INPUT PAPER

Project “Improving Rural Development in Georgia”

POLICY INTERVENTIONS TO RESPOND TO THE ECONOMIC IMPACT OF COVID-19 IN RURAL GEORGIA
Based on two potential scenarios in fighting COVID-19, this paper outlines the expected economic cost to the non-agricultural sector in rural areas of Georgia. It shows that 20,000 formal jobs, GEL 1 billion annual turnover and GEL 10 million monthly earnings are at stake, which will increase by a multiple if indirect effects and multipliers are taken into consideration. Analysis shows that where rural households have a business outside agriculture, 70% of household income is at risk. Women are more vulnerable than men and the number of female jobs that might be lost is 5 times higher than jobs held by men. The paper concludes with policy recommendations for those scenarios and for each of the probable phases of the crisis: adjustment phase, coping phase and recovery phase.

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1. **Baseline Scenario of COVID-19 Response**

Epidemiologists distinguish between suppression and mitigation strategies. **Suppression** aims to stop the progression of the infection, that is, bringing the infection rate to below 1 (one person infects less than one further person) and maintaining it there. Suppression requires very early action, a high testing rate also of people without symptoms and tracking of each and every case, and strict quarantine. Successful suppression strategies are for example pursued in South Korea, Taiwan and Singapore. In these countries, tracking usually includes making public where infected people live and where they have been to facilitate further identification of people who might have been in contact with them. Lockdowns can be avoided, and the economy kept afloat.

**Mitigation** delays the spread of the disease and reduce the peak by slowing the rate of infection, also known as ‘flatten the curve’. It can be a conscious strategy if the goal is to build ‘herd immunity’ while minimizing mortality rates. In Europe, the UK and the Netherlands were initially pursuing this goal and Sweden still is. Mitigation might also be the only choice if an outbreak is growing too fast and tracking of each case cannot be done any more. It usually involves travel restrictions and large-scale lockdowns. An extreme case of mitigation was implemented in Wuhan, China, where any movement was prohibited for more than two months. Most Western countries do also pursue this strategy to not only ‘flatten the curve’ but to bring the infection rate below 1, so that they can then switch to a suppression strategy. The imposed social distancing and movement restrictions do have strong economic implications.

A recent study by Imperial College showed that suppression is the preferred policy option, as it significantly reduces fatalities.

Any approach will require variable restrictions for the coming 1 to 2 years - either constantly or in waves - until there is either sufficient ‘herd immunity’ or a vaccine available in large quantities. Limiting the potential of so-called super spreaders is essential: much of the outbreak in for example Korea, Singapore, Iran, France and India can be traced to religious events; those of Spain and Italy to sporting events.

It becomes quickly clear that countries do not have a full choice between these approaches: a lot depends upon the state of the healthcare system, the technological level of the country for tracking and for establishing the algorithms and computing power required for the identification of potential contact points, the governance system and the acceptability of the measures by the population. But it is especially a hard choice between restricting the civil liberty of privacy ("East Asian approach") and of freedom of movement ("Western approach"). Even within Western Countries, there are differing levels of tolerances for governments enforcing lockdowns.

Georgia reacted early and decisively to the virus outbreak. It is in the process of obtaining fast testing devices, is a leading country in contact-less payments and has excellent mobile phone coverage, facilitating tracking. This would allow it to pursue either the “East Asian approach” or the “Western approach”.

Georgia has access to 700 functioning mechanical ventilators. Still, even in the best and most optimistic case, Georgia would require over 6 years to achieve ‘herd immunity’.

The key limiting factor for all approaches is the availability of intensive care beds with ventilators. As the world market for ventilators is emptied for some time to come, scientists in Germany, Spain
and other countries are designing simple and cheap ventilators that can easily be produced. The designs should be ready within weeks and will then be made available to the public. All require 3D-printers. Other solutions for partially pursuing the “East Asian approach” without privacy concerns are available: tracking can be arranged “bottom-up” instead of centralized and top-down. Extensive testing can be achieved through pooling, whereby multiple samples (e.g., from a household, or local cluster of up to 64 people) are pooled and, if tested positive, the whole pool is quarantined, but also through newly developed fast tests that show results within 10 minutes.

**Baseline scenarios**

According to the presented, two baseline scenarios shall be distinguished:

In **scenario A suppression** is assumed. In this scenario Georgia develops the tracking capabilities and programmes, builds testing capacities and produces facial masks. Applied rigorously, it might thereafter be able to keep schools, universities, factories, shops, hotels and the hospitality sector largely open. International travel restrictions, some social distancing (especially the prohibition of larger events) and home quarantine might remain in place throughout. The scenario assumes that the population accepts the restriction of privacy and is sufficiently co-operative and disciplined.

In **scenario B mitigation** (Western style) is assumed. In this scenario Georgia switches between more restrictive rules of social distancing including limitations of movement and closure of shops, factories, hotels, restaurants, schools and universities, and less restrictive regimes. It follows the underlying assumptions of the Imperial College analysis. This is that to stay within available hospital capacities, there will be 7 phases of restrictions within the coming two years. These are of slightly decreasing duration and each of roughly two months (only the first of 3 months), together with intermittent phases of relaxed controls of roughly one month. Triggers for relaxing and tightening restrictions are the occupancy rates of intensive care beds. Closures may thus be expected for about two-thirds of the time. If this were adopted in Georgia, it would require that the population accepts the repeated stronger restrictions of freedom of movement, that the economy can handle those switches and that Georgia progressively increases its capacities for intensive healthcare.

A study on the effect of the lockdown of the city of Wuhan in China allows the conclusion that an extension of a lockdown by 1 month leads to a delay of the next peak of the disease by 2 months. In a study of the German government, the dimension of the crisis has been summarized as “2019=1919+1929”. Nevertheless, this input paper assumes that the health and economic crisis will not be followed by a financial crisis that could, for example, arise because of default rates too high for the banking system to absorb, or a sharp depreciation of the Lari. Further, early discovery and licensing of a vaccine would of course lead to markedly different outcomes.
2. Potential impact on the rural non-agricultural economy

The Agriculture and Rural Development Strategy of Georgia (2021–2027) identifies high rates of self-employment in low productive sectors (especially among rural women), limited employment opportunities in the non-agriculture sector and a low level of economic diversification and competitiveness as principle weaknesses of rural areas. The instruments proposed in this paper will not only contribute to limit the negative impact of the crisis but also to achieve some of the goals of the strategy. This paper also adopts the definition of “rural” used in the strategy, that is, all regions apart from the 5 self-governing cities. As GeoStat does not have data fitting this definition, this paper takes as approximation for ‘rural’ all regions of Georgia except Tbilisi and Adjara, with the second largest city Batumi.

The composition of Georgia’s rural GDP by sectors is services 50.7% (including construction), industry 20.3%, agriculture, forestry and fishing 18.6% and public administration 10.4%. Non-agricultural rural businesses create a total turnover of GEL 16.5 billion and employ 196,000 people (2018) - equivalent to 21% of all people employed in rural areas.

The share of informal employment in total rural non-agricultural employment is 40%, where-in ‘rural’ is defined according to GeoStat criteria, and thus not directly comparable with this paper. A UNDP/IRDG survey, conducted in 2018 in 8 rural municipalities, showed that almost 50% of rural businesses are unregistered. According to that survey, households with unregistered businesses are significantly more likely to accumulate savings for investments, demonstrating the negative effects of taxes and higher utility fees on profits and in turn showing the benefits of remaining informal. On the other hand, the UNDP/IRDG survey revealed that 30% of businesses were not deregistered after their closure, biasing registration data and findings.

UNDP/IRDG survey data also show that about 30% of the rural businesses that took up a loan fail to service their loans on time (equivalent to 15% of all business). The survey also showed that over 10% of businesses expected their situation to get worse. In other words, a substantial number of rural businesses were already struggling before COVID-19.

The rural business service sector

Because of social (or rather: physical) distancing, businesses in the service sector are usually hardest hit by the crisis, implying over 100,000 rural jobs. Should similar proportions of informality hold true for this business segment, it could be estimated that there are additionally over 40,000 people informally employed, thus totaling almost 150,000 jobs. Informal employment will however be excluded from below analysis.
Key data on the rural service sector

<table>
<thead>
<tr>
<th></th>
<th>Turnover (GEL) / Year</th>
<th>Employment</th>
<th>Total Earnings/Month (GEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale and retail trade; repair of motor vehicles</td>
<td>6.3 billion</td>
<td>50,000</td>
<td>24 million</td>
</tr>
<tr>
<td>Transportation and storage</td>
<td>1.2 billion</td>
<td>14,000</td>
<td>9 million</td>
</tr>
<tr>
<td>Accommodation and food service</td>
<td>0.3 billion</td>
<td>12,000</td>
<td>7.5 million</td>
</tr>
<tr>
<td>Construction</td>
<td>1.1 billion</td>
<td>18,000</td>
<td>17 million</td>
</tr>
<tr>
<td>Other services</td>
<td>0.3 billion</td>
<td>12,000</td>
<td>5.5 million</td>
</tr>
<tr>
<td>Total services</td>
<td>9.2 billion</td>
<td>106,000</td>
<td>63 million</td>
</tr>
</tbody>
</table>

Source: GeoStat (rounded)

Travel restrictions and social distancing especially affect tourism-related services such as accommodation, hospitality and entertainment. Domestic and international tourists each spent monthly a total of roughly 1.5 mln nights in rural areas (2019, outside Tbilisi and Adjara). But expenditure patterns differed greatly: it can be estimated that international tourists spent almost 7-times more for accommodation, transport, activities and food and drinks in rural areas as domestic tourists.

Estimates on tourism in rural areas*

<table>
<thead>
<tr>
<th></th>
<th>Domestic Tourists</th>
<th>International Tourists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits per month</td>
<td>700,000</td>
<td>370,000</td>
</tr>
<tr>
<td>Nights spent/month</td>
<td>1.4 mln</td>
<td>1.5 mln</td>
</tr>
<tr>
<td>Total expenditure/night</td>
<td>GEL 30</td>
<td>GEL 200</td>
</tr>
<tr>
<td>Total expenditure/month</td>
<td>GEL 90 mln</td>
<td>GEL 300 mln</td>
</tr>
<tr>
<td>- food &amp; drink</td>
<td>GEL 22 mln</td>
<td>GEL 80 mln</td>
</tr>
<tr>
<td>- accommodation</td>
<td>GEL 5 mln</td>
<td>GEL 70 mln</td>
</tr>
<tr>
<td>- transport</td>
<td>GEL 15 mln</td>
<td>GEL 20 mln</td>
</tr>
<tr>
<td>- leisure</td>
<td>GEL 1 mln</td>
<td>GEL 50 mln</td>
</tr>
</tbody>
</table>

* Note that these data are estimations because GeoStat does not collect the data in the required format. They assume that proportions in the number of nights spent and expenditure patterns remain roughly stable independent upon the purpose and region of visit. Shopping has not been included in the estimation because most of it is assumed to take place in the larger cities.17

Neither strategy (A or B) will have benefits for international tourism in Georgia: the periods of easing of restrictions are not easily predictable and plannable for international tourists and may not coincide with the ease of restrictions in their own countries. Airlines will also be cautious in resuming services.18 It must therefore be assumed that international tourism will not recover fully until a vaccine is discovered or there is herd immunity. Though experience shows that international tourism tends to rebound strongly from external shocks and crisis,19 this may not be the
case this time: worldwide, households will have to use off their vacation days to partially compensate for closures and will have had to de-save to compensate for income lost. Tourism will thus rebound, but not compensate for the income lost during the crisis. This makes domestic tourism important for the Georgian rural economy.

Georgian rural areas may therefore lose up to 75% of tourism income, meaning almost 9,000 jobs earning in total almost GEL 5.5 mln are at risk. In case of scenario B, this could further increase because of the frequent imposition of restrictions of movement and social distancing, so that almost all tourism jobs and income could be lost. These losses will have knock on effects on, for example, the demand for food and wine.

Much of trade is grocery related and will therefore hardly be affected by the crisis. Still, the tourism related part of it will be affected by the reduction in international tourists (e.g., souvenir shops). Most of the 14,000 jobs in rural transportation and storage businesses are at risk during lockdown, and the tourism related part during the whole crisis. Also parts of construction work will suffer because people will defer expenses until there is more certainty for investments. Identifying the affected share in each of these sub-sectors is very difficult. Only for the purpose of including these jobs and incomes at risk, a perhaps rather conservative estimate of 10% reduction for each sub-sector is made. Note that reality is likely to diver from this estimate.

Under the above assumptions, a total of about 17,000 jobs, GEL 1 billion turnover and GEL 10 million monthly earnings are at risk in scenario A. In scenario B this increases to 20,000 jobs and GEL 12.5 million monthly earnings. For the total economic damage, multipliers need to be considered. As Georgian rural households consume almost all their cash income, the multiplier would accordingly be huge (in fact, standard calculation would yield a multiplier of 33). Because of the uncertainties in its determination, it is more prudent to only acknowledge that the actual negative impact of the crisis will be a multiple of the calculated GEL 10 mln monthly earnings and GEL 1 billion annual turnover. Informal jobs and indirectly affected jobs, e.g. in suppliers of restaurants, are not even included.

Potential structural effects

As in many rural areas worldwide, Georgian rural businesses involve a lot personal interaction. During the COVID-19 crisis, and in a world of increasing digitalization, these business models are partially a hindrance to development. In the competition for resources, Georgian rural areas risk being further left behind if businesses do not adjust.

A shortage of skills is frequently cited as problem holding back rural areas. This is obvious in tourism, but also holds back other sectors in a low value-added rural economy concentrated on trade, tourism and agriculture. That aggravates the competition between rural and urban areas of Georgia. Skills shortage in tourism is also a disadvantage for positioning Georgia well in the struggle for international tourism after the crisis.

Georgia can be characterized as monocentric country, which has a negative effect on the development of the regions. The lack of medium-sized urban areas determines and exacerbates inequalities at the level of socio-economic development within the country. Keeping businesses and people in rural areas requires adequate and demanded public and private services. Efficient provision of those services requires increased co-ordination of efforts and co-operation on
all levels, that is, between municipalities and between the local and the central level. Supported by more decentralization it will allow the emergence of multiple ideas and the creation of urban growth magnets in rural areas.

If Georgian rural areas do move into these directions, they will be better positioned to compete in the post-crisis world. If not, they risk being even further left behind.

Resilience of rural non-agricultural business households

Absolute poverty in rural areas is already 5 percentage points higher than poverty in urban areas (23% vs. 18%). With so many jobs at stake, it is important to analyse the ability of rural households to cope with this crisis. Most people living in the countryside have several sources of income. This reduces risk particularly if they have state funded income (a government job, pension or social security) or if they sell their agricultural produce. Other sources of income – private sector jobs, self-employment and remittances – are uncertain at these times.

The mentioned UNDP/IRDG survey revealed that rural households which have a business outside agriculture get 60% of their household income from that business. Other sources of income comprise salaries (15%), sale of agricultural products (10%), pensions, Targeted Social Assistance (TSA) and others (10%) and rents (5%). Remittances play almost no role.22

Half as many rural people are employed in the private sector as in the public sector, so one-third of the total salaries earned must be regarded as risky. This means that about 70% of the income of an average rural household with a non-agricultural business are at risk in this crisis. Crisis hit households with a non-agricultural business would therefore require around GEL 580 monthly24 to maintain the status quo.

Households with a non-agricultural business get differing proportions of their income from the business. Households with hotel and restaurant businesses get 70% of their income from the business. Households with a retail business get 60% of their income from the business. Households with a transport business get 50% of their income from the business. This means that, with a loss of income from the business, those households with hotel and restaurant businesses are hardest hit.

Households with unregistered businesses are even less resilient than others because they derive significantly less income through salaries and through sale of agricultural production than those with registered businesses.
The special role of women

Worldwide, women are less affected by COVID-19. Among the countries that provide gender disaggregated data, the male-female death ratio is between 1.09 and 1.89, possibly mainly for biological factors. In Georgia, confirmed COVID-19 cases are equally spread among both gender. But women are more affected than men by the consequences of COVID-19. An increase in domestic violence as consequence of quarantine has already been reported (e.g., plus 30% in France). Women are also much more dominant in care-giving and trade professions, and are the main care-giver at home, exposing them even more to infections.

Also economically, women are more at risk than men: women business owners diversify slightly less than men and derive a lower percentage of their income from agriculture and from salaries. This makes them less resilient in this crisis. Though trade-related businesses are likely to be less affected by the crisis then transport-related businesses they employ much more people and a much higher percentage of women. In consequence, in both sectors together up to 5 times more female than male jobs are at risk.

During the crisis and recovery phase, Georgia will probably see a slower reduction in and faster surge of male employment. The reason is that the UNDP/IRDG survey revealed that about 70% of rural Georgians would give preference to men if jobs are scarce, with only a small (+/-2%) difference in the assessment by women and men.
3. **Policy Responses**

With about 20,000 rural formal rural jobs and GEL 10 mln monthly earnings at stake, excluding any multiplier or knock-on effects, the government has an implicit fiscal framework for action.

**Phases**

Policy support can be distinguished in three phases: an “adjustment” phase, a “coping” phase and a “recovery” phase.

1. **The adjustment phase** may last three to four months. It is a political necessity to support businesses to partially compensate for losses occurred due to the lockdown. But, as acknowledged by the Georgian government, it is not possible to support businesses throughout a crisis of one to two years’ duration. Many businesses will close down, possibly in various waves - more in scenario B than in scenario A.

To minimize the money lost in supporting businesses that are unlikely to survive the crisis, support should be targeted as soon as possible at those businesses that have a realistic chance of surviving the crisis. In the light of limited resources, the government and its agencies will thus have to make hard choices which are akin to medical triage (where those people with better chances of survival are given preference in medical treatment). It is though worth noting that so far many Western European countries have refrained from making such choices and have promised blanket support to enterprises.

2. The goal of the **coping phase**, lasting until the end of the crisis is in clear sight, is stretching the available funds in such a manner that stark increases in poverty are avoided, the social fabric is maintained, and the economy is ready for recovery after the crisis ends. It is especially important to prevent families falling into poverty. This can be achieved by keeping fundamentally viable businesses alive, keeping as many as possible jobs, and creating or maintaining self-employment.

3. The goal of the **recovery phase** is to boost the economy as fast as possible to partially regain lost output. Measures are hard to anticipate since the state of economies at the end of the crisis is hard to predict.

Throughout, preference should be given to women run businesses as they are, as shown, more vulnerable.

As it is frequently emphasized, the **post-corona world** will be different from the pre-corona world. The crisis therefore also provides a chance for redirecting the rural economy. Rural businesses may change their business model, co-ordination may reduce cost and increase impact, and rural-urban linkages may be strengthened and rural towns develop to growth poles. Alternatively, the decline of the rural economy relative to the urban economy may accelerate, with more rapid reallocation of labour from the countryside to the towns. No one yet knows how the world will look like, so by stimulating different approaches the country may gain by later copying the best suited. Should economic restructuring not take place, Georgia’s rural areas risk falling behind even further.
Policy support in the adjustment phase

In both scenarios, the policy instruments would be the same but that their relative weight will change.

As speed is of primordial importance in this phase, unconditional grants and tax deferrals will be the instruments of choice. **One-time fixed grants** for SMEs can be provided to any registered business that can demonstrate its general viability (see eligibility criteria below). Grants will be stepped by turnover according to the firm definition in the tax code, and by sector. As shown above, accommodation, souvenir shops and entertainment related businesses can be deemed to lose the most business and should therefore be entitled to the largest grants, followed by restaurants, food and transport, and finally trade, construction and other services.

**Tax deferrals** may be offered to all eligible companies. Small businesses which paid the enterprise cost of gas, electricity and water at March 1st 2020 may be eligible to pay household rates for a certain time.

Additionally, the government should offer a portfolio of **non-financial instruments for businesses**. These should include:

1. **Support in changing the business-model** (e.g. e-commerce, future contracts, virtual tourism experiences by museums or similar), **changing the target market** (e.g. family-tourism with social distancing, food for elderly or people in quarantine) or **downsizing**. The support will have three major directions:
   a. Identification and promotion of potentially suitable business models and markets for rural businesses. This can be supported by donor projects.
   b. Business services to support adjustment of individual business models or markets, and in down-sizing.
   c. Matching-grants for the implementation of new business models. These grants are independent from the above-mentioned financial support instruments.

2. Supporting businesses in strategic planning during crisis through training and mentoring. The crisis will have significant impact on many value chains and markets. Most businesses are unlikely prepared to strategically address those changes. Web-based training and mentoring will help them.

Finally, the government and key players should support the adjustment process and prepare for the coping phase through:

1. creating conducive environment for setting up social enterprises. These will become even more important during this crisis, especially those that care for elderly people who, due to social distancing, will require even more support; and

2. setting up communication lines for tourism related businesses to address emerging issues and co-ordinating responses with the World Travel and Tourism Council (WTTC).
Policy support in the coping phase

Depending upon the scenario, the coping phase may see continuous restrictions especially on risk groups (that is, elderly and those with pre-existing conditions) and those who have been exposed to infected people (scenario A). It might also see phases of stricter restrictions of movement alternating with more relaxed phases (scenario B). In both cases, there will be further waves in the number of infected people and therefore disturbances to rural life.

The preference for speed of the adjustment phase should be replaced by tailored support to reduce fiscal strain. Again, the policy instruments will broadly be the same, only that their relative weight will change. It must be emphasized that the onus will be on the private sector to find ways forward because the capacity of government is at best supportive.

The financial instruments should be oriented towards helping those businesses deemed sufficiently healthy to survive, and households to avoid falling into poverty.

Loan guarantees including interest rate subsidies are the most important financial instrument in this phase. They will be provided to eligible businesses through accredited financial institutions. Guarantees may cover 90% or even 100% of the loan and might be limited to a certain multiple of the business turnover as shown in tax submissions dated 31st March 2019. They will be for a fixed duration of years to be defined later. The guarantees should be combined with an interest rate subsidy for a fixed duration. The government should also cover any bank fees for setting up the loan. For eligibility criteria and application process see below.

Employers who maintain their staff could be supported through either wage subsidies in form of short-term work allowances or a jobs credit scheme. Both are however very challenging to implement in an economy without any employment registry and especially in the tourism sector, where seasonality also implies seasonal work relations.

Probably, the bulk of the financial support during this phase must be directed towards both, an increased coverage of TSA and an increased level of TSA. Note that business owners who became insolvent might have assets such as a house and equipment, but in the current crisis those cannot easily be liquefied. It is furthermore important to allow businesses to keep important assets to restart rapidly in the recovery phase. It is therefore recommended to adjust the TSA system accordingly.

As demand will be low and unlikely to grow for some time, businesses as providers of goods and services and households as providers of labour should be supported to introduce cost cutting measures to increase their disposable income. Besides efficiency gains, rural economic actors should also prepare themselves to improve their positioning for the post-crisis recovery. The non-financial instruments for businesses should therefore be more oriented towards efficiency gains, cost cutting and a preparation for the recovery phase:

1. Support businesses and households through promotion, matching-grants and training to reduce cost by improving processes and installing cost-saving equipment (e.g., renewable energy and energy efficiency technologies, business process optimization, co-ordination of business activities).

2. Support businesses to identify new providers or marketing channels within their respective value chains, should existing value chain participants be unable to continue their role efficiently.
3. Support businesses and households to improve their recovery relevant skills to better position themselves (e.g., on-line VET in tourism services).

**Central government** should:

1. Improve the **coordination between governmental programmes** to increase impact and reduce cost;

2. Further advance **monitoring of the impact of interventions** to optimize the flow of financial and non-financial support;

3. Invest in **public infrastructure** according to municipal needs and plans to create jobs at the local level and thus reduce TSA payments and improve the positioning in the recovery phase;

4. **Reduce particulate matter:** already in 2018, scientist found that billions of viruses per sqm are transported through the stratosphere. They now found that a high concentration of particulate matter accelerates transmission rates between people. Georgia/Tbilisi is a country with a high air pollution, causing many pneumonic preconditions and thus affecting the survival rate in case of a COVID-19 infection;

5. **Promote domestic tourism**;

6. Review the benefit of the pre-crisis tourism target markets and, if applicable, work towards changing the country’s brand (as e.g., Australia, Israel, Italy and New Zealand), considering the large international competition,

7. Provide clear **information** to visitors on COVID-19 outbreaks in each area; and

8. Increase **budgetary transfers** to municipalities and build their capacities to implement; and

**Local authorities** should be supported to:

1. Create clear and agreed **plans for the recovery**;

2. Improve co-ordination and co-operation with neighbouring municipalities to improve efficiencies, reduce cost and increase attractiveness (for example under the Regional Development Program (RDP) of MRDI); and

3. Improve rural-urban linkages and the attractiveness of rural towns.
Policy support in the recovery phase

The recovery phase depends heavily on the success of the re-orientation in the coping phase. It will first have to get those sectors going with the highest job-creation effect, and later the others. Because many businesses may attempt entering the market it is important not to create over-capacities, as too many businesses would quickly fail. As central government it is also important to promote a more balanced growth, that is, creating jobs in urban and rural areas. In so doing, governmental programmes should not overlook regions that were perhaps most affected by the crisis. The impact-oriented M&E system will provide precious assistance in this.

Noting again that the onus will be on the private sector, instruments for the recovery phase should include:

1. **Matching-grants** for business (re-)start-up and expansion, probably at higher subsidy-rates as pre-crisis (considering that most households will have run out of money). Preference may be given to previous business owners;

2. Support for **re-establishing cut value chains** and linking producers with international supply and demand;

3. Support in **implement development plans** made during the crisis phase; and

4. Promoting Georgia as a distinct tourism destination.
South Korea swiftly adopted a widespread testing and tracking strategy in conjunction with an innovative digital crowd-sourced contact tracing strategy. It commands an infrastructure of over 8 million CCTV (1 camera for every 6.3 people), tracks bank cards and mobile phone usage to identify people who have been in contact with infected people. It then makes public who is infected, where the live and have been. With 15,000 tests per day it is one of the countries with the highest testing per capita (https://theconversation.com/coronavirus-south-koreas-success-in-controlling-disease-is-due-to-its-acceptance-of-surveillance-134068). Some movement restrictions were imposed in the hotspots and schools closed for one week. In country and some international travelling remained possible, shops and factories were not closed (https://www.pharmaceutical-technology.com/features/coronavirus-affected-countries-south-korea-covid-19-outbreak-measures-impact/). Result: South Korea left the 33% growth curve already on day 15 (after 100 cases) and now flattened the curve (https://www.ft.com/content/e015e096-6532-11ea-a6cd-df28cc3c6a68). Taiwan reacted immediately when first case in Wuhan was known (31.12.19). It imposed limited travel bans and closed schools short after the first case emerged. Introduced mask rationing system shortly afterwards to ensure that whole population has a mask. Most importantly, Taiwan used the analysis of big data and online platforms to locate infections and share that information with a very disciplined public, in an impressively transparent and engaging manner (https://foreignpolicy.com/2020/03/16/taiwan-china-fear-coronavirus-success/). Lockdowns have been avoided. Result: Taiwan still has only a few hundred cases (https://www.ft.com/content/e015e096-6532-11ea-a6cd-df28cc3c6a68). Also Singapore introduced widespread testing (2,000 tests daily with a population of 5.7mln) and tracked suspected cases rapidly and informs the public about their location online. It imposed very strict quarantine measures but no lockdown (https://www.pharmaceutical-technology.com/features/coronavirus-affected-countries-singapore-covid-19-2019-ncov-impact-tourism-economy-travel/). Its infection rate quickly flattened, though a second surge is now testing its system (https://www.ft.com/content/e015e096-6532-11ea-a6cd-df28cc3c6a68).

Herd immunity is resistance to the spread of a contagious disease within a population that results if a sufficiently high proportion of individuals are immune to the disease, especially through vaccination but also through infection and recovery.

When reaching a “tipping point”, a suppression strategy must switch to a mitigation strategy. This tipping point is reached when infections double within two or three days, in addition to a high occurrence of untraceable cases (i.e. those cases that cannot be brought in connection to known clusters or imports). Once the number of these untraceable cases exceeds 200, a country must switch from suppression to mitigation, because it is impossible to stop the chain of infections (https://www.zeit.de/wissen/gesundheit/2020-03/coronavirus-quarantaene-lockdown-ausgangssperre-alternative-pandemie-alexander-kekule).

Two months after the apparent first infection and one month after the discovery of the disease, China imposed a strict lock-down of the originating city Wuhan and the whole province Hubei in late January. By end of March, neither the city nor the province reported any new cases. China is gradually reducing the measures with the idea of lifting them completely by early April. Studies predict that a relaxation of measures in March would lead to a resurgence 3 months later, in June, and generate a second peak at the end of August. On the other hand, a relaxation one month later, in April would buy an additional month in reaching the next peak, which would then be October (https://www.pharmaceutical-technology.com/features/coronavirus-affected-countries-china-outbreak/).


Note that global experience shows that in case of privacy restrictions a ratchet-effect may occur, leaving elements of the approach in place after the end of the crisis. This will not happen with restricting the freedom of movement.
7 This calculation assumes optimal, that is perfectly balanced, distribution of cases across time and space. As there need to be reserves for peak demands, the calculated years should easily be doubled: 3.7mio population * 60% * 3.5% on Intensive Care (IC) with ventilator * 10 days minimum on IC / 350 available ventilators (half assumed to be needed for regular patients) = 2,220 days; 3.5% calculated from https://www.worldometers.info/coronavirus/ for Georgia. The that the Ministry of Health assumes that 5% of the infected need intensive care. Note further that civil.ge (https://civil.ge/archives/342281) states there are 2,000 ventilators are available, which would cut the time for achieving herd immunity to 2 years.


9 https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30072-4/fulltext

10 https://www.n-tv.de/wissen/Corona-Schnelltest-braucht-zehn-Minuten-article21692563.html

11 Imperial College (16. March 2020). *Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand*. Note that the study only analyses the UK and the US. But the results should broadly be similar for most countries.

12 The study predicts that a relaxation of measures in March leads to a resurgence 3 months later, in June, and generates a second peak at the end of August. On the other hand, a relaxation one month later, in April would buy an additional month in reaching the next peak, which would then be October (https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30072-4/fulltext). If correct, a complete lockdown would therefore eradicate the disease more thoroughly but would lead to the necessity of another complete lockdown a few months later. Note that this model does not take hospital capacities into consideration. On the other hand, it somewhat reflects the waves experienced in the 1918/19 Spanish Flu, where a bad first spring wave was followed by a lull over the summer to return with the most violent and lethal fall-wave. Only the third wave in spring of the following year ended the crisis.


14 According to the methodological explanation of Geostat, “urban” is a settlement in the territory of which industrial enterprises, tourist and resort establishments or medical and socio-cultural institutions are located, and which carries out the functions of a local economic and cultural center. Urban infrastructure is not essentially focused on carrying out agricultural activities. A settlement with a registered population of over 5,000 may fall within the category of a city. „Rural“ is a settlement the boundaries of which mainly include agricultural land and other natural resources, and the infrastructure of which is essentially focused on carrying out agricultural activities.

15 All following data by GeoStat, usually of 2018, and where available of 2019. The GDP data are preliminary data of 2019.

16 Keda, Khulo, Borjomi, Akhalkalaki, Kazbegi, Tetritskaro, Lagodekhi, and Dedoplistskaro.

17 For the calculation, GeoStat data on tourism by region, expenditure pattern and inbound/domestic have been taken. As before, ‘rural’ is assumed to be Georgia excluding Tbilisi and Adjara. The percentage of visits to these ‘rural’ areas have been set in relation to overall tourist and then applied to the expenditure pattern. It was assumed that the average nights spend are the same for urban and rural areas and for any purpose. Shopping
has not been included in the estimation because most of it is assumed to take place in the larger cities. No differentiation was made between the definition of ‘local transport’ in case of inbound tourists and ‘transport’ in case of domestic tourist. As all are approximations, the resulting figures have been rounded.

18 Note that airlines doubt that business will go back to pre-crisis levels and are starting to decommission planes (https://www.bbc.co.uk/news/business-52209591).


20 Standard calculation of multiplier is 1 / (1 - MPC) with MPC = Marginal Propensity to Consume = (Cash expenditure - savings) / Cash expenditure. Data taken from GeoStat.


22 A few households (15%) are getting a very large slice of their income this way (80% or more). Obviously, there are strong variations in the composition of income sources among rural households with a non-agricultural business: Salaries, where 50% earn at least 20% (average: 25%) of their household income from this source (vs. 40% for others); Sale of agricultural products, where 20% earn at least 20% (average: 5%) of their household income from this source (equal to others); Pensions, TSA, aliments and others, where 20% receive at least 20% (average: 10%) of their household income from this source (vs. 50% for the others); Rents, where 10% earn at least 10% (average: 5%) of their household income from this source (vs. almost 0% for the others, demonstrating the wealth creation effect of rural non-agricultural businesses); and Remittances, where 5% earn at least 10% (average: almost 1%) of their household income from this source (vs. 10% for the others).

23 Calculation: 60% business + 1/3*15% in private job + 5% rents + some remittances = 70%

24 Average rural household cash inflows of GEL 871 * 70% - savings of GEL 28 = GEL 580


27 Results of UNDP/IRDG survey: 58% of trade businesses are run by women, employing in average 80% women. 21% of transport businesses are run by men, employing in average 50% women.


30 https://www.heise.de/tp/features/Feinstaubpartikel-als-Viren-Vehikel-4687454.html
