

Strategies towards sustainable Urban–Rural Interlinkages in Ghana

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Highlights

To achieve sustainable development in Ghana, key challenges in urban–rural linkages that must be addressed are inequality and gender gaps, poor infrastructure, food security and livelihoods, partial decentralization, and poor access to financial support. Prioritized solutions consist of

- Gender inclusiveness
- Investment in basic and economic infrastructure
- Promotion of modernized and sustainable agricultural systems

INTRODUCTION

This policy brief is an output from the project “Development Strategy for Urban Sustainability in Africa on the Basis of SDGs Interlinkage Analysis” (USiA), led by the University of Tokyo and United Nations University in Tokyo in collaboration with African partners and funded by Japan International Cooperation Agency (JICA). This project’s goal for Ghana is to propose a set of potential solutions to contribute to building sustainable urban-rural linkages, focusing on SDG 9 (industry, innovation, and infrastructure) and SDG 11 (sustainable cities and communities). A further intent is to guide decision-making and collective action to optimize synergies or trade-offs of urban–rural linkages.

The challenges and solutions were initially identified by research, including academic articles and policy documents, and elaborated through two local workshops in Ghana in August 2018 and January 2019. More than 20 policy makers, representatives from NGOs, funding agencies, and experts participated in each workshop. During the first workshop, more than 20 potential solutions were identified; these were prioritized using the three dimensions of sustainability: social, economic, and environment. Potential solutions were ranked based on the three dimensions separately and later combined to obtain the overall top three ranked solutions. Then the top three solutions were further

elaborated to include specific examples and actions during the second workshop.

KEY URBAN-RURAL CHALLENGES

Rural development is important for sustainable economic growth. However, its linkages with the fast-growing cities in Ghana have resulted in a number of challenges:

■ Inequality and gender gaps

There are increasing developmental inequalities between urban and rural areas. This disparity is even higher when gender is considered. Challenges relating to gender include limited female participation in decision-making processes, in the labor force, and in secondary-school enrollment, and with high birth rates among adolescents (UNSD, 2019). Social and economic systems are not fully inclusive of equal female participation although the population of Ghana is 51.7% female and 48.3% male (Ghana Statistical Service (GSS), 2014).

■ Inadequate basic and economic infrastructure

Increased urban–rural migration, urban sprawl, industrial expansion, and population increase have contributed to expanding urban slum areas that have inadequate housing facilities, and high rents translate

to a lack of affordable housing. Slum communities face high exposure to risk and extreme-event disasters, and they have inadequate access to social and public services and amenities, including waste management and sanitation, education, and health. Inadequate infrastructure and unstable institutional, financial, and political systems further fuel community problems. Additionally, low recycling rates, improper refuse disposal from households and commercial establishments, and poor burning practices exacerbate negative consequences on water quality and quantity, sanitation, health, and hygiene.

Urban–rural connectivity is also weak as a result of poor and inadequate transport systems. Additionally, limited or absent information and communications technology (ICT) infrastructure in rural areas hampers effective health, education, communication, and business services.

■ Limited effectiveness of decentralization

From a social, economic, and environmental perspective, limited local participation in development and governance processes tend to hinder and weaken urban–rural linkages. Some of the critical results of decentralization are institutional weakness, inefficient resource mobilization and utilization, inadequate human-resource capacity, and poor performance (Antwi & Analoui, 2008; Republic of Ghana, 2010). To achieve development that is inclusive of all social groups, especially at the local level, there is a need to improve processes that support bottom-up approaches for governance.

■ Food- and nutrition-security dynamics

Agriculture is the predominant livelihood of the rural population, who play a vital role in national food security. However, with limited economic perspectives, limited availability of land, and the impacts of climate change, more people are choosing to migrate from rural to urban areas in search of new livelihoods. These include young men, women, and children. While urban–rural remittances are one of the foremost contributors to rural household income and community development, the migrants face challenges in housing, access to health care and sanitation, trafficking, sexual abuse, exploitation, low salaries, and food insecurity.

Consequently, a smaller number of farmers and producers will have to meet the needs of a growing

urban population. The increasing urban population is affecting access, continuity, quality, and quantity of the food supply. Food insecurity is also linked to poverty, poor infrastructure, and socioeconomic instability of the increasing numbers of female-headed households.

TOP THREE IDENTIFIED SOLUTIONS

As a result of the USiA project, three main solutions to the above challenges were identified and elaborated.

1) Gender inclusiveness

Including gender considerations in all policy and decision-making processes is a critical step to reduce inequality in rural and urban centers. Addressing the gender gap has positive effects on migration patterns, food and water security, and education. Studies show that 55% of hunger reduction in developing countries could be associated with improvements in female education and reduction of inequality (UN Women, 2014).

Increasing public awareness of gender as a social construct could reduce related cultural challenges that impede the economic progress of women. For example, this could be achieved by incorporating gender and related issues in traditional curricula and by encouraging more proactive support by community heads and opinion leaders to positively reform cultural and traditional roles of women. The active participation of women also would provide holistic perspectives when identifying interventions or solutions for community development.

Educational programs that target skills development and capacity building would empower women economically. This could be achieved through



training programs in financial literacy, business development, supply chain, technology (e.g., mobile banking, online trading), etc. For example, marketing of produce such as groundnuts or value-added products such as shea butter, soap, and woven smocks would improve income generation. Registration of small businesses owned by women as formal entities also would provide wider opportunities for expansion. Women in the agrarian sector also could benefit from simple and affordable technologies to help them save time for other productive activities. Job-related skills development should be driven by community participation. A related example is an initiative by the World Bank (2014), a program that transitions adolescent girls or young women from school to productive employment in Liberia, Rwanda, and South Sudan.

Increased access to education by females could be achieved through tertiary scholarships, which would help reduce early marriages; investments to allow girls attend school all the time, such as production of affordable reusable sanitary pads (Mauran, 2018) or return-to-school policies for girls who get pregnant so that they can complete their studies (Wendekind & Milingo, 2015).

Support for unpaid household and care work for women, especially in urban areas, could be achieved through institutional policies that subsidize unpaid care work and adjust working hours (by reducing long hours or by providing flexible or staggered working hours during different periods of the day) and/or allow work from home). Introduction of a paternity-leave scheme (currently not being implemented in Ghana) as well as the provision of baby-care corners for mothers in the workplace could help achieve gender inclusiveness.

This solution involves some interactions among relevant SDGs, including SDG 5 (gender equality), SDG 10 (reduce inequalities), and SDG 16 (peace, justice, and strong institutions).

SDG interlinkage analysis (IGES, 2019) shows that there are synergies and trade-offs for SDGs related to gender inclusiveness, which have strong positive impacts on targets under several SDGs. These most notably include SDGs 1 (end poverty), 3 (good health and well-being), and 2 (zero hunger). Gender inclusiveness also has trade-offs with several targets, particularly under SDGs 2 (zero hunger), 3 (good

health), and 9 (industry innovation and infrastructure).

There are many examples of the synergy achieved through gender inclusiveness: In the agricultural sector, women dominate the value chain, accounting for the majority of women's livelihoods, and in the infrastructure sector, they contribute to installations for health facilities, roads, markets, storage facilities, communication, and renewable energy. Trade-offs attributable to gender inclusiveness include empowerment of women, resulting in a shift from agriculture to other sectors and, thus, a takeover of power and leadership from men.

2) Investment in basic and economic infrastructure

Food, water, health, education, housing, electricity, transportation, and communications are essential infrastructural components required to enhance urban-rural linkages in Ghana. They are critical resources for improving livelihoods and general well-being across the country (Simon et al., 2004).

Attracting public-private partnerships (PPPs) is important to leverage the enormous cost of investment and technical skills required. Innovation and incentives for various local institutions, especially the District Assembly (DA), could ensure added value to drive the PPP agenda to attract the private sector. The DA can generate its own funds, thereby reducing reliance on the DA Common Fund, to support productive PPP arrangements.

Improved access to information is important for strengthening public participation and for ensuring complementary social and economic infrastructure development. Various methods of effective data collection and information sharing and feedback could be explored using channels such as social media, community information centers, digital information hubs, or social groups such as religious bodies. Institutions such as the National Commission for Civic Education also could be strengthened through locally generated funds, such as from civil society groups, to support dissemination of relevant information that would have a positive impact on the population.

The provision of physical infrastructure that is green, appropriate, sustainable, and affordable to meet the needs of the people is important. Opportunities are available through government initiatives, such as the



one-district–one-factory policy, whereby improved storage facilities, integrated transportation systems (e.g., rail, road, and water), water-supply systems for irrigation and domestic use, processing facilities for value addition, etc., could be explored. Urban green infrastructure could be promoted with integrated modern and traditional design to maintain cultural and historical ties. Other considerations include sustainable, affordable housing and coastal flood-control infrastructure. The compact-cities concept, whereby high rise-buildings are constructed to accommodate urban population and to maximize land use for urban development, also could be considered. All these solutions would require institutional collaboration and interlinkages in an integral approach.

SDG interlinkage analysis (IGES, 2019) shows that infrastructure has strong positive impacts on many targets under SDGs 2 (zero hunger), 6 (clean water and sanitation), 7 (affordable and clean energy), and 17 (partnerships for all goals), and it has negative impacts on targets under SDGs 3 (good health and well-being), 7 (affordable and clean energy), and 8 (decent work and economic growth).

For example, producing a variety of by-products and utilizing waste should be actively promoted to achieve significant impact on SDG 12 (sustainable production and consumption) and 13 (climate action). Infrastructure related to solar, biomass production, and waste utilization also would reduce the negative aspects of SDG 7 (affordable and clean energy). An example of efforts in support of SDG 17 (partnerships for all goals) is collaboration for the multipurpose utilization of water resources, which would further SDGs 2 (zero hunger), 3 (good health), 6 (clean water and sanitation), 7 (affordable and clean energy), and 12 (sustainable production and

consumption). Another example with a positive impact would be a multipurpose dam, a synergistic infrastructure that would combine the contributions or achievements of SDGs 6 (clean water and sanitation) and 7 (affordable and clean energy). Building the dam for hydroelectricity and irrigation would be an investment in basic infrastructure that also would create positive support for SDG 8 (decent work and economic growth) by providing much employment from the onset. The roads built for the power project could provide access also to agricultural inputs and produce, markets, and storage facilities, thus, improving the agricultural value chain.

3) Promotion of modernized and sustainable agriculture systems

Increasing awareness of opportunities in sustainable agriculture by all stakeholders, including women and youth as well as the private sector, could be achieved and impactful through various innovative channels. For the youth, incorporating sustainable agriculture in curricula at the Senior High School level and using ICT such as WhatsApp, Twitter, Facebook, and other social media would make small-scale agricultural industries in rural areas more attractive and provide wider perspectives for their future. Given that modern agricultural systems address the challenges posed by climate change (low yield, costs), land degradation, rapid urbanization, and demands from the growing population, this is particularly true (Simon et al., 2004).

Urban demands also may require policies to offer the protection of local producers from outside competition using mechanisms such as price controls and import quota.

Training in modern, climate-smart, and sustainable technologies, supported by up-to-date and relevant research and data, would improve the skills and capacity of agricultural-extension-service providers



and farmers. Upscaling and strengthening of climate-smart agriculture strategies include improved and adaptive breeds/varieties, conservation agriculture, organic farming, agroforestry, sustainable urban agriculture, efficient smart-irrigation systems, mechanization of farm equipment, solar- or wind-powered equipment for off-grid farming, and affordable agricultural insurance. Furthermore, promotion of agricultural processing and robust value-chain systems would ensure smooth production–consumption flows.

Provision of effective and efficient research and an education extension system would improve linkages between researchers, extension staff, and farmers for effective dissemination. Integration of innovative ICT-based platforms could improve the efficiency of matching demand and supply for products and resources such as BovControl (2016), Cure and Feed Livestock, e-Nutrifood, Weather and Crop Calendar, and AgriMarketplace (FAO, 2017). Upscaling installation of automated weather stations for accurate weather downscaling and forecast at the local level is a solution that also would require a strong PPP and effective coordination and implementation.

SDG interlinkage analysis (IGES, 2019) shows that agriculture-related SDG targets have synergies and trade-offs. Among the strong synergies involving many SDGs, most notable are SDGs 1 (no poverty), 2 (zero hunger), 3 (good health), 7 (affordable and clean energy), and 17 (partnership for all goals). For example, policy harmonization has synergy with SDGs 16 (peace, justice, and strong institutions) and 17 (partnership for all goals); increased awareness reinforces SDG 4 (quality education); and institutional capacity has synergy with SDGs 1 (no poverty), 2 (zero hunger), 3 (good health), 11 (sustainable cities), 12 (responsible consumption and production), 13 (climate action), 15 (life on land), 16 (peace, justice, and strong institutions). However, SDG 2 (zero hunger), 6 (water for irrigation) may have a trade-off with SDG 7 (affordable and clean energy).

CONCLUSIONS

Our results have shown that to have sustainable urban–rural linkages, there is an urgent need to prioritize gender inclusiveness, increase investments

in infrastructure systems, and transform the agricultural system through modernized and sustainable technologies. Policy implementation should endeavor to maximize the positive interlinkages among SDGs and targets while avoiding potential trade-offs through policy coherence (Tosun & Leininger, 2017; ICSU, 2017).

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