generation such as the structure of family, rural village, and urban city, as well as the relational structure between village and town.
- 3) The third is the technical dimension that creates everything required for clothing, food and housing (Tsurumi 1989, p. 58).

Later, in her work (Tsurumi 1999, p. 33), she adds the fourth dimension of feelings, senses and emotions which one can see from the acts and behaviors in one’s daily life.

¹²⁹ Source: Matsumura, A (ed.) 1995, *Sansei Doh Daijirin*, the Second Edition, Sansei Doh, Tokyo.

¹³⁰ Gould, J, & Kolb, W.L (eds) 1965, *A dictionary of the social sciences*, The Free Press, pp.723-24

In fact, Gohda exactly followed the four dimensional re-creation of tradition by being open to external factors in order to generate a certain dynamic process of re-creation.

- First, because he comprehensively understood the local culture and values that nurture the relationship between people and local nature, he gave new interpretations to these based on his scientific knowledge acquired from reading books and re-created these traditions in terms of a modern concept of nature conservation, to protect the EBFs in Aya.
- Second, he employed a modern autonomous system of the ACC system while in his vision, it was the re-creation of the traditional spirit of *Yui*.
- Third, he re-created local processes of production via the introduction of organic farming as well as supporting craftsmanship both of which have roots in traditional techniques. Yet, what triggered him to promote organic farming came from his scientific knowledge of ecosystems. Likewise, the promotion of craftwork became possible thanks to Aya Town Municipality's strong incentives to invite craftspeople (human resources) from outside of the town.
- Lastly, he always valued the joys that come from people's creativity, be it in traditional dance or festival, or local food, or farming work, which leads to the fourth dimension. He was equally open in this dimension by organizing the Cultural Festival of Aya Town Residents in autumn, which became famous for its exhibition of various hand-made crafts, arts and products of town residents and many people from Miyazaki City and other neighboring towns continue to visit and enjoy the culture of Aya together with Aya residents.

What Oita Prefecture did¹³¹ was to assimilate the one characteristic product of the village with the image of the village and to sell it, which I think is a well-thought out strategy of village revitalization. However, in the case of Aya, enjoyment of life and culture in the creative process of self-production by local people is the prerequisite and I aimed to develop a town where one can enjoy watching the way local residents enjoy making products. (Gohda & Gohda 2005, p. 50) [Translation by author]

Interestingly, it was the ACC system that played a catalytic role for the learning by local residents from Gohda's ideas, philosophy and visions. Gohda took advantage of the ACC system and attended numerous meetings and gatherings to have talks and debates with local residents.

Once, a male resident M. M. told me with pride. "*Chosei Zadankai* [Town Pollicy

¹³¹ He refers to *Isson Ippin Undoh* [One Village One Product movement] in Oita Prefecture, which became well-known in Japan.

Round-Table Talk] is a unique aspect of the culture of Aya. It has an almost 50-year-long history.” *Aya Chohsei Zadankai* [Aya Town Policy Round-Table Talk] was initiated by Gohda. This is an annual event which takes place in all 22 ACCs and thus takes a few months to complete. This is a forum where the Town Mayor and other executive members of Town Municipality meet face to face with the ward residents and have frank and open discussions on town development plans as well as various issues and problems related to people’s welfare.

In this way, a type of ESD took place through the ACC system, in the form of discussion, debate, and learning which led to the process to pass on the local values and wisdom in a sustainable manner and to benefit the well-being of local residents.

Most studies that have evaluated the development of Aya, either from endogenous or revitalization perspectives, value highly Gohda’s achievements in terms of economic recovery of the town and his capability as a politician. However, this study has a different point of view to evaluate his work. It is to examine how the endogenous ESD Gohda has initiated is being passed on to and maintained currently by local residents. This is linked with the very reason for choosing Uwabata as the case study location. It is because I consider the presence of endogenous ESD quite visible and prominent in Uwabata Ward in comparison with other wards when I made a preliminary visit to Aya Town in late 2008. Based on this perspective of what Gohda has done for Aya Town, I proceed to the next Chapter which argues what endogenous ESD really means in Uwabata.

4 Endogenous ESD in Uwabata: Supporting the Re-creation of the Tradition for the Quality of Life

This Chapter presents the synthesis of the theories in the Chapter 1, the findings and analysis of the case study in the Chapter 2, and the background framework of Endogenous ESD based on the history of Aya Town with an attempt to lead to answers for the key research questions previously raised. These are:

- When one gets out of the locked-in loop of labor and consumption and manages to gain freedom to be the owner of one's own life, what form does development take, and is such development sustainable?
- In the context of modern society, how can one develop the ability to achieve the functionings one wishes for, and expand human capability which leads to quality of life?
- What conditions and what types of education are required to develop such abilities?

So far, this study found the role of the ACC system critical in the discussion of the above-mentioned synthesis. Therefore, an in-depth analysis of the ACC system has to be made to identify its important linkages with Institutional and Relational Capitals as well as with Human and Collective Functionings.

4.1 The Role of the ACC System in the Re-creation of Tradition for Local Life and Culture

4.1.1 In-Depth Analysis of the ACC System

The ACC system is a type of social institution¹³² established for local autonomy. In Chapter 3, it was also considered as a component of Institutional Capital. Broadly, it is composed of four key elements: 1) framework or structure, 2) substance, 3) functions¹³³, and 4) functioning mechanism.

The difference between the public or administrative institutions (e.g. pension

¹³² Definition of institution: a significant practice, relationship, or organization in a society or culture <the institution of marriage>; *also* : something or someone firmly associated with a place or thing <she has become an institution in the theater> : an established organization or corporation (as a bank or university) especially of a public character (Source: Merriam-Webster Online Dictionary. <http://www.merriam-webster.com/dictionary/Institution>)

¹³³ 'Function' here is differentiated from the 'functioning' defined by Sen (1997) in relation to Human Capability.

system) and this autonomous system is the functioning mechanism. For example, the public pension system is managed by the Ministry of Health in close collaboration with Municipalities where professional staff like civil servants run the system using the budget allocated by the government. For the ACC system, local residents themselves are the implementers, in principle, without remuneration. The pension system will, however, not function, if it loses the credibility of the people, resulting in the non-participation or withdrawal of people from the pension scheme. In the case of the ACC system, it is also an open system in which anyone can join, but if the members do not implement programmes or activities by themselves, the system does not work. The credibility of the system itself counts for the former case and for the latter case, it is the will (to implement) of the members that counts.

In line with the above aspect of people's support, I will start with the analysis of the fourth element: the functioning mechanism which seems to be the key for the effectiveness of the ACC system.

4.1.1.1 Social Capital and Learning-Relation Networks as the Functioning Mechanism of the ACC System

While it is important that an institutional system has structures and functions, if people do not participate or support the system, it does not function, as shown by the example of the pension system previously described.

Our current modern society based on a capitalist economic system tends to treat people like economic animals and thus in turn, people tend to behave like economic animals dominated by the logic of economic incentives such as looking for cheaper products and easier jobs for the same salary. In this regard, people not only consider their labor as money but also time as money. In this sense, implementing autonomous functions without any economic incentives and spending people's precious time for no money is counter to the modern economic logic. All in all, autonomy does not pay. So, why do certain people still support autonomy?

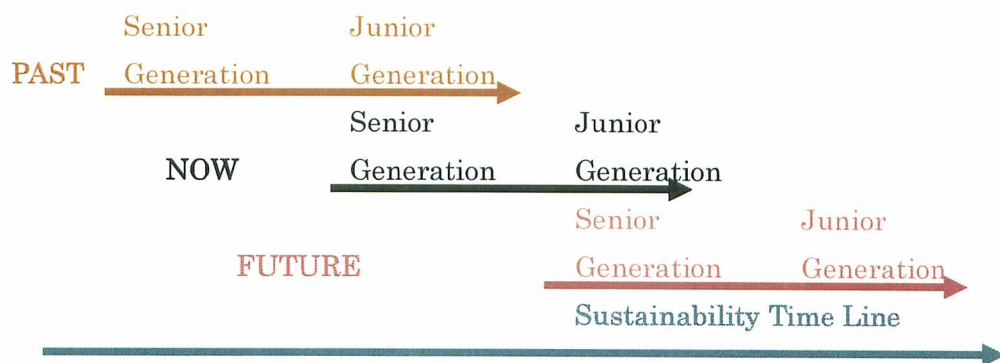
Most contemporary institutions are based on monetary capital from which the logic of economic incentive comes. Based on the findings and analysis

of the case study, one of my conclusions is that an autonomous system like the ACC system is based on social capital and not monetary capital. In other words, the ACC system is run by the capital of relationships outside of the locked-in loop of labor and consumption. As identified in Chapter 3, the ACC system can be considered as Institutional Capital which is mostly overlapped by Relational Capital in the case of Uwabata.

The possessors of Relational Capital share values and perspectives different from those common in the capitalist paradigm. Such values and perspectives are not new. They have existed for a long time, even perhaps from very ancient times, but in the case of Aya, they are represented by *Yui*, which is “mutual-help” or “reciprocity”. How does such a value link with the strong will to implement autonomy shown by the local residents themselves? The answer can be found in the following phrase of a person who gave me a reason why he wanted to run for the ACC Director.

“I have been coached and sometimes scolded by my seniors and elders in my cluster who gave me a role like the Head of the Children’s Association since I was young. So, I wanted to repay an obligation.” (A male resident K.S.) [Translation by author]

Figure 4.1: Unilateral Inter-Generational Feedback Mechanism of Coaching of ACC Management



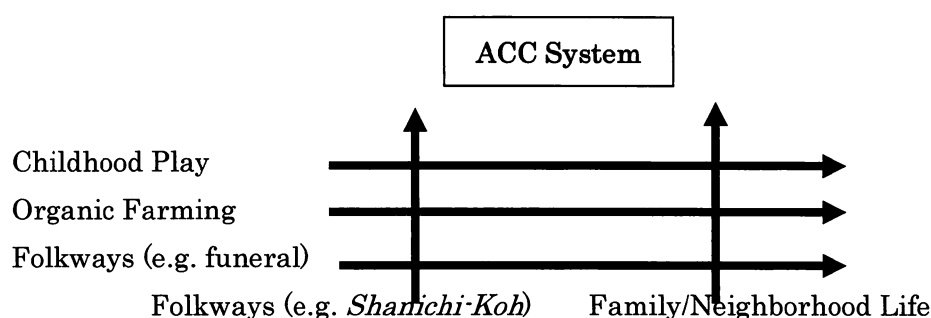
Source: Drawn by author

What he meant as repaying an obligation is not returning the favor back to his seniors or elders but to the younger generations in the ward. It is the inter-generational mutual-help relationships nurtured among the residents in Uwabata which enable the coaching mechanism of unilateral inter-generational feedback, from senior generations to younger generations through ACC management. This process is sustainable, since

they strongly consider the feedback as an “obligation” that they “must” do (Figure 4.1).

Thus, considering the ACC system as Institutional Capital within the structure of which rules and procedures exist to guide individuals’ behavior, supervised by people acting out well-recognized roles (Krishna 1999, p. 77), Figure 4.2 below provides a comparison between Institutional Capital (the ACC system) and Relational Capital (*Yui*). Although the source of motivation for *Yui* may be livelihood (farming), the value behind it can be described as reciprocity based on obligation and mutual trust.

Figure 4.2: Learning-Relation Networks that Support the ACC System in Uwabata



Source: Drawn by author

Analysis and visualization of the learning-relation networks suggests that folkways, having dual functions of vertical and horizontal networking, especially play an important role to help the ward develop quite extensive human-relationship networks which contribute to strengthening of solidarity at cluster and ward levels. In addition, numerous horizontal learning-relation networks do facilitate intra-cluster or ward-level ACC activities.

To summarize, the unilateral inter-generational feedback mechanism based on the coaching of ACC management (Institutional Capital) as well as the vertical and horizontal learning-relation networks (Relational Capital) supports the functioning mechanism of the ACC system in Uwabata.

4.1.1.2 The Substance of the ACC System as the Re-creation of Tradition

This section attempts to deal with the substance of the ACC, the second element that composes the ACC system, and illustrate how re-creation of tradition was crystallized in the substance of ACC system according to the four dimensions of tradition according to Tsurumi (1989, 1999) explained.

In section 3.2.1.3, it was argued that the ACC system is not the institutionalization of *Yui* and that from the organizational and relational perspectives, these are different types of social capital. The institutional framework and the structure of the ACC system is universal in Japan and is run by local residents with financial support given by the local Educational Board. The details of the structure are shown in Annex 1.

The issue here is its substance. In the case of Aya, the substance of the ACC system, according to my analysis, is made of the re-creation of tradition. The explanation on how tradition is re-created through adaptation to the needs and situations of today, is made according to each of the four dimensions of tradition: 1) The form of consciousness; 2) the social form; 3) the technical dimension; and 4) the dimension of feelings, senses and emotions.

Firstly, while Berman (1997) illustrates the source of motivation for Institutional Capital are rules, procedures and sanctions contrary to the beliefs, values and ideology in the case of Relational Capital (See Table 3.1), the ACC system as an institutional organization for autonomy does integrate a value-based structure as per the structure of consciousness under 1). As previously questioned in section 2.2.1.5, despite being a modern system, very traditional religious rituals and practices, such as the *Shintosh* ritual to open the General Assembly in April, are being integrated in the ACC system.

The local autonomy used to take place in Uwabata in the form of *Yui* as a mutual-help organizational structure to achieve personal and collective objectives of well-being. However, given the disappearance of such traditional structures as a result of modernization, local residents had to find an alternative structure to fit their autonomous system, which

became the ACC system. While the hardware of autonomy has changed to a modern one, the software somehow carries a traditional structure of consciousness which is the spirit of *Yui*, mutual-help or cooperation in the context of agricultural farming connected with the natural gods of mountains and water. Hence, Uwabata residents maintain the traditional structure of consciousness in the ACC system in the form of symbolic expression by religious rituals.

Integration of religious rituals in the ACC system demonstrates the very value and significance of local autonomy, while this is unthinkable for public institutions. Separation of politics from religion is expected for any public institutions as the general public cannot share one religion or value. Autonomy, on the contrary, which can function only with shared objectives and values of local residents, may have less well defined or no border between the politics (objectives) and religion (values).

Secondly, for the social structure, the ACC system is based on cluster system which used to be the structure of *Yui* in the old days and now has become the original basis of Relational Capital.

Thirdly, in the technical dimension, by incorporating certain traditional events and ceremonies in the ACC activities, traditional skills and techniques are maintained within the ward to carry out activities related to folkways in the ACC system.

The last dimension of feelings, senses and emotions should be understood within traditional context. In the rural life in the past, there were no entertainment that people could access by payment. People thus created entertainment for themselves such as *Shanichi-Koh*, *Ohana-Mi*, *Tawara-Odori*. which had close connection with their livelihood, human-relationship and local nature. In this regard, the ACC activities incorporate such traditional events to enjoy and maintain a traditional style of collective dining as well as worship of nature gods while modifying how they are undertaken in the current context.

Reflecting back that Gohda has actually followed these four dimensions of tradition in the realization of his visions during his term as the Town

Mayor, it is quite indicative that he has re-created the ACC system itself as the “means” for local residents to equally re-create their local tradition of life and culture.

4.1.1.3 Re-creation vs Simplification of Traditional Functions

This section looks at how the re-creation of tradition takes place at function or activity level. The analysis of findings on how the ACC system incorporates traditional functions possibly implies that if it were not for the ACC system in Aya, many traditional events and functions would have disappeared already. Stated another way, there used to be many traditional events and ceremonies that were carried out within the traditional system of *Yui* or other similar socially organized traditional networks. Such traditional systems or networks disappear over time as modernization accelerates and westernized lifestyles influenced by globalization become more and more common in Japan. However, in the case of Aya, such tradition is accommodated in the ACC system which reflects the will of local residents expressed in their autonomous system, and re-created to a certain extent by adapting it to changing social and economic situations.

Adaptation or modification to a certain extent could be called re-creation of tradition but in some cases, it is questionable to call it re-creation. The following are cases of *Tawara-Odori* and of *Shanichi-Koh* demonstrate this.

- Case of *Tawara-Odori*

Uwabata is known for the *Tawara-Odori* [Straw Bag Dance] which is dedicated every year to Ikusago Shrine in Uwabata and once in every 5 years to Aya Shrine which belongs to all the residents of Aya Town. The performance of *Tawara-Odori* ceased about 50 years ago for almost 15 years when the agriculture in Uwabata declined and the number of young men has decreased.

“When I was 21 years old, which is about 35 years ago, I have revived ‘Tawara-Odori’. I made a proposal to revive ‘Tawara-Odori’ at the General Assembly of Uwabata ACC, the director of which was my father at that time. I proposed the participation of men of all ages as there was no written rule that the dancer had to be a young man. I threatened them

that those who disagree would be ostracized from this ward. Then, Mr. Y volunteered to be the dance coach. I believe Y. Family has a bloodline of dancer. Everyone was so excited at the time of revival. Since then no one is against continuing this traditional dance.” (A male resident M.K.) [Translation by author]

As a result of the revival, men of all age groups as well as children, both boys and girls, are now being mobilized to dance *Tawara-Odori*. In this way, the software (dance) of *Tawara-Odori* is being succeeded while the hardware (dancers) has changed over time.

- Case of *Shanichi-Koh*

Shanichi-Koh used to take place twice a year at cluster level. However, since six years ago, *Shanichi-Koh* events were absorbed as ACC activities at Ward level. More precisely, *Shanichi-Koh* in Spring was absorbed into the *Ohana-Mi* [Cherry Blossom Viewing] event six years ago and that in Autumn into the *Jyugo-Ya* [Full Moon Night: Moon Viewing] event four years ago, mainly because of the increase of elderly households who do not have the capacity to be *Yado*, as well as the increase of wage-labor households who consider such traditional events too much of a burden and obsolete. The home-made local dishes are now replaced with catered food and instead of the hospitality at the house of *Yado* at cluster level, all the ward residents get together at the ACC building.

When comparing these two cases, *Tawara-Odori* more or less maintains four dimensions with additional perspectives in the third and the fourth dimensions given the participation of children (Table 4.1). Thus it may be relevant to consider the case of *Tawara-Odori* as re-creation of tradition. However, it is questionable to call the case of *Shanichi-Koh* as re-creation of tradition. The latter case obviously illustrates simplification or streamlining of tradition by the loss of its first and the third dimensions. In this regard, the current style of *Shanichi-Koh* maintains the façade of tradition but it has lost the substance of hospitality based on the mutual-support and mutual-learning nurtured within the Relational Capital.

Table 4.1: Comparison Between Current Styles of *Tawara-Odori* and *Shanichi-Koh* According to Four Dimensions of Tradition

	<i>Tawara-Odori</i>	<i>Shanichi-Koh</i>
Dimension of the Form of Consciousness	Considered as ward identity and maintains its spiritual relations with local nature and local gods.	Lost the original spirit of mutual-help that created the <i>Shanichi-Koh</i> event.
Dimension of Social Form	Considered as an activity to be supported by entire ward.	Shifted from a cluster level event to a ward level event.
Technical Dimension	In addition to senior-junior coaching, peer-coaching among children was introduced.	No more learning about making local dishes and home-based hospitality among housewives.
Dimension of Feelings, Senses and Emotions	Considered as pride of the ward. Children's performance enhances the sense of community solidarity by children and their parents.	Maintain as a convivial event at ward level (though with less participation than before)

Source: Drawn by author

Nevertheless, there still is one cluster the members of which have strong relationships and proactively organized *Shanichi-Koh* in addition to ACC events.

“The Sakashita cluster has organized ‘Shanichi-Koh’ because Fuji-chan had been sick and was about to be hospitalized, we thought we should cheer her up. So, about 16 of us got together... Rinko-san cooked fried dishes, I did *Nigomi* and Kazuaki-san did grilled chicken. I was very happy because she said delicious again and again and loved the rice slightly burned in the kettle. When we sang a song ‘Come back again’ with karaoke at the end, she was so pleased and shed tears.” (A 73-year-old female resident M.E. on 16 October 2009) [Translation by author]

Furthermore, the current ACC Director who took the office in April 2009 has an intention to challenge the ward residents to re-consider the way to organize *Shanichi-Koh*. He understands that autonomy does not involve imposing ideas on the ward residents in a top-down manner but exchanging views and values among the residents and learning from each other. In this way, he hopes to obtain a consensus to change the way

Shanichi-Koh currently takes place to recover its substance to some extent, while taking account of the limitations people are facing.

In this way, Uwabata endeavors to follow the way Gohda did; re-create tradition through continuous adaptations and re-adaptations to current conditions. Only through this way will the deep local knowledge, traditions and wisdom that are endogenously originated from people's relationship to the local nature in Aya, be molded to a shape that matches the current as well as future needs and demands.

4.1.2 Conclusions from the In-Depth Analysis of the ACC System

Gohda's visions and endeavors for the revitalization of Aya Town could be considered as endogenous development alias re-creation of tradition of Aya. Although such development took the form of policy implementation at town level, he has also tried to communicate his message to local residents through discussions and debates at numerous ACC meetings that the genuine value which is indispensable for sustainable living of local residents is to be found in the process of re-creation of local traditions that are based on the deep knowledge of local nature and local wisdom. To acquire the genuine value, he urged local residents to go through this process by themselves. This process to urge local residents to continue the way Gohda has carried out endogenous development for the sake of acquiring the genuine value for sustainable quality of life, could be regarded as endogenous ESD.

He then placed his hope in the ACC system to function as the "means" for local people to acquire the genuine value for sustainable living, which is to re-create tradition for the sustainable living of ward residents while responding to present needs. The case of Uwabata indicates that in this context, endogenous ESD is learning that enhances both Institutional and Relational Capitals that support the functioning mechanism of the ACC system and that equally facilitates the autonomous process of re-creation of local tradition of life and culture at the functional level through discussions and debates among local residents.

4.2 The Quality of Life in Uwabata

In the previous section, I have explained how the visions of the former Town Mayor Gohda were realized as endogenous development and as re-creation of tradition in Aya and are now reflected in the ACC system which also enables local residents to re-create tradition at the ward level. The conclusion is that the learning that takes place throughout these processes that support the ACC system itself and that takes place for the re-creation of local tradition, can be considered as endogenous ESD.

This section now discusses how such processes of re-creation of tradition in the ACC system are associated with the quality of life of Uwabata residents and how endogenous ESD fits in this mechanism. For this reason, the concept of freedom which Amartya Sen used to explain human capability needs to be re-examined in relation to what I called the “locked-in loop of labor and consumption” in the Introduction.

4.2.1 Freedom that Enables Quality of Life

Saito (2005, p. 12)¹³⁴ in his book entitled *Freedom* refers to the definition given by T. H. Green (1891).¹³⁵ It indicates that freedom is the positive force or ability to do and enjoy what is worth doing or enjoying, and what we do and enjoy with others as well. To give more explanations to the “force”, Green adds that the freedom is the force exercised through help or security provided to a person by his/her colleagues, and in turn, the force that is exercised by him/her to provide help or security for them. This indicates a characteristic of the complementarity of freedom (Saito 2005, p. 85), which implies intolerance to the freedom based on the sacrifice of others’ freedom. In the case of Uwabata, this could also be interpreted as freedom of reciprocity, that is, by enabling others to have freedom, one’s own freedom gets realized thanks to reciprocity.

Based on the above definition of Green, Saito argues that when people are able to achieve and enjoy what they reason worth achieving and enjoying using the resources that belong to themselves, others or society, it means freedom (Saito 2005, p. 35). From this perspective, the absence of interference (or institutional security for it) does not mean freedom itself nor do the resources

¹³⁴ Saito, J 2005, *Jiyuh* [Freedom], Iwanami Shoten, Tokyo.

¹³⁵ Green, T. H 1891, ‘Liberal legislation and freedom of contract’, in Nettleship, R. L. *Works of T. H. Green*, Vol. III. Longmans, Green and Co., pp 370-371

that belong to themselves, others or society. These are rather the conditions of freedom. Sen considers these conditions of freedom as the “means” and instead of arguing inequality at the level of “means” or conditions of freedom, he questioned the inequality at the level of “purpose” or substantial freedom itself.

Capability is primarily a reflection of the freedom to achieve valuable functionings. It concentrates directly on freedom as such rather than on the means to achieve freedom, and it identifies the real alternatives we have. In this sense it can be read as a reflection of substantive freedom. In so far as functionings are constitutive of well-being, capability represents a person’s freedom to achieve well-being (Sen 1992:49).

So when we understand that capability is akin to one’s substantial freedom to achieve well-being or quality of life, we can see if the expansion of capability which is what Sen calls development, can be reflected in the substantial freedom of one’s life. Let’s then, apply this perspective to the life in Uwabata. However before moving to the case in Uwabata, it is necessary to look back the problem of locked-in loop of labor and consumption to explain what I consider freedom in Uwabata.

In Chapter 1, I have argued that the convenience we enjoy today has a close connection with the locked-in loop of labor and consumption in capitalist society. That is, we have to buy convenience as such convenient products and services are created by particular groups of specialist with specialized scientific knowledge, information and technologies that are embedded in the economic and industrial structure of society. For example, everyone has the freedom to purchase a laptop if he/she has enough money to buy one, but it does not mean he/she gains the knowledge and technology that devised the laptop. We are merely users of it and when it breaks down, we have to depend on the people who have specialized skills and equipment to fix it and we again have to pay for repairs. To pay for the service, we have to continue working to earn money. This is a simplistic illustration of the locked-in loop of labor and consumption. So, in this context, such freedom has a condition that we have at least financial capacity to purchase what we want, be it products or services. Such a condition of freedom discriminates against those who are not able to earn money for various reasons such as physical handicap or unemployment where our institutional social welfare system kicks in. To make the social welfare system work, however, people have to work and pay tax to the government to finance

the system. So, the social welfare system is equally run by the locked-in loop.

From the case of Uwabata, I can conclude that the residents in Uwabata have access to two types of convenience. One is the convenience to be purchased by money as I described earlier and the other is the convenience based on personal and collective capability which brings freedom in leading their local life. While the former type of convenience speaks for itself, the latter may require more detailed explanations in relation to the case described in Chapter 3.

As stated earlier, one key component of freedom is the resources that belong to oneself, others or society. In the case of Uwabata, material resources come from local nature and immaterial resources such as information, knowledge and wisdom come from human resources (i.e. local residents). The residents of Uwabata have free access to these resources. However, one has to bear in mind that the free access to human resources in the case of Uwabata is possible thanks to social capitals (i.e. institutional and relational capitals). In the use of such resources, the residents of Uwabata use their own knowledge and skills to achieve their personal (e.g. farming, fishing, hunting) and collective (e.g. folkways, ACC activities) functionings. Without dependency on money, the residents of Uwabata enjoy personal life and conviviality in the re-creation of tradition. This demonstrates their freedom to achieve their functionings for quality of life.

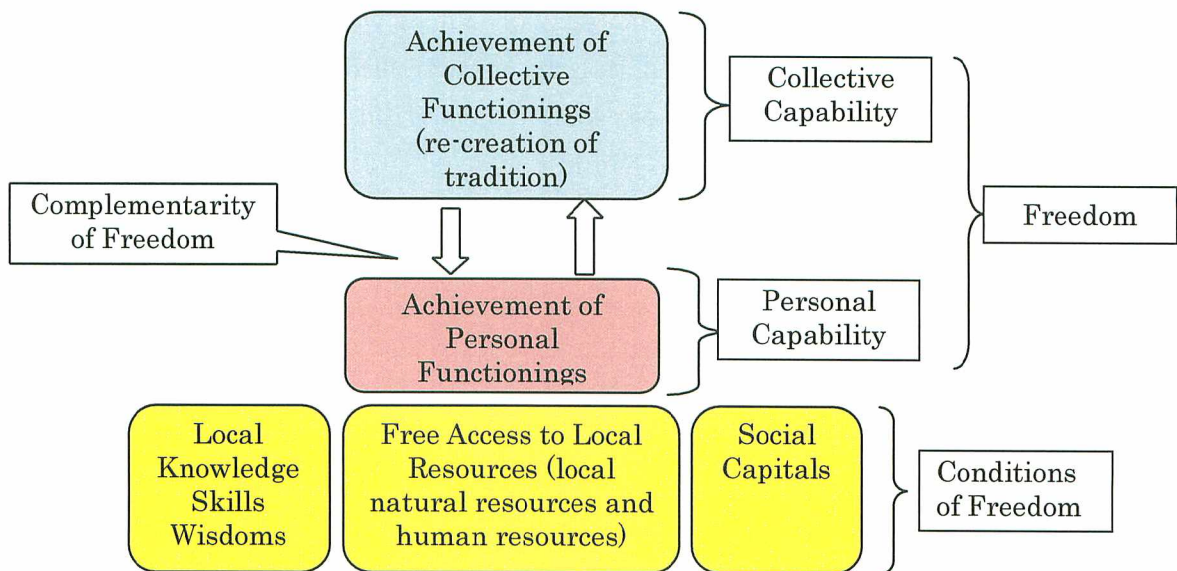
While certain complaints among the local residents exist that they spend so much time for the ACC related activities, the realistic view is that the residents of Uwabata have much more freedom than the paid workers living in the middle of an urban city who have little freedom (capability) to afford to spend their energy and time for such creative activities. So, in terms of the second type of convenience, it can be said that the life of the residents of Uwabata is partly situated out of the locked-in loop of labor and consumption. From this perspective, since money is not involved, this type of freedom does not produce inequity among local residents. The well-being achieved within such a socially just kind of freedom, which is not based on the sacrifice of others' freedom could be considered as a good quality of life.

Uchiyama (1999) calls freedom as *jizai*¹³⁶, as a word of inquiry, and as a

¹³⁶ Uchiyama translates freedom as *juzai* instead of *ijyu* in light of Japanese historical context against western context which developed the concept of freedom [*ijyu*].

self-question on how to live in freedom. However, if such inquiry remains within a private world, there is a risk that freedom becomes synonymous with selfishness. When the freedom becomes selfishness, what would be a problem? He thinks it is the loss of the guarantee of sustainability. If one lives only in his/her private world, there is no necessity to extend its freedom beyond the self-centered world (Uchiyama 1990, p. 228). Human beings as social beings, are probably destined to realize freedom in a social world. Freedom in this context must have a mechanism of sustainability which should have a close linkage with the sustainability of the natural environment and resources on which a society bases the foundations of life, economy and culture.

Figure 4.3: Building Blocks of the Freedom in Uwabata

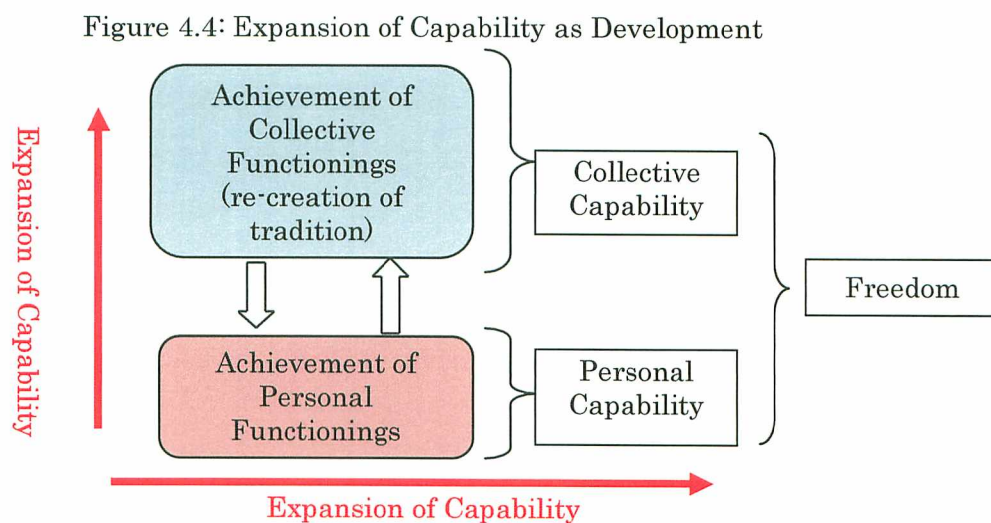


Source: Drawn by author

The critical point of the argument in my study is, therefore, that the expansion of human capability to collective capability is the key to introducing a sustainable mechanism for the freedom of a society. To lead my argument to its final conclusions, the Figure 4.3 above was drawn, which is an illustration of the synthesis of the relations among various elements that enable freedom in Uwabata. Based on this Graphic, my argument proceeds to the next section about the expansion of human capability.

4.2.2 Development as Expansion of Human Capability

Now regarding the expansion of capability, in theory, the expansion of capability should look like Figure 4.4 below.



Source: Drawn by author

One is the horizontal expansion of capability in a strict sense according to the theory of Human Capability of Sen (1992) which occurs at personal level. The other is the vertical expansion from personal capability to collective capability. While it is important to achieve personal functionings for one's own well-being, the measurement of personal development at this level in a highly industrialized country like Japan is difficult since Sen (1992) argues that the measurement of development is essentially the measurement of basic freedoms such as "having access to adequate nutrition", and "having access to potable water" for the people living in developing countries. For this reason, he has proposed the use of the indicators of social development such as public health and education, to evaluate the effectiveness of development work and policies of the governments of developing countries.

Assuming that the basic freedom is in principle available to the residents of Uwabata, the functionings the residents of Uwabata wish to achieve must be complex and diverse. However, what I can infer from the information collected from the interviews of the residents, the expansion of human capability for them is strongly linked with their relationships with local nature due to the

dominant farming nature of the ward industry and its surrounding natural environment¹³⁷. The more they develop abilities to observe and understand local nature and skills in their dealing with local nature, the more freedom from the locked-in loop of labor and consumption they gain. In this regard, developmental projects that involve partial destruction of farming fields or local nature in Uwabata, represents counter-development for the residents as it will reduce their human capability connected with the local nature.

The vertical expansion of human capability from the personal level to the collective level is quite significant in terms of social change which Sen (1997:1960) indicated. He refers to the indirect role of human capability through influencing social change. In the case of Uwabata, it is the participation in the ACC management and activities by the residents, which marks the dynamics of the re-creation of tradition as endogenous development. It is from this perspective of social change that the endogenous learning in Uwabata should be considered as endogenous ESD.

While the process of the re-creation of tradition may be slow and nothing radical, the development in the context of Uwabata is not about policy or project implementation but about maintaining values and tradition through adaptation to changing social and economic environments and incorporation of new cultures and knowledge, which should be the residents' own way of re-creating tradition. UNESCO (2009, p. 3)¹³⁸ affirms this viewpoint that sustainable development is primarily a matter of culture. It is concerned with values and with relationships with others and the natural world. ESD engages directly with the values that shape human development and people-environment relations.

4.3 Building Sustainable Community through Endogenous ESD

Finally, I would like to present the conclusions on “how endogenous ESD looks like” as demonstrated in the life and culture of the residents in Uwabata. I will describe this endogenous ESD from three perspectives, namely 1) premises/conditions necessary for it, 2) its characteristics and 3) its roles in building sustainable

¹³⁷ Having satisfaction through the possession of the means is considered as utility and not achieving functionings. Nevertheless, playing sports might be considered as a functioning involving certain feeling of accomplishment through physical training and acquisition of experienced-based knowledge.

¹³⁸ UNESCO 2009, *Policy dialogue 1: education and the search for a sustainable future*. ED-2009/WS/7, UNESCO, Paris.

community.

1) Endogenous ESD have a condition that it should be based on:

- local nature/natural resources and environment;
- local history, culture and tradition;
- local autonomous system; and
- open system

The first three conditions have been explained elsewhere in this thesis. The last condition of an open system requires more explanations. It is often misunderstood that endogenous development happens in a closed system, which, in the context of the modern world and globalization, is unrealistic. Even a small rural community like Uwabata ward, local residents are connected with the market economy and benefit from basic infrastructures and services like elsewhere. However, the open system in this perspective has a much more proactive implication. Kawakatsu (2008: 18)¹³⁹ argues that endogenous development is based on relationships while a general tendency is to see it as a phenomenon that occurs in the world of closed box, which is simply a misunderstanding. The potential emerges at the time of encounter with something external, such as nature, people, literature, information, and ideology. If endogenous development is not open, there will be no stimulation and thus the potential will neither surface nor trigger creation. Taking advantage of the encounter with the external world, the inner potential emerges through the tense relationships between the external elements and the development agent itself. In fact, I have previously explained this open system in section 3.3., in the way in which Gohda facilitated re-creation of tradition through the dynamics of the interface between the tradition and external factors such as scientific knowledge.

However, as described in section 3.2.2.2, a silent conflict between scientific knowledge and local knowledge emerges in the context of the protection of the EBFs. The local residents who value spiritual view of local nature do not reject the protection of the EBFs at all and rather firmly support it. They are probably struggling to find the point of interface with such external knowledge, which will lead both sides to reach some creative solutions. A natural scientist whose work is dedicated to the promotion of the protection of the EBFs in Aya explains his point of view in this respect.

¹³⁹ Kawakatsu, H 2005, 'Naihatsuteki hattenron no kanohsei' [The potential of the theory of endogenous development], in Kawakatsu, H & Tsurumi, K. (eds) *Naihatsuteki hatten towa nanika* [What is endogenous development], Fujiwara Shoten, Tokyo.

“The mentality of Aya residents has been in transition change since 1980. The students who go to high schools in the city used to feel ashamed of Aya being their hometown. But it has changed. They started to have confidence around 2000. Aya residents themselves have been feeling that change in their bones. Others also have changed. The EBFs conservation started to win public attention. The consciousness of Aya residents has been definitely changing. But it takes some time for such change to be translated into actions... In rural life, time flows slowly. People have *Shigarami* [relational ties] to deal with. Therefore they take gradual steps. At one point in the future, a change will occur. People from urban areas expect immediate results based on the logic of effectiveness. They live with time which flows ten or twenty times faster than that in the rural area. They should not expect that from us.” (A male civil servant K.K.) [Translation by author]

Since 2008, under the framework of the ACC system, Uwabata Ward, in collaboration with the Nature Conservation Society of Japan (NACS-J) and the Universities of Hokkaido and Tokyo along with other environment-related NPOs, has been conducting *Fureh-Ai Chohsa* [Interactive Survey] to produce a *Fureh-Ai* Map of Uwabata showing various local wildlife, local lore and traditional stories related to the landscape and natural environment of Uwabata. In this regard, Uwabata chose to be open to collaborate with such external group with external knowledge and information. The *Fureh-Ai* Map reflects the relationships between local nature and local residents not from a scientific perspective but from a cultural perspective. Yet, making this map brings new opportunities for Uwabata to transmit local information to the external world and develop creative interactions with the feedback given from the external world. In this way, re-creation of tradition takes place with an open system and it will be also extended to another level. On the 22nd of April 2009, the then ACC Deputy Director said in a *Fureh-Ai Chosa* meeting.

“It does not make sense that Aya-Pro is managed only by staff from the Forestry Bureau, the Miyazaki Prefecture and Aya Town without involving local people. In this discussion, we recognized the importance of the river and I believe it is thanks to the good forests we have such a good river. I hope to take advantage of the feelings of Uwabata residents for the river by connecting it to the forests, and eventually with the reforestation of the Aya EBFs.”

The characteristics of endogenous ESD are summarized as follows.

2) Endogenous ESD has the characteristics of:

- nurturing especially the relationships between local nature and local people, and people and people (e.g. formation of social capital) ;
- non-literal, which is based on verbal and physical communication that

requires face-to-face contact among people;

- creativity, in terms of developing one's own local knowledge and skills to produce crafts and products with natural resources and to perform local art. Likewise, creativity in terms of developing all human senses including the sixth sense in the context of acquiring local knowledge from local nature. From a broader perspective, it also facilitates re-creation of tradition by the ACC system;
- value-driven, such as “mutual-help” or “reciprocity”, “solidarity”, spiritual values of local gods, norms and social manners/morals;
- life-long (learning);
- participatory as the learning is based on relationships, which in turn have strong links with non-literal communications. Examples of participation are childhood play, folkways and various ACC activities; and
- conviviality, which is linked with the above participatory nature.

To explain the nature of conviviality, I again refer to Polanyi (1958);

Conviviality is usually made effective by a more deliberate sharing of experience, and most commonly by conversation. The exchange of greetings and of conventional remarks is an articulation for companionship, and every articulate address of one person to another makes some contribution to their conviviality, in the sense of their reaching out to each other and sharing each other's lives. Pure conviviality, that is, the cultivation of good fellowship, predominates in many acts of communication; indeed, the main reason for which people talk to each other is a desire for company... It also forms a transition to a second kind of pure conviviality, from the sharing of experience to a participation in joint activities. Such cooperation is usually incidental to a purpose jointly aimed at, but it becomes purely convivial in the joint performance of a ritual. By fully participating in a ritual, the members of a group affirm the community of their existence, and at the same time identify the life of their group with that of antecedent groups, from whom the ritual has descended to them (Polanyi 1958, p. 210-211).

The ritual Polanyi indicated above is a traditional one passed down from generation to generation. In the context of Uwabata, this is what we call *Kyoshoku Girei* [Collective Dining Ritual]¹⁴⁰ in Japanese. It is originally associated with Shinto rituals where people eat together the food offered to god after the performance of religious rituals. In this sense, *Shanichi-Koh* is a collective dining ritual associated

¹⁴⁰ Dine together what was offered to god. Dining together the food cooked with the same fire, aims to strengthen the spiritual and physical connectedness between the god and people and among people who worship the god. In Japan, *Naorai* (in *Shintosh*) is equivalent to such ritual. (Source: Saneido Daijirin Homepage. <http://www.weblio.jp/content/%E5%85%B1%E9%A3%9F>)

with the *Ta-no-Kami* [God of rice field]. Yet, in a broader context, since the annual general assembly of the ACC starts with the Shinto ritual to receive the blessing of local god and followed by *Ohana-Mi* [Cherry-Blossom Viewing] dining, any dining events related to the ACC activities could be considered symbolically as a collective dining ritual.

Many of the ACC activities are followed by a gathering for drinking and dining. It offers a forum for the ward residents to enjoy food and drink together as well as good companionship with fellow members of the community. According to my observations, they exchange not only casual conversations but also serious opinions to improve the well-being of the ward residents. Miyazaki is known for its distilled spirit called *Shohchu*. In Aya, without exception, drinking *Shohchu* is part of the local culture. Frank and direct exchange of opinions often takes place while drinking *Shohchu* at the ACC. In this manner, the ACC system does provide formal and informal occasions for local residents to discuss community building within a convivial environment.

Finally the links between the endogenous ESD and the process of community building are explained below.

3) The roles endogenous ESD plays in the process of building a sustainable community are:

- To create the conditions of freedom (or the means to freedom) as visualized in Graphic 4.3. More precisely, it involves enabling local residents to acquire local knowledge, skills, wisdom, and social lore, and helping the formation and strengthening of social capital. It therefore, contributes to the achievement of quality life, and hence expansion of personal and collective capabilities as well as freedom.
- To support the sustainability of the above mechanism through the inter-generational succession of knowledge and skills at individual, family, cluster and ward levels.
- To contribute to the process of the re-creation of tradition through the ACC system which will bring about gradual social change.
- To contribute to human development, as endogenous ESD helps create the conditions to maximize one's own potential and emphasises human growth (Tsurumi 1999, p. 32).

In conclusion, I decided to call the learning and teaching I have discovered in the life and culture of the residents in Uwabata “endogenous ESD”. Contrary to “conventional” ESD activities that often employ with top-down, organization-based, project-based and universal/public education approaches, this endogenous ESD is distinctly complex and deep, having roots at the level of social capital, local nature, history, and tradition of the place where people live.

The most distinguished difference from the usual ESD is that endogenous ESD has an inseparable tie with local autonomy because its learning dynamics go hand-in-hand with the dynamics of re-creation of tradition of the local community that triggers gradual social change. In other words, without adapting to changing socio-economic and environmental situations today, local autonomy is not sustainable. However, such adaptation has to take account of local nature, history, tradition, and culture that are endogenous elements of the place as well as the identity of the place and people. Development based on fully exogenous elements, or on the denial of endogenous elements breaks down the relationships between local nature and local people, as well as those between people and people, which have been historically nurtured in the place. This in turn results in the reduction of personal and collective capabilities that have also been nurtured by endogenous elements.

Likewise, introducing ESD in an exogenous manner to local residents, such as giving lectures on gender equality, human rights, or peace education (see Figure 1.1) does not make any sense by itself. It will remain at the level of knowledge acquisition but such knowledge has no context in the life and culture of local residents and will not result deeper in their value and behavior changes.

The residents of Uwabata do not know about ESD but if their learning and teaching are endogenously created and embody the concept of sustainability, naturally they should have similar characteristics of ESD. In fact, the characteristics of endogenous ESD which are described previously in this section are identical to those of high quality education that ESD mirrors (UNESCO 2006, p. 17) as below.

- Interdisciplinary and holistic: learning for sustainable development embedded in the whole curriculum, not as a separate subject;
- Value-driven: sharing the values and principles underpinning sustainable development;
- Critical thinking and problem solving: leading to confidence in addressing the dilemmas and challenges of sustainable development;

- Multi-method: word, art, drama, debate, experience. Different pedagogies which model the processes;
- Participatory decision-making: learners participate in decisions on how they are to learn;
- Applicability: the learning experiences are integrated in day to day personal and professional life;
- Locally relevant: addressing local as well as global issues, and using the language(s) which learners most commonly use

To conclude this section, I would like to quote an 84-year-old local resident in Aya.

“People today complain about carrying out folkways or customs as they think it’s too much of a bother, too costly or burdensome. Due to the modernization that symbolizes affluence, such difference in value emerges. What I call the culture of living is the culture that respects nature which is the divine entity that surpasses human beings. It is useless to be a millionaire if you do not have wisdom. Money does not matter. That is the culture of living. We used to work without any payment. We also bartered items such as soy sauce and salt. While we use a machine for pounding rice-cake today, in the old days, two to three households got together and pounded rice-cake for the entire day. It was of course work without payment. So, it did not cost any money. The culture of the paid worker is the culture to force people to do arduous work. I have no objection to mechanization of the tough tasks but we have to sustain the culture that promotes caring deeply for each other.” (A 84-year old male resident T.I. on 13 January 2009) [Translation by author]

This resident is concerned about modern monetary culture because it makes people forget the perspective of “indispensability” which is something one cannot replace with money or exchange with money. He sees the quality of life not in monetary affluence but in the richness of wisdom that respects nature and the heart-warming relationships among people. This is exactly what Sen warns about when he says not to think upside down. We should lead life not for the sake of the means but for the freedom that links the means and the purpose of our life.

Freedom, according to what I have learned from this case study, will not be attained in a convenient manner like purchasing with money or simply touching a button. Freedom demands that we change our values and how we lead our life. It challenges us to maximize our human capability by mobilizing our entire intelligent and physical abilities and senses to think, observe, discuss, act and spend time long-enough to gain appropriate knowledge, wisdom and skills to achieve personal and collective well-being. The word “efficiency” does not exist in this process as it

deals with nature which is beyond the control of human beings. Freedom does demand cumbersome effort and a great deal of time from us but it will eventually reward us with conviviality after the hard work to accomplish it.

4.4 Remaining Challenges and Future Perspectives for Uwabata

In the last section of the Chapter 4, I would like to come back to the issue of the open system. As indicated previously, having an open system is one of the conditions for endogenous ESD to come into existence. Over time, Uwabata develops through the process of self-re-creation while making interactions with the external environment. However, since it is open to such externalities, Uwabata also faces certain frictions.

4.4.1 The Issue of Generation and Gender Gaps

Under section 3.2.1.3, I discussed about the relationships between Institutional Capital and Relational Capital in Uwabata. As illustrated in the Graphic 8, my conclusion is that the space of overlap between the Institutional Capital and Relational Capital in Uwabata is quite significant and that because of this large overlap, autonomy in Uwabata through the ACC system runs quite smoothly.

However, my interviews with people in different age groups gave me a certain insight about a critical generational gap which was probably created as a result of rapid social change strongly linked with the rapid economic growth that connects with entrance exam race at school in Japan after the 30's of Showa [after 1955]. While the generational gap seems to be an internal issue, it contains external social elements because Uwabata is open and exposed to the above-mentioned socio-economic context in Japan.

The gap identified is roughly between the group of the residents over 50 years old who have built strong inter-generational relationships through childhood play and carried out folkways by division of (unpaid) labor with a spirit of mutual-help, and the group of those younger than 50 years who have gradually lost the opportunities of participation in childhood play and folkways partly due to the intensified entrance exam race in the course of their childhood and

instead built horizontal relationships with their friends at school. The number of people in their twenties, thirties and forties who came back to Uwabata after spending a certain number of years of urban life is not so many (Figure 4.5), and most of them do not do farming but work as employees of companies.

Figure 4.5 : Demographic Structure of Uwabata Ward as of February 2009



Source: Aya Town Population Survey Report (2009)

These two groups seem to have different views over the unpaid labor prerequisite in carrying out ACC activities as part of their autonomous system. In fact, the simplification or streamlining of *Shanichi-Koh* described in section 4.1.1.3 was demanded by the latter group. The dynamics of the former group are weakening due to their aging and they no longer demonstrate strong leadership in running the ACC system. In a sense, they are hoping that the younger generations naturally succeed the leadership role. Nevertheless, if the latter group gradually becomes dominant in the management of the ACC system, it may affect negatively the solidarity of the community and result in a shrinking of the Relational Capital that supports the ACC system in Uwabata.

The issue here, presumably pertains to the lack of deep understanding of what the local tradition really means to the community of Uwabata by the latter group members who have very weak relationships with local nature and relatively weak inter-generational relationships in the community. Indeed, when analyzed through the lens of the four dimensions of tradition based on the concepts of Tsurumi (1999, pp. 32-33), the younger generation hardly has had any learning opportunities to connect to the tradition in this respect, and

they also lack understanding of the difference between re-creation of tradition and simplification or streamlining of tradition as demonstrated in Table 4.1.

The older group members who have grown up in the environment of strong relationships with local nature and Relational Capital at that time, take for granted [*Atarimae*] that the residents perform folkways just like their predecessors had done before. However, for the latter group members who have different views, values and lifestyle from the former, their connection with such tradition in all four dimensions seems very weak or lacking and thus the logic of *Atarimae* does not work for them.

So, the challenge is to reduce this generation gap, especially for the current ACC Director in Uwabata. In fact, this issue seems to be quite common in other wards especially those with a larger population of paid workers like Kohgeh and Miyabaru Wards. There is also an additional factor to influence such indifferent attitude towards local values and tradition, that is related to gender.

Women play important roles in the rural community life. In Uwabata, they are not visible at center stage but their husbands who take leadership in the ACC management and activities, require full support from their wives who prepare/arrange materials, food and drink and do cleanup jobs for various ACC functions at back stage.

The members of the Women's Association under the ACC system discuss and learn from each other the know-how of balancing the daily household chores and the tasks of child-rearing with the roles expected by their husbands regarding ACC functions. However, the key condition for membership of the Women's Association to be aged 50 years or less, which means there are less than ten members at the time of writing. The fact is that the number of members on paper is about thirty, but most of them do not participate in the activities. In particular those who got married and moved in to Uwabata from other areas have to build up human relationships in Uwabata from scratch and are very much unfamiliar with the local folkways and tradition in Uwabata. While their status in the family may not be solid yet, they represent the largest female population in their generation and have power to influence the ACC activities.

Given the daily burdens of housework especially for those in their twenties and thirties who are in the middle of raising children, their priorities often are

family issues and not community functions at the ACC. Such prioritization by the wives does influence the attitude of their husbands who, as a consequence, demand simplification or streamlining of folkways. Thus, this perspective of daughter-in-law or *Yosomono* [outsider] also brings a change of values and lifestyle, which equally influences the way the ACC system is being managed. Nonetheless, if this interface with external factors works positively, it could become a process of re-creation of tradition instead of simplification or streamlining of tradition.

It is possible that a solution can be found eventually in the ACC system. One activity could involve awareness-raising for these young wives about local values and wisdom through their participation together with their children in the activities of the Children's Association. The Head of the Children's Association, in this respect, must think creatively about how to attract not only the interest of children but also that of mothers in the collective communal activities. The other possibility involves a more proactive approach by the senior wives in the Women's Association to encourage the participation of younger wives in the activities of Women's Association. In the latter case, it is more of a challenge for the senior wives in Uwabata to, first, make more creative approaches to stimulate the interest of younger wives to appreciate local values and wisdom and, second, think together to overcome the rigidity of the roles of women in the ACC system by proactively suggesting new roles for women in carrying out the ACC activities. Though rather radical, changing the rules to include members over the age of fifty for the Women's Association may enhance the role of senior wives to coach younger wives in this respect.

It is reckoned that such direct approaches to young wives and their children will eventually have an indirect influence on the attitudes of young husbands towards community building in Uwabata and possibly trigger gradual narrowing down of the generation gap. Thus, the future of community building in Uwabata still requires the leadership, creative abilities and capabilities of the ACC Director and the member of the executive committee.

Lastly but not least, the role of neighbors in developing good relationships with the young couples is also important. Efforts to maintain strong Relational Capital in Uwabata are indeed critical. In this respect, the role of the Head of Cluster, who is also a member of the ACC executive committee, to encourage such relationship-building may be equally important.

4.4.2 What Makes Uwabata So Attractive

Notwithstanding internal frictions caused by external values and lifestyle, Uwabata maintains its charm to attract external people. It is again because of its openness to others. As previously indicated, Uwabata has been working on the *Furear*Map with the external academic group of NACS-J, two Universities and NPOs. It was the Aya Town Municipality staff who suggested Uwabata Ward as the candidate for the interactive research that the academic group wanted to carry out. The Municipality staff do consider that Uwabata Ward has certain attractions and the main reason for it is their strong human-relationships among the residents and the openness to interactions with external groups.

Actually it is not only the recognition by external people but also by the people of Uwabata who boast about their solidarity.

“The good thing about Uwabata is its solidarity, which is because of the quality of the seniors. They are good models and they coach the juniors. I used to be yelled at by scary uncles but they did it out of their affection for me. Because we help each other, we have solidarity. Everyone knows each other... Because people are thoughtful here, they have high tolerance.” (A 74-year-old male resident on 14 January 2009) [Translation by author]

“The good relationships among residents remain in Uwabata. We do not accept on faith everything Aya Municipality tells us. I believe the spirit of autonomy has existed in Uwabata since a long time ago. Leaders have been doing quality coaching of children. The whole ward is like a family.” (A 53-year-old male resident on 13 January 2009) [Translation by author]

Interestingly, because of their openness to accept external groups, the ward attracts more and more external groups. From 2010, Uwabata is going to receive the CSR (Corporate Social Responsibility) activity of an NPO group called “Kino-Ieh Daisuki no Kai [Wooden House Lovers Group]” whose members are mostly living in the Tokyo metropolitan area. The activity is in fact linked with the Aya-Pro as previously mentioned in section 3.2.2.2. It aims to do voluntary work thinning Japanese cedar forests in Aya and planting evergreen broadleaf trees in their place. At the same time, the volunteers will experience local food and crafts as part of the living culture of the local residents in Aya. The latter element of the activity involves interactions with Uwabata residents. In fact, this CSR activity started in 2009 and it was

Mokudoh Ward that received the NPO activity. The NPO wanted to continue its activity with a new ward this year and the discussion to identify a new ward took place at the ACC Liaison Council meeting. The Uwabata ACC Director described what happened at the meeting.

“You know that the ACC Director of Mokudoh Ward is also the Chairman of the Autonomous Community Center Liaison Council. Because of his leadership, Mokudoh Ward managed to receive the Kino-Ieh Daisuki no Kai. But since Mokudoh Ward wanted to hand over the role to another ward this year, he asked for one other ward to volunteer at the Liaison Council Meeting. Actually no wards volunteered in the beginning. Then, realizing the seriousness of the situation, all ACC Directors started telling me that it had to be Uwabata Ward to do it. Oh my god! What a work to do!” (A 53-year-old male resident on 14 October 2009) [Translation by author]

The Uwabata ACC Director was smiling while complaining that Uwabata was chosen for the CSR activity of Kino-Ieh-Daisuki-no-Kai. I actually sensed his confidence and pride that Uwabata will do a good job. The acceptance of the CRS activity has no economic incentives like subsidy or budget. This is purely a voluntary work which demands unpaid labor among Uwabata residents. It is therefore beyond the scope of economic development but is within the scope of endogenous development which aims for improving the quality of life.

After all interviews, readings and analysis of data, what became very clear to me is that the main reason why Uwabata is so appealing to external people is because of its inner strength based on solidarity, that is, Uwabata people have a clear identity based on their own local nature, tradition, culture and values that are constantly being re-examined and re-created through the internalization of external elements by being open. In other words, Uwabata will not be shaken or broken apart by accepting external elements or values in place of what they have succeeded from its predecessors, which is what we call exogenous development. Uwabata people are open because they have solid confidence in their own values firmly rooted in the local environment, social relations and human spirituality which Guattari (1993, p. 8) envisioned as three ecological domains. The in-depth analysis of the communal learning under section 2.3.3 based on Table 2.2 fully supports this standpoint.

Endogenous ESD which I found in the daily interactions among local residents is nothing but casual, trivial, frank, informal, and low-profile and the teachers are all ordinary people from children to elderly people, in contrast with any

institutional education provided by teachers and academic professors with good social status. Yet, endogenous ESD is something indispensable in the process of community building in Uwabata. It is a kind of learning that helps Uwabata residents expand their freedom out of the locked-in loop of labor and consumption, and enjoy the creativity in the process of re-creation of tradition as well as the conviviality by achieving collective functionings through the ACC system.

Yet, there is an old saying that adversity is the touchstone of virtue. The sustainability of Uwabata remains to be proved by its own virtue that will resolve the generational and gender gaps to maintain its glow.

Finally, I would like to end this Chapter by returning to the words of Sen concerning the meaning of development which I have contended throughout this study.

The acknowledgement of the role of human qualities in promoting and sustaining economic growth – momentous as it is – tells us nothing about why economic growth is sought in the first place. If, instead, the focus is, ultimately, on the expansion of human freedom to live the kind of lives that people have reason to value, then the role of economic growth in expanding these opportunities has to be integrated into that more foundational understanding of the process of development as the expansion of human capability to lead freer and more worthwhile lives (Sen 1997, p. 1960).

Epilogue: Potential of Endogenous ESD Beyond Uwabata and Aya

The discovery of endogenous ESD in Uwabata led me till the end of my research in the Master's Course. At the end of this study, I would ask two questions to myself. The first question is whether or not Aya has reached its ideal stage for which Gohda has made passionate endeavors to reach through his endogenous ESD. The second question is if endogenous ESD is actually indigenous to Uwabata or not. In this epilogue, therefore, I would like to touch on two remaining challenges, namely endogenous ESD for Aya and endogenous ESD beyond Aya, which I wish to explore in my future research.

● Endogenous ESD for Aya

For the first question, insofar as my observations based on a limited number visits, Aya still has space for more development in terms of quality of life. The ACC system to which Gohda entrusted his hope, is being sustained but there is a risk of losing its substance by falling into the same old routine. As autonomy cannot be done in an efficient and convenient manner, constant and cumbersome efforts to maintain interactions and feedback among ward residents are required. As I have argued in Chapter 4, the solidification of the basis of autonomy such as Relational Capital takes a long time, starting from childhood throughout one's life time. Given such a cumbersome process, with an additional impending issue of the clash between new and traditional values mainly caused by generational and gender gaps, I see certain limitations of entrusting the ACC system in endogenous development for the entire future of Aya. It is reasonable that we cannot expect the same level of solidarity and trust among residents in other wards as that in Uwabata. Likewise, it is certainly logical not to depend on one system for development. Probably it is necessary to find diverse ways to support endogenous as well as sustainable development in Aya. In this respect, a new approach to endogenous ESD in Aya needs to be looked at.

Including the issue of sustaining the quality of the ACC system, I believe that the robust human development efforts that will generate right leadership truly necessary for Aya, will be the key to eventually overcoming certain bottlenecks such as a shrinking labor force due to the falling birthrate and aging population, which typically happens in a medium sized rural town. Human development, however, requires a long-term perspective.

One potential I found is the interface between school education and communal education in Aya. According to my interviews with the principals of Aya Primary School

and Aya Junior High School, what we call “official” ESD has not yet been introduced in the school education. Yet, these two schools have been carrying out certain activities probably equivalent to ESD. The activities are called community school activities.

The community school as promoted by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) started as primary school activities in the annual year of Heisei 18 and Heisei 19 [from April 2006 until March 2008]. However, according to the Aya Primary School principal, such activities already existed before and what was done was to fit existing activities into the framework of the community school which the MEXT demanded in order to designate Aya Primary School as a research study school and provide a subsidy. These activities involve exchanges between children and local people (e.g. elderly persons living in nursing homes, persons with handicaps) and experience-based learning such as rice and sweet potato planting and harvesting, catching eels, studies on aquatic organisms, and so on.

Interestingly, even though school projects from MEXT finished in March 2008, the Aya Educational Board decided to continue the community school activities and to involve Aya Junior High School as well from Heisei 20 [April 2008 onwards]. Aya Junior High School began a unique community school activity involving a three-day camp, the content of which was planned by children. The aim of the community school camp is to learn more about Aya town, its history, the ACC system, current issues, traditional craftsmanship, organic agriculture, and so on. The camp included a forum of exchange with all 22 ACC Directors and other various local people with the necessary knowledge, wisdom and experience. This is an activity led by the proactive leadership of Junior High School children. The Aya Junior High School principal acknowledges the advantage of being in Aya to do community school activities.

“Having a long historical background, the ACC system has established a good cooperative framework with schools, which is an advantage of Aya in comparison with other municipalities. With this community school framework, schools can ask communities for help and the communities also suggest what they can do for us.” (The male principal of Aya Junior High School on 4 August 2009) [Translation by author]

Yet, the typical dilemma of limited time exists in both schools.

“Children have to do Children’s Association activities, sports activities, and also study. It is so difficult to make these all compatible, but schools cannot complain about the ACCs. Here, the ACCs has the power.” (The male principal of Aya Junior High School on 4 August 2009) [Translation by author]

“To be honest, school has no time for school-community alliance. The capacity of school has a limit. The number of hours allocated for interdisciplinary learning [Sougouteki

Gakushu no Jikan] which is currently 105 hours per year ... will be reduced to 35 hours in H.23 [from April 2011]... Shouldn't it be the communities that play the main role of community school?" (The male principal of Aya Primary School on 4 August 2009) [Translation by author]

In fact, since 2001, the ACC in all 22 wards have a common activity during school summer vacation called *Tohkan-Bi*, which is a one day activity for primary school children to go to the ACC to learn and play together with local people. It was a replacement of one school day during the summer vacation and proposed by the former primary school principal. He wanted children to know more about the local people, local tradition and community where they live. The suggestion was actually welcomed by the ACC directors and thus the activity has been supported until the present time.

Besides such ESD-type activities, environmental education such as an eco-school at Aya Junior High School also exists. Eco-school is a spring camp involving lodging three nights at the Miike Miyazaki Nature House for Youth in Miyakonojoh City. Children experience mountain climbing, sleeping in a tent, cooking, bird watching and listening to lectures by specialists on environmental issues such as global warming. Apart from school activities, an NPO-based environmental educational activity called *Gendabo-no-Mori-Zukuri* [Building Children's Forests]" started on 7 February 2009. It involves planting of 2,300 trees of 29 species of deciduous broad-leaved tree and evergreen broad-leaved trees on land owned by Aya Town, with an aim to make a new *Satoyama* forest for children in Aya to play around. 150 people including children in and out of Aya participated in the tree-planting event.

In summary, besides the endogenous ESD I found in Uwabata, there are various ESD and environmental education related activities taking place in Aya as a whole, and the various stakeholders include schools, the ACCs, local people, Aya Town Municipality and NPOs. Aya is fortunate to already have such local-based and environmental-conscious activities and yet, each stakeholder does the activity from its own interest and there is no coherence among these activities despite the goodwill of these stakeholders.

"We do events and activities here and there, but I do not see the vision of child-raising in Aya. Aya Town must propose a philosophy shared by all the residents. That is, human development and community development." (The male principal of Aya Junior High School on 4 August 2009) [Translation by author]

The concerns raised by the principal of Aya Junior High School as above are the same as mine. Human Development of the children in Aya seems to have a critical link with both

endogenous development and the sustainability of the communities of Aya Town. Since the period of rapid economic growth, parents in rural area encouraged their children to get better jobs in urban cities, which eventually helped Japan to become one of the top GDP countries in the world while sacrificing the rural areas by letting the young rural population to decline. Given that the demographic peak of the total Japanese population is over and there is weakening production capacity of the initial industries in Japan, Japan is now needing a new paradigm which balances the economy and the environment, beyond the “folly” of economic growth during the 20th century. Children should have freedom of choice, including where they live and lead their entire life. In the last half century, most children in rural areas have been towards jobs in urban cities. This tendency may still continue and yet, children should be given an equal opportunity to know better the local nature and local community where they grow up, as well as to gain universal and scientific knowledge provided by school education.

Aya has the ACC system, a great tool that enables the residents to maneuver its autonomous way to attain quality of life but the tool has to be used according to the vision of the users. For this reason, it will be necessary to search for a new development of endogenous ESD in Aya and at the same time, to educate and inspire a new vision for current and future leaders in Aya, in which the endogenous ESD must have its roots.

- **Endogenous ESD beyond Aya**

Now, the answer to the second question about the indigenousness of endogenous ESD in Uwabata is, to a certain extent, yes. If I have done the research in the neighboring wards such as Yotsueh Ward, I might not have been able to identify endogenous ESD. Yet, the potential of endogenous ESD might exist in Yotsueh Ward too if I go through the conditions, characteristics and the roles described in section 4.3, and see where the gaps and disparities lie and what kind of new or different elements could supplement such gaps in the context of Yotsueh Ward.

Besides, I did not put “rural areas” as one of the conditions for endogenous ESD, because such a condition did not emerge from all the analysis and discussions I have undertaken. However, it has to have local nature which is one of the most critical elements for endogenous ESD. Do the communities or municipalities in urban areas, like those in Tokyo, have some local nature? Probably yes, although it is very much limited. These days, city planning for new development projects involving the construction of large apartment complexes are environment-conscious and include artificial green blocks like a park and biotope. If there is no local nature, people can even create local nature, from a radical point of view. In this way, the perspective of

the applicability of endogenous ESD to other cases cannot be ignored.

Given the success of the revitalization of Aya through the endogenous development approach of Gohda, many other municipalities see Aya as a model of revitalization and are trying to follow its path and launch certain revitalization projects. Nevertheless, they are probably hardly aware of the endogenous ESD perspective Gohda actually had in his mind. If the endogenous ESD perspective is given its role in the revitalization of a municipality, it will not focus on implementing projects but rather on the relations and recovery or re-building of the relations among local nature, local society and local people.

In conclusion, the potential of endogenous ESD lies in its application to other communities or municipalities with diverse backgrounds of local nature, history, culture, socio-economic factors, and so on. Furthermore, as previously indicated, the interactions of endogenous ESD at the interface with institutional education also need to be looked at. Then, what should be the scope of the application of endogenous ESD? Should it remain within Japan or should it be expanded to overseas, such as to other Asian countries? These are the key challenges I envision in the course of the PhD study at the Socio-Cultural Environmental Studies Department.

Annex 1

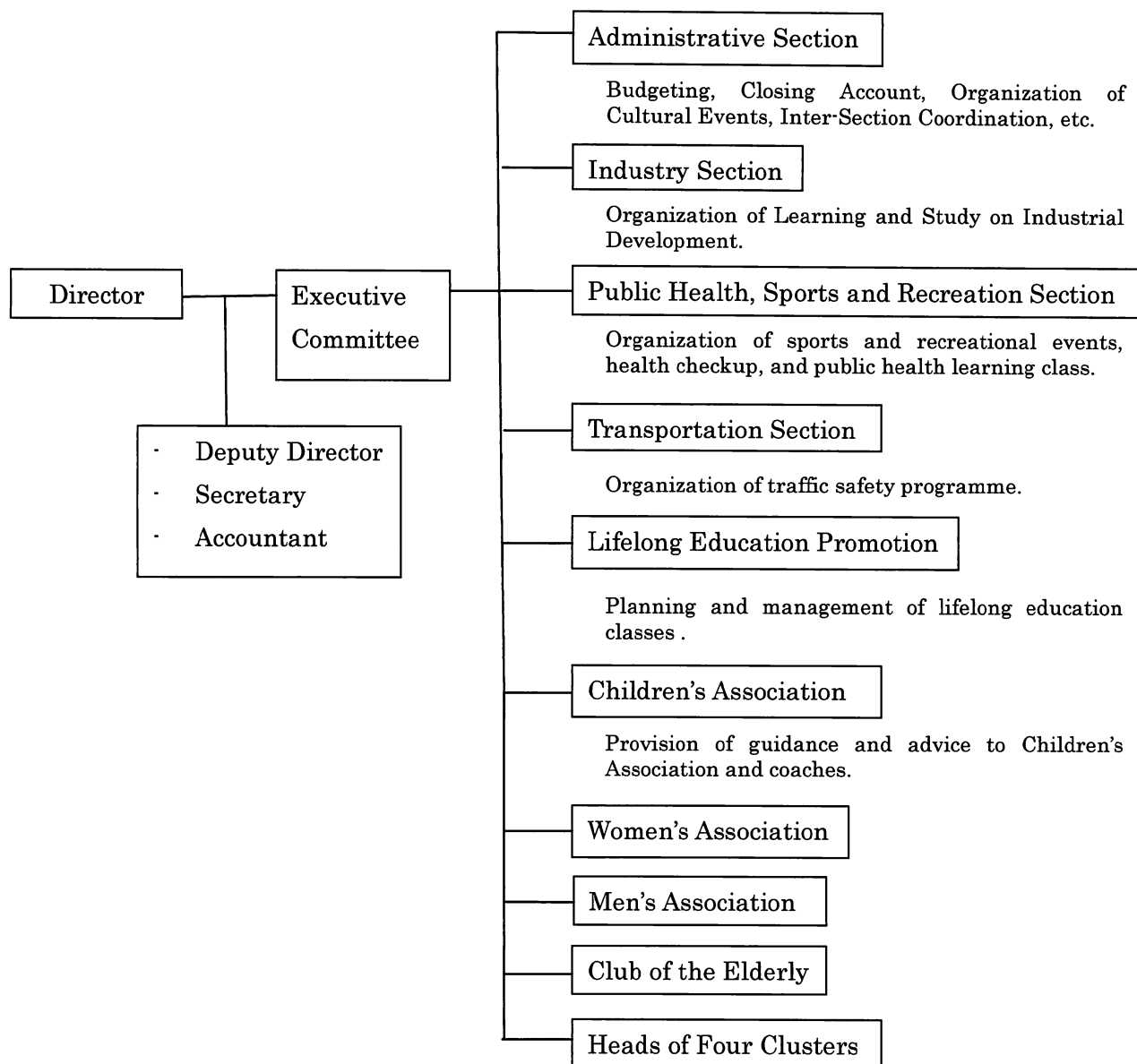
Chronology of Key International Milestones for Global Sustainability and Education

Key International Milestones for Global Sustainability	Key International Milestones for Education Associated with Environment and Sustainability
<p>1972 UN Conference on the Human Environment in Stockholm → Establishment of UNEP and IEEP proposed. 'Limit of Growth' published by Rome Club</p>	<p>1972 International Environmental Education Programme (IEEP) was established jointly by UNESCO and UNEP → Follow up of the recommendation clause 96 of the Stockholm Conference</p>
	<p>1975 International Workshop on Environmental Education in Belgrade organized by UNESCO/UNEP → Belgrade Charter built upon the Stockholm Declaration</p>
	<p>1977 Intergovernmental Conference on Environmental Education organized by UNESCO in Tbilisi → Tbilisi Declaration based on the Stockholm Declaration and Belgrade Charter</p>
<p>1980 'World Conservation Strategy' (Old Strategy) published by IUCN → Introduction of the concept of 'sustainable development' for the first time</p>	
<p>1987 Brundtland Report 'Our Common Future' published by World Commission on Environment and Development The UN General Assembly officially endorsed 'sustainable development' in the resolution 42/184 in December.</p>	
<p>1991 'Caring for the Earth' (New Strategy) published by IUCN/UNEP/ WWF</p>	
<p>1992 The UN Conference on Environment and Development (the Earth Summit) in Rio de Janeiro → Agenda 21(Chapter 36 on education) → Alternative Treaties by NGOs</p>	<p>1992 World Congress for Education and Communication on Environment and Development (ECO-ED) organized by UNESCO in Toronto → Follow up on Agenda 21, Chapter 36</p>

Key International Milestones for Global Sustainability	Key International Milestones for Education Associated with Environment and Sustainability
	1993 'Education for Sustainability' published by IUCN Commission on Education and Communication
	1997 International Conference on Environment and Society organized by UNESCO and the government of Greece → Declaration of Thessaloniki as follow up on Agenda 21, Chapter 36
2000 Earth Charter prepared by Earth Charter Commission	
2002 The World Summit on Sustainable Development in Johannesburg in June → Plan of Implementation (Clause 124 on education for sustainable development)	2002 UN Resolution 57/254 on the Decade for ESD (DESD) in December.
	2005 Launch of the DESD (2005-2014)

Annex 2

Organigram of ACC System



Annex 3
Annual Plan of the ACC in Uwabata Ward
Calendar Year of 2008

<p>Overall Objectives:</p> <ul style="list-style-type: none"> ● Help children grow sturdily ● Improve our environment and nurture a rich spirit ● Make our life healthy and convivial
--

	ACC	Industry Section	Public Health and Recreation Section	Transportation Section	Women's Association	Men's Association	Children's Association	Elderly Club
April	<u>Obana/MCherry Blossom Viewing</u> General Assembly Executive Committee Meeting (on the 10 th)	Executive Committee Meeting (on the 10 th)	Executive Committee Meeting (on the 10 th)	Spring Traffic Safety Campaign Executive Committee Meeting (on the 10 th)	Executive Committee Meeting (on the 10 th)	General Assembly Executive Committee Meeting (on the 10 th)	Cleaning of the ACC building Executive Committee Meeting (on the 10 th)	Cleaning of Ikusago Shrine (every month) Ground Golf Activity (every month)
May	Cleaning of River Banks Round-Table Discussion with Town Administration	Flower Planting Clean-up Activities	Ward Heads of Section Meeting at town level			Ward Heads of Association meeting at town level	Birdhouse making. Collection of used bottles, Fund-raising for tree-planting	Friendship Farming activity Club gathering (every month)
June	Training of the executive committee of South Cluster Nutrition Class					Round-Table meeting at block level Field visit to other Prefecture		
July	Participation in the Summer Festival at town level Ward Round-Table discussion	Clean-up activities	Recreation	Summer Traffic Safety Campaign	Participation in the Summer Festival at town level	Participation in the Summer Festival at town level Men's mini volley ball event at town level	Participation in the Summer Festival at town level	Participation in the Summer Festival at town level
August	Cleaning of Ward					Life-Long Education Participation in the parade for traffic safety	Family Camping	Ground Golf event at town level
September	Ward event for the elderly Ward get-together	<u>Jyugo-Ya Festival (Moon-Viewing)</u> <u>Shanichi-Koh</u>	Ward Heads of Section meeting at town level	Town event for Traffic Safety Promotion Autumn Traffic Safety Campaign	Ward event for the elderly		Participation in the Ward event for the elderly <u>Jyugo-Ya Festival</u>	Ward event for the elderly
October	Town Sports Festival Cleaning of Ward	Visits to home vegetable gardens	Town Sports Festival	Lectures on Traffic Regulations	Association Meeting			Athletic Meeting for the elderly
November	Cultural Festival for Hand-made Crafts at town and ward levels Support to Evergreen Broadleaved Forest Marathon at town level	Cultural Festival for Hand-made Crafts at town and ward levels		Traffic Safety Class	Cultural Festival for Hand-made Crafts at town and ward levels		Cultural Festival for Hand-made Crafts at town and ward levels	Friendship Farming activity
December	<u>Festivity for Ikusago Shrine</u>			Ward Heads of section meeting at town level End-of-year Traffic Safety Campaign		Life-long Learning Class	Flower Planting Christmas Party	Bamboo bloom and wiping cloth making
January	<u>New Year's gathering</u>				Association Meeting Women's gathering at town level			
February	Life-long Learning Event at town level <u>Hina-Yama (doll's) festival</u>	Furrow Burning		Eradication Campaign against Drink-driving		Meeting with the Women's Association	Setsu-Bun ¹⁴¹	Flower Garden keeping Health Promotion Class
March	<u>Hina-Yama (doll's) festival</u>				Association Meeting	Joint Training with the Women's Association	Farewell and Welcome Gathering	General Assembly Meeting

*traditional events are underlined.

¹⁴¹ *Setsubun* (February 3 or 4); the day before the beginning of spring according to the lunisolar calendar. On the evening of this day, people open the doors of their houses and drive the demons (i.e. bad luck) out of their homes and gardens by throwing handfuls of beans and shouting "Demons out! Good luck in!" (source: Nittesu Gijutsu Jyoho Center 2006, the 8th edition: *Nippon—the land and its people*, Nihon Gakusei Sha, Tokyo.)

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