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Abstract

Economic growth, often measured by gross domestic product, has a mixed record in enhancing the sense of people's happiness while exacting a high price from society – paid in environmental and social problems – as data from Japan show. We need to see not just events and patterns but also underlying structures and mental models. A systemic view reveals that the real problem is blind faith in infinite growth in a finite world. We must shift our focus to understanding and pursuit of what constitutes happiness. The new paradigm requires a new framework and a new set of indicators.

In Japan today, we are beginning to see many grassroots activities that enable us to depart from blind faith in economic growth. The authors present a framework for a more holistic view of happiness, with cases from Japan, such as a company shifting its primary goal from sales growth to enhanced GCH (Gross Company Happiness) and the "Candle Night" movement co-initiated by one of the authors.

The myth of economic growth

The notion that economic growth or income growth leads to happiness has become an unspoken premise for today's world. Economic growth, often measured by gross domestic product (GDP), however, has had a mixed record.

Japanese GDP per capita increased eightfold from 1955 to 2005. In the early years, the growth of the economy not only raised the standard of living but also helped boost school enrolment and human longevity, thereby enhancing human capital. In the past 30 years, however, we have seen an overall decline in the sense of happiness.

People are gradually finding out that high economic growth has not brought them happiness or fulfillment. In modern-day Japan, since the 1960s, people believed that working hard day and night at a job would make them happier.

But what have we really got as a result? Our society is suffering from dysfunctional families because of absent fathers, juvenile delinquency, and mental depression. There has also been a rash of shocking murders. Elementary school kids have been killed by their friends. Parents have been killed by their children, and vice versa. In some incidents, for no other reason then a sense of frustration, some people have taken the lives of strangers.

Economic growth's side effects

While economic growth doesn't lead to happiness, it has created many side effects.

Globally, human activities emit over eight billion tons of carbon into the atmosphere every year, about twice as fast as the rate of removal by ecosystems. Global oil production may have peaked in 2006. Some 36 countries worldwide face serious food shortages. By the middle of this century, no fewer than seven billion people in 60 countries may experience water scarcity.

Material consumption and production has gone well beyond its sustainable levels, and as a result, we are experiencing crises in the world in terms of climate change, energy, food, water, and so on. We address these issues with efficiency, especially through technological advances, but the appetite for growth has overtaken those efficiency improvements.

Further, contrary to the widespread notion that economic growth saves nations or households from poverty, it has actually widened

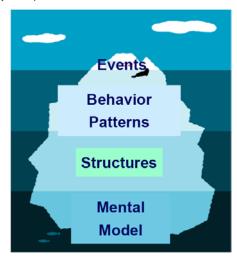
the gap between rich and poor, and our political systems haven't been able to reconcile skewed distribution of income and wealth, resulting in social problems of poverty, education, health, and human rights.

Systemic view of economic growth

Albert Einstein pointed out that "We can't solve problems by using the same kind of thinking we used when we created them." It's time for us to step back and see it differently.

To change our level of perspective, we should first recognized that underlying the events we take part in or witness there are behavior patterns that lead to the events, structures that create the patterns, and mental models behind such structures. The deeper we understand the problem, the more holistic and essential we can approach problems. (Chart 1)

Chart 1: Levels of Perspective



Patterns of "overshoot and collapse" are rampant throughout Earth's ecosystems as the growth of human population and economic activities have gone beyond the planet's limits. On the 550 other hand, the level of happiness in Japan and other industrial nations such as the UK and US, despite continued economic growth, has been stagnant, if not decreasing.

Population and the industrial economy are known to be strong reinforcing feedback loops. People give birth, and children born increase the population, which will lead to more births. Industrial capital manufactures goods. Some goods are consumed or designed to provide services such as agriculture, resource extraction, and human services, but others become industrial capital, which will result in the manufacture of more goods.

In the past century, we have seen exponential growth of both population and industrial capital. This growth has driven more growth in the consumption of materials and food, the use of energy, water, and chemicals, and emissions of polluted air, water, substances and waste. Their trajectories are all the same—upward.

Can the Earth sustain these activities, and if so, for how long? Many signs around the world indicate the answer is no, and that we have already gone beyond the limits. A delayed consequence could be the collapse of civilizations.

Mathis Wackernagel and Bill Rees developed an indicator called the Ecological Footprint. It measures the impacts of human activities relative to the Earth's capacity to provide various services such as resources and sinks. According to their analysis, human activities require 1.4 times the capacity of the Earth. But we have only one available.

Right leverage point but wrong direction

Nations address growth as a leverage point to deal with economic, social, and environmental problems. They are correct except that they push the growth in the wrong direction.

Economists often see the economy as a process to transform capital comprised of materials, labor, and money into flows of goods and

services that provide utilities for the people. One of their fundamental assumptions is that the higher the utility, the happier people will be.

As is evident with industrial nations, the ever-growing flows of goods and services have not made people any happier after they've fulfilled their basic needs. In fact, they made people less happy because they're paralyzed by pursuing *more*, not just *enough*.

We have to realize that accelerating and maintaining economic growth isn't a solution to these problems. Actually, it creates more problems. At the core of these problems is blind faith in economic growth in our finite world. This unchecked growth has been creating many more symptoms of the problem rather than fixing them.

Framework for sustainable development

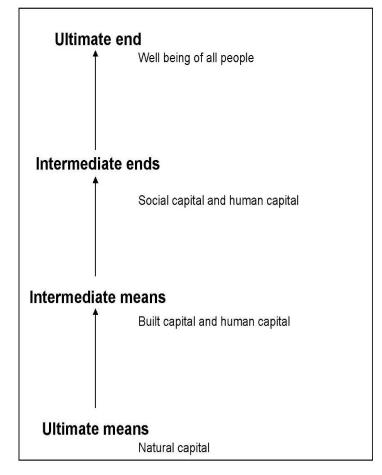
We must shift our focus to understanding and pursuit of what constitutes happiness. The new paradigm requires a new framework and a new set of indicators.

We must first examine what are ends and what are means. What we need to pursue is the wellbeing of people, and economic growth is only a means to that end. We must shift our paradigm of economic growth to that of pursuits of a higher purpose of life.

The new framework needs to address the fact that capital should create wellbeing rather than flows of the economic outputs. It needs to take into account natural, human, and social capital that enables the wellbeing of people.

Herman Daly drew a diagram called the "Daly Triangle." Its main idea is to situate the human economy within a hierarchy, resting on a foundation of natural capital and reaching to the ultimate purpose of people's happiness (Chart 2).

Chart 2 Daly's Triangle



In this hierarchy, at the base is the ultimate means, or natural capital, such as solar energy, the biosphere, earth materials, and biogeochemical cycles, out of which all life and all economic transactions are built and sustained.

The intermediate means are tools, machines, factories (built capital), skilled labour (human capital), and processed raw

material and energy, which define the productive capacity of the economy.

The intermediate ends are the outputs of the economy – consumer goods, health, wealth, knowledge, leisure, communication, and transportation. They also constitute social and human capital.

At the top of the hierarchy is the ultimate end-wellbeingembodied by happiness, harmony, fulfillment, self-respect, selfrealization, community, identity, transcendence, and enlightenment.

Donnela Meadows underscored the central ideas of this hierarchy: that the economy is borne up by and draws from nature and that it serves higher goals and is not an end itself. The primary goal of a sustainable society is to produce the greatest possible ends with the least possible means.

Its basic aggregate indicators are the *sufficiency* with which ultimate ends are realized for all people, the *efficiency* with which ultimate means are translated into ultimate ends, and the *sustainability* of use of ultimate means. The focus should be wholeness, not maximizing one part of systems at the expense of other parts.

The goal of perpetual economic growth is nonsensical, because the material base can't sustain it and because human fulfillment doesn't demand it. What we need is to pursue good science to use natural capital sustainably, to make economy and politics just and efficient, and to nurture a culture that illuminates the higher purposes of life.

Slow society—Japan's emerging paradigm

Although Japan has been no exception to following the growth paradigm, we are starting to see many grass-root level activities that shift the paradigm to a new realm. To shift our attention from economic growth to wholeness, one of the possible leverage points

is to slow down the economy. Slowing down allows us to regain our time—with which we can step back, see the whole, and contemplate what is really important.

In Japan, the concept of a "slow life" movement has been booming for several years. The movement is evident in books, magazine feature articles, websites, and newspapers ads. Some big bookstores have a section dedicated to slow life and slow food. You can even hear "slow music" on Japanese airliners.

If people who were originally slow start to slow down, it may not make much difference, but if tense and fast-paced people become relaxed and slow down, it may be an indicator of something major.

In general, the Japanese people are very punctual, and their society may be regarded as a fast society in many aspects. According to data from electric power companies, for example, the average length of accidental blackouts per customer per year is only two minutes in Japan. In contrast, it is 80 minutes in the United States, 70 minutes in the United Kingdom, and 45 minutes in France.

Data on delays in train arrival times, collected by the Central Japan Railway Company, indicated that the average delay for its highspeed bullet trains was 0.7 minutes per train last year, and 0.1 minutes two years ago. In Japan, if a train arrives at a station more than 1.5 minutes behind the schedule, it is counted as delay. The equivalent delay is five minutes in the city of New York, and three minutes in Berlin.

A typical businessperson in Tokyo spends only five minutes to eat lunch. And many do so while reading a document or newspaper. Generally speaking, the Japanese are fast-paced people.

It seems, however, that the structure or mindset of Japanese society has been changing slowly but steadily.

An increasing number of people have noticed that something is wrong. Although they have worked really hard, they have not 555 become happy. They feel unconsciously or subconsciously that they might have lost something precious in the process, which makes them stop and say, "Wait a minute." Such a feeling seems to underlay the emergence of a slow movement in Japan.

Iwate's take-it-easy declaration

Iwate Prefecture issued a "Take-It-Easy Declaration" in 2001 to launch a movement away from the prevailing ethos of economic efficiency. "Let's make our life in the new century more human, more natural, and simpler"—these ideas indicate Iwate's ideal, epitomized by its "Take-It-Easy" slogan. For example, Iwate's approach to buildings is to preserve traditional wooden houses that stand in harmony with nature, rather than to cut forests to make way for state-of-the-art buildings. Such a sense of harmonious coexistence between nature and humans is highly valued in Iwate's take-it-easy movement.

The expression 'working hard' has been a symbol of the high economic growth period in Japan," said then-Governor Hiroya Masuda of Iwate Prefecture. "Iwate's Take-It-Easy Declaration might appear to encourage laziness, but in fact it does not. Rather, it symbolizes our intention to live a more natural life.

Iwate tried to reach a larger audience by placing national newspaper advertisements for its "Take-It-Easy Declaration." The slogan, encouraging an intentional shift away from contemporary values emphasizing economic efficiency, has been well received by people across the nation.

The rise of slow cities

Not only Iwate but also other local governments are campaigning for a more relaxed and comfortable lifestyle instead of the current lifestyle characterized by efficiency and speed. In the last couple of years, increasing numbers of municipalities have joined this movement, for example, by adopting "Slow Life" as their slogan

and by assigning a "Slow Life Month" for special events to raise residents' awareness of slower lifestyles.

Kakegawa City, which adopted the nation's first "City Declaration of Lifelong Learning" in 1979, has been actively promoting the development of human and community resources through lifelong learning. The city's twenty-year experience with this endeavor has culminated in the creation of a new vision fittingly called "Slow Life." Mayor Junichi Shinmura was reelected after advocating slow life in his campaign during the most recent municipal election.

A Slow Life Summit was held on August 24, 2003, in the city of Gifu with the participation of 20 municipalities from around the country that have embraced slow life as their slogan. They adopted the Gifu Declaration on Creating a Slow Life Community for designing a community where citizens can enjoy life to the fullest.

Japan's Environment Ministry mentioned the term "*slow life*" for the first time in the 2003 edition of its Environmental White Paper – a sign that the movement is spreading.

Minamata's transformation from "polluted" to "environmental" city

In the last few years, a new movement to "rediscover one's community" has been growing throughout Japan. Local residents are leading this new drive, known as *Jimoto-gaku*. It encourages citizens to rediscover the uniqueness of their lifestyles and regional culture in order to plan a thriving and livable community while being aware of outside influences, worst cases of industrial pollution started unfolding in the 1950s, with its after-effects lasting still today. The city came up with the idea of *Jimoto-gaku* to redesign itself as an environmental model city, transforming a bitter legacy into a positive future for its citizens.

All residents in a community take part in examining and learning about the wisdom, skills, and human and natural capital of their

community. In *Jimoto-gaku*, local people are referred to as "people of the earth" and non-locals as "people of the wind." When working together, "people of the wind" offer ideas and viewpoints to "people of the earth," an approach that helps keep the community vibrant. Sometimes unique characteristics of the community can only be seen through the eyes of "people of wind." This "cross-breeze" helps to stimulate co-operation among residents who may have had little contact with each other before. In addition, the wisdom of the elderly is a vital part of the equation of *Jimoto-gaku*. They have valuable ideas and lessons to impart to the next generation. In return, the elderly are infused with the power of youthful ideas and exuberance.

The first step to understanding the uniqueness of a community begins with an evaluation of its strengths and assets. Locating and understanding all assets is an important part in this process. A community's assets can include its environment, climate, culture, tradition, history, and ethnicity.

The next step is studying how these assets have evolved through time. Unique ways of life exist in unique environments, this is known as *shindofuji*, a Buddhist term meaning our bodies are inseparable from the environment. That is to say, the environment makes us what we are. Understanding the uniqueness of the environment and daily life helps local residents to decide how much outside influence is appropriate.

People in Minamata have long suffered from what became known as Minamata disease, an industrial illness caused by eating polluted fish and shellfish. Around 1954, many cats started dying of an unknown cause in local fishing villages. Although methyl mercury discharged by the Chisso Corporation had been suspected as the cause, the central government took no measures until 1968, when it acknowledged that the disease was caused by pollution from the Chisso factory. The government's failure to take prompt measures such as banning fishing, and the company's

failure to stop producing the pollutant pushed the number of direct victims to over 10,000. Forty years since the discovery of the disease, no cure is yet available, and many victims of fetal Minamata disease still suffer to this day.

Although the disease became known internationally, however, other than people in the fishing villages, the residents of Minamata knew little about it or its victims. Both the local government and also ordinary citizens with various interests clashed with the victims. Over the years, they have learned to avoid this issue.

Tetsuro Yoshimoto, a local government official in charge of promoting regional revitalization at the time, thought that if citizens understood correctly what had happened in Minamata and knew more about the community, it might contribute to solving the problem. To ensure that the many Minamata disease victims had not suffered meaninglessly, he thought of applying this idea of community regeneration. He proposed a new idea for the community where local citizens could feel connected and proud. This was the birth of *Jimoto-gaku*.

Yoshimoto then gathered ten citizens from the age of 20 to 50 from each of the 26 districts and organized a group that facilitated various activities in the area. Under the motto, "We will stop asking for things we don't have, and will start doing what we can," the group began searching for positive aspects around them. They also reexamined how the Chisso Corporation had contaminated the food chain, the plight of the victims, and the state of their community. Gradually, dialogue between the victims and the rest of the citizens started taking place, and their communication improved.

The conflict generated between the citizens and the victims was transformed into positive energy to generate something new. Open, non-judgmental dialogue helped each group to recognize and accept differences with other groups. Citizens became eager to create a new community by and for themselves.

The first theme the citizens took up was water. They investigated the source of their water and wrote down the findings on a map. They then began inventorying other assets, including locally grown yams, mountain plants and herbs, sweetfish, Shinto shrines, and ancient trees. Anything in a community could be seen as a precious asset. At first, people didn't imagine these things could be their assets. "These are assets? We have lots of them!" The residents all cooperated in making a local "resource map."

By practicing *Jimoto-gaku*, the citizens realized how the city had capitulated to outside influences for short-term gains. They now have a clearer vision of what they would like to bestow on future generations and how to best accomplish that vision. Their conclusion was the creation of a community in harmony with nature, industry, and local traditions and customs.

Today, Minamata declares itself to be an environmentally conscious city. It established the Minamata Environmental Prize, and Environmental Meister System that recognize producers of environment-friendly products. As of October 2003, a total of 23 producers of organic green tea, rice, mandarin oranges, additivefree dried fish, and chemical-free traditional Japanese paper were officially recognized.

The concept of rediscovering your community has spread to over 100 municipalities across Japan. The town of Mihama in Aichi Prefecture, which was one of the first to take up *Jimoto-gaku*, has become a successful bamboo charcoal-producing village. This charcoal has become a specialty item in the area. The citizens in the town of Yuta in Iwate Prefecture have been promoting alternative energy sources such as wind power and biomass. On a prefectural level, Iwate launched an "Iwate *Jimoto-gaku*" project in 1999 as part of a ten-year development plan, and has been reassessing local assets in the prefecture. Similar efforts are now underway in the prefectures of Gunma, Gifu, Kochi, and Miyagi.

En (a wonderful Japanese word, translated as bond, fate, or karma in English) is appropriate in considering the underlying ideas of *Jimoto-gaku*. There is *en* with nature, *en* with ancestors, and *en* with local residents who share a common future. *Jimoto-gaku* helps remind citizens of their communal *en*, a feeling that had been fading in recent years.

By taking good care of the precious gifts of nature and the value of local customs and traditions, residents develop a wonderful sense of pride and love for their community. Ultimately we are all connected and decisions we make at a local level have the power to extend around the globe. Across the mountains, crossing the oceans, each community is connected with an invisible bond.

Non-growth-oriented companies

Comparable changes in mindset, though less extensive or visible, are steadily taking place in the corporate world as well. Many business people and owners of small- and medium-sized businesses now ask, "How can we incorporate slow-life elements into current business activities, which tend to assume that we must always have economic growth?" Questions like this trigger an awareness that our socioeconomic system must change drastically. Some businesses have started to adopt a set of values that departs from the prevailing ones.

Ina Food Industry, the country's leading agar product (edible gelatin from seaweed) manufacturer, declares that its "Tree Rings" form of management has given it 49 consecutive years of financial growth despite being in a volatile industry. This company never follows the fads, but has focused its innovation on what is really good for customers. The secret of success is that even when it had developed new products, it timed the product launches with the capacity growth of its employees. The company believes that the growth of people and organizations should be just like tree rings—slow and steady.

This type of change in mindset toward growth is steadily taking place in the corporate world. Many business people now ask, "How can we incorporate slow-life elements into current business activities, instead of assuming that we must always have economic growth?" Questions like this trigger an awareness that our socioeconomic system must change drastically.

Another such example is Mukouyama Painting, a small paint supply company with about 20 employees. The company's president was a typical business owner until ten years ago, pushing his people to work hard with slogans like "Boost sales by 20 percent!" But many of his employees left the company and recruiting new workers was difficult, making him stop and wonder about the huge gap between his approach and reality.

He asked himself soul-searching questions. "Who am I?" "What is the company for?" "What should I do?" Influenced by various people, he came to this conclusion: "We live in a capitalist society where people are self-centered, but I really want to live in a world full of love, peace, harmony, cooperation, and self-sufficiency." Since then he has carried out various reforms based on this new perspective.

For example, the company measures the success not by the amount of sales or profits but by what he calls GCH (Gross Company Happiness), namely, the total happiness of all employees. He took this idea from Bhutan's GNH (Gross National Happiness) index. In each of the past eight years, he set a sales goal that meant negative growth, say, 92% of the previous year's sales, thinking that aiming to serve customers well rather than to increase sales would be good for the happiness of his employees.

Now the company is known for its commitment to social responsibility and is well received in the community. The turnover rate of employees has dropped to zero. The president is happy, and so are his employees and the community.

An increasing number of companies have decided not to try to expand their business, or adopted a no-growth policy, so as to realize the real happiness that these companies were established to offer.

The candle night campaign

The Candle Night, an evening when people turn off their electrical lights and instead use candles at a predetermined time, was initiated by two Japanese non-governmental organizations (NGOs) – Daichi-O-Mamoru-Kai (also known as the Association to Preserve the Earth) and the Sloth Club – which worked to start a voluntary blackout movement in Japan. The first Candle Night, held on the summer solstice, June 22, in 2003, was launched together with other environmental groups using the slogan "Turn off the lights. Take it slow."

The Candle Night initiative simply suggests that people switch off their lights for two hours, from 8:00 to 10:00 p.m., on the night of the summer solstice and enjoy some time by candlelight in any way they want – having dinner, listening to music, taking a bath, etc. Some join in local Candle Night events, while others simply enjoy a quiet night without watching TV. It is a voluntary, participatory, and creative cultural campaign that suggests that people share "alternative ways of spending time" and "more diverse scales of affluence" by temporarily turning away from goods and information as an experience shared by society as a whole.

Beyond political messages such as saving energy and protesting the use of nuclear power, Candle Night encourages a broader concept that calls for enjoying time on one's own terms by "turning off the lights and taking it slow." It has attracted many supporters. The initiative was started with the hope of involving as many as one million people. It turned out that some five million across the country participated the first time (according to an estimate by the

Ministry of the Environment), and more than 200 major landmarks such as Tokyo Tower and Himeji Castle turned off their lights.

Since then, Candle Night has taken place on the summer and winter solstices every year, and involved more supporters and events each year. In 2007, a total of 39,845 major facilities, including the famous landmark, Tokyo Tower, switched off their lights, reducing power consumption by 812,508 kilowatt-hours across the country during the event.

The event is now spreading across the world. The Korean Environmental Women's Network, an NGO in Korea, worked closely with Japanese Candle Night organizers to hold its own Candle Night. Events were also held in Taiwan, Australia, China (Shanghai), Mauritius, and many other countries. The Candle Night Committee now sends out newsletters in English to 64 countries in its bid to connect activities and share the inspiration.

Featuring a sense of connection and happiness

The key promoters of this event only provided a platform, however, and do not take the lead in spreading the movement. That is probably why many events are independently organized and the movement has spread so fast around the world.

Each of us may feel that alone our impact is small, but when people act together positively as one, the results can be powerful. The Candle Night Committee is hoping to connect with other movements in the world, such as the group organizing Earth Hour in Australia, identify the links among the motivations behind the various movements, and then make them visible. Many people are concerned about our planet and future, but we have not yet reached the point where these feelings are strong enough to turn into actions that drastically change politics and the economy. The Candle Night Committee would like to connect people through these shared thoughts and feelings and transform them into power.

The Candle Night website, the "Candlescape," uses advanced information technologies such as cell phones and the Internet to help share such feelings and reinforce a sense of connectedness. Participants not only in Japan but also around the world can send messages that are displayed in real time globally. The messages appear as "lights" on the world map displayed on the website. The website enables participants to realize the existence of other participants around the world who share the same feelings.

Candle Night is now being observed twice a year on the summer and winter solstices. In Japan and around the world, in communities, cafes, and homes, people who share the idea have started to gather and to take action. Candle Night provides an opportunity for them to put their ideas into action.

People who participate in Candle Night are encouraged to stop a moment and think not only about their immediate personal issues but also about true happiness and the things they believe are important, even in the middle of their busy daily lives. Organizers believe that the result of taking this time to think and ponder can be used as one of the leverage points to redirect our society and economy onto a better path, both in Japan and around the world.

"Street sprinkling" cools Japan in summer

Another movement is spreading across Japan, drawing attention to a type of activity that anybody can join: the Sidewalk Sprinkling Campaign. The Japanese language has a special word, *uchimizu*, which refers to sprinkling water on the streets and sidewalks to cool them down in summer. It is a traditional custom in Japan, and was especially common during the Edo period (1603–1867). A contemporary poem on the website expresses the spirit of this reborn tradition.

All together on the same day, at the same time, sprinkle water to cool the summer heat, recycling bathing and other water. It's just little effort.

Just a little effort can cool the scorching summer.

Just a little effort can cool the heat-island effect.

Just a little effort can save electricity in midsummer.

Just a little effort can make you gentler to the Earth.

Just a little effort can refresh your mind and body.

Just a little effort can unite a community.

Just a little effort can make everyone happy.

Th Edo Period Street Sprinkling Campaign was carried out for the first time ever in Japan—and of course in the world—at noon on August 25, 2003. Many people participated and rediscovered that the wisdom of this watering custom from the Edo Period was still useful and effective today. It has been attracting new supporters, who have rediscovered the joy of doing "just a little effort." (Part of the message in Japan is about recycling water. For *uchimizu*, people are to use rainwater, bathwater, etc., rather than water from the tap. Bathwater is quite clean in Japan, as the tradition is to use the bath only for soaking after washing.)

In 2004, *Uchimizu* organizers set a target of lowering the temperature in central Tokyo by two degrees Celsius, appealing to the public with the slogan "Bring on the wind." This attempt was planned as a real-life test of computer simulations of the cooling effect of water sprinkling that had been conducted by the Public Works Research Institute (under the Ministry of Land, Infrastructure and Transport of Japan). This time, sprinkling by the 300,000 participants succeeded in dropping the temperature by one degree Celsius.

Neither Candle Night nor the Edo-Period Sprinkling Water Campaign is huge movements that could dramatically reduce human impact on the environment. But global environmental issues are ultimately concerned with our ways of life and our

happiness. So no matter how advanced our technology, or how excellent our products or laws, it will not be possible to shift toward a sustainable society if each person does not have a fresh look at his or her lifestyles and values.

In that sense, these movements could be seen as new and noteworthy in that they show us the meaning and significance of "just a little effort," and let us feel the joy of translating ideas into action to lead to the wave of social change.

Final remarks

For many developed nations, "slowing down" is not only effective in changing our "overshoot and collapse" trajectory, but it gives us a chance to stop and see wholeness, to ask ourselves what really matters, and to collectively take action toward our vision of *sustainable, efficient* and *sufficient* society. For developing nations, other considerations are needed, but perhaps they can leapfrog over the struggles with "growth" that most industrial nations have faced. Humanity has been chasing after growth for a long time. Now it's time to apply what we've learned.

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