



Adaptation for livelihood security in COVID-19 crisis among the urban poor in Bangkok, Thailand

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Abstract

This research aims to examine the vulnerability affected by poverty and livelihood risk, including the adaptation and solutions supporting livelihood security in the first wave of the COVID-19 crisis, which is the unforeseen livelihood shock. A qualitative methodology was used to collect field data in two Bangkok communities: (1) Rim Khlong Phraya Rajamontri, Bang Bon District; and (2) Wat Chonglom, Yannawa District. These two communities represent livelihood of the urban poor in slum areas. Research methods were livelihood capital survey, semi-structured interview, and focus group discussion. The study results found that most of the vulnerable households had at least three adequate assets for the urban poor, including human, physical, and financial capital, which helped them survive in the COVID-19 crisis. Moreover, they managed their assets, which are capital or resources and capabilities they own effectively, empowered by social capital, which has been integrated into the form of a civil society network. Those who had much more social capital made a quick recovery after their losses in this crisis. It is a way in which livelihood security is created following livelihood security and community-based development approaches to handle COVID-19 crisis effectively. Strengthening social capital can be a guideline to fight for livelihood security of the other vulnerable groups in an urban area. Further study should be applied by participatory action research to allow an active participation of all stakeholders to get an appropriate model for disaster management.

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Introduction

Modernization leads to rapid economic growth and urbanization, with people moving to urban centers to find better opportunities for economic well-being and education.

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Thailand has a population of around 69.8 million, while Bangkok has around 10.5 million. 5.1 million are registered and 5.4 million are unregistered. Bangkok is 20 percent of the Thai population. (United Nations Human Settlements Programme, 2019). Bangkok has a total area of around 1,569 km², which amounts to 7,000 people per 1 km² in density (Administrative and Registration Office, Bangkok Metropolitan Administration, 2020). Urbanization in Bangkok has resulted from a modern Thailand Plan.

Urban poor who live in informal settlements such as slum areas with inadequate environment normally struggle to secure their livelihoods. The COVID-19 pandemic put them in a worse situation (Eshun & Denton, 2018). This study aims to explore how the urban poor can cope with COVID-19 crisis to secure their livelihoods. The study of urban vulnerable poor should state how to manage an expandable risk of urbanization to protect and strengthen their capability in coping with unpredicted crises and changeable trends, such as disaster and climate change affecting urban livelihood, especially for the vulnerable poor. Finding a good solution to handle urban trends aims to strengthen livelihood security, because the urban poor is surrounded by a risky environment.

The United Nations (2011) predicted that the world population would reach 9.8 billion by the year 2050, with 6.7 billion being born and raised in urban, rather than rural areas. This trend leads to the undesired consequences for the urban versus rural poor. The urban trend has a special characteristic: crime, unemployment, and inadequate housing. Even though the urban area is a source of jobs, income, and the opportunity for education and health care, only the middle-income class will gain full benefit. They are capable of renting, buying, and owning their assets, whereas the working class and the poor have been pushed to settle in insecure housing and inadequate environments, especially those who live in slum areas, which can be found in highly expandable areas. Moreover, living in slum areas affects well-being and livelihood security (Fraser, 2015).

The global expansion of COVID-19 put Thailand in a state of quarantine. This increased the rate of affected people every day. Mostly, people continue their daily life in hard times, especially the urban poor in slum areas, which are often surrounded by an unhealthy environment. Strict policies and measures enforced by the government tend to push the poor to a more difficult situation both: (1) economically — the poor cannot afford the COVID-19 protecting equipment due to expensive cost; and (2) socially — the poor feel much stress due to limited travelling and social distancing. Such needs a proper solution to help vulnerable households survive in a crisis like this by coping and adapting their assets to lower their risk and strengthen their livelihood security. Then, they can manage crises and plan for handling and recovering to a resilient state by themselves in the future.

Literature Review

Poverty is a phenomenon that has several aspects. Its root is complex and dynamic. It also has different

meanings depending on the standpoint, perspective, and the issue studied by the researcher. For example, one definition is lack of income, vulnerability, insecurity, exclusion, and powerlessness (Chambers, 1983). Poverty is classified with three factors: economics, social, and politics. In an economics context, poverty is a lack of income or consumption. A widely accepted index in the economic context is “a dollar a day index” (Ravallion et al., 2008). Other definitions include well-being (Sen, 1985; Carney, 1999), freedom and capability (Sen, 1985), insecurity (Chambers, 1989; Moser, 1998), and lack of social protection and powerlessness (Chambers, 1995). However, the poverty definition has always been questioned as to what is it, who asks, and who answers? (Chambers, 2005).

Sustainable livelihood is an approach that has been developed from the concept of livelihood but combines much more complexity and the relationship between components and relevant factors that interact with each other (Chamaratana & Phenthavy, 2020). Its foundation comes from three important concepts, such as capability, equity, and sustainability, which have been integrated to be one framework. These integrated concepts are both method and goal that support each other (Chambers & Conway, 1992) and point to the objective, goal, and importance of development, especially poverty reduction in rural areas. In 1997, the Department for International Development (DFID) provided a white paper to propose the idea of sustainable livelihood to build an understanding of poverty characteristics and how to survive from the poverty trap. The hope was to eliminate around 50 percent of global poverty by 2015. This approach helps to describe the positive and negative factors in building a good opportunity for livelihood, including the relationship between success and failure of it. Moreover, it also helps developmental project planning to be sustainable (Ashley & Carney, 1999). Sustainable livelihoods are peoples’ capability of asset management they own or access (Masae, 2015). A sustainable livelihood framework shows the relationship between any factors which lead to the successful goal of the livelihoods approach as listed below.

1. The vulnerability context is the environment and difficult circumstances surrounding the poor. It is an unpredictable situation that affects livelihoods directly and leads to the poverty trap. Some situations are rapid or short term, while other situations proceeded gradually or long term. But the consequence of situations influences the poor’ livelihoods both directly and indirectly. In terms of urban context, vulnerability intertwines with policy, institution, and process. When a city becomes the center

of development and economic growth, its urban population can easily be promoted in both social and human development whereas social deprivation could not be neglected (Eshun & Denton, 2018).

2. Assets and capability can be formed into ‘Capital’; the resources the poor own. In other words, it is the production cost related to livelihood outcomes and affected by choosing livelihood patterns. Furthermore, it is directly influenced by vulnerability context and policy institution and process. Assets or capitals have been classified into five types as follows.

2.1 Human capital is a congenially personal ability and learning skill. It is a valuable characteristic that indicates human capability, continuously growing when meeting a proper investment (Schultz, 1962). Human capital is one intangible capital, because it cannot be traded and is only gainful for the owner. This is a combination of health, education, skill, knowledge, and various experiences. Apart from these, tacit and empirical knowledge are included. Therefore, institutions and organizations that have high-capacity human capital will gain success (Pinkesorn et al., 2017).

2.2 Natural capital is a natural resource-influenced livelihood, especially rural livelihood, which relies on circular resources and natural capital. A natural resource is both cause and outcome of livelihood, including vulnerability context, which intertwines with human capital. To rephrase it, a natural resource can help improve livelihood vulnerability. It can be food supply with healthy materials. At the present time, a natural resource is much more important to the economic system, highlighting circular economy (Wautelet, 2018) to help improve using resources efficiently, with less raw material.

2.3 Physical capital is tangible capital that can be provided to produce economic value added by livelihood activities, including production costs for basic needs. Physical capital can be counted to be a tool of occupation and consumer products for household, personal, or shared assets. These can be described into two major types as follows: (1) fixed assets, which can be a production tool to create income, such as equipment, machinery, property, and intellectual property; and (2) infrastructure, which is a fundamental supporting livelihood activity, such as roads, electricity, tap water, wastewater treatment system, communication system, education, and health system.

2.4 Social capital is a norm and common value of civil society for the benefit of others (Putnam, 2001). These are based on two fundamental ideas as follows: (1) It arose from collecting and increasing through a preservation system, which is an investment to build

membership unity and spirit by performing formal and informal activities, such as traditional cultures, patronage, and networking; and (2) Collecting capital to create intangible valuable assets to strengthen network coordination between membership and others (Samukkethum, 2015). When looking through a sustainable livelihood framework, social capital is more accepted to be a helping tool for the poor to survive from the poverty trap. It has a distinguished aspect of trust.

2.5 Financial capital is an important tool used to call for legal claims and obligations between the business sector or individual. It is a capital which is used to reach the livelihood goal; for example, currency and savings, gold, and land, which can be exchanged for money. It also includes intellectual property, which can be claimed for a future benefit. Financial capital is different from other capital. It is both assets and liabilities. However, financial capital is flexible, because it can easily turn to other capitals to reach the livelihood goal.

The sustainable livelihood approach is flexible in practice, which can add the relevant dimension. Its base foundation is people-centered, holistic, strengthening, macro-micro linkage, and sustainability (Carney, 2003). However, using this framework is different, depending on each user. For instance, DFID, OXFAM, CARE, and UNDP adjusted and developed this framework to fit their activities. A sustainable livelihood framework is an effective tool to study the poor’s livelihood, although it has been criticized to be an improper tool to understand political and structural changes in society. This framework neglects political capital, which is needed to analyze political power. Political negotiation on the rights of livelihood assets lacks transparency and accountability when embedded in policy and structure of local government, because power structure and level are unstable and dynamic (Banks, 2015; Baumann, 2000; Scoones, 2009). Although, this framework works well in the rural context, it could fit in the urban context as well because it acknowledges the multi-faceted nature of poverty; persistence and dynamic. It still recognizes that the poor develop a diverse and changing livelihood portfolio focusing on their perception and shaping their own needs (Farrington et al., 2002). Moreover, it provides a systematic basis of identifying how people manage their asset within the context of vulnerability and institutional frameworks. This framework allows adding the related factors to fit in the selected context.

Urbanization led to a rapid development in Bangkok focusing on infrastructure investment such as roads, transportation networks, telecommunication, and high-rise buildings. These helps economic growth

and contributes to job offer, then people move to town finding a better opportunity in terms of job and education (Patel et al., 2020). Unfortunately, the cost of living in urban area makes them vulnerable to fall into the poverty trap, which is difficult to escape, and then the COVID-19 crisis emphasized an increase in extreme poverty (Kittiprapas, 2023). In conclusion, sustainable livelihood framework used in this study focused on household asset analysis and the role of policy, institution, and process which enhance the capacity of the urban poor to cope with COVID-19 crisis by adapting their own assets to be effective livelihood capitals.

Livelihood security is an important concept, because the well-being of the urban poor is built from participation, empowerment, and livelihood security. The urban poor need to have the capability to cope with risk and crisis. They should get support as a form of social protection or safety net from civil society for wellbeing (United Nations, 2011). The level of peoples' participation in development activity has been rated from 'low to high' (Samah & Aref, 2011). Non-participation is self-planning (Wandersman, 2008), voluntary, or compulsory participation (Oakley, 1989). Participation is people voluntarily getting involved with the process of decision-making, controlling, and managing the community resource to get the target done (Oakley & Marsden, 1984). Understanding the participatory outcome is shown by how people get an opportunity to shape their community development plan (Samah & Aref, 2011). People participation helps develops potential and capability to negotiate in the process of decision-making. The livelihood security approach has been developed to be a mainstream approach, which involves classification of urban and rural livelihoods, project planning on the right target, and the role of local government on policy intervention. Supporting and enforcing this approach is related to human security, being people-centered based on equity, human rights, capability, and sustainability. This approach focuses on the poor-the main actor of resource management by their views. It reflects the form of livelihood opportunities for giving rise to sustainable livelihood, including active participation. This approach also helps analyze livelihood strategy, which strengthens livelihood security by examining the vulnerability and capability of the poor to adapt and recover from a crisis that affects their livelihood (Ekblom, 2012).

Livelihood adaptation is the capability of coping and adapting to crisis-affected livelihood security. It is based on two concepts: capacity and resilience dividend. Developing the urban poor capacity for livelihood

adaption could be done by the participation of every sector involved with development activity in the form of multilateral sectors. These include government, public, private, and political sectors. Enforcing peoples' power is moving or transferring capacity to each other—individual to group and group to network. It is a so called 'politics' that is the power of decision making (Moore, 2001). Moreover, it is the cooperation between stakeholders who are insiders and outsiders, such as the public-private sector, including building the body of knowledge and sharing (Naomi & Koichi, 2008). Participation comes from enforcement, which changes people from defender to actor—who control and manage their resource by themselves (Cala & Simpson, 2001) using social capital to gain benefit and well-being from development outcome (Oakley & Marsden, 1984). In conclusion, it is giving community power to do decision making, share their ideas, gain a benefit, respond to the consequence, and manage the risk. In the 21st-century, the challenges to livelihood security are as follows: (1) Urbanization expedites the growing rate of population that affects vulnerability in providing infrastructure and service for citizens; (2) Globalization changes social structure that gives rise to, and spreads vulnerability; and (3) Climate change can affect urban poor areas due to rising sea levels (Rodin, 2015). Therefore, livelihood adaptation of the urban poor should comprise five aspects as follows: (1) Knowing and realizing the vulnerability of the assets they own to plan and use a proper livelihood strategy; (2) Accessing all data and options to help make decisions; (3) Sharing information to integrate participation; (4) Capability to control decision making; and (5) Flexibility to adapt in real-time.

COVID-19 has been described as a disaster or crisis. Developing the capability of coping and adapting to the crisis helps the urban poor to survive and recover. The process of fighting the COVID-19 crisis is a call for multilateral participation to strengthen the active participation mechanism. All sectors support information, budget, and resources to strengthen the community development and develop the potential of the community from coping to recovering from the disaster with attention to livelihood security.

Methodology

Area of Study

This research used purposive sampling in two communities in slum areas in the greater Bangkok area. Wat Chong

Lom Community, Yannawa District is a modern business and commercial district that is a high densely populated area with migrant people from another area. Rim Khlong Phraya Rajamontri, Bang Bon District is a new industrial area, which is a medium, densely populated community, with mostly original inhabitants. The difference is size and location.

Participants

The participants were 10 key informants and 20 research participants/case studies. Fieldwork was conducted within 16 months to collect field data for analyzing and synthesizing.

Data Collection

The field data were collected after the first wave of COVID-19 between February 2020 to May 2021. Four research tools were used: (1) A capital survey/checklist based on livelihood assets, such as physical, human, social, natural, and financial capital to examine the vulnerability of the poor; (2) Semi-structured interviews to examine the form of the expectation and motivation to build livelihood security in the COVID-19 crisis; (3) Focus group discussion to examine specific details on points of interest and find a consensus; and (4) Participant and non-participant observations to explore the study area and collect general data. These tools were approved by the triangulation method by three experts. The tools were applied to 10 percent of the case studies.

Data Analysis

1. Gathering data related to objectives to clarify research questions. This included documentary research, semi-structured interviews, focus group discussion, and participant and non-participant observations.

2. Analyzing data by categorizing data in form of narration and explanation.

Ethical Consideration

This research meets the criteria of approval from the National Institute of Development Administration Institutional Review Board and Bangkok Metropolitan Administration, including the consent form from all research participants.

Results

Studying the adaptation of urban poor aims to examine the capability of the poor to cope and recover from the COVID-19 crisis. The study analyzed household vulnerability based on assets the 20 case studies own (see Table 1), including human, financial, physical, and social, which is described to be a productive livelihood capital of the urban poor.

The Analysis of Household Capability

The poor households in two study areas have at least three capitals; human, financial, and physical capital. Natural and social capital were found in some households. The study found natural capital only in Rim Khlong Phraya Rajamontri, Bang Bon District. However, it is enough for the urban poor to have at least three capitals, because such is important capital for livelihood security.

Livelihood vulnerability has been raised to analyze the capability of the poor household to cope with the COVID-19 crisis as follows: (1) Economic vulnerability is examined by human, financial, physical, and natural capital; and (2) Social vulnerability is examined by social capital. The result found that poor households had medium to low livelihood vulnerability, because they had at least three capitals. Having all capital or livelihood assets led the poor household to have the capacity to cope with the crisis by good adaptation more than those who had lower capital. According to the urban poor, the most important capital for them is human and financial capital, which helped them decrease livelihood vulnerability. They were able to cope and adapt to survive in the COVID-19 crisis.

Table 1 Conclusion of case studies' assets

Community	Type of assets				
	Human	Physical	Natural	Financial	Social
Wat Chonglom	10	10	0	10	8
Rim Khlong Phraya Rajamontri	10	10	10	10	10

Note: Some case studies of Wat Chonglom own at least 3 types of household asset whereas Rim Klong Phraya Rajamontri own all types, but various in detail. The data were collected by household capital survey and interview.

Adaptation of the Poor Households

Poor households do not plan to build long-term livelihood security, but short-term planning to cope with the COVID-19 crisis. These are diminished factors of capacity to strengthen livelihood security. The result of the semi-structured interview and focus group discussion show that the government sector has an important role in supporting the vulnerable urban poor to cope and adapt well to the COVID-19 crisis, by giving them daily-life consumer goods for free (see Table 2). This not sufficient support for poor households. Building social capital (self-reliance) should be an important option to lower vulnerability and insecurity, which helps strengthen the livelihood security of the poor.

Table 2 Relief measures to alleviate the impact of COVID-19

Sector	Type of measures
Government	Food and supply donation, Cash subsidies, Information, Vaccination and immunization
Civil society	Food and supply donation, Information
Private	Food and supply donation
Political	Food and supply donation

Supporting Guidelines for Livelihood Security

Building social capital by grouping and networking in the form of multilateral corporations combined with civil society, government, business, and political sectors help strengthen the livelihood security of the poor. Such can be found in several projects and activities in Bangkok Metropolis as follows: (1) The Little Free Pantry Project involves bringing consumer goods to public areas. It aims to alleviate the suffering of COVID-19 victims; (2) The Kitchen Mobile Project prepares ready-to-eat food for those who suffer from the COVID-19 crisis by driving to slum areas, religious places, and schools in the Bangkok area; and (3) The Community Isolation Project provides community space for civil society, which helps control isolation, quarantine, and minimizes virus spread. The conclusion of the focus group discussion was that free handouts was an unsustainable short-term solution. There is a need for active participation from all stakeholders in the form of community engagement for disaster management focusing on disaster resilience that is suited to the community context. It also focuses on daily updated information and publicity in the community. This empowers and develops the community's capacity to realize and classify their risks through participation. The community will feel free to act in social activities with another sector. The point is that the community can participate in the decision-making process, which is

an effective process for community-based development. The role of the public and private sectors is to engage with the community and to provide a protocol for each community to effectively adapt to the risk they face.

Discussion

Vulnerability

Vulnerability, affected by poverty and the risk of the poor's livelihood in the COVID-19 crisis reached a different level during COVID-19. Prior to that, poor households had low vulnerability because they were still in a secure situation, with enough assets to live. Workers were paid, and merchants did their jobs based on supply and demand until the COVID-19 outbreak. Deng's research (Deng et al., 2021) found that the outbreak affected human capital and the economy. The workforce decreased due to illness and death. It also caused a lower rate of household income, national consumption, and investment significantly. By lockdown policy declaration, the government used control measures, such as travel control limitations, social distancing, and public space accessibility. Household incomes decreased with unemployment, whereas the cost of living increased (e.g., for virus protection).

A proper solution to handle the COVID-19 outbreak would have been to decrease unnecessary expenses and increase income by adapting important assets — human and financial capitals. The study found that a household with high-capacity human capital, but lower financial capital, for example, higher level education, higher capacity, and better health will gain benefit more than a household with higher financial capital but lower human capital. The study points out that a household with a high-level capacity of human capital can find much more information to deal with the crisis in the short term.

Even though human and financial capitals are important factors for poor livelihoods, social capital is much needed to support and strengthen livelihood security. The study found that those who have social capital can cope and recover from the COVID-19 crisis rapidly. Poor households with many types of social capital, including a sense of trust, shared value, kinship relations, and group members or networks can help decrease the livelihood vulnerability of the poor household. Fraser et al. (2022) found in a study in four U.S. states that social capital was a powerful tool to cope with the COVID-19 crisis.

Adaptation for Livelihood Security

COVID-19 is described to be one form of disaster, which spread rapidly and impacted broadly both economics and society. It caused a lower rate of travel, communication, and economic growth, but a higher demand for health services (Makridis & Wu, 2021). Pongutta et al. (2021) found that the incomes of the poor living in slum areas in Bangkok resulted in the poverty rate increasing from 51.6 percent to 91.7 percent. The poor needed to limit their travel and cost of living. One in ten relied on food donations, while 61.1 percent could not access financial support and social protection. Civil society played an important role in providing aid to the poor by giving them food, survival bag, job offers, and a COVID-19 test kit. The government sector enforced some regulations, including social distancing and work from home to prevent COVID-19 from spreading.

Some argue that while social distancing can help decrease the rate of COVID-19 infection and pandemic, it eliminates the role of social capital in livelihood security. Social capital plays a prominent role in decreasing the risk and vulnerability of the poor by focusing on trust and relationships in the community. Social capital is an important factor in supporting people in the community to participate and fight for survival in this crisis. Even though everyone has different capacities, forming a group or network can help them handle the crisis satisfactorily. They provide social support for living conditions and access to information. They decrease vulnerability and strengthen the livelihood of the poor. This is related to the study of Bartscher et al. (2021), who concluded that strengthening social capital helps decrease the rate of illness and death and recover peoples' health, which is a factor in increasing the livelihood security of the poor.

Conclusion and Recommendation

The poor household can cope with the COVID-19 crisis enough for survival by effectively adapting their assets or capital on their own. As a part of coping, the household needs the following: (1) clean shelter, clothing, and household equipment for physical well-being; (2) decrease daily expenses and increase income for economic conditions; (3) gather in a group to exchange information and help each other with social conditions; and (4) manage community waste for environmental conditions. The result shows that working together under good leadership at both household and

community levels can help vulnerable groups such as the elderly, disabled people, and children survive a difficult situation. Some households who have strong leadership can play a leading and supporting role for their families. Others need the support of a group or network to share knowledge and find solutions. For long-term planning, they need support from the government and related groups to participate together. Civil society should promote and support as follows:

1. Support for strengthening social capital in the form of a network, which is a developing type of social network. It is a network of goodwill relationships between humans that motivate social movement and progress. Social networks must reach out to the urban poor who are normally excluded.

2. Promote and support for building capacity at each level — individual, household, community, and national. Stakeholders must understand the norm, shared value, and culture of the vulnerable group to design a proper solution that fits each context and enables the poor to access assets.

3. Participatory Action Research (PAR) should be performed to allow all stakeholders to participate in the research process to get an appropriate model for disaster management to suit each group. By understanding disaster risk and building capacity, the community can cope and adapt well, and recover from a crisis.

Conflict of Interest

The authors declare that there is no conflict of interest.

References

- Administrative and Registration Office, Bangkok Metropolitan Administration. (2020). *Civil registration data*. (Unpublished manuscript).
- Ashley, C., & Carney, D. (1999). *Sustainable livelihoods: Lessons from early experience*. DFID.
- Banks, N. (2015). Livelihoods limitations: The political economy of urban poverty in Dhaka, Bangladesh. *Development and Change*, 47(2), 266–292. <https://doi.org/10.1111/dech.12219>
- Bartscher, A. K. (2021). Social capital and the spread of Covid-19: Insights from European countries. *Journal of Health Economics*, 80, 1–15. <https://doi.org/10.1016/j.jhealeco.2021.102531>
- Baumann, P. (2000). *Sustainable livelihoods and political capital: Arguments and evidence from decentralisation and natural resource management in India*. Working Paper 136. Overseas Development Institute.
- Cala, C., & Simpson, B. (2001). *Measuring results in community development: An exploration of participation and network capacity domains*. Network Discussion Paper.

- Carney, D. (1999). *Livelihoods approaches compared: A brief comparison of the livelihoods approaches of the UK Department for International Development (DFID), CARE, Oxfam and the United Nations Development Programme (UNDP)*. Department of International Development.
- Carney, D. (2003). *Sustainable livelihoods approaches: Progress and possibilities for change*. Department for International Development.
- Chamaratana, T., & Phengthavy, T. (2020). Livelihood strategies of Laotian women with disabilities households after training from vocational training center in Vientiane capital, Lao PDR. *Journal of Raichasuda College*, 15(2), 62–75. <https://rs.mahidol.ac.th/rs-journal/eng/vol.15/vol.15-02-005.php>
- Chambers, R. (1983). *Rural development: Putting the last first*. Intermediate Technology Publications.
- Chambers, R. (1989). Editorial introduction: Vulnerability, coping and policy. *IDS Bulletin*, 20(2), 1–7.
- Chambers, R. (1995). Poverty and livelihoods: whose reality counts?. *Environment and Urbanization*, 7(2), 173–204.
- Chambers, R. (2005). *Ideas for development*. Earthscan.
- Chambers, R., & Conway, C. (1992). *Sustainable rural livelihoods: Practical concepts for the 21st century*. IDS discussion paper No. 296. Institute of Development Studies.
- Deng, G, Shi, J., Li, Y., & Liao, Y. (2021). The COVID-19 pandemic shocks to human capital and policy responses. *Accounting & Finance*, 61(2021), 5613–5630. <https://doi.org/10.1111/acfi.12770>
- Eklblom, A. (2012). Livelihood security, vulnerability and resilience: A historical analysis of chibuenne, southern mozambique. *Ambio*, 41(5), 479–489. <https://doi.org/10.1007/s13280-012-0286-1>
- Eshun, F., & Denton, F. (2022). Institutional roles in enhancing assets adaption of urban poor. *Urban Governance*, 2, 200–211. <https://doi.org/10.1016/j.ugj.2022.04.005>
- Farrington, J., Ramasut, T., & Walker, J. (2002). *Sustainable livelihoods approach in urban areas: General lessons, with illustrations from Indian cases*. SIDA.
- Fraser, A. (2015). *Rethinking urban risk and adaption: The politics of vulnerability in informal urban settlements* [Doctoral dissertation]. London School of Economics and Political Science.
- Fraser, T. Page-Tan, C., & Aldrich, D. P. (2022). Social capital's impact on COVID-19 outcomes at local levels. *Scientific Reports*, 12(1), 6566.
- Kittiprapas, S. (2023). Characteristics of the urban poor under COVID-19 control measures: a case study in Bangkok. Thailand and The World Economy, 41(1), 148–170. <https://so05.tci-thaijo.org/index.php/TER/article/view/263129/177308>
- Makridis, C. A., & Wu, C. (2021). How social capital helps communities weather the COVID-19 pandemic. *PLOS ONE*, 16(1), e0245135. <https://doi.org/10.1371/journal.pone.0258021>
- Masae, A. (2015). Enhancing sustainable rural livelihood through community-based development. *Journal of Social Development*, 17(1), 89–110. <https://so04.tci-thaijo.org/index.php/jsd/article/view/37422>
- Moser, C. O. N. (1998). The asset vulnerability framework: Reassessing urban poverty resuction strategies. *World Development*, 26(1), 1–19. [https://doi.org/10.1016/S0305-750X\(97\)10015-8](https://doi.org/10.1016/S0305-750X(97)10015-8)
- Moore, M. (2001). Empowerment at last?. *Journal of International Development*, 13(3), 321–329. <https://doi.org/10.1002/jid.787>
- Naomi, S., & Koichi, M. (2008). Knowledge and networking strategies for community capacity development in Oyama-machi: An archetype of the OVOP movement. *Journal of OVOP Policy*, 1(6), 5–20. http://www.iovoppa.org/files2/06_naomi-e.pdf
- Oakley, P. (1989). *Community involvement in health development: An examination of the critical issue*. World Health Organization.
- Oakley, P., & Marsden, D. (1984). *Approaches to participation in rural development*. International Labour Organization.
- Patel, R., Sanderson, D., Sitko, P., & De Boer, J. (2020). Investigating urban vulnerability and resilience: A call for applied integrated research to reshape the political economy of decision-making. *Environment & Urbanization*, 32(2), 589–598. <https://doi.org/10.1177/0956247820909275>
- Pinkesorn, K., Kittisaknawin, C., & Kongklai, C. (2017). Human capital: Corporate human capital scorecard. *Journal of Graduate Studies*, 11(2), 193–202. <https://so02.tci-thaijo.org/index.php/JournalGradVRU/article/view/97773/76161>
- Pongutta, S., Kantamaturapoj, K., Phakdeesettakun, K., & Phonsuk, P. (2021). The social impact of the COVID-19 outbreaks on urban slums and the response of civil society organisations: A case study in Bangkok, Thailand. *Heliyon*, 7, e07161. <https://doi.org/10.1016/j.heliyon.2021.e07161>
- Putnam, R. D. (2001). Social capital: Measurement and consequences. *Canadian Journal of Policy Journal of Policy Research*, 2(1), 41–51. <https://www.oecd.org/innovation/research/1825848.pdf>
- Ravallion, M. Chen, S., & Sangula, P. (2008). *Dollar a day revisited*. (Policy Research Working Paper 4620). <https://documents1.worldbank.org/curated/en/350401468157768465/pdf/wps4620.pdf>
- Rodin, J. (2015). Cities in the age of crisis: Realising the resilience dividend. *Urban Solutions*, 7, 54–61. https://smartnet.niua.org/sites/default/files/resources/CLC_UrbanSolutionsIssue7.pdf
- Samah, A. A., & Aref, F. (2011). The theoretical and conceptual framework and application of community empowerment and participation in process of community development in Malaysia. *Journal of American Science*, 7(2), 286–195. <https://www.jofamericanscience.org/journals/am-sci/am0702/>
- Samukkethum, S. (2015). Community, individuality and development in the globalization era. *Journal of Social Development*, 17(1), 1–27. <https://so04.tci-thaijo.org/index.php/jsd/article/view/37424/31136>
- Scoones, I. (2009). Livelihoods perspectives and rural development. *The Journal of Peasant Studies*, 36(1), 171–196.
- Schultz, T. (1962). Reflections on investment in man. *Journal of Political Economy*, 70(1), 1–8.
- Sen, A. K. (1985). *Commodities and capabilities*. North-Holland.
- United Nations. (2011). *Sustainable livelihoods: A broader vision*. (Discussion paper).
- United Nations Human Settlements Programme. (2019). *Urban challenges*. <http://urbanresiliencehub.org/facts-and-figures/>
- Wandersman, A. (2008). A framework of participation in community organizations. *The Journal of Applied Behavioural Science*, 17(1), 27–58. <https://doi.org/10.1177/002188638101700103>
- Wautelet, T. (2018). *The concept of circular economy: Its origins and its evolution*. https://www.researchgate.net/publication/322555840_The_Concept_of_Circular_Economy_its_Origins_and_its_Evolution