



A CONCEPT PAPER ON SUSTAINABLE COMMUNITY DESIGN

Based on learning experiences from field studies in Japan



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Introduction

Nowadays, the term "Sustainable Community" is used widely and becomes a goal that any communities in the world aim to. A sustainable community is not just the development of economy but also the improvement of quality of life in society and the protection of environment as well. However, in order to achieve the "Sustainable Community" goal, it would largely depend on the conditions of economic, environmental and social factors in each community.

This report is our group's output basing on the knowledge we got from the seminars and workshops alongside the in four (4) field study cases of Nishiyodogawa, Karahori Town, Moku Moku Farm and Toba City, this paper shows our own opinions and discussions about the theme of "Sustainable Community Design". It is our group's aim to answer these two (2) questions:

- What are Sustainable Communities?
- How do we mobilize resources to achieve sustainable communities?

Also, we named our group "Danketsu" - a Japanese word which means "together" in English. It symbols for the group working's spirit of seven (7) of us including Jay from Philippines, Deborah from Singapore, Im from Thailand, Newni from Myanmar, Khone from Laos, Nobata from Japan and Sheila from Vietnam.

We will now bring you closer to our group discussion findings.

Executive Summary

The challenge for the 21st century is how to mobilize and manage its natural, financial, human, infrastructure and cultural resources effectively. Economic Growth Development results in the imbalance in many aspects including environmental and social pillars. This imbalance often leads to a crisis. We realized that when crisis occurs, a community has to make a decision to solve the crisis together and to find the most valuable outcome. At the same time, the decision requires a community capability to satisfy the well being of the community and to create the opportunity from the crisis. Evaluation is the last process to measure and learn from that crisis.

Toba is an example of sustainability even though it faces a crisis of the declining on Ama-san population. Even though Nishiyodogawa had positive effects for victims since the 20-year of crisis, it is not a sustainable community due its ongoing rehabilitative work at regaining its community. Karahori on the other hand, only faced a cultural crisis and is a limited example in terms of our exploration on the theme of sustainable community design.

Sustainability is an ideal goal for any society or community. A community that has positive outcomes, economic-social-environment balance and well-resource mobilization can be a sustainable community. The sustainable community is a mobile society that develops within constraints, adopt alternatives and seek to convert resources into assets. The community can either be highly mobile or lowly mobile. Sustainability depends largely on its mobilization of resources.

I. WHAT ARE SUSTAINABLE COMMUNITIES?

Sustainability or to sustain means ‘to maintain; keep in existence, keep going; prolong’. A deeper application of sustainability to human society translates into developmental goals of each community. Communities with their human systems are complex and they are a variety of factors that come into play as a community pursues its developmental goals. Sustainability therefore has to be a concept translated to a community’s development. Sustainability or sustainable development is ‘economic development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

Based on our case studies, it is evident that no community aspires unsustainability. However, there are specific features and characteristics that sustainable communities possess which contribute to positive effects of development. Sustainable communities are mobile societies that develop within constraints, adopt alternatives and seek to convert resources into assets. The Crisis Theory, Sustainable Community Model and Noodle Theory will further explain these key features of sustainable communities.

Crisis Theory

The Crisis Theory seeks to outline the different phases a community experiences and illustrates how a community chooses its course of development and the result of that development.

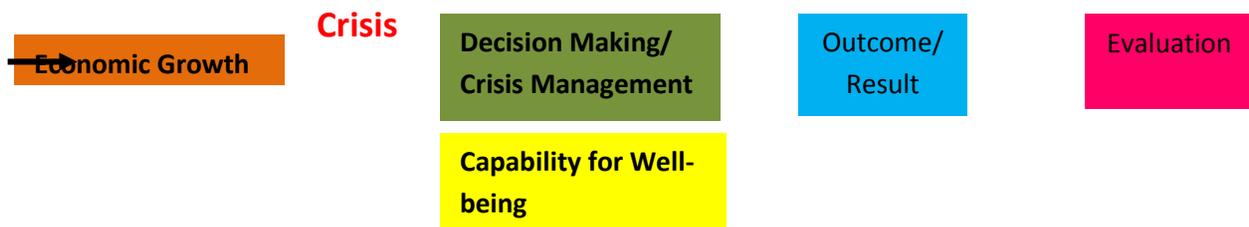


Figure 1: Crisis Theory Indicating the different phases a community experiences

Figure 1 outlines the 4 main stages of the Crisis Theory. The community pursues development prioritizing economic growth. This results in modernity while loss of traditionalism, resource exploitation and imbalance occurs. This imbalance between the economic, environmental and social sphere happens because economic development exerts pressure both environmentally and socially. These pressures then lead to crises such as climate change, cultural erosion and ultimate negative effects on human security and capital.

The crisis then propels the community to respond, make a decision and manage the crisis. At this phase, the priorities of the community are re-evaluated. This phase also requires an increase in participation of the people and with evolving mindsets, the community then is able to embrace solutions.

Prior to the crisis, economic growth might have been pursued at the expense of human development. The crisis however urges the community to begin prioritizing human development. Economic growth adopts a utilitarian thought that GDP and income are a status symbol of development or an indicator of developed or developing country. At the decision-making or crisis management phase, the community begins considering the capability of its citizen to live a good life. This as defined by the Capability approach is the “valuable set of valuable beings and

doings like being in good health or having loving relationship with others to which they have real access.' In other words, development is not just purely economic but begins considering the human dimension as well.

Crisis Theory in Case Studies: Karahori, Nishi Yodogawa and Toba

As a result of economic growth, the area around Karahori experienced development. The houses in Karahori were then perceived as old and dirty and citizens sought to demolish them as to keep up with the pace of modernity. The cultural crisis brought external players such as artist who were able to appreciate the value in adapting the old buildings for modern use. The establishment of the Karahori Club allowed for a slew of activities to change the mindset of the people. Crossroads, alleys and house walls in the area were decorated with artworks for appreciation by the general public. An effective network of young artists contributed to the projects, which resulted in a change in mindset of the people.

Similarly in Nishi Yodogawa, the objective of achieving economic growth contributed to the air pollution caused by the factories spreading all over the community. The environmental crisis had negative effects on human health and environment. The community in Nishi Yodogawa experienced a change in priorities that extended beyond economic growth and a quest to restore the quality of life back in the community. The community realized that the value and capability of the average citizen was priceless and needed to be a priority. This then propelled the citizens to act upon the problem and pursue a lawsuit. The lawsuit resulted in a community embarking on measures such as emission control and establishing a social organization to continue rehabilitative work in the community. However, it is evident that it is still a polluted community with air contamination from factories. In addition, the urban design in Nishi Yodogawa also requires further improvement where schools should not be built beside factories.

In Toba, the ageing problem is a product of Japan's economic development which saw resulted in a decline in birth rates. The crisis in Toba is largely cultural where the threat of the loss of the Ama culture is one that the community is currently battling. Stakeholders, especially local government and private sectors, are realizing the crisis and are adopting various methods to resolve it. While we are unable to comment on the outcome of the crisis, Toba has displayed a few traits of sustainable community. Firstly, Toba preserves it Ama culture by developing alternate sources of income for Ama so as to attract more females to be Ama divers. Secondly, while developing economically, Toba also ensures that they are measures in place so that current human activities do not exploit or exhaust marine life and natural resources. Thirdly, I think Toba has also used human resources creatively. This is seen through the Shimakko guide project where children are encouraged to be tour guides so as to be aware of their resources. This education of the young contributes to the human resources development where the identity in the community is strengthened as citizens are more aware of the resources and assets in their community.

The Crisis Theory outlined the phases a community experiences through its development, highlighting points of tension caused by development and the reaction of the community in reassessing its development paradigm. However, it becomes imperative at this point to explore the characteristics of sustainable communities and this will be done through the Sustainable Community Model.

Sustainable Community Model

As mentioned, sustainable communities are communities that seek alternatives and develop within constraints. The **Sustainable Community model (Figure 1)** indicates the three main spheres that influence development and are directly affected by development in a community. Each sphere contains a capital, which is the potential required to obtain an output, infrastructure which support mobility of activity and important actors that are able to mobilize capital and infrastructure efficiently so as to obtain output that contributes to development.

Economic Sphere

The Economic sphere contains financial capital such as shares, bonds and banknotes. Infrastructure such as buildings, factories, technology, transport are mobilized by economic actors such as businesses and production companies to produce goods and services. The economic sphere supports economic activity of the community.

Environmental Sphere

The environmental sphere can be defined by the presence of a natural or physical environment. The environmental sphere comprises of natural capital which is 'natural resources (energy and matter) and processes needed by organizations to produce goods and services'. (nweni) Similarly, through infrastructure such as transport and manufacturing companies, natural resources are converted into energy sources and provide goods and services that sustain the survival of communities.

Social Sphere

The social sphere is largely concerned with human capital and infrastructure and actors constantly seek to develop human capital so as to enhance the well-being of the individual in the community. Human capital incorporates the health, knowledge, skills, intellectual output, motivation and capacity for relationships of the individual. It is developed through infrastructure that exist in the form of healthcare, education and social organizations. Actors in this sphere such as schools, civil organizations and human units such as families play a crucial role in transforming human capital into a viable contribution towards the development of the community.

Balance of the Economic, Environmental and Social Sphere

All communities are constantly developing through interplay of factors in their environmental, economic and social sphere. In the economic growth phase, as elucidated by the Crisis theory, the community prioritizes economic growth which excludes social well-being and in many instances has adverse effects on the environment. This creates an imbalance because the output of the economic sphere impedes the activity in the social and environmental spheres.

In addition, the imbalance also results in negative consequences. For instance, in the case of Nishi Yodogawa, the pursuit of development manifested through rigorous production of goods. This then resulted in pollution, which affected health of the citizens and also affected the quality on air. The Nishi Yodogawa case illustrates how imbalance is a result of the conflicting development that occurs in the three spheres and how it poses problems for the community in sustaining itself.

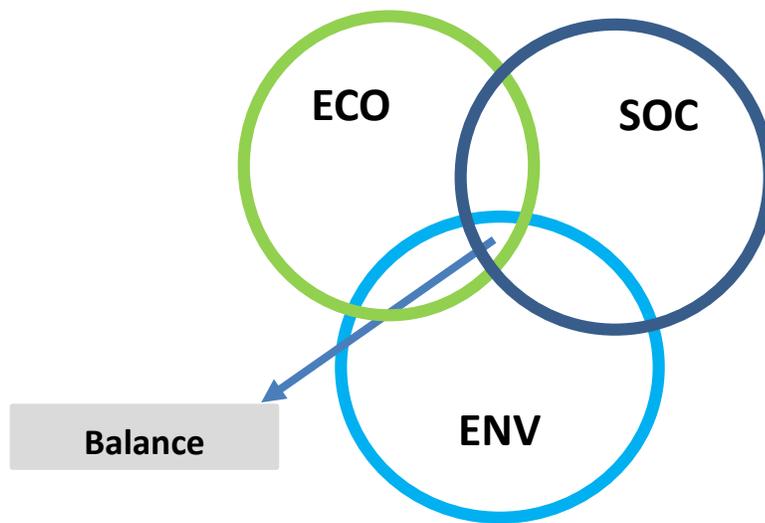


Figure 2: Sustainable community Model

Sustainable communities however, are seeking to achieve a balance between the three spheres so as to minimize negative impacts on society. As expounded earlier in a clear definition of the types of capital, infrastructure and actors present in each sphere, it is evident that all three spheres may be in conflict as the community develops. The point of balance as indicated in the figure above implies certain constraints that the community has to develop within. This move to develop within constraint or sustainable development is another indicative feature of sustainable communities.

Constraints of Development

The balance between the economic, environmental and social sphere is an important goal sustainable communities pursue as they develop. This demands that communities develop within constraint and not just solely aim for economic growth. Economic growth prescribed by supply-demand curves and market forces in Economics do not indicate a ceiling or limit. Sustainability and the notion of balance presented by the Sustainable community model advocates for constraint in the process of development. Moreover, sustainability stipulates a responsibility to future generations by preserving present resources reflects the crucial need for sustainable communities to develop within their constraints.

There are five primary constraints to sustainable development namely: **Inclusiveness, Connectivity, Equity, Prudence** and **Security**. Inclusiveness is practiced in the course of development where the existence of the economic, social and environmental spheres is not threatened. Development is inclusive because it considers the need to ensure social well-being, environmental health along with economic activity. Secondly, sustainable development also understands the connectivity between human and natural systems. This then propels a consideration of the impact of development from a more holistic perspective. Thirdly, equity is important because fair distribution of resources is important. This will ensure that the community is able to sustain resources for its future generation and also compensate if its activities are too damaging.

Fourthly, sustainable development also calls for maintaining life-supporting ecosystems and to ensure that current activities allow for regeneration and restoration of resources. This then requires current resources to be consumed within limitation so that the impact of human activities does

not exhaust resources completely. Finally, given the human centered nature of sustainable development, security is another constraint that society needs to develop within. The community needs to pursue development ensuring that life-supporting systems are preserved so as to ensure that the livelihood and survival of human beings that are dependent on the ecosystems are not threatened.

The five constraints of sustainable development postulate the need for development to be pursued within these premises. The figure below indicates the area of sustainable development. The area indicated by the red triangle reflects the move of the community in pursuing development in a more inclusive and holistic.

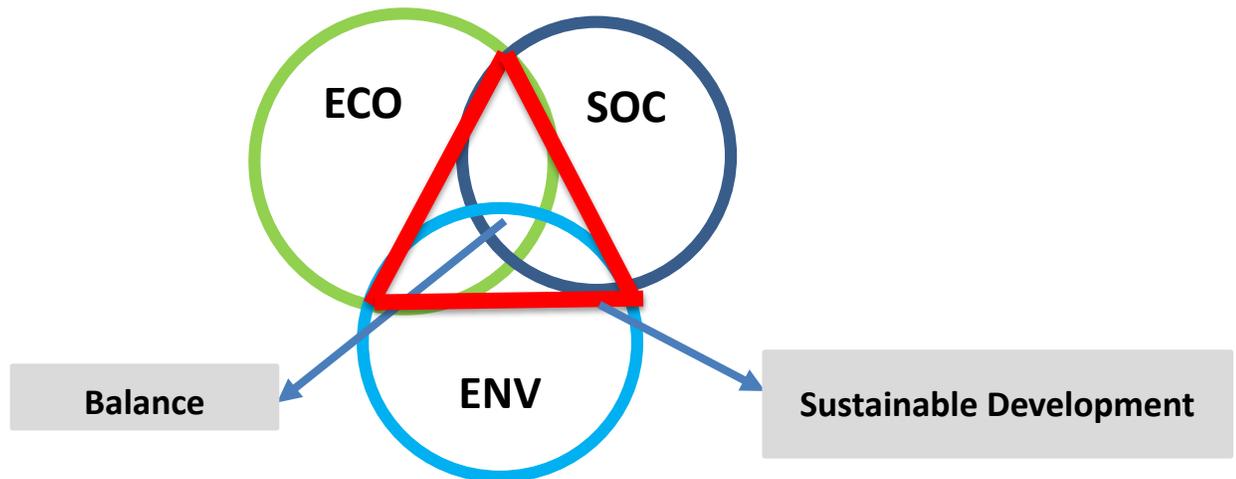


Figure 3: Sustainable development triangle

For example, in the case of Nishiyodogawa, the manufacturing companies were effective economic actors. The lack of environmental legislation on air quality was also an absence of infrastructure in the environmental sphere. These then, resulted in pollution and adverse health effects on the population. The community was not sustainable because the development was not within the constraint of balance. However, after the lawsuit, legislation on environment was developed.

In addition, manufacturing companies adopted measures on emission; companies also begin contributing to social awareness in social organizations, which created awareness on the implications of pollution. The manufacturing companies then evolved from just solely economic actors to also contribute in the social sphere. This then, shows that apart from ensuring the output of each sphere does not have adverse effect on the other, it is also imperative that the actors in each sphere contribute positively to the development of the other sphere. This also means that stakeholders take on dual roles. This results in inclusiveness and connectivity in developmental goals in the community. The convergence of the actors also provides room for resources to be better distributed and prudently used.

Therefore the sustainable development triangle is reflective of the community moving towards sustainability as its spheres converge. It also symbolizes the ability of the community to develop within constraints.

Noodle theory

Apart from developing within constraints, sustainable communities also seek constraints. The Noodle theory as depicted in the figure below posits that resources are limited and that alternatives enable resources to be utilized within constraints.



Figure 4: Noodle Theory depicting resource limitation and access

The figure below indicates three parties who are consumers of the resource which is a plate of noodles placed in the centre. A has a plate and chopsticks and is able to gain access to the noodles. Similarly B, also has a plate and chopsticks to access the noodles. C is a bystander who is not consuming the noodles at the moment but may do so at some point. A reflects a community that has limited options. B on the other hand, possesses alternatives and therefore is not heavily reliant on the supply of noodles. The absence of alternatives propels A to consume a larger amount of noodles than B. C, the bystander is reflective of the future generation that is yet to consume the resources. It is clear from this illustration that compared to A, B would be able to leave behind noodles for C's consumption. Therefore, a sustainable community that seeks alternatives ensures that its reliance on resources are well-managed. This enables it to preserve resources for its future generations.

II. RESOURCES AND ITS MOBILIZATION

Types of Resources and its Consumers

Resources, although limited, are crucial to the development of every community. Resources are a source or supply from which benefit is produced. Resources may exist in tangible or intangible forms. There are various types of resources but primarily the report will concentrate on five main resources: human, financial, cultural, natural and infrastructure.

- A. Human Resources** - HR is a set of individuals or group people who contribute and build the workplaces, for example, in a organization, business sectors, and general workers. We sometimes may find that human capital is called and used synonymously with human resources, but human capital may typically refer to more narrow and specific view. Other term are called manpower, talent or skilled people.
- B. Financial Resources** - FR as funds that is available to a business for spending. These funds may come in the form of money, liquid securities or credit lines. Common financial resources are acquired through a bank or an investor. For example, a company which is going into business, an entrepreneur needs to secure sufficient financial resources in order to be able to operate efficiently and sufficiently well to promote success.

Small businesses have a difficult time obtaining bank loans, while a large corporation may find it's funding through individual or equity investors, mutual funds and stock. Venture capitalists also invest in companies, although they have many requirements for both small and large businesses. They may require a fixed rate of return, a stake in ownership and input on management decisions.

- C. Cultural Resources** - Before talking about Culture Resources (CR), let explain the meaning of culture that involves and linked as cumulative human being from time to time. Culture refers to the cumulative deposit of knowledge, experience, beliefs, values, and attitudes.

It is the systems of knowledge shared by a relatively large group of people in any area and the sum of total of the learned behavior of a group of people that are generally considered to be the tradition of that people and are transmitted from generation to generation.

Culture Resources are defined as the collective evidence of the past activities and accomplishments of people. Buildings, objects, features, locations, and structures with scientific, historic, and cultural value are all examples of cultural resources. Cultural resources are finite and non-renewable resources that once destroyed cannot be returned to their original state.

Cultural resources include prehistoric and historic archaeological sites, historic standing structures, bridges, cemeteries, and monuments, among others. Impacts to resources eligible for the National Register of Historic Places must be mitigated through excavation, avoidance, or preservation. All Federal and most State agencies are required to identify and protect cultural resources on the lands they manage. Industries, whose projects are licensed by federal and/or state agencies, must identify and mitigate impacts to cultural resources in project areas before construction activities.

- D. Natural Resources** - Natural resources are anything that obtained or provided from earth and naturally happen within environment to satisfy human needs and wants. Natural resources are often classified and characterized by amounts of biodiversity and geo diversity existent in various ecosystems and some of them are essential for our survival while most are used and converted for satisfying human's needs.

A natural resource may exist as a separate entity such as fresh water, and air, as well as a living organism such as a fish, or it may exist in an alternate form which must be processed to obtain the resource such as metal ores, oil, and most forms of energy. There are very few resources that are considered inexhaustible, meaning it will not run out in foreseeable future, for example; these are solar radiation, geothermal energy, and air (though access to clean air may not be). The vast majority of resources are exhaustible, which means they have a finite quantity, and can be depleted if managed improperly.

- E. Infrastructure Resources** - As we know "Infrastructure" is one thing very necessary in our society and it becomes more potential to facilitate economic growth in social movement. **Infrastructure** is the basic physical and organizational structure needed for the operation of a society or enterprise, or the services and facilities necessary for an economy to function. It can be generally defined as the set of interconnected structural elements that provide a framework supporting an entire structure of development. It is an important term for judging a country or region's development. In current situation, we can find so many kinds of infrastructure resources that available in diversity communities such as roads, water supply, electoral grids, telecommunication and so forth, infrastructure can also be defined as the typically components of interrelated systems providing commodities and services essential to enable, sustain or enhance societal living condition.

Resources are consumed by Government, local residents, private sector and external players. However, resources in themselves are not valuable if they are mobilized solely for consumption purposes. While developing within constraints and seeking alternatives, it is important that sustainable communities aim to convert their resources into assets.

Resource Asset Model

The Resource Asset Model postulates that to increase the ability of communities to be sustainable, current resources need to be converted into assets. This then would increase the capacity of the community and also contribute to a more efficient mobilization of resources.



Sustainable communities convert resources into assets through mobilization.

Concept of Assets

Assets are capital, which increases present capacity and future potential. There are key five capitals model; Natural capital, Human capital, Social capital, Manufactured capital and Financial capital which providing a basis for understanding sustainability in terms of the economic concept of wealth creation or capital and consider how wider environmental and social issues

can affect long-term profitability. Social capital helps to shape the quality and quantity of a society's social interactions. This means that networks and interplay of actors happens for the benefit of community.

Importance of Assets

Limited resources create the need for alternatives. This then means that the community needs to be able to respond to the lack of any particular resource, which then requires the community to possess capital. We need to consider what the community needs to do in order to maximize the value of each capital. However, the community needs to consider the impact of its activities on each of the capitals in an integrated way in order to avoid 'trade-offs' and using these models for decision-making can lead to more sustainable outcomes. For example, in Toba, fishermen experience a limited supply of abalone during certain months of the year. This then made them consider fishing other types of marine life during that period for income. However, they are only able to do so due to the existence of capital which was present in the form of finance, information and their knowledge.

Assets creation

Assets are created through networks and the interplay of actors. The networks and collaboration between actors would contribute to the interweaving of the economic, social and environmental sphere. For example, a power plant is purely an economic actor. However, it becomes an environmental actor when it adopts measures to reduce its emissions and take precautionary measures. It also becomes a social actor when it encourages environmental activities among children. This then not only increases collaboration but ultimately contributes to social capital.

It is evident that to convert resources to assets, an efficient mobilization strategy is crucial. It is imperative that the mobilization strategy meets the goals of development that the community has. Resources are also mobilized through a variety of ways. In addition, in analyzing sustainability, it was also clear that mobility and mobilization of resources are closely linked and affect the ability of a community to be sustainable.

Mobilization of Resources

The resources are available may be useless if we don't care about how to manage and mobilize these resources to be effectively and equitable in our societies. The main following purposes resource mobilization concepts are;

1. To improve and maintain quality of life
2. To mobilize resources to convert into assets
3. To identify resources & maximize use of these identified resources
4. To increase use of resource for long-term benefit

There are six (6) ways to mobilize resources to achieve sustainable community:

1. **Education.** Take an example with Toba case. Sugashima Island is famous for the beautiful beach scenery, fresh, delicious seafood and traditional Ama (female divers) culture. By applying the activity of Shimakko Guides, a child-volunteer-tour-guide group to extra-curriculum activities at a primary school, children on the island together with their families and the local residents understand more about the value of their island as well as be aware

of the important of protecting environment and preserving Ama culture for their sustainable community.

2. **Government Policies or Legislation and Enforcement.** Nishiyodogawa is a proof in this case. "The Pollution-Related Health Damage Compensation Law" and "Nishiyodogawa Air Pollution Lawsuit" show the efforts and responsibility of government in promulgating policies and enforcement of controlling the smoke emission from heavy industry factories to the air in order to keep the clean sky for everybody in Nishiyodogawa Ward.
3. **Financial Support.** JA supports money to Moku Moku farmers to start their own business.
4. **Technology.** Which also plays an important role, a specific example for this point are Ama divers who were well-known by the traditional diving way of catching fish without any supporting equipment in the past time. Nowadays, with the support of modern technology, diving suit helps Ama divers a lot in keeping their body temperature and makes their work easier and more convenient.
5. **Mass Media.** In the case of Nishiyodogawa, Mass Media is very essential in raising the voice of asthma victims about air pollution to public as well as informing local residents about its danger to people's health and lives during and after the crisis happens.
6. **Social Participation.** Let's look at the case of Karahori Town. By applying the method of Old Structure and New Contents, the project renewed the town but still kept its traditional features. The key to make this project successful is the social participation of professional artists and volunteers artists who can be students from art universities or any people interested in joining this project.

Mobilization of Resources, Mobility and Sustainability

As mentioned above, mobilization refers to the process of assembling, organizing resources so as to achieve an output that is beneficial to the community. Apart from mobilizing resources, sustainable communities need to be mobile societies so that individuals in the community can have access to options and have equal opportunity to seize the options.

Mobility refers to free movement from one point to another. This implies that speed, capacity for movement, freedom and also having wide range of options. It also means that individuals in the community have the access to resources and have the freedom or the equal opportunity to seize the wide range of options. For instance, the existence of schools does not mean the community is mobile. The ability of children to be enrolled in the schools without restriction and be able to afford the education would determine whether the community is highly mobile.

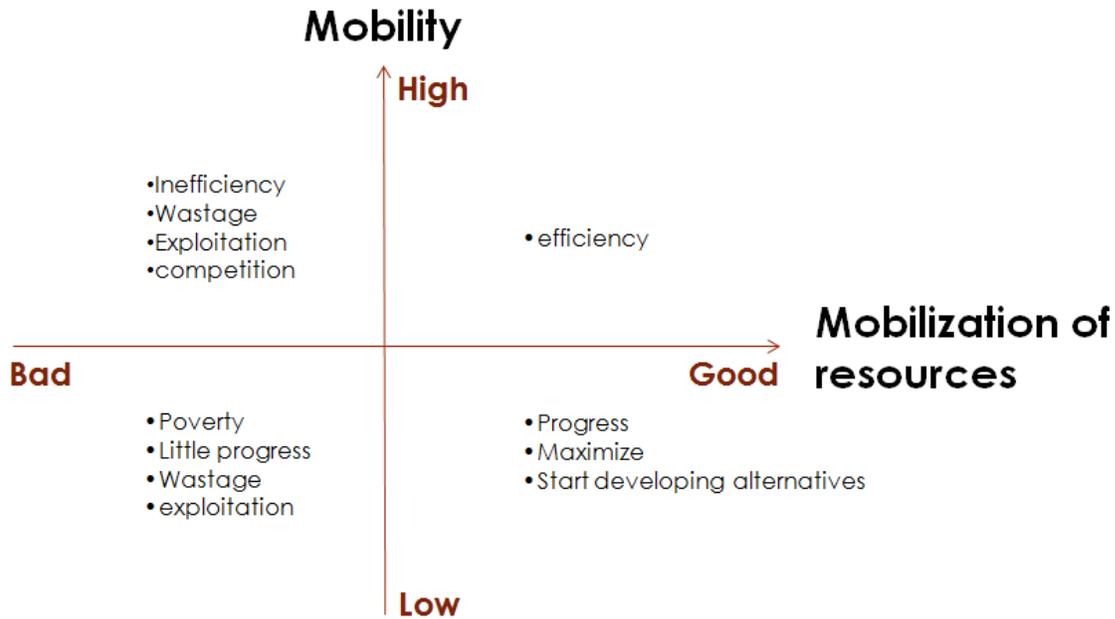


Figure 5: Relationship between Mobility, Mobilization of Resources and Sustainability

The graph shows that if the community with high mobility means that there are wide ranges of options; alternatives and everybody have equal opportunities to access to the resources. In addition, the community has a capability to mobilize the resources efficiently, which means that the community is sustainable.

If a community is highly mobile but mobilizes its resources poorly, it will lead to inefficiency, wastage, exploitation and competition. This community will not be able to sustain itself in the long term.

A community with low mobility has limited options and alternatives. In addition, only a limited segment of society can gain access to the resources. However, if the community is able to mobilize its resources efficiently, this will allow the community to maximize its resources, start developing alternatives. This also will contribute to its ability to achieve high mobility with time. In this case, the community will be sustainable. On the other hand, a community with low mobility which mobilizes its resources poorly will experience poverty, little progress, wastage and resources exploitation.

In conclusion that whether the community with high mobility or low mobility it is only depends how capable the community to mobilize the resources is the key to achieve to sustainable community.

Challenges in Mobilization of Resources

As mentioned above, resources are available but limited; therefore, we need to maximize mobilization of resources to achieve the target of "Sustainable Community". However, problems and challenges are always the big concern to community during the process.

Here are the eight (8) challenges that a community often faces to:

1. **Limitation of resources.** Resources limitation such as natural resource and human resource is an unavoidable problem. Especially, brain drain has become a phenomena recently in many communities or ASEAN countries where young people or the talent decide to leave their communities / countries to live or work in another place that providing them a better quality of life. The Ama culture is in trouble when the number of Ama is decreasing every year. Not many young people want to do this job because it's a really hard work and there are not many successors in this field while the aging of professional Ama keep increasing.
2. **Climate change** has become a serious matter in any parts of the world. Climate change can affect the natural ecological system, people's health and lives. In case of Toba city, climate change affects to the sea current, marine life and sea creatures as well; therefor it also affects to the development of abalones which are very famous in this area.
3. **Lack of participation.** People involvement, especially young generation, shows their interest and concern to any community's activities. It's also an important factor that decides the success of a project or not.
4. **Lack of good governance.** Considered one of major threats to the economic and social development of a community. Good governance can provide a good and clear action plan with a smart strategy and an effective operation to achieve the target of "Sustainable Community".

In case of Nishiyodogawa, the city governance focused on economic development without caring about environment until local people raised their voice and concern about the air pollution and many diseases that can affect to the next generation.

5. **Financial support.** Finance is the material factor which directly decides the developing speed of a project; therefore, lack of financial support is always a concern for any communities.
6. **Inefficiency of technology or urbanization for example.** The inefficiency of using technology can be a waste in this modern era. Taking advantage of technology might shorten the conducting time or reduce labor-saving. Urbanization inefficiency may lead to many related problems such as destroying the traditional architecture or lacking of green spaces.
7. **Time-consuming.** Sustainable Community is always a long-term project which needs the cooperation and efforts from all community's sectors from local governance, NGOs, private sectors to local residents. It takes lots of time for a community to plan, conduct, manage and handle problems happening during the process. Nishiyodogawa is an example. It took more than 20 years for the community to find out the reason for air pollution and to solve the problem as well.

8. **Evolution of norms and belief.** People mindset can be changed basing on norms and belief from different cultures or religions for example. This change can be good or not good depending on what norms and belief people believe in; therefore sometimes it can be a challenge for the government to maintain the sustainability in community. For example, in the case of Karahori, people's negative perception towards the old buildings endangered the town's historical identity. The process of evolution of norms was key in enabling the community to preserve its culture and identity.

Conclusion:

In this group discussion, we therefore conclude that, resources are limited and we should find alternatives. The challenge for the 21st century is how to mobilize and manage its natural, financial, human, infrastructure and cultural resources effectively

In this group study, we have challenged ourselves and asked if sustainability a realistic approach in managing our resources or it is just a theory that could be just happen in a perfect or ideal world.

After thorough discussion, we felt that sustainability is an ideal goal for any society or community, Sustainability is how we value the future, how we manage our resources and how we think of the next generation's valuable assets. Development that meet the needs of the present without compromising the ability of the future generation's use of these valuable assets. Our concept rests on three pillars of Economic/Government, Social and Environmental goals. This means that we need to find a balance of these pillars so as to propel sustainability in our communities. We emphasize also that realizing the importance of these three pillars is a long-term goal that can be met when we mobilize our resources at present efficiently.

We see Toba as an example of sustainability that is current, we have discussed in our crisis theory that for any community, a crisis is a valuable factor in order to realize the value of managing its resources, we have identified in Toba, that the decline of the AMA population with its lack of successors and the decreasing population are considered as one of its present crisis. This was not a road blocks to progress and development, but these are positive setbacks to maximize the use of its resources and we have seen how these owners of the resources use and manage its depleting resources. We have also proved that when we identify our resources and mobilize them effectively we see valuable assets and how the local residents are enjoying such benefits. Toba may not have everything but what they have, are assets that when mobilized, it creates a community that is unique and therefore, creates an identity that the community would be proud of. Just to emphasize, in the case of Toba, the AMA culture is a cultural asset that the community be proud of for the rest of the world.

Nishiyodogawa is an example that we felt that we need to emphasized on, Nishiyodogawa is a work in progress, 20 years of crisis might be a long time for many, but crisis has its positive effects. It is a battle every stakeholder has faced and probably have won, but the battle is not yet over. The need to mobilize its resources is its immediate need – the unified work between the government sector, private sector, victims and families, the businesses, key people such as lawyers and scientists are essential to deliver a goal and achieve it. The case might be over, but the battle to sustain, develop and grow is far from over.

Many ASEAN countries are blessed to have the resources, and yes we know that these resource are not as adequate 50 years back however, as we have discussed sustainability might not be the immediate goal for now but sustainability is definitely is a key factor in having a community

that is fast growing, where city's population density is becoming bigger and bigger every year and more and more cities are produced around the world.

The challenge for us now is how to mobilize its resources, that lack of social participation from citizenry and lack of government support are key challenges in mobilizing resources. The changing norms and beliefs plus financial aspects are elements to add on to, to these challenges.

The government, civil society, policy makers play important roles in meeting and solving these challenges. They need to recognize that that they play a role in the society's role for the future. Ensuring that an inclusive and sustainable future for all of us.

However, another key point is: we as participants recognize these challenges we might not have that big voice on a grand scale that can influence an entire nation, but we the have the chance and opportunity to influence in our smallest ways, and we must make use of these influences positively. The time for a positive change is now. We must play our part as a leader in societal transformation, whether at work, or at school, we make an effort to influence people and to make their habitats a better place to live is a step in achieving a goal that is sustaining for the future.