MEMORANDUM

To: H.E. Paul Kagame, President of Rwanda

From: Brian Rhindress, Minister of Welfare and Social Policy of Rwanda Subject: Addressing Poverty and Development outcomes in Rwanda

Date: 11 December 2018

Abstract

The Jameel-Latif Abdul Poverty Action Lab's (J-PAL) restores humanity to anti-poverty policy research by partnering with local institutions to study poverty causes at the intersection of access, culture and institutions. In the domains of food, health and education, it is found that both supply and demand-side factors influence the behavior of poor people in low-income countries. The J-PAL approach may be used when considering anti-poverty policies for Rwanda as it transitions from low to middle-income status. Rwanda should carefully recruit private investment and develop community-teacher programs to train youth for the future workforce.

Poor Economics: Behavior of the Poor and Institutions in Low-Income Countries

A. Population Behavior According to Poor Economics – Food, Health and Education
Competing assumptions about poverty and aid often assume that poverty is caused by the
lack of individual and institutional resources, or by lack of local demand. To empirically
determine the true contextual causes of individual and institutional poverty, J-PAL partners with
local stakeholders to conduct Randomized Control Trials (RCTs).

While many development economists theorize that lack of food access stunts development, inhibiting productivity and creating a poverty trap,⁴ the relationship between productivity and food is complex and long-term. J-PAL'S RCTs in Sierra Leone showed that a 10% increase in food consumption resulted in a 4% productivity increase.⁵ Studies in India also showed that a 1% increase in income resulted in 0.67% change in food budget. One explanation is that when incomes increase, poor people spend more on quality of life-enhancing purchases such as better-tasting foods, television, and family and religious celebrations.⁶ This evidence may seem to reject the hypothesis of a short-term poverty-trap. Yet long-term efforts to encourage iodine supplements during pregnancy and iron throughout childhood have been linked to longer school enrollment and increased productivity. Thus, when it comes to food choices of the poor, we must equally consider access, quality of life, awareness, malnutrition, and long-term outcomes.

Healthcare poverty trap models suggest that sickness can induce family debt, educational impediments and further health issues.⁷ Yet demand-driven theorists say that even at low prices,

demand is limited for low-hanging fruit solutions such as diarrheal medicine and malarial bed nets. Studies in India, Pakistan, Panama and Nicaragua show that poor households spend a significant 3-6% of their monthly budget on healthcare. However, this spending is often for expensive cures, not cheap prevention. In India, 50-75% of poor people prefer private doctors or spiritual healers to better-trained staff in public facilities.⁸ Affordable preventative treatment often goes unused, such as \$14 bed nets that increase income by up to \$295.⁹ Thus, the healthcare poverty trap is caused by access issues, health education gaps and lack of public trust.

Poor students receive less and lower quality education than wealthier students, caused both by lack of high-quality educational opportunities and lack of uptake of existing opportunities. ¹⁰ J-PAL studies found that many educational stakeholders—students, parents, teachers and public policy makers—mistakenly think of education as a lottery or a zero-sum game, where only the best and brightest will see big payoffs. ¹¹ As a result, many parents invest primarily in one of their children, and many teachers expecting little may teach differently to poor students. J-PAL also found that parents believe that primary education pays off up to 15% than secondary education. However, education pays off proportionally per year and thus, the poverty trap of education may be just as dependent on misconceptions as on access issues.

B. Government Responsibility for Behavior of the Poor

Even when resources are available, J-PAL and *Poor Economics* shows that broader expectations by government institutions encourage families in poverty to choose options that perpetuate poverty and may create poverty traps. For instance, while many individuals choose private healthcare providers and spiritual healers over public clinics, studies show provider absentee rates of 56% in India, and up to 35% in Bangladesh, Indonesia, Peru and Uganda. ¹² It is no wonder low-income people do not attend facilities that are closed so often. Similarly, in education, many systems are designed with lingering imperial influences to provide a gateway to college or opportunities for above average and wealthier students. ¹³ A range of policies reinforce sociological determinism, such as expelling students at the bottom of classes in India and Kenya.

"Supplying" food, healthcare or education is not as straightforward as building a school and supplying teachers – it also involves addressing cultural expectations and holding government workers accountable to their jobs. ¹⁴ Thus, even if demand for services seems low, there may be a larger issue of the way in which services are supplied by the government. Last,

there is a question of how much responsibility low-income countries must assume for corruption, underdevelopment and policy shortcomings in their societal institutions, when considering imperial history and the global post-colonial order of power.¹⁵ Overall, the RCT approach of J-PAL does not wait for entirely top-down or bottom-up approaches to development, but works to implement immediate policy tweaks, suited to the local context.

Background on Poverty and Inequality in Rwanda

Rwanda may be best known for one of history's worst genocides in 1994, in which the Hutu ethnic majority massacred up to 800,000 Tutsis and moderate Hutus in a period of about 3 months. ¹⁶ The humanitarian crisis ended with a military victory by the Tutsi-led Rwandan Patriotic Front (RPF), eventually leading to the formation of a presidential system in 2000, led by RPF leader H.E. Paul Kagame.

Despite its fractured history, over the last 18 years Rwanda under Kagame has become one of the fastest growing African economies, with significant poverty reducing outcomes. Rwandan GDP has increased at a rate of 8% or higher¹⁷ from \$141B USD in 2000 to \$554B in 2014.¹⁸ Child mortality has dropped by 2/3, primary school enrollment is nearly universal, and the national poverty rate has dropped from 58.9% in 2000 to 39.1% in 2013. Life expectancy at birth has increased from 48.4 in 2000 to 66.6 years in 2015, and population has increased from about 8 to 12 million in the same time period. While some of these gains may be attributed to the end of the genocide, such gains are nonetheless significant. Still, though 1M people have been lifted out of extreme poverty, ¹⁹ 63% of Rwandans still live on less than \$1.25 per day.²⁰

This unprecedented, Africa-leading development comes as a result of significant economic and structural reforms under Kagame with help from the World Bank and IMF. International aid and lending accounts for 30-40% of the Rwandan national budget and World Bank commitments tripled from \$177M in 2014 to \$545M in 2018.²¹ Much aid is directed towards Rwanda's "Vision 2020" and the 5-year strategic plans, the Economic Development and Poverty Reduction Strategy I & II from 2007-18.²² These plans aim to bring Rwanda to middle-income status by 2020, create more non-farm jobs, increase agricultural productivity, further reduce poverty, and develop the private sector to reduce external dependency. Rwanda is shifting from an agrarian, subsistence-based economy to a knowledge-based ICT economy, with Kigali as an innovation

hub anchored by businesses, startups and educators such as Carnegie Mellon's Africa campus IT and engineering.²³

EDPRS I and II prioritize home-grown initiatives such as *Umuganda*, a monthly day of community service, school construction, and community-based healthcare programs. Regarding education, while Rwanda is nearing full primary school enrollment, up to 13% of students still can not read a single word by their 4th year.²⁴ If students are already this behind in school, it will be difficult for many youths to participate in the rapidly changing Rwandan economy. EDPRS II aims to create up to 200,000 new jobs per year to curb youth unemployment.²⁵

Recommendations for President Kagame

Recommendation #1: Strategically grow the Rwandan private sector within the "Economics of Mutuality" framework to prioritize development of the Rwandan capital-class, entrepreneurs and low-skilled workers.

With accelerated growth, a population that is 67% under 25²⁶ and a business-friendly legal environment,²⁷ many foreign companies and investors are interested in Rwanda. While Rwanda has prioritized private growth to supplant its high dependence on foreign aid, care should be taken to ensure that Rwandans are the primary beneficiaries of foreign and domestic private investments. The Economics of Mutuality model is framework on which governments and companies adopt shared comprehensive financial, social, human, and natural capital goals.²⁸

The Economics of Mutuality has been successfully pioneered with the Sharing Cities Platform, where the French company Bel trained local street vendors to sell Baby Bel cheeses in Ho Chi Minh, City, Vietnam. Within 2 years, the Bel Access program profitably employed 2,261 street vendors, 1001 of whom were covered by health insurance, and 817 created bank accounts.²⁹ The Maua project in Kenya was similarly successful, where Wrigley's gum company worked with local churches and NGOs to identify 700 local active entrepreneurs to stock and sell gum at 130 stock points.³⁰ In both cases, company employees were eligible for business and managerial classes, which ultimately raised incomes by 30% after 12 months.

Rwanda should ensure that foreign companies wanting to do business should structure operations using a similar framework. Such companies would lift the incomes of many local Rwandans, but also provide significant business and management training, so Rwandans can ultimately manage and run their own businesses. Additionally, as more Rwandans receive

technical and management training through institutions like Carnegie Mellon-Africa,³¹ it is possible that inequality will rise, from the formation of a new capital-class. Local capital owners should be encouraged to adopt a similar framework, to ensure that benefits are better distributed between low-skilled, entrepreneurial and elite Rwandans.

Recommendation #2: Strategically place community teachers in rural villages around Rwanda's six future secondary cities to provide basic remediation, agricultural technology and ICT skill development, and family educational awareness.

To prepare Rwandan students for the technology-enhanced agricultural and knowledge-based ICT economy of tomorrow, it should invest in community teacher programs to provide comprehensive supports to high-needs Rwandan students.³² Local schools should be subsidized to hire multiple community-teachers at a fraction of the cost. At the early elementary level, these teachers will provide specialized remedial instruction in reading. At the upper levels, the community teachers should be trained as personalized work readiness coaches.³³ All staff will additionally be required to communicate the financial benefits of extended education to parents. This model has been successful in increasing letter-recognition by 60% in India in 3 years, and 0.16-0.19 standard deviations improvement in Kenya after 18 months.³⁴

To fully harness the opportunity, upper-level community teachers should focus on pre-ICT curricula in partnership with partners from Kigali and the greater Smart Africa collective.³⁵ Additionally, given that adult farmers showed difficulty adopting cutting-edge technology agriculture practices in a recent RCT,³⁶ students in rural communities could also be prepared for newer technology to help ease transitions. To fully roll-out this strategy, community teachers should be targeted to the surrounding rural communities of the next six secondary cities outlined in the EDPRS II plan.³⁷ Thus, not only will the community teachers help prepare high-needs students for tomorrow's economy, they will help ease Rwanda's second wave of urbanization.

Conclusion

Overall, there is not one silver-bullet approach to reducing poverty—other than paying attention to the actual experiences and systems of government surrounding poor people. Considering Rwanda's current position as a relatively rapidly developing African nation, with the attention of major investors, the timing is right to adopt such localized development

policies—considering locally-attuned business models through the "Economics of Mutuality" framework and preparing the future urban workforce through community-teacher programs.

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<sup>1</sup> Banerjee, Abhijit V., and Esther Duflo. 2011. Poor economics: a radical rethinking of the way to fight global poverty. New
York: PublicAffairs, 43.
<sup>2</sup> Ibid, 3-5.
<sup>3</sup> Ibid, 14-16.
<sup>4</sup> Ibid, 21-22.
<sup>5</sup> Ibid, 26-28.
<sup>6</sup> Ibid, 33-35.
<sup>7</sup> Ibid, 43-48.
<sup>8</sup> Ibid, 51-53.
<sup>9</sup> Ibid 44-45.
<sup>10</sup> Ibid, 81.
<sup>11</sup> Ibid, 87-89.
<sup>12</sup> Ibid, 54-56.
<sup>13</sup> Ibid, 90-94.
<sup>14</sup> Ibid, 54-57.
15 Ibid, 238-239.
<sup>16</sup> History.com. Accessed December 12, 2018. https://www.history.com/topics/africa/rwandan-genocide.
<sup>17</sup> ICT Centric Innovation Ecosystem Country Review. Report. Accessed December 11, 2018. https://www.itu.int/en/ITU-
D/Innovation/Documents/Publications/Executive_Summary-Brochure_Rwanda_409090.pdf
18 "Data for Rwanda, Low Income ." Literacy Rate, Adult Female (% of Females Ages 15 and Above) | Data. Accessed
December 12, 2018. <a href="https://data.worldbank.org/?locations=RW-XM">https://data.worldbank.org/?locations=RW-XM</a>.
<sup>19</sup> "Rwanda: Achieving Food Security, Reducing Poverty, Moving up the Value Chain." World Bank. Accessed December 12,
2018. http://www.worldbank.org/en/results/2016/07/12/rwanda-achieving-food-security-reducing-poverty-moving-up-the-value-
<u>chain.</u>

20 Hutt, Rosamond. "5 Things to Know about Rwanda's Economy." World Economic Forum. Accessed December 12, 2018.
https://www.weforum.org/agenda/2016/04/5-things-to-know-about-rwanda-s-economy/.
<sup>21</sup> "Overview," World Bank, Accessed December 12, 2018, http://www.worldbank.org/en/country/rwanda/overview.
<sup>22</sup> Economic Development and Poverty Reduction Strategy II. Report. 2013.
http://www.minecofin.gov.rw/fileadmin/templates/documents/NDPR/EDPRS_2.pdf.
<sup>23</sup> "Programs." CMU Africa. Accessed December 12, 2018. https://www.africa.engineering.cmu.edu/programs/index.html.
<sup>24</sup> Rom Evidence to Policy. Report. May 30, 2013.
https://www.povertyactionlab.org/sites/default/files/event/05.30.2013 Rwanda conference booklet SMALLEST.pdf.
<sup>25</sup> Economic Development and Poverty Reduction Strategy II. Report. 2013.
http://www.minecofin.gov.rw/fileadmin/templates/documents/NDPR/EDPRS_2.pdf.
<sup>26</sup> "Teacher Training and Entrepreneurship Education: Evidence from a Curriculum Reform in Rwanda." The Abdul Latif Jameel
Poverty Action Lab. Accessed December 12, 2018. https://www.povertyactionlab.org/evaluation/teacher-training-and-
entrepreneurship-education-evidence-curriculum-reform-rwanda.
<sup>27</sup> Economic Development and Poverty Reduction Strategy II. Report. 2013.
http://www.minecofin.gov.rw/fileadmin/templates/documents/NDPR/EDPRS_2.pdf.
<sup>28</sup> "What Is EoM?" Economics of Mutuality, Accessed December 12, 2018, https://economicsofmutuality.com/what-is-eom.
<sup>29</sup>B El Group: Bel Access and the Sharing Cities Platform. Report. May 2017.
https://static1.squarespace.com/static/5a142e2b9f07f5b18a237f95/t/5a574483085229f556cb9918/1515668623960/2017 case
study - Bel Access.pdf.
<sup>30</sup> "Maua." Economics of Mutuality. Accessed December 12, 2018. https://economicsofmutuality.com/maua/.
<sup>31</sup> "Programs." CMU Africa, Accessed December 12, 2018, https://www.africa.engineering.cmu.edu/programs/index.html.
<sup>32</sup> Rom Evidence to Policy. Report. May 30, 2013.
https://www.povertyactionlab.org/sites/default/files/event/05.30.2013_Rwanda_conference_booklet_SMALLEST.pdf.
33 Ibid.
34 Ibid.
<sup>35</sup> Smart Africa. Accessed December 12, 2018. http://smartafrica.org/.
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³⁶ "Promoting Agricultural Technology Adoption in Rwanda." The Abdul Latif Jameel Poverty Action Lab. Accessed December 12, 2018. https://www.povertyactionlab.org/evaluation/promoting-agricultural-technology-adoption-rwanda.

³⁷ Economic Development and Poverty Reduction Strategy II. Report. 2013. http://www.minecofin.gov.rw/fileadmin/templates/documents/NDPR/EDPRS 2.pdf.