Chapter 6
North Kyoto's Response to Japan's Shrinking Population

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6.1 Trends in Japan and the Northern Area of Kyoto Prefecture

6.1.1 Trends in Japan

In Japan, the population is decreasing and ageing. During the coming two or three decades, local cities outside the metropolitan areas will be "marginalised cities". This term is used to indicate that such cities will be unable to sustain city functions at certain levels in terms of quality and quantity, such as administrative, medical and educational services, retail and cultural activities. The tax bases of local city governments have become vulnerable because of both long-term economic stagnation industrial losses. Their fiscal management faces serious difficulties every year. It is getting more difficult to maintain and improve existing urban infrastructure. The populations of both central and satellite cities located in metropolitan areas, including Tokyo and Osaka, are likely to decrease.

According to estimates by the National Institute of Population and Social Security Research, in 2060, the total population of Japan will be 86.73 million. In comparison to 2010, this means a decrease of 32.3%. In 2046, the estimated population will be below 100 million. This means that in 30 years, it will decrease by more than 20 million people. This is mainly because of the continuing low birth

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rate. If current birth rate declines continue, the current total fertility rate of 1.39 (National Institute of Population and Social Security Research 2010) will be 1.35 in 2024. This is caused mainly by people marrying later in life, as well as families having fewer children. Recent instability in employment has also led to an increase in the percentage of unmarried people, as the stability required for starting a family is lacking. The percentage of unmarried people aged 30–34 has reached 47% for males and 35% for females, according to the 2010 national census and *Nihon Keizai Shimbun* (2012).

During the period 2010–2015, the only prefectures in which populations are predicted to increase are Tokyo, Kanazawa, Aichi, Mie, Shiga and Okinawa (Fig. 6.1). Akita, Aomori and Wakayama are predicted to decrease by 4–6%. During the period 2030–2035, the rate of population reduction will be over 6% in Akita, Aomori, Wakayama and Yamaguchi, and most prefectures will experience a 4–6% decrease.

Core cities in local areas are experiencing remarkable levels of population decrease. Natural death rates, combined with social decreases have contributed to the rapidity of the overall population reduction. Of cities with more than 100,000 people, 27.5% have seen decreases in their populations (Yahagi 2009). During the period 2005–2006, 45.5% of the cities with more than 100,000 people had decreasing populations while 22 prefectures experienced drops in their populations. Recently, more than half of the cities with 100,000 inhabitants experienced population decrease. In the case of local small and medium cities (those with less than 100,000 people), their population reduction trends are even more remarkable, with most of them predicted to become marginalised cities.

The accelerated ageing of the population is caused by low birth rates and longer life spans. The average life span in 2010 was 79.64 years for males and 84.19 for females. In another 50 years, they will be 86.39 for males and 90.93 for females. Consequently, according to estimates by the National Institute of Population and Social Security Research, in 2060, the ageing rate (over 65 years old) will reach 39.9%. Longevity in society is not a bad thing. We are not living in the era of *Ubasuteyama* (“granny dumping”), and this longevity is something of which to be proud. The problem lies in the lack of balance between population and age structure. In ageing cities, where the young and the middle-aged have left, the economic and social conditions that support people’s daily lives will deteriorate. The sustainability of cities will be threatened.

Japan’s population is not likely to increase in either the medium or long term. Also, ageing will not cease. Shrinkage will be one of the fundamental patterns of city typology. Except for times of war and disasters, urban researchers and policy developers have accepted growth and expansion as being self-evident, so they have focused on directing that growth or expansion. This is the first study and formulation of urban policies based on the premise of city shrinkage.

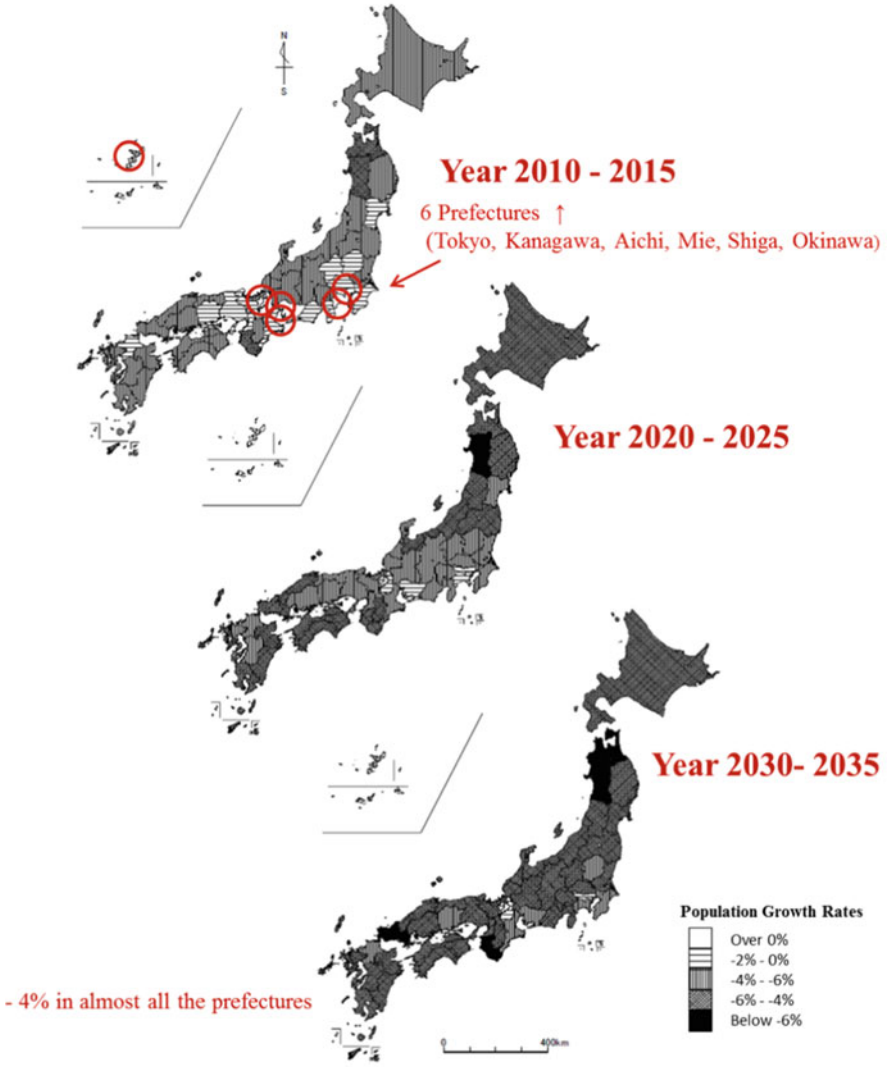

Fig. 6.1 Prefectures experiencing a population decrease in Japan (2010–2035). *Note*: This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. *Source*: Based on National Institute of Population and Social Security Research. Available at: http://www.ipss.go.jp/index-e.asp. Accessed June 2012

6.1.2 The Northern Area of Kyoto Prefecture

The Northern Area of Kyoto Prefecture is composed of the Chutan area (Ayabe City, Maizuru City, Fukuchiyama City) and the Tango area (Miyazu City,

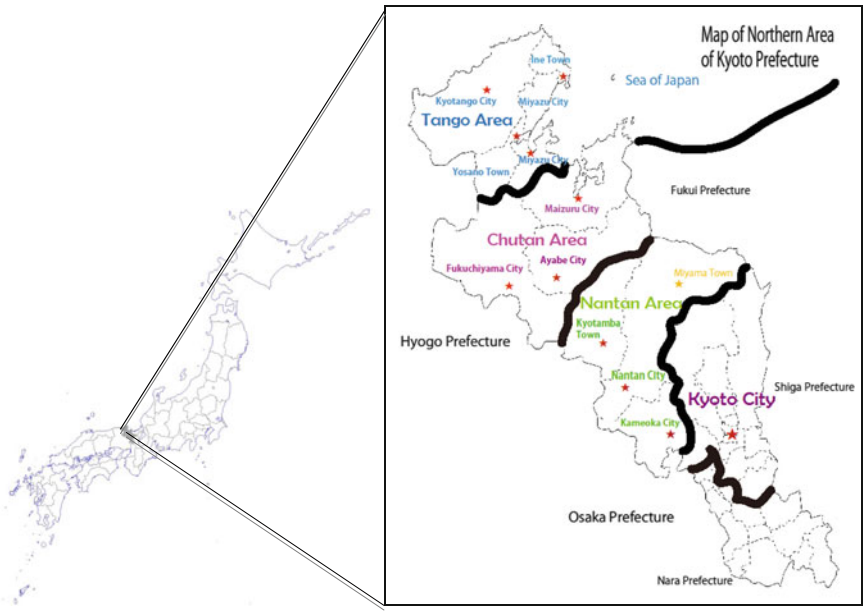

Fig. 6.2 Map of Kyoto Prefecture. *Note*: This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. *Source*: Author

Kyotango City, Ine Town, Yosano Town) (Fig. 6.2). Ryukoku University's project for regeneration of the Northern Area of Kyoto Prefecture, the "Research Centre for Local Public Human Resources and Policy Development", adds the Nantan area (Kameoka City, Nantan City, Kyotamba Town) to its research targets. This chapter deals with the three areas combined as the "Northern Area".

These areas are located in the north of Kyoto City at the east end of the Chugoku mountains. The mountains are not precipitous, though there are few plains. They are in a typical rural area. In winter, it snows a lot while in summer, it is often foggy. It is not pleasant in terms of climate. Recently, highways have been built; however, it is still a long way to Kyoto City. They are thus regarded as disadvantaged areas in terms of geography as well as climate. Rapid population reduction, as well as population ageing, are evident. The social and economic issues which shrinking societies face have been manifest for many years.

The main industry has been agriculture. People grow rice on the plains and vegetables and fruit in fields on the sloping land. However, population decreases and increases in the number of ageing people (more than 65 years old) in such rural areas makes the functioning of traditional communities fragile, which in turn threatens the sustainability of agricultural production. Agricultural production currently does not even reach the rate of 3% of gross regional product. The fabric industry was growing but has declined recently, resulting in the loss of an industrial

base. Consideration is being given to the development of a manufacturing-based food industry to operate in co-operation with agricultural production.

6.1.3 *Demographic Change in the Northern Area of Kyoto Prefecture*

According to the national census, the total population of the Northern Area of Kyoto Prefecture increased slightly between 1990 and 1995. After that, between 1995 and 2000, it decreased by 4035. The population of Kyoto Prefecture also decreased during 2000–2005. The population of the Northern Area began decreasing five years earlier than Kyoto Prefecture and has continued to decrease. The total population in 2010 was 469,023.

According to predictions by the National Institute of Population and Social Security Research, the population of the Northern Area is expected to decrease to 441,457 in 2020 and 407,890 in 2030. Compared to 2010, these estimates put it at 13% less (Fig. 6.3). The rate of population decrease of Kyoto Prefecture during the same period is estimated to be 7.7%.

The city with the largest population in the Northern Area is Kameoka City (92,399 inhabitants in 2010). It is located close to Kyoto City, which puts it in a good position for commuting to school and work, which was why Kameoka experienced population growth during 1995–2000. Maizuru City had a total population of 88,669 in 2010. It has a military base and its young population is relatively large. However, a population decrease was recorded there during

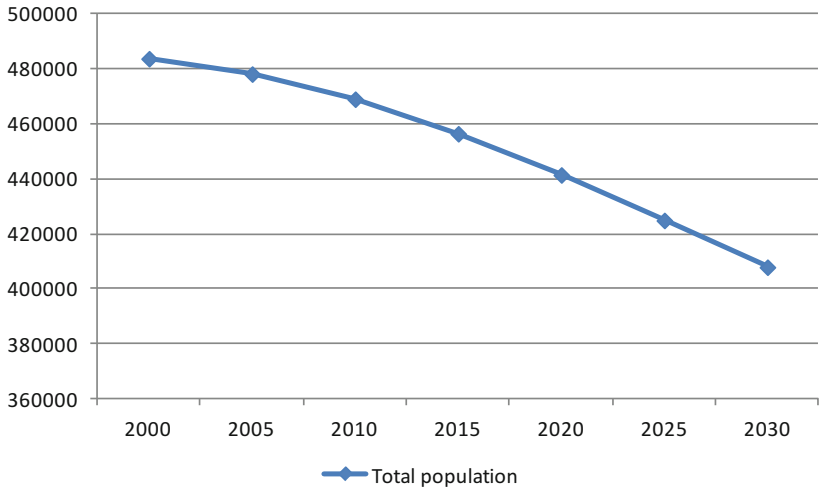

Fig. 6.3 Demographic change of the Northern Area of Kyoto Prefecture (estimation) (2000–2030). *Source*: Based on National Institute of Population and Social Security Research. Available at: http://www.ipss.go.jp/index-e.asp. Accessed June 2012

1990–1995. Fukuchiyama City has a distribution centre for agricultural products in the Northern Area as well as government offices. Historically, it has been a core city to the north of Kyoto City, but as is seen in the other cities in the area, its population recorded a decrease, according to the national census of 2000–2005, at which time Fukuchiyama City became a shrinking city.

The other cities and towns are experiencing even more rapid population drops. For example, Miyazu City, facing Wakasa Bay, recorded a population of 19,948 in 2010, which was a 24.6% decrease (base year: 1990). Because of its remarkable population decrease, it faces difficulties in continuing community activities within the city. This results in the body blow effect by which the population decrease undermines the financial basis of the city.

The population of the Northern Area is also ageing rapidly. The ageing rate in 2000 was 22.4%. In 2010, it had increased by 5.1–27.5%. The rate is higher than the national average ageing rate of 23.0%, which is also the average rate of Kyoto Prefecture. In 2035, Miyazu City in the Tango area is expected to record an ageing rate of 50%, which means one of every two citizens will be older than 65 (Kyoto Prefecture 2012). At the same time, the working-age population (15–65 years old) will decrease. The percentage working-age people in the Northern Area of Kyoto Prefecture declined from 62.2% in 2000 to 59.0% in 2010. This rate is also below the Japanese national average rate of 63.8%.

6.1.4 Economic and Industrial Trends in the Northern Area of Kyoto Prefecture

The industrial structure of the Northern Area of Kyoto Prefecture differs from one region to another (Kyoto Prefecture 2012). In the Nantan area, where Kameoka City is located, and the Chutan area, where Fukuchiyama City and Maizuru City are situated, manufacturing industries account for one third of regional production. Industries include food processing, shipbuilding and metal industries. However, the Tango area, where Miyazu City is located, only recorded 16.7% manufacturing industries. Conversely, the Tango area recorded 22.4% for service industry production, which is approximately 6% higher than the other two areas. In Miyazu City, the service industry is the largest industry, accounting for 28.5% of its gross production in 2009. This implies that its tourism industry, which takes advantage of the scenic beauty of Wakasa Bay, supports its regional economy.

The stagnation of economic activities has been occurring for a long time in the Northern Area of Kyoto Prefecture. This is because the Japanese economy is still not able to escape from the long-lasting recession, and the investment which leads to new employment has been small, so the population is still decreasing. Therefore, this is considered to be a structurally depressed area. In the Tango area, during the decade from 2000 to 2009, the economic growth rates for eight fiscal years showed negative growth. Negative growth has become the norm. It is assumed that it will be

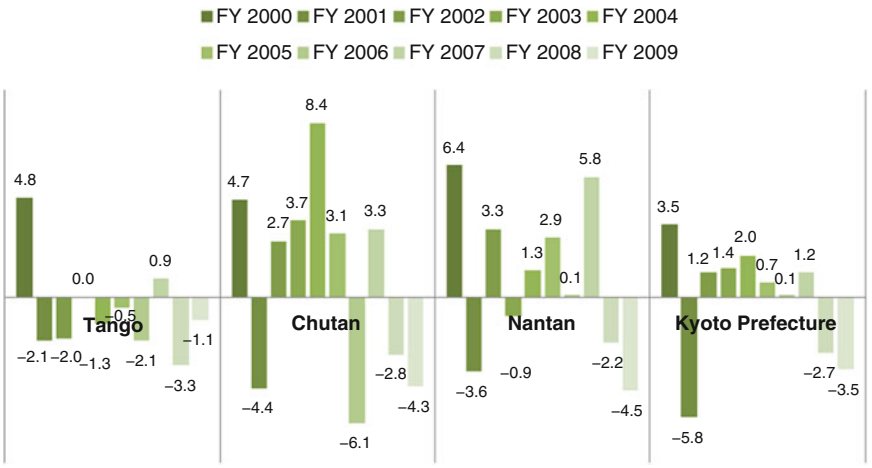

Fig. 6.4 Transitions of economic growth rates of the Northern Area of Kyoto Prefecture. *Source*: Kyoto Prefecture (2009), Kyoto-fu Chousonmin Keizai Keisan (Kyoto Prefecture Municipal Accounts)

difficult for economic growth rates to become positive, sustainable growth in the future. Both the Chutan and Nantan areas recorded negative growth for four fiscal years (Fig. 6.4).

The employment situation is also serious because of the long-term recession. While the official ratio of job offers to jobseekers in the Northern Area of Kyoto Prefecture has shown slight signs of improvement in the last two years, it continues remain below 1.0 and many people have given up looking for work.

According to Kyoto Prefecture, economic stagnation naturally leads to a decrease in incomes. The distributive income per capita for fiscal year[1] 2009–2010 in the Tango area was JPY 1,896,000, a 13.1% decrease compared to the 2000–2001 fiscal year. The Chutan area recorded an income per capita of JPY 2,415,000, a 5.5% decrease. In the past decade, the regional gap within the Kyoto Prefecture has expanded rapidly. In fiscal year 2000–2001, the distributive income per capita in the Tango area amounted to 70% of that of Kyoto City, but in fiscal year 2009–2010, the gap extended to 62.2%. This income gap is identified as a factor which accelerates the population exodus from the disadvantaged areas to metropolitan areas.

[1] Japanese fiscal year starts at the beginning of April and finishes at the end of March the following year. Also known as FY.

6.1.5 Local Societal Trends in the Northern Area of Kyoto Prefecture

In order to sustain a comfortable life in an ageing society, medical facilities are essential. In the Northern Area of Kyoto Prefecture, the number of hospitals has not changed remarkably yet the number of hospital beds has increased slightly. According to the Ministry of Health, Labour and Welfare's Survey of Physicians, Dentists and Pharmacists (2010), the number of medical doctors engaged in hospitals, for each secondary medical care block, is 286.2 per 100,000 people in Kyoto Prefecture, which is ranked number one nationally (the national average is 219.0). However, in the Northern area the numbers are much lower than the average for Kyoto Prefecture: Tango (152.6); Chutan (209.2); Nantan (170.2).

According to the Kyoto Medical Practitioners Association, the Northern Area of Kyoto Prefecture is faced with various challenges such as "unbalanced locations of doctors", "lack of medical doctors", "lack of a combined co-operative medical centre", "elderly-friendliness (access, etc.)", and "improvement of the emergency medical system". Additionally, the number of students at primary, junior and high schools is decreasing, reflecting the declining birth rate. The total number of primary schools in Kyoto Prefecture decreased by 20 from 2000 to 2010. Ten of them were in the Northern Area of Kyoto Prefecture.

If schools are closed or merged, problems such as longer commuting distance will arise. A decision also needs to be made regarding how the unused school buildings and gyms can be utilised.

In the Northern Area of Kyoto Prefecture, there has been an increase in the number of people who receive welfare benefits (public assistance). The main causes are considered to be long-lasting recession and a lack of new employment. Presumably because farmers are self-sufficient to some extent in rural areas, the relative increase in the number of people who receive welfare benefits is seen chiefly in urban areas. The increases in Maizuru City, Fukuchiyama City and Kameoka City are significant. Maizuru City's rate of public assistance (per 1000 people) is 14.8%, which is the highest in the Northern Area of Kyoto Prefecture.

6.1.6 OECD Older Workers Friendly Places to Work (OLWOF) Index and Elderly Friendly Places to Live (ELFRI) Index

In collaboration with the OECD and LORC, questionnaires for the Older Workers Friendly Places to Work (OLWOF) Index and the Elderly Friendly Places to Live Index (ELFRI) were used in the Northern Area of Kyoto Prefecture. The results are reported below.

The overall OLWOF Index out of 5 (1 is poor, 5 is excellent) for the Northern Area of Kyoto Prefecture is 2.3, which is categorised as an area with a poor

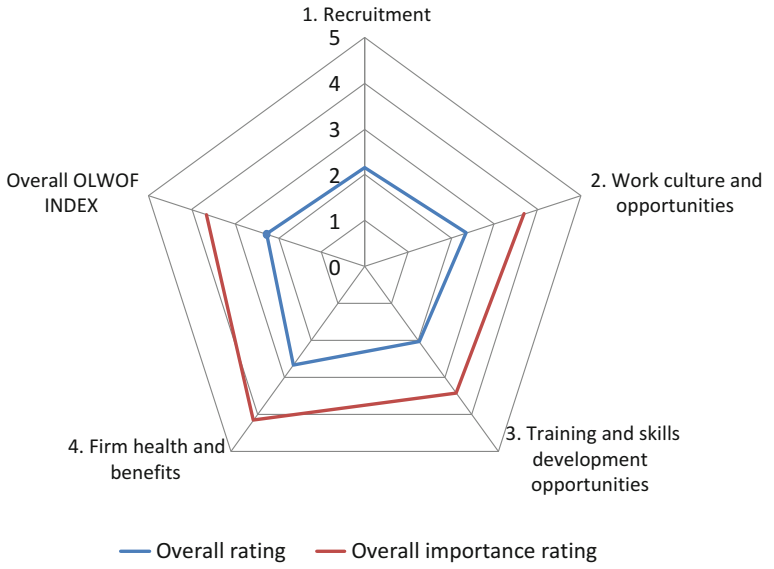

Fig. 6.5 OLWOF index of the Northern Area of Kyoto Prefecture (2012). *Source*: Author

OLWOF Index. More specifically, the OLWOF topic index overall rating is as follows: recruitment: 2.2; work culture and opportunities: 2.3; training and skills development: 2.0; firm health and benefits: 2.7. Significantly, the overall importance rating of OLWOF for the Northern Area of Kyoto Prefecture is 3.7, which categorises the area as average. More specifically, the importance of OLWOF topics were rated as follows: work culture and opportunities: 3.7; training and skills development: 3.4; firm health and benefits: 4.2 (Fig. 6.5). This slow realisation of the importance of older persons working for the regional and local economy may reflect the delayed response in developing strategies to keep older persons in employment and contributing to the regional and local economies. It reflects a significant policy gap between reality and what ideally should be done.

The overall ELFRI Index out of 5 (1 is poor, 5 is excellent) for the Northern Area of Kyoto Prefecture is 2.7, which is below average as an elderly-friendly place to live. More specifically, the ELFRI topic index is as follows: outdoor spaces and buildings: 2.7; transport: 2.7; housing: 2.5; social participation: 2.9; respect and social inclusion: 3.1; civic participation and employment: 2.7; communication and information: 2.6; community support and health services: 2.7 (Fig. 6.6). Generally, according to the index, the Northern Area of Kyoto Prefecture is not an elderly-friendly place to live, with plenty of room for improvement and policy focus.

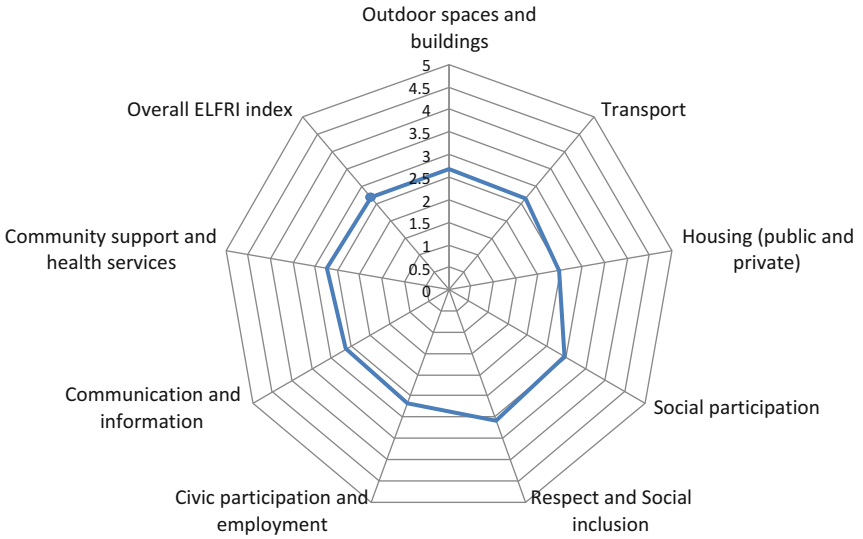

Fig. 6.6 ELFRI index of the Northern Area of Kyoto Prefecture (2012). *Source*: Author

6.2 What Can Universities Do? Kyoto's Challenges

6.2.1 Higher Education in Japan and Vocational Education and Training (VET)

In Japan, the expectation that higher education institutions will play certain roles in the field of vocational education and training (VET) has been enhanced recently (OECD 2000). However, the Japanese government has not yet been successful in establishing a qualification framework for VET. There is no framework that defines the relationship between general education and VET like the European Qualifications Framework (EQF). There are no strategies or scenarios on how higher education institutions should be involved in VET.

There are qualifications for specific professional occupations such as medical doctors and teachers. To obtain these qualifications, study of the formal courses provided by higher education institutions is required. Other certification and skills such as information and communication technology (ICT) are obtained outside higher education institutions. The higher education institutions may provide learning opportunities, but, mostly, certification and skills accreditation relating to jobs are obtained outside higher education institutions.

Generally, Japanese companies and administrative institutions have not taken VET by higher education institutions positively. Employment practices in Japan, which are based on the pillar of lifelong employment, expect employees to share their skills and abilities with their workplaces rather than gain general professional skills and vocational knowledge from them. Companies and administrative

institutions prefer generalists rather than specialists. They expect workers to attain specialties and skills through on-the-job training. Such training is not based on systematic programmes, but is rather focused on the accumulation of experience. Recently, this trend has started to change.

The views of companies with regard to VET have been influenced by low economic growth over long periods of time. More companies are seeking career education training from higher education institutions. Events such as the Lehman Brothers shock, the European financial crisis and the Great East Japan Earthquake caused a serious economic recession. The employment issue has become a top priority for both management and labour.

Since the adoption of the Decentralisation Law in 2000, local authorities have begun to request the capacities of administrative officers to be enhanced. Not only local decentralisation, but also the changes to local policies that put more emphasis on the participatory process, have led to local authorities requiring administrators to improve their communication skills. Administrative institutions consider that such officials should have these abilities before beginning their employment.

Companies and administrative institutions are changing their understanding of human resource cultivation and VET. This is part of a lasting change rather than a short-term change. By examining the data on the university attendance ratio and the unemployment rate, it is possible to understand that such a lasting change is commonly seen in OECD member countries (OECD 2008).

The university attendance ratio in Japan was approximately 10% in the 1950s. It increased rapidly until the middle of the 1970s, peaking in 1976 at 38.6%. It decreased slightly until the 1990s when it increased again. In 1993, it was over 40%, and since 2005, it has been over 50%.

In Japan, during the development of the social economy, from the high-growth period through the stable growth period to the period of the bubble economy, the belief that more highly educated persons are required has been growing. As a result, a society has evolved that puts increased emphasis on educational background.

As a global trend, the unemployment rate of highly educated people is low. Together with realising the importance of a knowledge society and achieving technological advancement, there has been a growing tendency to require higher educational qualifications. The increased rate of university attendance in Japan is in accordance with this global trend.

However, the unemployment rate of university graduates in Japan increased rapidly from 1992 when the Japanese economy went into recession, brought about by the collapse of the bubble economy (Fig. 6.7). The rate of increase is almost the same as the general unemployment rate. Throughout the 1990s, the general unemployment rate continued to increase but, in comparison with its previous levels, the improvement in the unemployment rate of university graduates was not remarkable. Through the 2009 Lehman shock, the general unemployment rate declined again, but the continuing tendency for the unemployment rate of university graduates to decline became more serious.

The difficulties faced by highly educated people in the labour market indicate that the proportion of the labour force with higher education qualifications may

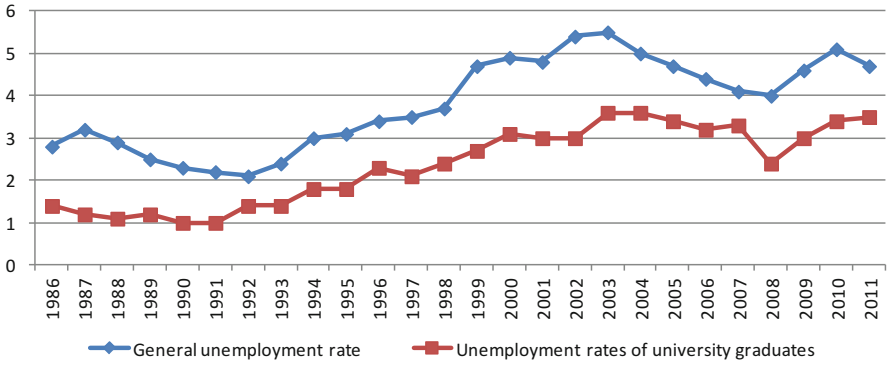

Fig. 6.7 Unemployment rates of university graduates (1986–2011). *Note*: In 2011, Iwate, Miyagi and Fukushima were not counted. The rates shown are as at February of each year. *Source*: Author based on Ministry of Internal Affairs and Communications (2012) "Labour Force Survey". Available at: http://www2.ttcn.ne.jp/honkawa/index.html. Accessed December 2012

become excessive. A number of OECD member countries are facing similar situations. The labour market seeks to move towards the knowledge society, and the younger generation, which feels anxious about a lack of employment options, goes to university. Subsequently, as mentioned above, the university attendance rate in Japan increased during the 1990s. University students in Japan are mainly the younger generation, and it is quite rare to find people who entered university for the purpose of lifelong learning.

Although the unemployment rate in Japan was higher than the Netherlands, Sweden, the United Kingdom and the United States for quite a while, it is currently lower. However, the anxiety over unemployment that young university graduates feel is not only due to increasing unemployment rates, but also to the unstable conditions caused by increases in temporary employment. Social changes, which are not measurable by unemployment rates, are having great impacts on the younger generation in Japan.

A comparison of permanent full-time and temporary part-time employment shows that permanent employment increased until 1997, but has continued to decrease since then, while the number of temporary or casual jobs has increased continually. The proportion of temporary jobs has increased, from 2.0% in 1990 to 35.4% in 2011 (Fig. 6.8). Currently, more than one in three people employed in industries other than agriculture and forestry is a temporary or casual employee. The rate of casual employment for the population aged 15–24, both male and female, has increased rapidly, which had become a social issue.

The school dropout rate in higher education is 10%, which is low in comparison to the average rate of 31% among OECD member countries (OECD 2008). The goal to increase the ratio of people who enter higher education institutions and, at the same time, to decrease the school dropout rate, has already been achieved to a large extent in Japan. Therefore, it is believed that, in order to eliminate the younger generation's anxieties about employment, higher education institutions should play

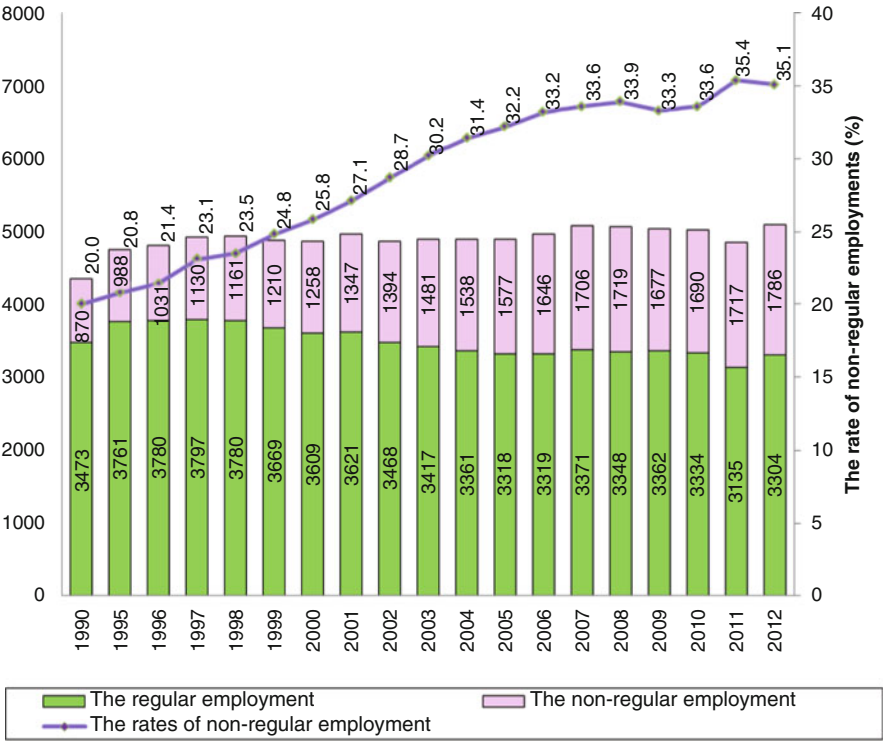

Fig. 6.8 Regular employment versus non-regular employment (1990–2012). *Note:* Targeted at all employment areas except agriculture and forestry (excluding executives). The figures are the averages between January and March, and prior to 2001 were as at February of each year. Non-regular employment includes part-time, temporary staff, contract workers and casual staffs. In 2011, the figures exclude Iwate, Miyagi and Fukushima. Source: Author based on Ministry of Internal Affairs and Communications (2012) "Labour Force Survey". Available at: http://www2.ttcn.ne.jp/honkawa/index.html. Accessed December 2012

more positive roles. Such circumstances lead to the hope that higher education institutions will become involved in VET.

6.2.2 Research Centre for the Local Public Human Resource and Policy Development (LORC), Ryukoku University, and the Kyoto Model

What kind of reform can higher education institutions make so that companies and administrative institutions change their views on human resources and VET and help younger people avoid the social problems associated with not having stability in work? The Research Centre for the Local Public Human Resources and Policy

Development (LORC), Ryukoku University was established in 2003 in order to respond to this question as one of its most important research missions.

Funded by Ryukoku University and the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT), the centre started its activities not only as research studies, but also to make practical policy recommendations as a research centre that interacts with local communities. The main features of LORC's approaches are, firstly, that it carries out research studies that attempt to link the solutions of local social issues and human resources. Secondly, research outcomes are to be shared through partnership and collaboration between organisations that belong to various sectors such as local governments, local communities, non-profit organisations (NPOs) and business associations.

Kyoto City, where LORC is located, is a historical city, and at the same time, a university city. According to the FY 2009 general survey of schools, there are 37 universities and colleges in Kyoto. Kyoto has the second largest number of universities and students after Tokyo, and 139,237 students commute to Kyoto City. Approximately 10% of Kyoto City's total population of 1,470,000 are university students and university professors.

According to the same general survey of schools (FY 2009), there are 48 universities and colleges in Kyoto Prefecture. The universities, including the 37 universities in Kyoto City mentioned above, which have more than one campus are counted based on the location of their headquarters. Most universities and colleges are situated in the southern area of Kyoto Prefecture. In the Northern Area of Kyoto Prefecture, there is only one university and one college.

In considering the role to be played by higher education institutions in human resources and VET, it is necessary to take these features into account. LORC proposed to carry out a collaborative project in order to realise research outcomes for nine universities in Kyoto Prefecture which have social science departments. Those involved are Kyoto University, Kyoto Prefectural University, Kyoto Sangyo University, Kyoto Tachibana University, Kyoto Bunkyo University, Seibi University, Doshisha University, Bukkyo University and Ryukoku University. A series of recommendations were developed in response to three development phases.

In the first phase of LORC (FYs 2003–2007), through partnership and collaboration among various sectors, a system for human resources to tackle local issues was proposed. In order to foster the human resources that have civil and public minds, an education programme targeting master's programmes was developed. It was also pointed out that it was necessary to establish a framework that will be recognised socially as well as academically, to ensure the quality of qualifications (Shiraishi and Niikawa 2008; Tomino and Hayata 2008; Tsuchiyama and Ooyano 2008).

The second phase (FYs 2008–2010) focused on the socialisation and realisation of research outcomes (Shiraishi et al. 2011; Saito et al. 2011). It was concluded that the framework to be developed in the Kyoto area should be a qualification framework related to the European Qualifications Framework (EQF). To achieve these goals, a platform for collaboration with local universities was established, involving nine universities, one university's collaborating organisation, four economic groups, two local governments, as well as one local government's collaborating organisation.

LORC also recommended the development of an educational programme linked to general education at Levels 5–7 of EQF in the field related to policy science. In order to ensure the competence of learners, as well as to encourage recognition of the qualifications, the Consortium for Local Public Human Resources Development (COLPU) was established as an institution for public recognition.

The third phase (since 2010), pursues the development of more advanced educational programmes for human resource cultivation, to match the needs of local communities. Using the Northern Area of Kyoto Prefecture as a field site, as it is an area in which population reduction and economic and social decline are seen, a "Kyoto Model" is being developed and carried out, which links solutions to social problems with training in human resources.

Derived from the platform of universities' local collaborations, the Community and University Alliance for the regeneration of the Northern Kyoto Area (CUANKA) was established in 2012 as a formal organisation for collaboration. In order to develop the projects of CUANKA, the nine participating universities received subsidies from MEXT together with funds from local governments for individual projects.

The Kyoto Model (Fig. 6.9) that LORC recommends is intended to foster human resources expertise to allow participation in policy making and, simultaneously, implement processes for solving problems in local communities as a process of university education and VET. Through collaborations between universities and stakeholders in local communities, learners will find local agendas and design policies as well as implement them. Students will not only experience practical involvement, but also study academic approaches and practical policy analyses at universities.

In the Kyoto Model, universities develop and provide the educational programmes which are equivalent to Levels 5–7 of EQF, and the local communities provide the learners with the opportunities for practical involvement. The learners will earn qualifications, obtained through their involvement in solving the problems of local communities, which are certified by COLPU.

If the Kyoto Model functions well, it will enable the human resources graduates who have certain knowledge, skills and competences that are helpful for problem-solving in local communities to find work in those communities. Such graduates are not merely competent workers: they have certain roles to play in society.

The keys to success for the Kyoto Model are whether or not universities can develop policies that help solve local problems, and whether it is possible for local communities to welcome and accept such human resources. By linking the research resources of nine universities, it is hoped that a collaborative university system will be established that can respond to various local needs. CUANKA is considering ways to utilise the human resources skills developed there.

The Kyoto Model will demonstrate roles to be played by higher education institutions as companies and administrative institutions change their understanding of human resource development and VET and their importance in helping with social issues such as employment for younger people and a declining population together with economic and social stagnation.

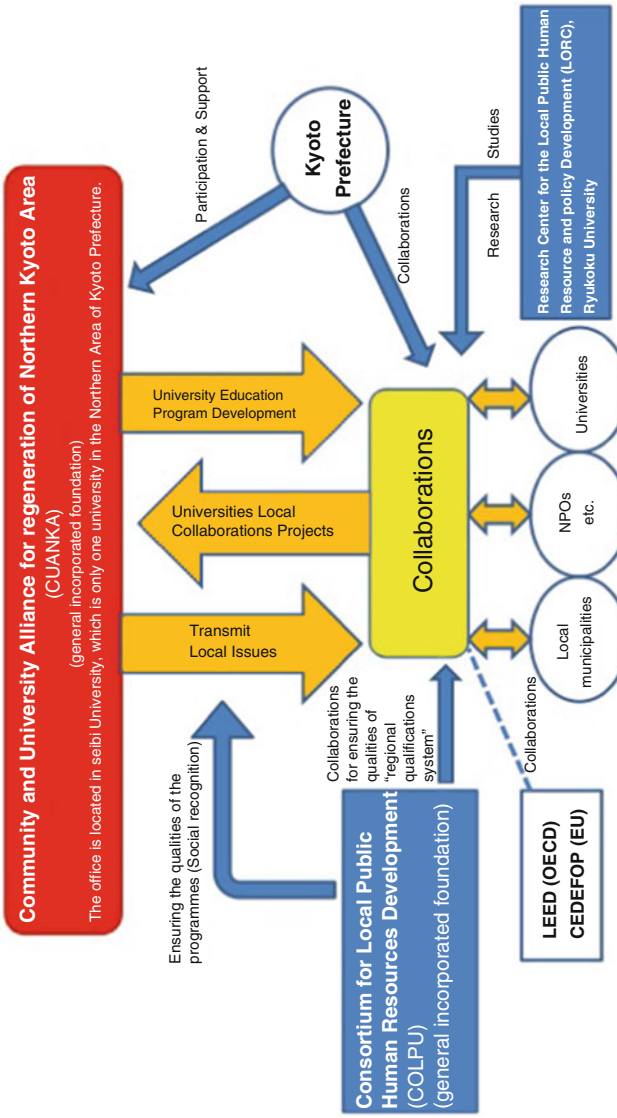

Fig. 6.9 Universities' local collaborations: The "Kyoto Model". *Source*: Author

6.3 Regeneration of Northern Kyoto Area (CUANKA): Trialling the Community-University Alliance

6.3.1 The Critical Situation that Local Communities Face in the Northern Area of Kyoto Prefecture

The Northern Area of Kyoto Prefecture is a typical example of the declining Japanese population problem. Compared to other Japanese local areas, this was a rich area for around 1500 years. The Northern Area of Kyoto Prefecture was very close to the former Japanese political centre (Nara and Kyoto) and Japanese economic centre (Osaka). Trade with Korea and the People's Republic of China in ancient days, shipping trade around the Sea of Japan in the middle ages and Edo era, and the transport of products provided the Northern Area of Kyoto Prefecture with a distinct advantage.

However, the area has changed greatly, because of Japan's rapid economic growth after World War II. The traditional trading between Japan and the Asian continent was lost due to the Cold War between the east and the west, which meant there was a decline in trade. Japan's growth drained young labour forces from the local areas, including the rural areas, to a large extent. This led to the so-called dual structures of Japanese society, in which Japan could not escape from the phenomenon of rich urban areas and deteriorating economic and social rural environments. Moreover, advancing industrial structures with their associated mass production and mass consumption, as well as shifts in the transport system from rail services to a rapid transit system of cars and expressways, meant that local central cities like Fukuchiyama became disadvantaged areas that cannot recover easily. In this way, the Northern Area of Kyoto Prefecture has become symbolic of the depressed areas among local cities and rural areas.

The following section outlines how CUANAKA was established to solve these various social problems which are becoming more prominent due to the ageing society and shrinking population.

6.3.2 CUANKA

Approximately 60 universities are located in Kyoto Prefecture, and research and education activities of a high standard are carried out here. In Kyoto City, since 1997, there has also been the Consortium of Universities in Kyoto, which is a public interest incorporated foundation that carries out research and education as well as local socially supportive activities. A large-scale international research project on sustainable social systems has been conducted since 2003, funded by MEXT, which led to the establishment of LORC. Since 2008, supported by MEXT, a strategic university alliance project relating to human resource development and the

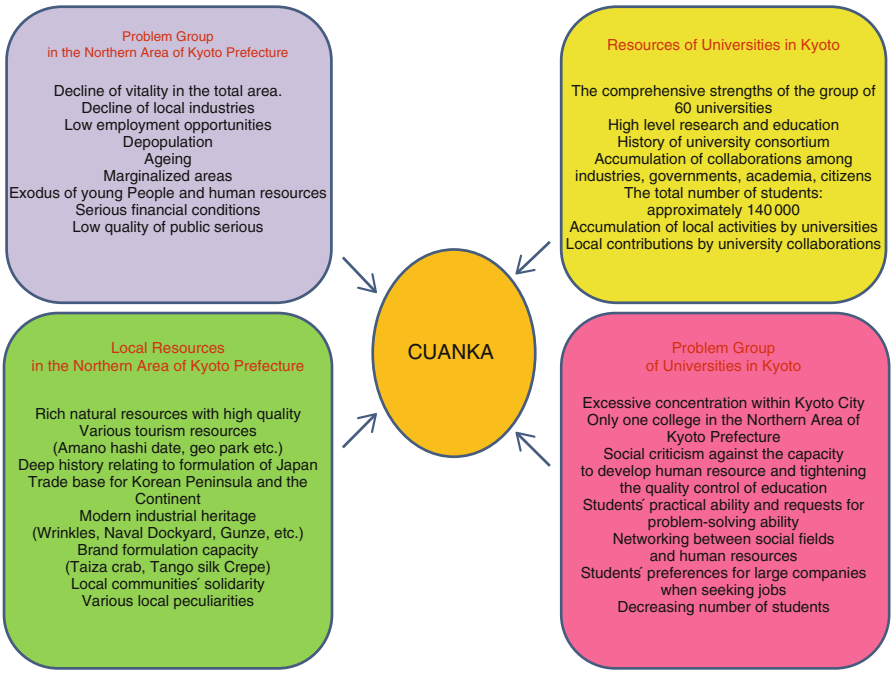

Fig. 6.10 Local communities' and universities' collaboration for particular problems and social resources groups. *Source*: Author

establishment of a qualification system in a partnership society has been carried out collaboratively by nine public policy universities.

Through such projects, the necessity for "global public human resources", highly skilled workers who can take a lead in solving problems through cross-sectional activities, has become clear. Such problems include numerous issues that local communities may face in the globalising world. This led to the establishment of a system to foster "global public human resources" based on collaboration between industry, government, academia and citizens in Kyoto. The system has already established a qualification system, based on the human resource development curriculums of universities, which corresponds to Levels 5–7 of the European Qualifications Framework in the EU. Since 2010, COLPU, as a core institution, has taken responsibility for operating the system.

Based on outcomes from the human resource development system of "regional qualification framework for policy making" in Kyoto, CUANKA attempts to solve problems in the Northern Area of Kyoto Prefecture. Comprehensive and consistent co-operation between stakeholders and local universities promote the projects outlined below, which aim to advance the reform of university education programmes as well as human resources development (Fig. 6.10).

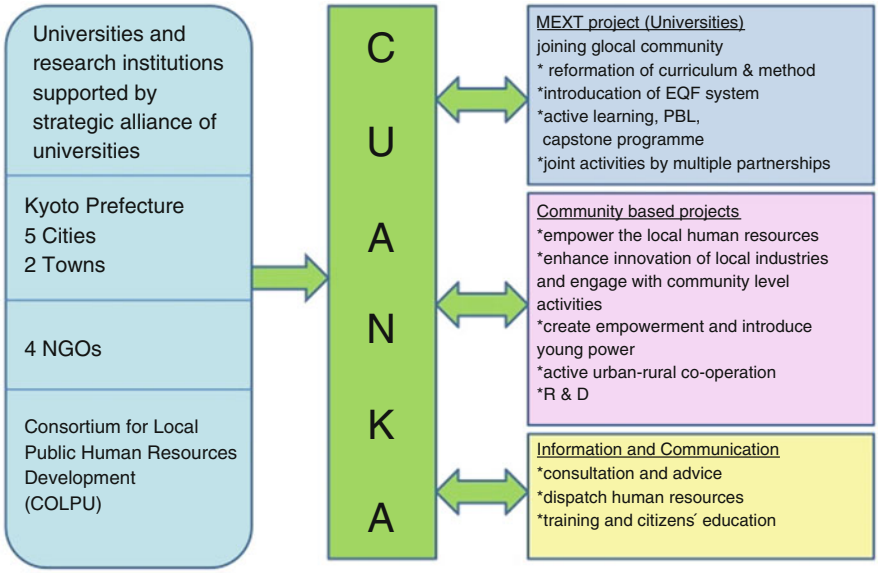

Fig. 6.11 System of CUANKA. *Source*: Author

CUANKA's three main activities are:

1. Fostering global public human resources that can respond to various issues in the Northern Area of Kyoto Prefecture;
2. Establishing a consistent collaborative system of industries, governments, academia and citizens in order to promote urban-rural networking and to utilise cross-sectional human resources; and
3. Solving local problems and revitalising local communities.

CUANKA is composed of local universities and stakeholders involved in community development in the Northern Area of Kyoto Prefecture (Fig. 6.11). The operations of CUANKA are summarised as:

1. appoint co-ordinators for each local area and university;
2. establish university collaboration offices and facilities for locals and universities to network in the Northern Area of Kyoto Prefecture;
3. Have universities carry out studies and research that are designed to help solve local issues collaboratively; and
4. Kyoto Prefecture provides basic financial support and works with CUANKA at the project level.

CUANKA conducts the actual project so that universities and local communities can share mutual benefits through collaborative co-operation, targeting the Northern Area of Kyoto Prefecture. University-local partnerships can respond freely to the characteristics and scale of the problems. The financial resources necessary to

implement the projects are available from various sources. They include government subsidies (including MEXT), subsidies through local grants from Kyoto Prefecture, the resources of local municipalities and relevant groups, as well as grants from private foundations.

CUANKA conducted four different types of pilot projects in order to have a broad base:

1. Whole Area Type: Leadership programme to promote entrepreneurship and to encourage local activities, implemented by Kyoto Prefecture and COLPU, sponsored by Kyoto Prefecture;
2. Allied Area Type -1: Research and analysis of the structure of consumer behaviour to build up an innovative commercial policy, implemented by two universities, three cities, three chambers of commerce and COLPU, sponsored by three cities and MEXT;
3. Allied Area Type -2: Aims to develop eco-tourism with motor driven bicycles supported by a renewable energy system, implemented by two universities, Kyoto Prefecture, three cities and three cities' tourist offices, the local railway company and COLPU, sponsored by Kyoto Prefecture, COLPU and MEXT; and
4. Single Area 1 Issue Type: Local regeneration by establishing a system for barrier-free tourism in Miyazu City, implemented by two universities, Kyoto Prefecture, Miyazu City, Miyazu Chamber of Commerce and Industry, a tour operator and COLPU, sponsored by Kyoto Prefecture, MEXT and COLPU.

The areas subsidised by MEXT in 2012 as university collaboration projects are:

1. local regeneration through networking between universities and locals, utilising Satoyama resources;
2. policy marketing research projects;
3. 1300th anniversary project for Tango's foundation;
4. formulating a business model to promote "sport tourism" in the Kita Kinki area;
5. building residential-type facilities for local-university networking; and
6. introduction of renewable energy to local communities.

CUANKA's operations have just begun. It is hoped that declining areas will be revived by supporting social entrepreneurs, fostering green industries and human resource development to enhance social activities in terms of quality and quantity.

6.4 Policy Implications and Recommendations

6.4.1 Policy Implications

In the Northern Area, which is declining economically and socially, tertiary education institutions and human resources are lacking. The case of Kyoto Prefecture highlights the importance of establishing the mechanisms (regional capacities) by

which universities located in urban areas can become involved in local affairs. They could tackle local problems such as the creation of employment opportunities and help define and meet aged care needs, as well as engage in environmental conservation, among other issues, by forging networks between local stakeholders, NPOs, local businesses and community organisations.

The case of Kyoto Prefecture is unique in that numerous universities are establishing multi-level collaborative networks by linking their special fields of study and laboratories. Universities are doing more than providing knowledge and human resources to the area unilaterally. In the "Kyoto Model", universities gain new knowledge by setting the area as their target for study while at the same time students studying local affairs and urban policies gain "training on the spot". Students can receive training to formulate local and urban policies and to solve local issues practically. The "Kyoto Model" is advantageous in that universities and local communities are in a reciprocal relationship.

The Northern Area of Kyoto Prefecture is an area which is rich in nature, yet has an ageing and rapidly decreasing population. In order to attract the younger generation, it will be vital to create employment opportunities and jobs for both the elderly and the young in the future. At the same time, the "Kyoto Model" will be challenged to decide how to establish green markets (environment) and silver markets (labour markets or consumer markets for the elderly). Some experimental and challenging efforts are being made, but the question is how to create a surge which can lead to local regeneration in the future (OECD 2011).

In the "Kyoto Model", in order to ensure the practical abilities of students, "on-the-spot" training is provided, particularly focusing on formulating policies. Universities are also often accepted by local communities as being a recognised public policy expert. The aim is to foster highly educated people, mainly at master's level, who can take the lead in the local regeneration process, by being positively committed to depressed areas faced with social and economic difficulties.

6.4.2 Policy Recommendations

1. Demographic change, which results in population reduction and ageing in this case, is caused by diverse conditions. Due to adjustments in the industrial structure, production sites have been moved overseas. Low birth rates have accelerated because of the change in values in people's lives. Additionally, the suburbanisation of housing in metropolitan areas often leads to lower numbers of people living in the central cities. Therefore, the policies pursuant to the sustainability of shrinking cities should be multi-dimensional, and urban policy studies need to be interdisciplinary. Additionally, with regard to government, in order to respond to issues efficiently and effectively, it is necessary to determine the appropriate scale and level of approach (all recommendations from Martinez-Fernandez et al. 2012).
2. Local cities experiencing decreasing populations, and economic and social decline for various reasons, rely on public investment and still face the difficulty

of attracting private investment. What is needed for revitalisation and regeneration is economic and social development which makes use of historical, geographical and natural attributes. In other words, pursuing the possibility of endogenous development is the only way to survive, enabling the area to capitalise on local features in the era of economic globalisation. By choosing such a path, it will be possible to ensure quality of life for local people.

3. Local cities that have decreasing and ageing populations are faced with the problem of scarce human resources. To utilise limited human resources, it is imperative for local community members, such as local government, economic groups, cultural groups, businesses and non-profit organisations, to be more conscious stakeholders, and to establish the frameworks by which they collaborate with each other. The policy direction that Kyoto Prefecture has taken, making use of the experience and skills of older workers, providing further opportunities for them, and offering them the chance to play active roles in local communities, should be welcomed.
4. Universities, which are storehouses of intellectual and human resources, should contribute to the regeneration of local cities which are facing the problems of demographic change and decline, irrespective of where they are located. In the Northern Area of Kyoto Prefecture, innovative and creative efforts are being made, in that numerous universities outside the areas in question collaborate and form partnerships with local stakeholders to cultivate human resources and conduct studies of regeneration programmes. The exchanges between universities and local communities have brought about numerous creative projects. The outcomes of such efforts can be exported to others as the "Kyoto Model".
5. One of the "Kyoto Model's" weaknesses could be in regard to the effort to create new employment, which should be one future policy agenda. Local cities with rural areas and beautiful countryside have natural assets. It is necessary to create new businesses that make the most of the green assets, develop opportunities for the elderly to work and generate consumer markets for the elderly (generally called "silver markets"), at the policy level. Further study is needed in this regard.
6. It is difficult for one single city to solve the issues of demographic change and sustainability. It is essential to develop collaboration between cities, which can respond to issues at the city region level. Additionally, it is necessary to build diverse networks with metropolitan cities in remote places. Kyoto Prefecture needs: more positive attempts to build a distribution system by which organic agricultural projects are sold directly to people living in urban areas; the development of agritourism; and extension of housing subsidies which encourage settlement from urban areas.
7. Lastly, statistical data which ensures quality and comparability and helps to formulate policies is needed. Ensuring comparability of knowledge bases regarding how and by how much cities are shrinking enables tailor-made policies and measures to be designed, and contributes to practical and efficient policy decisions. For this, measurement methodologies also need to be examined, including scales for the analysis.

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