

Reviving Community and Local Developments from the Impact of COVID-19

Diagnosis on economic activities and potential interventions for vulnerable population

Impact on community and local development

COVID-19 has exerted unprecedented stress on global economic supply-chains since the crisis has caused both demand and supply side bottlenecks. This is structurally impacting income-generating sectors, especially in lower-income regions where even larger impacts in rural development and labor markets are felt, and causing further social and economic damages. For example, agriculture is an input-intensive industry, which under the COVID-19 context, has suffered disruptions in the supply chain (transportation systems, clogged ports or roads, delays in customs clearance). This situation has exposed farmers and affected agricultural production as it also affects labour and capital inputs of production. COVID-19 has also exacerbated both risk and vulnerability relative to the generation of local subsistence, community development, labor and livelihood – being this last one, a critical concern given its rippling effects in public health, prosperity and social mobility.

While the effects of the COVID-19 pandemic have yet to be fully understood, it threatens both urban and rural communities across the globe, impacting not only public health but also the economic fabric. COVID-19 triggers a pike in uncertainty that could jeopardize economic development such as in economic activity, supply chain, financial market, and job loss. The pandemic has shown a severe implications from global supply chain, that industrial production in China has fallen by 13.5% compare to the previous year¹, to bankruptcy for local businesses. In terms of the job loss, according to the ILO (2020)², about 305 million full-time job losses are expected globally compared to the pre-COVID crisis in 4th quarter of 2019, which is estimated as 10.5 percent of job loss. Job loss is expected worse in the informal economy that about 1.6 billion information economy workers (representing the most vulnerable in labor market) are expected to suffer from their income of living.

Impact on vulnerable population

Vulnerable populations are affected by the crisis not just because they are often more at risk from contracting the virus, but also because they are particularly hard hit by the economic crisis¹.



1. Women across the globe, and especially in developing countries, have felt a larger impact of the pandemic because it has deepened pre-existing gender inequalities.

The compounded economic impacts of COVID-19 are especially felt by women, who are generally earning and saving less money due to job insecurity. The increase in unpaid care and domestic work along with an exponential increase in gender-based violence have made women particularly vulnerable in this crisis².



2. Children are also facing severe disruptions as a result of COVID-19,

particularly in many developing countries where youth represent a major demographic. While children have not yet felt a large impact from the direct health effects of COVID-19, the crisis has caused significant socio-economic and well-being effects, including the exacerbation of the learning crisis from school closures and threats to child survival, health, and safety (UN, 2020).



3. Indigenous populations are being directly impacted by COVID-19

because they have significantly higher rates of disease compared to the rest of the population, which increases the likelihood of high mortality rates caused by the virus. Few indigenous peoples have adequate access to healthcare as well as social protection systems to support them in this crisis. Because the virus has largely impacted elderly populations, indigenous elders are at great risk, which can have significant cultural implications for their communities because of their role as leaders, teachers, and cultural preservers (UN, 2020)³.

1 World Economic Forum (2020). Managing COVID-19: How the pandemic disrupts global value chains
2 International Labour Organization (2020). ILO Monitor: COVID-19 and the world of work. Third edition

1 OECD (2020). The territorial impact of COVID-19: Managing the crisis across levels of government
2 UNWomen (2020). Policy Brief: The Impact of COVID-19 on Women
3 UN (2020). The Impact of COVID-19 on Indigenous Peoples

About this note

This document is prepared by GeoAdaptive LLC. to guide decision makers in development planning/public policy to explore the effective and efficient ways of how spatial approaches can be used across sectors to cope with COVID-19. As such, this document does not present a specific proposal but rather introduces several key themes that are considered needs to be addressed, as well as a potential menu of activities we are in position to provide.

The following represents a rapid concept note developed by GeoAdaptive LLC, in order to inform the potential assignments to assist the efforts at the WB in supporting the Turkana region in Kenya during the COVID-19 crisis. The concept note was developed using a rapid due-diligence process by the firm specialist using secondary resources that are publicly available. The thematic and geographic focus of this note was developed based on the discussion with the country expert at WB which manifested the need to tackle the challenges in community-driven and local economic developments. Other considerations related to vulnerable populations have been explored as they are considered critical parts of the region.

Many communities in developing countries are expected to experience much larger populations at risk, fewer basic services, and less innovative approach. Compared to high-income countries, developing countries have lower capacity of the enabling factors that scaling up innovative responses because of differences such as in demographic characteristics, level of education, level of informality of the economy, institutional capacity, digital network using ICT.

COVID-19 will impact households in many ways, including basic service, limited access to healthcare services. As the pandemic crisis spreads, it is clearly identified that the population with the least access to basic services-such as water, sanitation services-will be impacted in their human health. According to WRI (2020), about 40% of the global population, approximately 3 billion people, are experiencing lack of basic services in their households¹. Global organizations, such as WHO, UN-Water and Red Cross, are increasing their assistance to provide immediate strategies; however, problems will worsen for the people living under poverty and in informal settlements.

1 World Resources Institute (2020). Combating the Coronavirus Without Clean Water

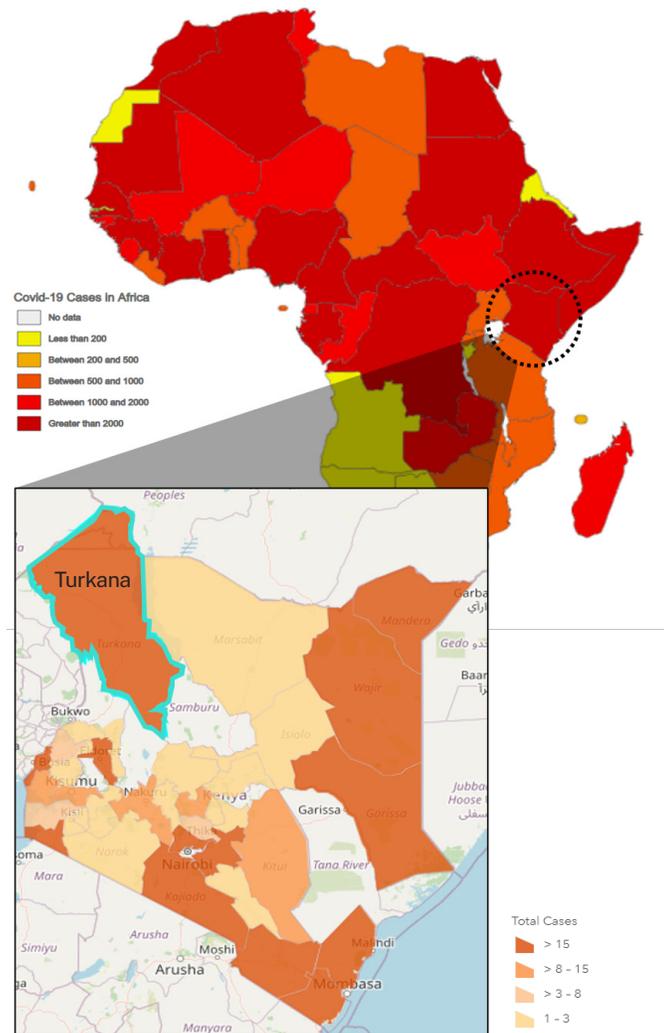


Figure 1. Distribution of COVID-19 in Africa (top) and Kenya (bottom), June 2020 (Source: COVID-19 Map- Johns Hopkins Coronavirus Resource Center)

Case of Kenya

As a result of Kenya's large informal sector, high poverty rate, and unemployed youth population, the COVID-19 pandemic has had large impacts on the economy thus far. The country has 6,070 recorded cases as of June 29th, and this number is expected to rise dramatically as local transmission rates increase. The bulk of Kenya's cases are concentrated in Nairobi and Mombasa, with 3,031 and 1,445 cases, respectively. Though Turkana currently has less than 100 cases, the county is at risk for severe economic downturn due to its high poverty rate and vulnerable populations¹.

A recent report from the World Bank (April 2020) described ways in which COVID-19 has impacted Kenya's economy. Overall, the report predicts economic growth to be at 1.5% in 2020 in a baseline scenario, with a potential downside scenario of a contraction to 1.0%, if COVID-19 related disruptions to the economy last longer. The disruption of global supply chains, from social distancing and changes in household and firm behavior, is reducing the availability of intermediate and capital goods. Because of this, exports for kenyan goods like horticulture, tea, coffee, and flowers have been hard hit. The tourism sector has also felt the economic burden of declining tourist arrivals. Remittance inflows, which accounted for 2.9% of Kenya's GDP in 2019, have slowed down due to the adverse effects on the economies where the Kenyan diaspora is working².

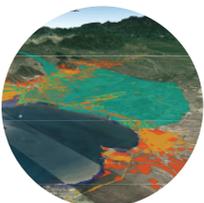
Measures to contain the virus' spread have hit SMEs and entrepreneurs particularly hard. A recent study in neighboring country, Uganda, found that micro and small businesses experienced a larger decline in business activity compared to medium and large firms because of increased operating expenses due to preventative health measures (e.g. provision of on-site lodging for employees and sanitizing equipment for customers). The study also revealed concerns of small businesses, including lessened production and productivity, reduced supply of inputs, and credit and liquidity constraints³. These impacts are expected to be felt by kenyan SMEs as well, and particularly ones owned by women, which account for more than a third of all SMEs in emerging markets⁴.

It is crucial for Kenya to support health policy responses to mitigate the impacts of the virus, yet the country also must address the economic fallout and social pressures caused by social distancing and shutdown measures. The government has taken measures to reduce risks of community transmission and strengthen the capacity of the health system, and fiscal policy responses have aimed to protect vulnerable households and ease firms' liquidity constraints.

1 Ministry of Health, Kenya (2020). Update on COVID-19 in the Country
 2 WB (2020). Kenya Economic Update
 3 Brookings Institute (2020). Impact of COVID-19 on micro, small, and medium businesses in Uganda
 4 IFC (2020). Uncertainty, Fear, and Coronavirus: The New Reality for Africa's Entrepreneurs

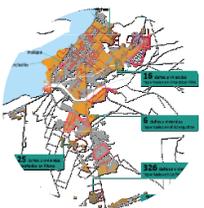
Spatial Approach as a Reactivating Solution

Information about a territory and the conditions of its population development, social status and economy is crucial when making public policy decisions and evaluating the results of ongoing initiatives. It is recognized that the territorial spatial structure regulates a large number of development dynamics, including the distribution of human capital and the concentration of natural and productive resources, such as the positioning and organization of the structure and productivity factors. Like all global crises, COVID-19 has a spatial dimension that must be addressed and managed through a territorial approach that considers the spatial structure of each affected territory (OECD, 2020).



The integral development of a territory, its population and its economy depends on a multitude of variables, whose integration and analysis presumes a highly complex challenge. This is particularly relevant in rural development where multiple socio-economic factors determine the efficiency of the territory's latent resources.

Therefore, the availability of information and a clear understanding of the order and relationships of these factors plays a relevant role in defining a framework of comprehensive understanding. This comprehensiveness is fundamental for the formulation of policies that promote socially inclusive development, rural and inclusive forms of production, and address disparities within the territory, especially when considering the impacts of the COVID-19 pandemic. The understanding of the territory can also provide vehicles to capitalize on multiple integrated resources, and on the structure of the territory, including its actors and markets. For a territorial approach to be rigorous, it requires transcending from the "domain of information" to the "domain of knowledge." This leap is made through the processes and analysis that unveils the dynamics that shape the social, environmental and productive aspect of the territory.



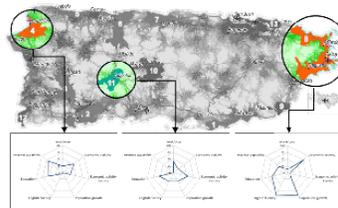
Recent advances in geographic information technologies and spatial analysis, as well as the improvement of territorial approach models, have provided new elements to model and generate organization schemes in the complexity of variables that make up a territory.

Among them, advances in geo-statistics, spatial econometrics and dynamic models of complex systems are making it possible to represent a territory in all its complexity. Specifically, the possibility to evaluate social service performance, biophysical conditions of the territory as it relates to the capacities of the population to capitalize on such resources given specific markets and their demands, as well as the possibility to integrate all that information through statistical and econometric evaluation in the territory provides platforms to evaluate challenges, alternatives and programs in rigorous ways.

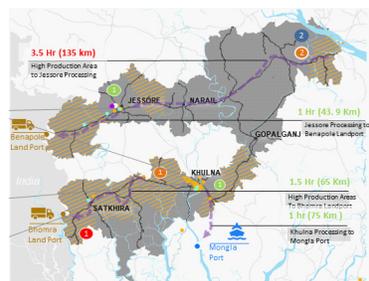
Dataverse, new scalable and replicable data from open and official sources makes these approaches available more than ever to the development sector. Technological advances to collect and distribute satellite data at no or little cost as well as the advancement of global to local open data sources make it possible to apply these approaches in a rapid and efficient manner. Furthermore, in places such as Kenya, where the international community has deployed multiple efforts, makes it possible to start these processes from an advanced place regarding data.

Having mentioned this, and given the ecosystem of challenges exposed by COVID-19, it is crucial to design an analytical structure to seek the spatial and quantitative identification of the gaps and opportunities present in the region of study. This understanding is progressive in terms of the complexity of analytical methods, and the spatial resolution of the analysis of national and regional scales and resolutions from municipal to sub-municipal. As such the evaluation of limitations should be conducted through a process of detecting territories with gaps and opportunities that co-exist in the same geographic space –making possible a maximum return on investments and actions while addressing challenges and gaps, further enhancing opportunities.

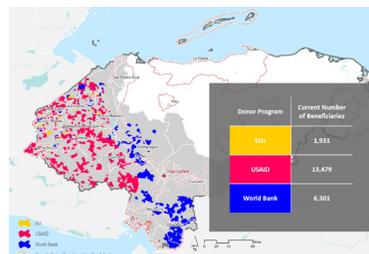
Relevant experience



Client: US Department of Interior
Area: Puerto Rico
Goal: Identify sustainable tourism hubs across Puerto Rico, and develop strategic actions under the impact of Zika virus and Hurricane Maria



Client: World Bank
Area: Bangladesh
Goal: Empower women-led business and entrepreneurship in rural Bangladesh by identifying agriculture value chain routes for fishery, floriculture, and dairy products



Client: Inter-American Development Bank
Area: Honduras
Goal: Integrate poverty reduction programs from USAID, EU, and WB to prioritize 200,000 households of supports



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GeoAdaptive is a global interdisciplinary research consultancy specialized in the development of analysis and territorial strategies that deliver sustainable forms of development. We employ spatial economic techniques to convey multi-sectoral and geographically-explicit recommendations to our clients, maximizing their opportunities and reducing their potential risk. Our list of clients, include multilateral organizations, national and regional governments, infrastructure banks, and foundations in more than 23 countries.