

# 2015 Emory Global Health Case Competition

## Brick by BRICS: Laying the Foundation for Sustainable Development in the Former Soviet Union



---

**Emory Global Health Institute**

**The Emory Global Health Institute Case Writing Team**

All characters, organizations, and plots described within the case are *fictional* and bear no direct reflection to existing organizations or individuals. The case topic, however, is a true representation of circumstances in the former Soviet Union region. The case scenario is complex and does not necessarily have a correct or perfect solution, and thus encourages a judicious balance of creative yet perceptive approaches.

The authors have provided informative facts and figures within the case and appendices to help teams. The data provided are derived from independent sources, may have been adapted for use in this case, and are clearly cited such that teams can verify or contest the findings within their recommendations, if it is pertinent to do so. Teams are responsible for justifying the accuracy and validity of all data and calculations that are used in their presentations, as well as defending their assertions in front of a panel of knowledgeable judges representing different stakeholders.

## Introduction

At the end of 2016, the leaders of the five-country alliance “BRICS” (Brazil, Russia, India, China, and South Africa) met to discuss the progress of their New Development Bank (NDB). With the recent release of the Sustainable Development Goals, certain BRICS leaders argued for the NDB to intensify their focus on sustainable development and minimize emphasis on physical infrastructure projects.

While Russia and China’s representatives stressed the importance of physical infrastructure projects for economic development, the representatives for Brazil, India, and South Africa highlighted the substantial value of human capital investments. Brazil, also a member of the Inter-American Development Bank (IDB), pointed out that in 2011, the IDB “called for an alignment of the Bank’s actions to the Millennium Development Goals (MDGs)” [1]. “It would be wise,” the representative from Brazil argued, “for the NDB to stay ahead of the curve and align ourselves with the recently released Sustainable Development Goals.” After heated discussions, the representatives reached consensus on a new initiative focused on sustainable development. On January 1, 2017 they released the following statement to the public: “In light of the recent release of the Sustainable Development Goals, the BRICS New Development Bank will launch a USD 250 million loan program. The program will provide low interest loans (3.2% interest) of up to USD 50 million, to one country from within each of the five BRICS partner regions, to support sustainable development through investments in human capital.”

The request for applications (RFA) was circulated to all eligible countries on Monday, January 26, 2017. On Saturday, January 31, 2017, the NDB will hold its first round of special meetings to hear proposals and select the country for each region. Through a random lottery system, the first presentations will be from Russia and the former Soviet Union (fSU) republics (Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan). To increase transparency and objectivity in the selection process, the NDB has assembled an external review panel consisting of interdisciplinary experts. Panelists bring extensive experience and expertise working in the region and are familiar with the intricacies of the political and socio-contextual environment.

## The BRICS Countries and the New Development Bank, at a Glance

At the 6<sup>th</sup> BRICS summit in July 2014, BRICS (Brazil, Russia, India, China, and South Africa) countries formalized their decision to develop the New Development Bank (NDB) and drafted the “Agreement on the New Development Bank,” which sets forth the foundation of the bank. The BRICS countries were weary of complying with Western-dominated multilateral development banks and international financial institutions (e.g. the IMF and the World Bank). By creating their own development bank, BRICS intend to develop the “means to increase their bargaining power in the global economic system and to lend greater voice to the perspectives and interests of the BRICS member nations” [2, 3].

The bank was formed with an initial authorized capital of \$100 billion and an initial subscribed capital of \$50 billion [2]. The “Agreement on the New Development Bank” explains the bank’s focus is to “mobilize resources for infrastructure and sustainable development projects in BRICS and other emerging economies and developing countries” [4]. According to Article 3 of the Agreement, the bank will be permanently headquartered in Shanghai, China and the structure of the bank will be as follows: “The Bank shall have a Board of Governors, a Board of Directors, a President and Vice-Presidents. The President of the Bank shall be elected from one of the founding members on a rotational basis, and there shall be at least one Vice President from each of the other founding members” [4]. India was the Bank’s first president [5].

At a glance, all five countries have extremely disparate political systems and economies that are inherently competitive. For example, historically, China has not possessed close ties with India or Russia, and its relations with the US do not mirror those of the other BRICS member-nations. However, with the founding of the New Development Bank, BRICS countries are committed to working together to promote sustainable development across their respective regions.

## Overview of the Former Soviet States

### History

When Mikhail Gorbachev came to power in 1985, the economy of the Union of Soviet Socialist Republics (USSR) had stalled and the political structure made improvements nearly impossible [6]. Gorbachev instituted the policies of *glasnost* (social and political openness) and *perestroika* (economic restructuring), which loosened the government’s control of the economy and society. Concurrently in Eastern Europe, non-Soviet states began revolutions against communism. This “atmosphere of possibility” made its way to the Soviet states. First, the Baltic States (Estonia, Lithuania, and Latvia) declared independence, followed by Belarus and Ukraine. Weeks later, all but Georgia declared independence, with Georgia taking two more years. The USSR officially disbanded on December 25, 1991 [6].

Since dissolution, the Baltic states of Lithuania, Latvia, and Estonia have seen the most economic growth, and are the most western minded [7]. The “EU borderlands” of Ukraine, Belarus, and Moldova have had harder transitions to independence. Moldova was the first post-Soviet state to revert to communism. Since March 2014, Ukraine has been engaged in a civil war between the western part of the country that has stronger ties to Europe, and the eastern part of the country that has stronger ties to

Russia. Within the Caucasus states, Azerbaijan and Armenia are currently in a frozen conflict over an area known as Nagorno-Karabakh, located in Azerbaijan but with an ethnically Armenian background [8]. The post-Soviet states in central Russia including Kazakhstan, Turkmenistan, Uzbekistan, and Kyrgyzstan, and Tajikistan, have experienced limited political and economic progress [7; **Exhibit 1**].

### **Economic Development and Global Competitiveness**

According to the World Economic Forum's 2014-15 Global Competitiveness Report (GCR), the economic climate in Europe is "mixed, with many countries now recording stronger growth and returning to trend growth rates, while others continue to suffer from weak growth driven by protracted internal demand, high unemployment, and financial fragmentation" [9]. In addition to describing the global and regional economic climate, the GCR details how "competitive" each country is globally, based on how it ranks on twelve pillars of economic development (see **Exhibit 2**: *Pillar 1: Institutions; Pillar 2: Infrastructure; Pillar 3: Macroeconomic environment; Pillar 4: Health and primary education; Pillar 5: Higher education and training; Pillar 6: Goods market efficiency; Pillar 7: Labor market efficiency; Pillar 8: Financial market development; Pillar 9: Technological readiness; Pillar 10: Market size; Pillar 11: Business sophistication; Pillar 12: Innovation*). Although these pillars are reported separately, they do not exist independently. For example, a strong innovation capacity (pillar 12) will be very difficult to achieve without a healthy, well-educated and trained workforce (pillars 4 and 5).

Using these pillars, the GCR classifies countries based on three stages of development: Stage 1: Factor-driven, Stage 2: Efficiency-driven, and Stage 3: Innovation-driven. Countries may be classified as in-between these stages as well. These stages of development are critical in a country's decision-making on how to become more globally and economically competitive. As the report explains, "While all of the pillars described above will matter to a certain extent for all economies... they will affect different economies in different ways" [9].

The GCR highlights key disparities in economic development in the former Soviet Union. Kyrgyzstan and Tajikistan are considered stage 1 economies while Azerbaijan and Moldova are transitioning from stage 1 to stage 2. Though the World Bank classifies several former Soviet Republics as High Income, Estonia is the only country classified as a stage 3 economy by the GCR. **Exhibit 3** shows the income category for each of the countries according to their World Bank classification<sup>1</sup>. Other economic indicators are presented in **Exhibit 4**. Many disparities arise from the availability of tradable resources. For instance, the economic gap between Kazakhstan, with a GDP of over \$224B, and Kyrgyzstan, with a GDP of only \$7B, stems from Kazakhstan's oil reserves. Oil is a major natural resource of Russia, Turkmenistan, Azerbaijan, and Kazakhstan [7] and contributes to their classification as at least upper-middle income. It has also been well documented that factors contributing significantly to current disparities in economic development include: a) the initial state of the republic at the time the USSR dissolved, including its dependency on Moscow; b) the economic reforms enacted by the different countries at the time of dissolution; c) and existing political and social norms [10, 11].

---

<sup>1</sup> The World Bank classifies countries based on their Gross National Income (GNI) per capita, which for low-income countries is \$1,045 or less, lower-middle income countries is \$1,046 to \$4,125, upper-middle income countries is \$4,126 to \$12,745, and high-income countries is \$12,746 or more (Country and Lending Groups, 2014).

### **Global Burden of Disease**

In 2013, the Institute of Health Metrics and Evaluation (IHME) released country profiles for the 2010 Global Burden of Diseases, Injuries and Risk Factors Study<sup>2</sup>. The report for the Eastern Europe and Central Asia region highlights the shifting burden of death and disability away from communicable diseases and towards non-communicable diseases such as ischemic heart disease and stroke [12]. These trends are similar to other global trends, though exceptions are evident. For example, loss of health from HIV and tuberculosis were substantially higher in Eastern Europe compared to global trends. Similarly non-communicable illness and injuries such as cirrhosis, traffic accidents, self-injury and depression contributed more to disability burden in this region compared to global estimates [12] (**Exhibits 5 and 6**).

There are many inconsistencies among the risk factors for disease that challenge targeted prevention efforts. For instance, studies show that in nearly all Eastern European countries, men in lower socio-economic groups are more likely to binge drink; in contrast, women in higher education groups drink excessively [13]. When looking at the region as a whole, alcohol-attributable deaths for men are roughly twice as high as they are for women, but alcohol-attributable disability-adjusted life years (DALYs) caused by harm to others are highest among women in Latvia, Lithuania, and Estonia [14]. The interaction of different risk factors can also magnify certain diseases or causes of mortality. Alcohol abuse alone contributes to mortality rates for liver cirrhosis, self-harm, mental illness, unintentional injury, and cancer. Similarly, smoking is a determinant for health problems such as lung cancer, chronic obstructive pulmonary disease (COPD), and heart disease, among others [13]. Low levels of physical activity, particularly among women in lower socio-economic groups, lead researchers to think obesity may eventually replace smoking as a health risk. The prevalence of multiple behavioral and environmental risk factors makes it difficult to understand the primary pathways for disease; however, it also creates opportunities to address multiple health outcomes by intervening on one or more key health indicators.

### **Health Disparities**

The system of health care in the USSR was universal and centrally planned with the goal of providing uniform quality of care to all regions. However, this goal was not fully realized. Even prior to the breakup of the Union, regional disparities in health indicators and health care access were evident [15]. Following dissolution of the Union, fledgling states evolved their own systems of health care. Though the principle of universality has been largely retained, it coexists to varying degrees in combination with other health funding and delivery strategies. Differences across countries in terms of health systems indicators are presented in **Exhibit 7**. In their cross-country analysis of changes in health care in former Soviet Union republics, Balabanova and colleagues [15] noted significant disparities between countries in health service utilization and financial access to services and drugs.

In their 2004 Lancet article, McMichael and colleagues noted that the former Soviet Union was one of two major regions where life expectancy was declining; the other being sub-Saharan Africa [16]. Compared to Western Europe, Eastern Europe has experienced worsening mortality rates, resulting

---

<sup>2</sup> <http://www.healthdata.org/results/country-profiles>

from the political transition, increasing poverty, a breakdown of public health and health care institutions, and the rise of behavioral risk factors that contribute to premature mortality [13]. These factors contribute to two striking disparities across the region: maternal and under-five deaths and the high mortality rates of working-age men [17]. For example, the maternal mortality rates across Eastern Europe range from as low as 1 per 100,000 live births in Belarus to as high as 75 per 100,000 in Kyrgyzstan [18]. Similar disparities are seen for under-five mortality. While injury and non-communicable disease are the leading causes of premature mortality among men in Eastern Europe, HIV/AIDS rates are increasing rapidly, largely due to injecting drug use, and will be a major cause of premature mortality in the coming years [12, 19]. In Moldova, for instance, upward trends of cirrhosis, heart disease, cerebrovascular disease, unintentional and self-inflicted injuries, lower respiratory infections, and tuberculosis have negatively impacted male life expectancy [20]. **Exhibit 8** shows the breakdown of global disease burden causes by age for men in Eastern Europe.

Another key difference in health trends between Eastern and Western Europe is the prevalence and management of mental illness. Eastern Europe lacks adequate funding for a mental health workforce and resources [21], thus creating a disparity between these regions in terms of mental health care.

Health disparities also exist within countries. An analysis of mortality rates in Estonia, for example, showed that life expectancy for university graduates was higher than those with lower levels of education, with inequalities both among men and women [22]. Similarly, mortality rates vary across socio-economic groups with those in higher socio-economic groups exhibiting better health outcomes [13].

Though little is known about the role of religion in health disparities in this region, a review of United Nations country specific data found that Muslim-majority countries typically have maternal and infant mortality rates twice that of non-Muslim-majority countries [23]. These findings have implications for Eastern Europe given the growing Muslim population in Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan [24].

## What is Sustainable Development?

In 1987, “Our Common Future” by the Brundtland Commission (formally known as the World Commission on Environment and Development), wrote: “Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs” [25]. The concept of sustainable development traditionally includes three pillars: economic development, social development and environmental protection [26]. Kates, Parris and Leiserowitz expanded this framework to more explicitly include health, which they deemed as integral to “people” being developed. In this framework, child survival and life expectancy are emphasized [27]. Amartya Sen, a prominent economist and philosopher, who describes poor health as an unfreedom, wrote: “a great many people have little access to health care, to sanitary arrangement or to clean water and spend their lives fighting unnecessary morbidity, often succumbing to premature mortality” [28]. According to Sen, development requires the removal of this unfreedom. As shown by the various development frameworks and conceptualizations described above, sustainable development does not have a shared definition across the development actors. People give different weights to different aspects of development. For example, some weigh

environmental protection very greatly, while others emphasize the intergenerational tradeoff highlighted in the Brundtland Commission's sustainable development conceptualization.

### **What is Human Capital?**

The World Economic Forum similarly cites the importance of "human capital" for development [29]. The 2013 Human Capital Report states, "A nation's human capital endowment—the skills and capacities that reside in people and that are put to productive use—can be a more important determinant of its long term economic success than virtually any other resource. This resource must be invested in and leveraged efficiently in order for it to generate returns, for the individuals involved as well as an economy as a whole" [29]. The report identifies four pillars in its human capital index (HCI) and scores countries accordingly: education, health and wellness, workforce and employment, and an enabling environment. Again, disparities within the region are notable. Estonia and Latvia are ranked 27 and 38, respectively, out of 122 countries on the HCI compared to Moldova and Kyrgyzstan, which are ranked at 83 and 95, respectively.

Lastly, the Sustainable Livelihoods Approach (SLA), developed by the United Kingdom's Department for International Development (DFID), posits that there are five types of capital people possess that are inherently required for development: human, social, natural, financial, and physical (**Exhibit 9**) [30]. In this framework, human capital consists of "the skills, knowledge, ability to labor and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives" [30]. Social capital is the network and connectedness of people, membership to formalized groups, and relationships of trust, reciprocity and exchanges "that facilitate co-operation" [30]. Natural capital includes public goods in the surrounding environment and biodiversity that are used for production (e.g. land, natural resources, and trees). Physical capital consists of infrastructure and producer goods that change the physical environment to enable people to meet their basic needs and be productive. Financial capital consists of financial resources people use to meet their needs and be productive; it can include available stocks like cash, bank deposits and liquid assets, and access to credit. Understanding the different forms of capital that individuals, households, and communities possess facilitates more effective and more sustainable development projects.

### **The Millennium Development Goals**

At the Millennium Summit in 2000, global leaders agreed to work towards reducing poverty and improving health and the environment with time-bound targets. Prior to this meeting, the Organization for Economic Co-operation and Development (OECD)'s Development Assistance Committee (DAC) had created the International Development Goals (IDGs). The IDGs, which evolved between 1996 and 2000, were ultimately merged with the Millennium Summit report and released as The Millennium Declaration in 2001 [31]. The merger between the IDGs and the Millennium Declaration resulted in the Millennium Development Goals (MDGs). There were eight MDGs with 21 targets [32] to be achieved by 2015. The MDGs include:

1. Eradicate extreme hunger and poverty
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases

7. Ensure environmental sustainability
8. Develop a global partnership for development

Though criticisms exist, it is generally believed that the MDGs have motivated action, political will, and the mobilization of funds to achieve poverty reduction and promote development [31]. “The Millennium Development Goals Report 2014” highlights that extreme poverty has reduced by half; 3.3 million deaths from malaria were averted between 2000 to 2012; 2.3 billion people have access to improved water sources; gender parity in primary education is almost achieved; women’s political participation has increased; and official development assistance was recorded at USD 134.8 billion in 2013, the highest ever [33]. Even with these successes, however, there are MDGs that will not be achieved by 2015. For example, threats to environmental sustainability continue with growing greenhouse gas emissions. One in four children face chronic malnutrition, and little progress has been seen for maternal mortality. School enrollment rates have stagnated, and an estimated 50 million children are not in school due to conflicts [33]. **Exhibits 10 and 11** summarize the progress on the MDGs in Eastern Europe, Caucasus, and Central Asia [34].

### **Sustainable Development Goals**

The Sustainable Development Goals (SDGs) are integral to the post-2015 development agenda. Similar to the MDGs, they are time-bound targets [32]. However, unlike the MDGs, the formation of the SDGs has been more participatory<sup>3,4</sup>. Consultations in 88 countries have been held to learn the priorities of people around the world. Exhibit 12 depicts the 17 proposed SDGs and their rank according to their score on SDG Scorecards surveys<sup>5</sup>. In December 2014, Secretary General Ban Ki-Moon released the Synthesis report on the SDGs [35].

## **Charge to Teams**

In response to the New Development Bank’s request for applications (RFA, see next section), your country’s President<sup>6</sup> has assembled a multi-sectorial sustainable development task force composed of the leading experts in innovative thinking from the government, universities, and civil society (i.e. your team). Together you will develop a strategy and a compelling argument for funding that exceeds the criteria laid out in the RFA. You are expected to present your proposal for funding to the NDB review panel at the first round of special meetings held this Saturday, January 31, 2017.

---

<sup>3</sup> The World We Want 2015 website is an information platform sponsored by the UN for people around the world to have access to the post-2015 consultation: <http://www.worldwewant2015.org>

<sup>4</sup> <http://vote.myworld2015.org>

<sup>5</sup> The SDG Scorecard ranks each goal on a scale of 1 to 4 for the following domains: ambition, action, and accountability. Scores are summarized to generate an overall score.

<sup>6</sup> Using the information provided and their own research/expertise, teams will need to select the country they represent from the list of eligible countries. Proposals will be evaluated as to how well the proposed activities fit within the chosen country’s needs and context.



## New Development Bank Sustainable Development Program Request for Applications

The New Development Bank welcomes proposals from Russia and the former Soviet Union Republics that promote investments leading to measurable sustainable development outcomes. Successful proposals will meet the eligibility criteria outlined below and exceed the selection criteria. The NDB recognizes the importance of health as a critical component of human capital, thus applicant countries must demonstrate not only economic returns, but also the health impacts of their proposed strategy. Infrastructure investments are allowed as part of this initiative, but only if proposals demonstrate significant returns on human capital.

### *Eligibility Criteria:*

- Countries: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan
- Time period: 10 years
- Budget: \$50 million
- Loan Repayment Period: 30 years from project end date

### *Selection Criteria:*

- Aligns with New Development Bank's goals and purposes
- Embraces (or implements) an innovative approach that is technically sound and feasible
- Invests in human and /or social capital to achieve Sustainable Development Goals
- Involves multiple sectors, fostering synergies among them
- Considers impacts of strategy on economic, social, and health disparities, including potential unintended consequences and strategies for their mitigation
- Demonstrates evidence-based pathways to economic and health returns
- Considers socio-cultural, ethical, and political contexts and associated risks
- Utilizes partnerships effectively, including but not limited to other development partners / agencies, public private partnerships, private sector
- Combines sustainability and scalability
- Measures effectiveness and impact over 10 years with health and economic indicators
- Ensures efficient and transparent use of funds
- Includes budget, timeline, and loan repayment plan<sup>7</sup>

---

<sup>7</sup> Budget is an estimate for implementing your proposal. Loan repayment plan may include economic returns, strategies to recover cost, productivity increases etc. that will enable the country to repay the loan.

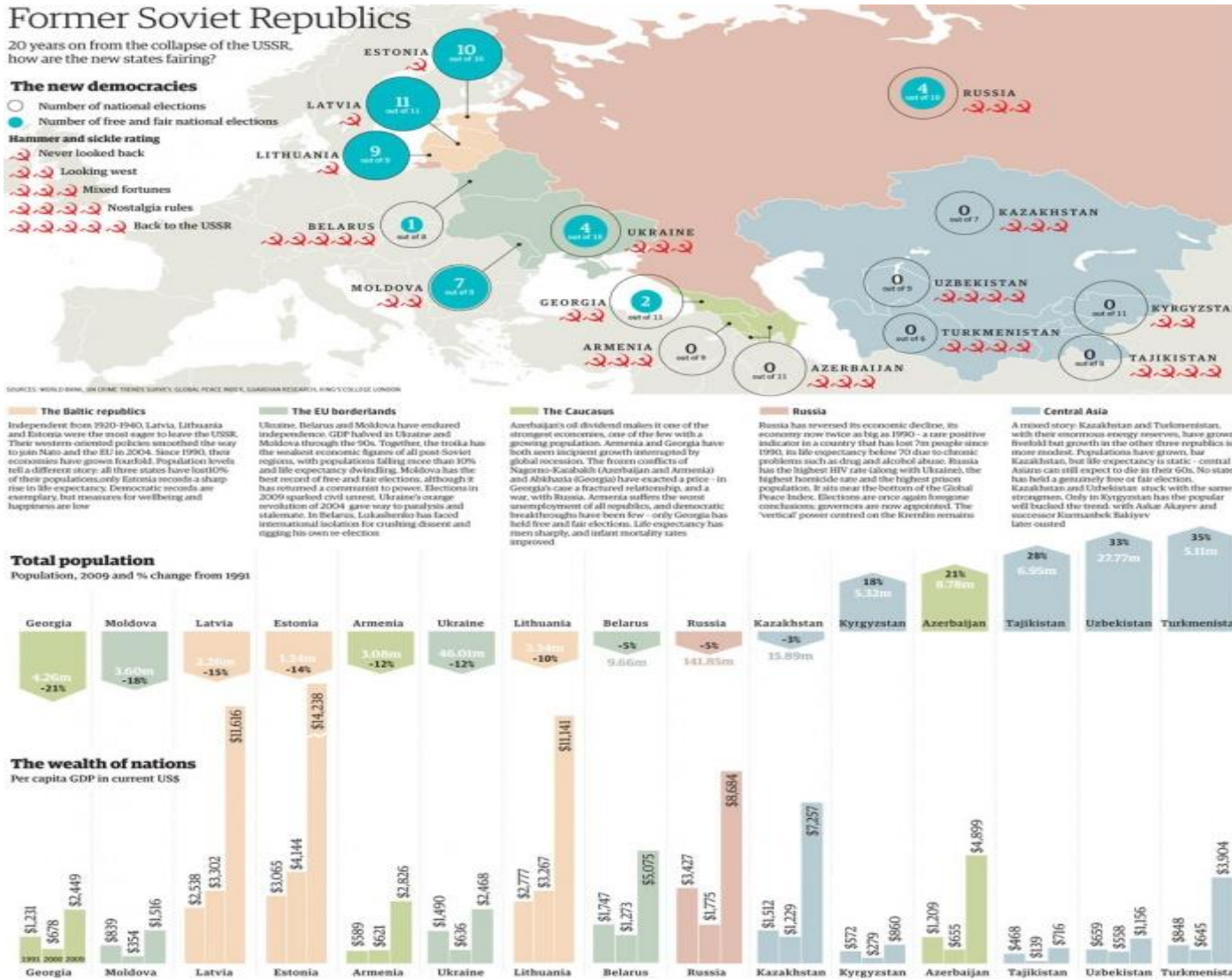
## References

1. Inter-American Development Bank (IDB). 2011. Strategy on Social Policy for Equity and Productivity. Social Sector. Accessed 20 Dec 2014 from: <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=35802223>
2. Preet, S., Sapra, S., & Mehdi, A. (2014). Articulating a Vision for a Progressive BRICS Development Bank. Oxfam India Working Paper Series; Accessed 28 Dec 2014 from: [http://icrier.org/pdf/report\\_brics\\_bank.pdf](http://icrier.org/pdf/report_brics_bank.pdf)
3. Ismi, Asad, and Peter Koenig. "De-Dollarization: Is BRICS a Viable Alternative to the U.S. Dominated World Economic System?" *Global Research*. N.p., 22 Nov. 2014. Accessed 28 Dec 2014 from: <http://www.globalresearch.ca/is-brics-a-viable-alternative-to-the-u-s-dominated-world-economic-system/5415375>
4. VI BRICS Summit "Agreement on the New Development Bank – Fortaleza, July 15." Accessed 19 Dec 2014 from: <http://brics6.itamaraty.gov.br/media2/press-releases/219-agreement-on-the-new-development-bank-fortaleza-july-15>
5. "BRICS Development Bank Launched, First President to Be from India." *The Times of India*. N.p., 16 June 2014. Accessed 29 Dec 2014 from: <http://timesofindia.indiatimes.com/business/international-business/BRICS-Development-Bank-launched-first-president-to-be-from-India/articleshow/38440605.cms>
6. Fall of the Soviet Union. (2011). Accessed 15 Dec 2014 from: <http://www.history.com/topics/cold-war/fall-of-soviet-union>
7. Rice-Oxley, M., Sedghi, A., Ridley, J., & Magill, S. (2011, August 17). End of the USSR: Visualising how the former Soviet countries are doing, 20 years on. *The Guardian*. Accessed 17 Dec 2014 from: <http://www.theguardian.com/news/datablog/2011/aug/17/ussr-soviet-countries-data>
8. BBC News Europe. Europe: country profiles. Accessed 17 Dec 2014 from: <http://www.bbc.com/news/world/europe/>
9. World Economic Forum. (2014). The Global Competitiveness Report: 2014-2015, page 9. Editor Klaus Schwab: Geneva. Accessed 17 Dec 2014 from: [http://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2014-15.pdf](http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf)
10. Spreafiko, M 2010. Economic Institutions and Economic Growth in the Former Soviet Union Economies. UNIVERSITA' CATTOLICA DEL SACRO CUORE WORKING PAPER. Accessed 20 Dec 2014 from: [http://istituti.unicatt.it/politica\\_economica\\_ISPE0054.pdf](http://istituti.unicatt.it/politica_economica_ISPE0054.pdf)
11. Ghedrovici, O and Ostapenko, N (2013) The Glaring Socioeconomic Meltdown in Post-Soviet Ukraine, Moldova, and Belarus. *International Journal of Business and Social Research (IJBSR)*, Volume -3, No.-5. Accessed 21 Dec 2014 from: <http://thejournalofbusiness.org/index.php/site/article/viewFile/19/19>
12. Institute for Health Metrics and Evaluation, Human Development Network, The World Bank. *The Global Burden of Disease: Generating Evidence, Guiding Policy – Europe and Central Asia Regional Edition*. Seattle, WA: IHME, 2013. Accessed 30 Dec 2014 from: [http://www.healthdata.org/sites/default/files/files/policy\\_report/2013/WB\\_EuropeCentralAsia/IHME\\_GBD\\_WorldBank\\_%20EuropeCentralAsia\\_FullReport.pdf](http://www.healthdata.org/sites/default/files/files/policy_report/2013/WB_EuropeCentralAsia/IHME_GBD_WorldBank_%20EuropeCentralAsia_FullReport.pdf)
13. Mackenbach, J. (2006). Health Inequalities: Europe in Profile [report]. In *Tackling Health Inequalities: Governing for Health*. European Commission. Accessed 5 Jan 2015 from [http://ec.europa.eu/chafea/projects/database/filerefer/SANCO/2005/2005300\\_1\\_en.pdf](http://ec.europa.eu/chafea/projects/database/filerefer/SANCO/2005/2005300_1_en.pdf)
14. Rehm, J., Shield, K., Rehm, M., Gmel, G., & Frick, U. (2012). Alcohol consumption, alcohol dependence and attributable burden of disease in Europe: Potential gains from effective interventions for alcohol dependence. *Centre for Addiction and Mental Health*. Accessed from: [http://amphoraproject.net/w2box/data/AMPHORA%20Reports/CAMH\\_Alcohol\\_Report\\_Europe\\_2012.pdf](http://amphoraproject.net/w2box/data/AMPHORA%20Reports/CAMH_Alcohol_Report_Europe_2012.pdf)
15. Balabanova D, McKee M, Pomerleau J, Rose R, Haerpfher C. (2004) Health service utilization in the former soviet union: evidence from eight countries. *Health Services Research*. 39(6 Pt 2):1927-50.
16. McMichael AJ, McKee M, Shkolnikov V, Valkonen T (2004) Mortality trends and setbacks: global convergence or divergence? *Lancet*. 363(9415):1155-9. Rechel, B. (2010). HIV/AIDS in the countries of the former soviet union: Societal and attitudinal challenges. *Central European Journal of Public Health*. 18 (2) 110-115. Accessed 31 Dec 2014 from: <http://apps.szu.cz/svi/cejph/archiv/2010-2-09-full.pdf>

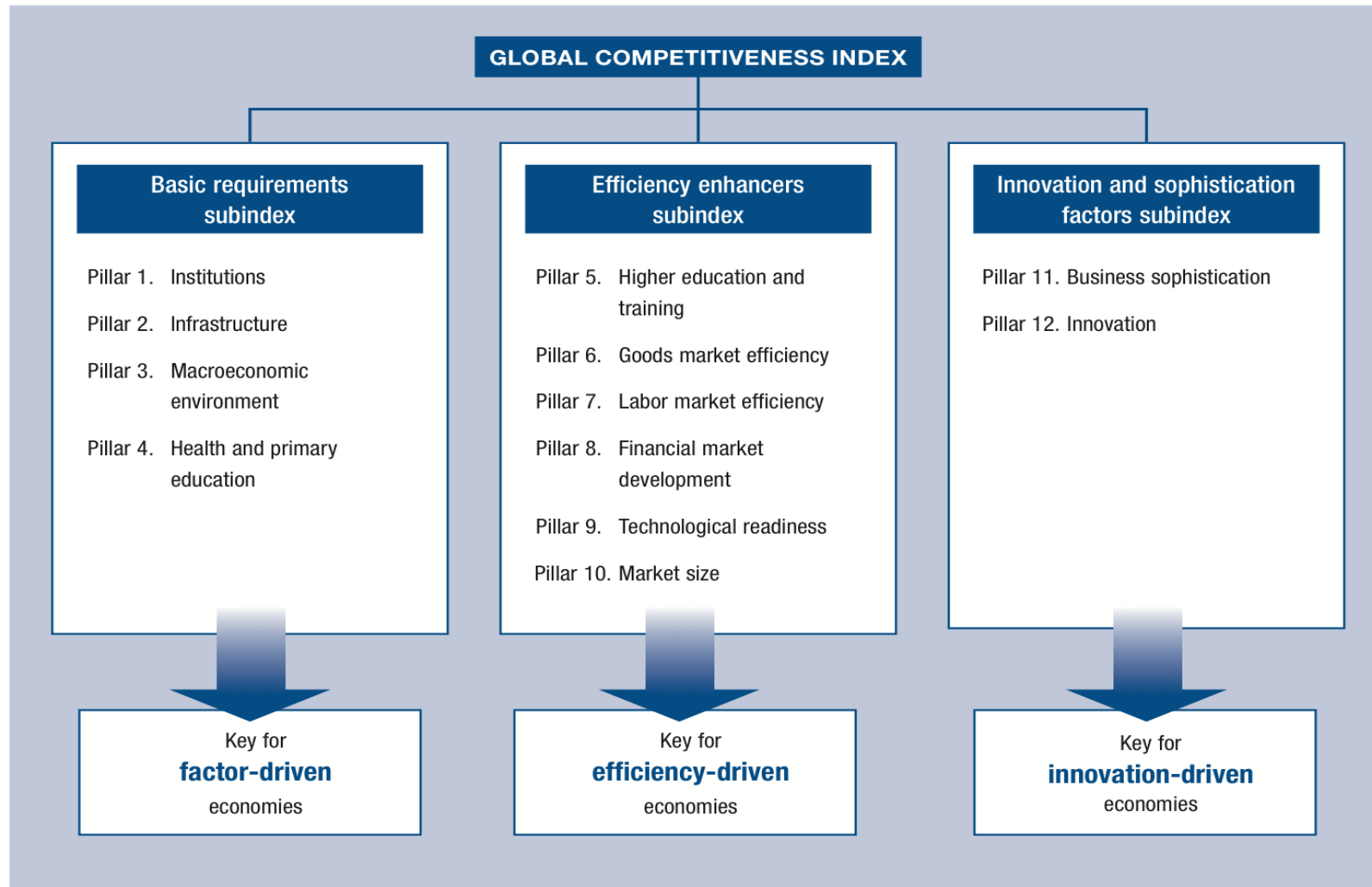
17. McKee, M., & Shkolnikov, V. (2001). Understanding the toll of premature death among men in eastern Europe. *British Medical Journal*, 323, 1051-5.
18. World Bank Open Data. The World Bank. (2014). Data last updated Jan 2015. Accessed 5 Jan 2015 from: <http://data.worldbank.org/>
19. Rechel, B. (2010). HIV/AIDS in the countries of the former soviet union: Societal and attitudinal challenges. *Central European Journal of Public Health*. 18 (2) 110-115. Accessed 31 Dec 2014 from: <http://apps.szu.cz/svi/cejph/archiv/2010-2-09-full.pdf>
20. Greenwell, F., Tomsa, A., Chung, C., & Tirdea, M. (2013). A Retrospective and Prospective assessment of mortality in the Republic of Moldova. *World Health Organization, Health Policy Paper Series No. 15*.
21. Semrau, M., Barley, E., Law, A., & Thornicroft, G. (2011). Lessons learned in developing community mental health care in Europe. *World Psychiatry*, 10, 217-225.
22. Leinsalu, M., Vagero, D. & Kunst, A. (2003). Estonia 1989-2000: enormous increase in mortality differences by education. *International Journal of Epidemiology*, 32,1081-87.
23. Razzak, J., Khan, U., Azam, I., Nasrullah, M., Pasha, O., Malik, M., & Ghaffar, A. (2011). Health Disparities between Muslim and non-Muslim countries. *Eastern Mediterranean Health Journal*, 17(9), 654-64.
24. Pew Research Center. (2011). The Future of the Global Muslim Population: Projections for 2010-2030. Accessed from: <http://www.pewforum.org/files/2011/01/FutureGlobalMuslimPopulation-WebPDF-Feb10.pdf>
25. World Commission on Environment and Development. "Report of the World Commission on Environment and Development: Our Common Future," 1987. Accessed 14 Dec 2014 from: <http://www.un-documents.net/our-common-future.pdf>
26. The World Bank Group. "What is Sustainable Development." 2001. Accessed 14 Dec 2014 from: <http://www.worldbank.org/depweb/english/sd.html>
27. Kates, R. W., Parris, T. M., & Leiserowitz, A. A. (2005). What is sustainable development? Goals, indicators, values, and practice. *Environment (Washington DC)*, 47(3), 8-21.
28. Sen, Amartya. *Development as Freedom*. Page 15. Anchor Books: New York, NY. 1999.
29. World Economic Forum. (2014). The Global Competitiveness Report: 2014-2015. Page 3. Editor Klaus Schwab: Geneva. Accessed 17 Dec 2014 from: [http://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2014-15.pdf](http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf)
30. Department for International Development, United Kingdom. "Sustainable Livelihoods Guidance Sheets." Page 17 and 19. April 1999. Accessed 14 Dec 2014 from: <http://www.eldis.org/vfile/upload/1/document/0901/section2.pdf>
31. Hulme, D. (2009) The Millennium Development Goals (MDGs): A Short History of the World's Biggest Promise. *Brooks World Poverty Institute Working Paper 100*. Accessed 21 Dec 2014 from: [http://www.bwpi.manchester.ac.uk/medialibrary/publications/working\\_papers/bwpi-wp-10009.pdf](http://www.bwpi.manchester.ac.uk/medialibrary/publications/working_papers/bwpi-wp-10009.pdf)
32. United Nations Development Programme. "The Millennium Development Goals Eight Goals for 2015." 2014. Accessed 18 Dec 2014 from: <http://www.undp.org/content/undp/en/home/mdgoverview/>
33. United Nations. "The Millennium Development Goals Report - 2014." 2014. Accessed 18 Dec 2014. <http://www.un.org/millenniumgoals/2014%20MDG%20report/MDG%202014%20English%20web.pdf>
34. United Nations Economic Commission for Europe. "Report on Achieving the MDGs in Europe and Central Asia, 2012." 2012. Accessed 18 Dec 2014.
35. United Nations Secretary General. "The Road to Dignity by 2030: Ending Poverty, Transforming All Lives and Protecting the Planet." 4 Dec 2014. Accessed 19 Dec 2014 from: [http://www.un.org/disabilities/documents/reports/SG\\_Synthesis\\_Report\\_Road\\_to\\_Dignity\\_by\\_2030.pdf](http://www.un.org/disabilities/documents/reports/SG_Synthesis_Report_Road_to_Dignity_by_2030.pdf)

# Exhibits

**Exhibit 1:** Visualizing how the former Soviet countries are doing, 20 years from the collapse of the USSR. Image Source: <http://www.theguardian.com/news/datablog/2011/aug/17/ussr-soviet-countries-data> [Accessed 30 Dec 2014].



**Exhibit 2:** Global Competitiveness Index from the World Economic Forum Global Competitive Report for 2014.  
Image source: [http://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2014-15.pdf](http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf) [page 9].



**Exhibit 3:** World Bank Economic Classifications, Source: <http://data.worldbank.org/about/country-and-lending-groups#Europe and Central Asia>

<b>Country</b>	<b>Income Level</b>
Armenia	Lower-Middle Income
Azerbaijan	Upper-Middle Income
Belarus	Upper-Middle Income
Estonia	High Income
Georgia	Lower-Middle Income
Kazakhstan	Upper-Middle Income
Kyrgyzstan	Lower-Middle Income
Latvia	High Income
Lithuania	High Income
Moldova	Lower-Middle Income
Russia	High Income
Tajikistan	Low Income
Turkmenistan	Upper-Middle Income
Ukraine	Lower-Middle Income
Uzbekistan	Lower-Middle Income

#### Exhibit 4. Country-Specific Social and Economic Infrastructure Chart

	Armenia	Azerbaijan	Belarus	Estonia	Georgia	Kazakhstan	Kyrgyzstan	Latvia	Lithuania	Moldova	Russia	Tajikistan	Turkmenistan	Ukraine	Uzbekistan
<b>Education</b>															
% Enrollment for Primary and Secondary Schools <sup>1</sup>	102/ 96	95/83	99/ 106	98/ 109	93/81 2005	105/98	106/ 88	105/ 99	99/ 107	88/88	99/85	98/87	N/A	106/ 98	93/ 105
School Life Expectancy (years) <sup>2</sup>	12	12	16	17	13	15	13	16	17	12	14	11	12.6	15	12
% of Female Graduates from Tertiary Education (2012 unless otherwise noted) <sup>3</sup>	61.1	52.1	60.5	67.5	59	N/A	61.4	67.5	63.9	59.9	N/A	38.4	N/A	54.7	44.3 2011
<b>Civic and Utilities</b>															
Terrestrial and Marine Protected Areas (% of total territorial area) <sup>1</sup>	8.1	7.4	8.3	23.2	3.7	3.3	6.3	17.6	17.2	3.8	11.3	4.8	3.2	4.5	3.4
% of Population with Access to Sanitation Facilities <sup>Error! Bookmark not defined.</sup>	91	82	94.3	95	93	97.3	92	N/A	94	87	71	94	99	94	100
% of Population with Electricity <sup>4</sup>	97.3	80.8	97.4	97.4	80.8	80.8	80.8	97.4	97.4	97.4	80.8	80.8	80.8	97.4	80.8
Mobile Cellular Subscriptions (per 100 people) <sup>5</sup> (2013)	112	108	119	160	115	181	121	137	151	106	153	92	117	138	74
% of Population with Access to Improved Water Source <sup>1Error! Bookmark not defined.</sup>	100	80	100	99	99	93	88	98	96	97	97	72	71	98	87
<b>Transport</b>															
Road Accident Death Rate (per 100,000 people) <sup>6</sup>	18.1	13.1	14.4	6.5	15.7	21.9	19.2	10.8	11.1	12.7	18.6	18.1	N/A	13.5	11.3
Road Density (km of road per 100 sq. km of land area) <sup>1</sup>	26	22	42	129	27	4	39	108	127	38	6	N/A	N/A	28	18.3
<b>Corrections and Justice</b>															
Prison Population (per 100,000 people) <sup>7</sup>	160	210	335	228	219	295	182	264	332	187	470	121	224	271	160
Crime Index <sup>8</sup>	33.7	38.1	28.9	29.1	19.4	45.8	57.9	39.8	34.8	49.0	52.3	38.6	N/A	50.2	64.3
<b>Economic Development</b>															
Gini Coefficient <sup>Error! Bookmark not defined.</sup>	30.3 2012	N/A	26.5 2011	32.7 2011	41.4 2012	28.6 2010	33.4 2011	36.0 2011	32.6 2011	30.6 2011	40.1 2009	N/A	N/A	24.8 2010	N/A
GDP in USD (in billions) <sup>1</sup>	10.4	73.5	71.7	24.5	16.1	224.4	7.2	31.0	45.9	7.9	2096. 8	8.5	41.9	177.4	56.8
Annual % GDP growth <sup>1</sup>	3.5	5.8	.9	.8	3.2	6	10.5	4.1	3.3	8.9	1.3	7.4	10.2	1.9	8
Unemployment Rate <sup>1</sup>	18.5	5.4	9.7	10.1	15	5.3	8.4	14.9	13.2	5.6	5.5	11.5	11.3	7.7	11.3
Urban Population (in millions) <sup>1</sup>	1.9	5.1	7.2	.89	2.4	9.1	2.0	1.4	2.0	1.6	106.0	2.2	2.6	31.5	11.0
Rural Population (in millions) <sup>1</sup>	1.1	4.3	2.3	.43	2.1	7.9	3.7	.65	.99	2.0	37.5	6.0	2.7	14.0	19.3

<sup>1</sup> <http://hdr.undp.org/en/countries>

<sup>2</sup> <https://www.cia.gov/library/publications/the-world-factbook/fields/2205.html>

<sup>3</sup> [data.uis.unesco.org](http://data.uis.unesco.org)

<sup>4</sup> <http://www.worldmapper.org/display.php?selected=346>

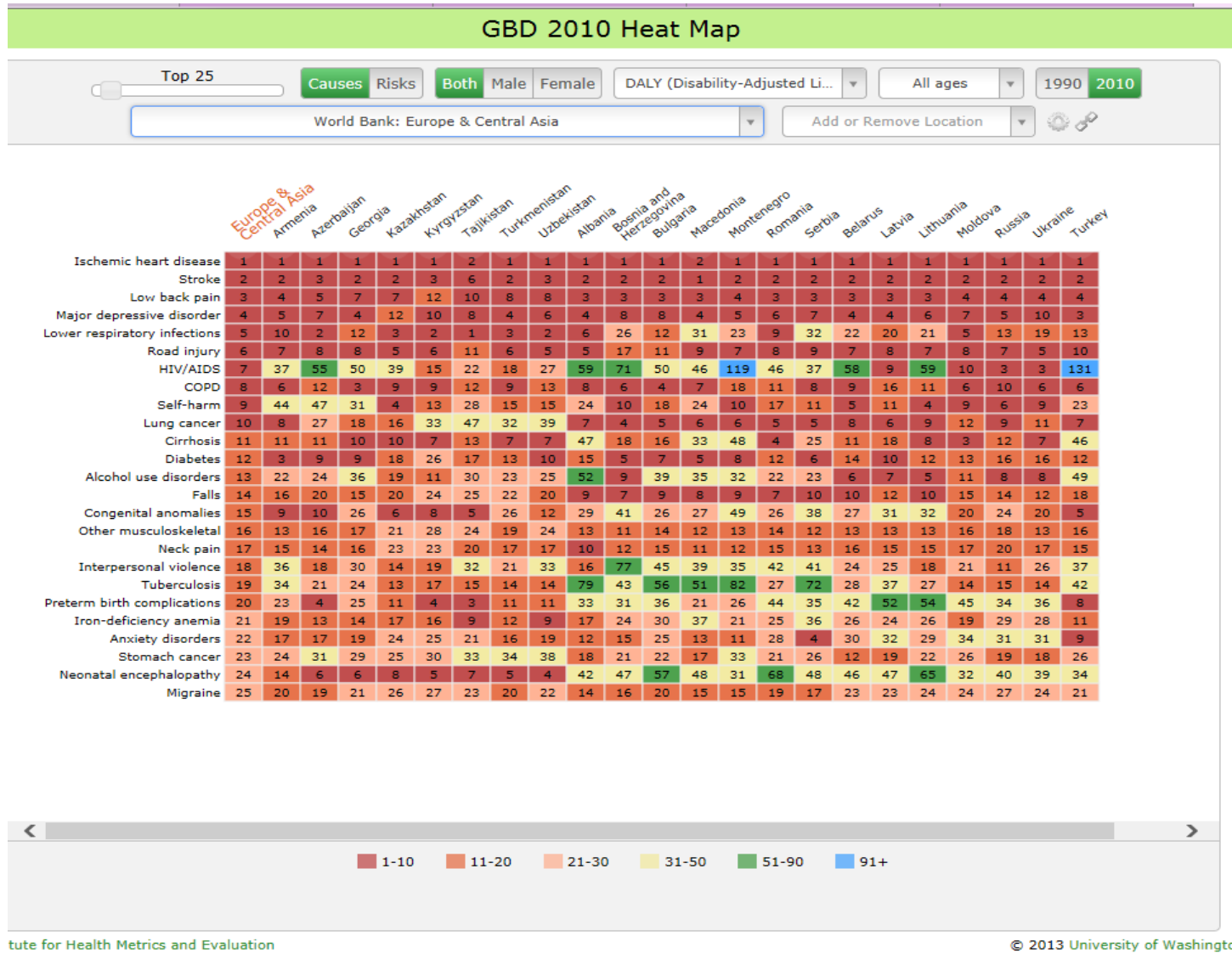
<sup>5</sup> <http://data.worldbank.org/indicator/IT.CEL.SETS.P2>

<sup>6</sup> [http://gamapserver.who.int/gho/interactive\\_charts/road\\_safety/road\\_traffic\\_deaths2/atlas.html](http://gamapserver.who.int/gho/interactive_charts/road_safety/road_traffic_deaths2/atlas.html)

<sup>7</sup> [http://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_incarceration\\_rate](http://en.wikipedia.org/wiki/List_of_countries_by_incarceration_rate)

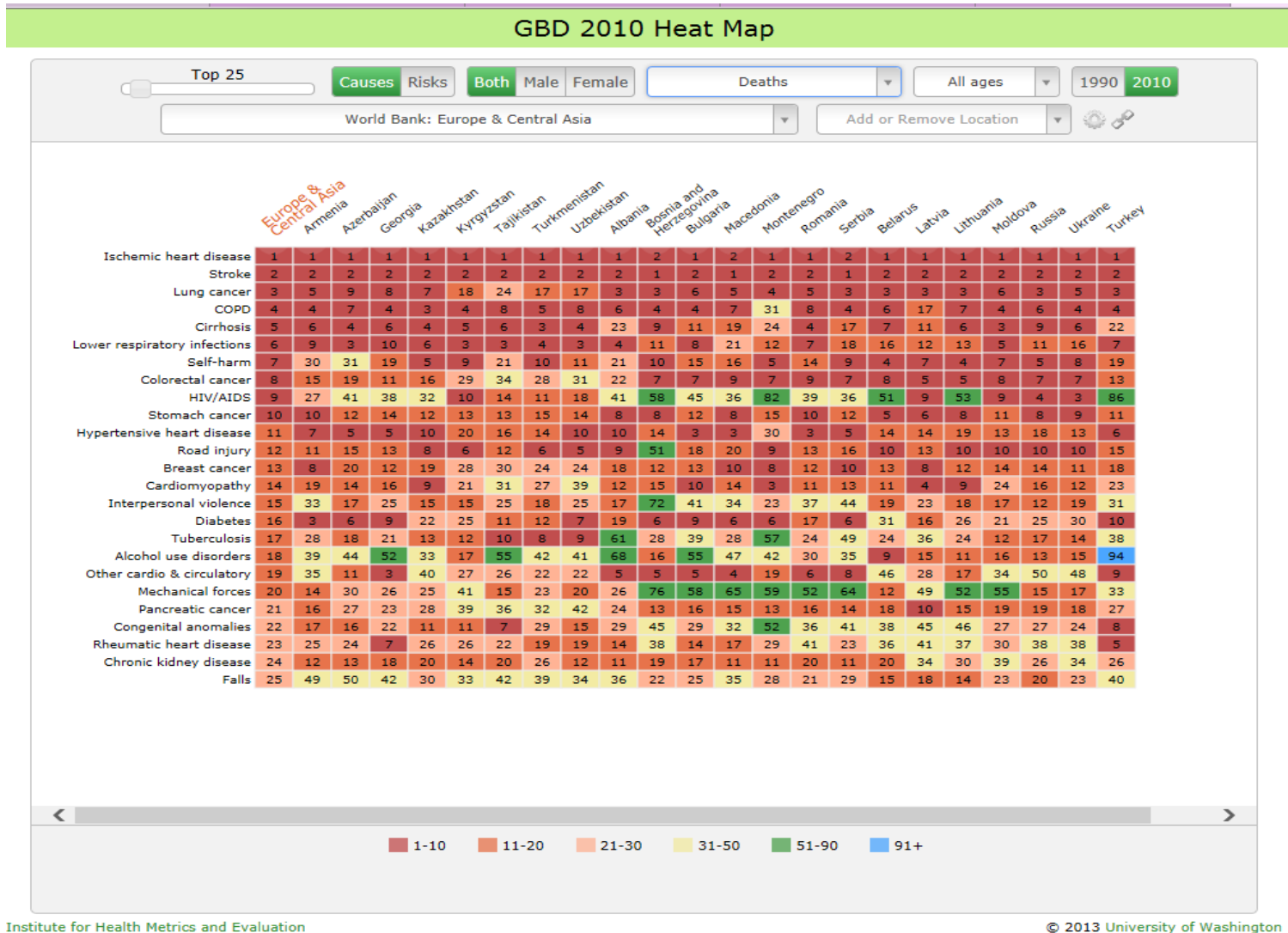
<sup>8</sup> [http://www.numbeo.com/crime/rankings\\_by\\_country.jsp](http://www.numbeo.com/crime/rankings_by_country.jsp)

**Exhibit 5:** 2013 Global Burden of Disease (DALYs) Heat Map of Europe and Central Asia for men and women, all ages. Numbers indicate rank contribution of disease to DALY burden. Source: Institute for Health Metrics and Evaluation (IHME). MDG Viz. Seattle, WA: IHME, University of Washington, 2014. Accessed 20 Dec 2014 from: <http://vizhub.healthdata.org/irank/heat.php>





**Exhibit 6:** 2013 Global Burden of Disease (Deaths) Heat Map of Europe and Central Asia for men and women, all ages. Numbers indicate rank contribution of disease to mortality burden. Source: Institute for Health Metrics and Evaluation (IHME). MDG Viz. Seattle, WA: IHME, University of Washington, 2014. Accessed 20 Dec 2014 from: <http://vizhub.healthdata.org/irank/heat.php>



**Exhibit 7. Country-specific health indicators**

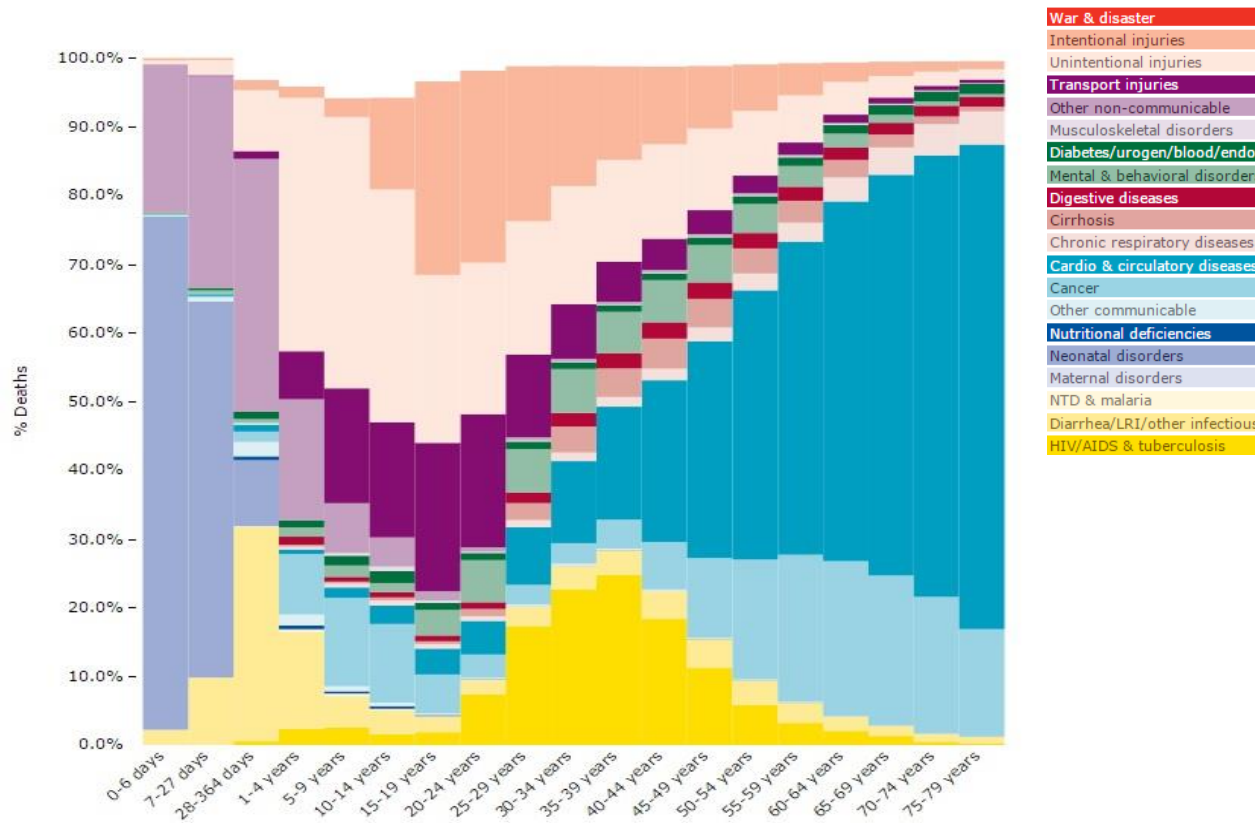
<b>COUNTRY</b>	Health Expenditure (% of GDP) <sup>1</sup>	Health Expenditure per Capita <sup>2</sup>	Population growth rate <sup>2</sup>	Physicians per 1000 people (2011) <sup>2</sup>	MMR (per 100,000 live births) <sup>1</sup>	IMR (per 1000 live births) <sup>1</sup>	NMR (per 1000 live births) <sup>2</sup>	<5 mortality (per 1000) <sup>1</sup>	Life Expectancy (men) <sup>2</sup>	Life Expectancy (women) <sup>2</sup>	Life Expectancy <sup>1</sup>	Adult mortality rate per 1000 (men) <sup>1</sup>	Adult mortality rate per 1000 (women) <sup>1</sup>	Hospital beds per 1,000 people <sup>2</sup>
Armenia	4.33	150	0.3	2.8	29	15	10	16	71	78	74.56	228	94	3.9 (2012)
Azerbaijan	5.24	398	1.3	3.4	26	31	16	35	68	74	70.75	175	85	4.7 (2012)
Belarus	5.32	338.8	0	3.8	1	4	2	5	67	78	69.93	307	103	11.3
Estonia	5.96	1010	0	3.3	11	3	2	4	72	82	74.44	207	69	5.3 (2011)
Georgia	9.89	333	-0.3	4.2	41	18	10	20	70	78	74.3	227	88	2.6 (2012)
Kazakhstan	3.92	521.1	1.5	3.8	26	17	9	19	65	74	66.54	337	152	7.2
Kyrgyzstan	6.49	84.3	2	2.5	75	24	13	27	66	74	67.53	279	135	4.8
Latvia	6.17	792	-1	2.9	13	8	5	9	69	79	72.15	237	89	5.9 (2011)
Lithuania	6.6	859	-1.1	3.6 (2010)	11	4	3	5	68	80	72.11	267	92	7.0 (2011)
Moldova	11.37	239	0	3.6	21	15	8	18	65	73	68.9	269	109	6.2 (2012)
Russia	6.2	887	0.2	4.3 (2010)	34	9	5	10	65	76	67.98	351	131	9.3 (2012) <sup>3</sup>
Tajikistan	5.78	55	2.5	1.9	44	49	22	58	64	71	67.25	180	156	5.5 (2011)
Turkmenistan	2.73	129	1.3	2.4 (2010)	61	45	23	53	61	70	65.45	375	201	9
Ukraine	7.19	293	-0.2	3.5	23	9	5	11	66	76	68.53	310	120	9
Uzbekistan	5.42	105	1.6	2.4 (2012)	36	34	14	40	65	72	68.24	213	132	4.5

<sup>1</sup> <http://hdr.undp.org/en/countries>

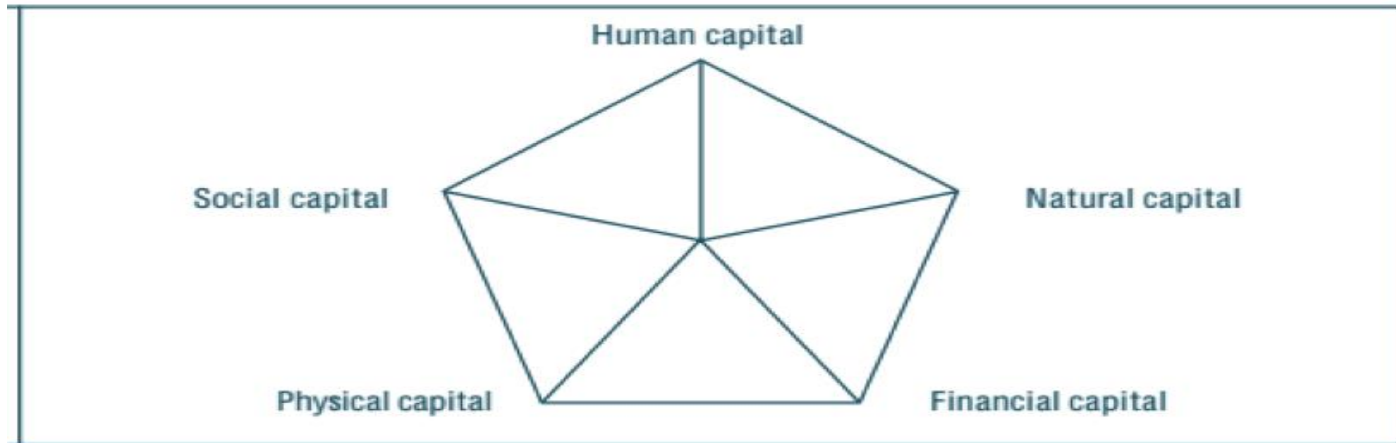
<sup>2</sup> <http://data.worldbank.org/indicator/SH.STA.MMRT/countries>

<sup>3</sup> <http://www.oecd.org/els/health-systems/health-data.htm>

**Exhibit 8:** 2013 Global Disease Burden Cause Pattern for Men in Eastern Europe and Central Asia Across Age Groups. Source: Institute for Health Metrics and Evaluation (IHME). MDG Viz. Seattle, WA: IHME, University of Washington, 2014. Available from: <http://vizhub.healthdata.org/mdg> [Accessed 20 Dec 2014].



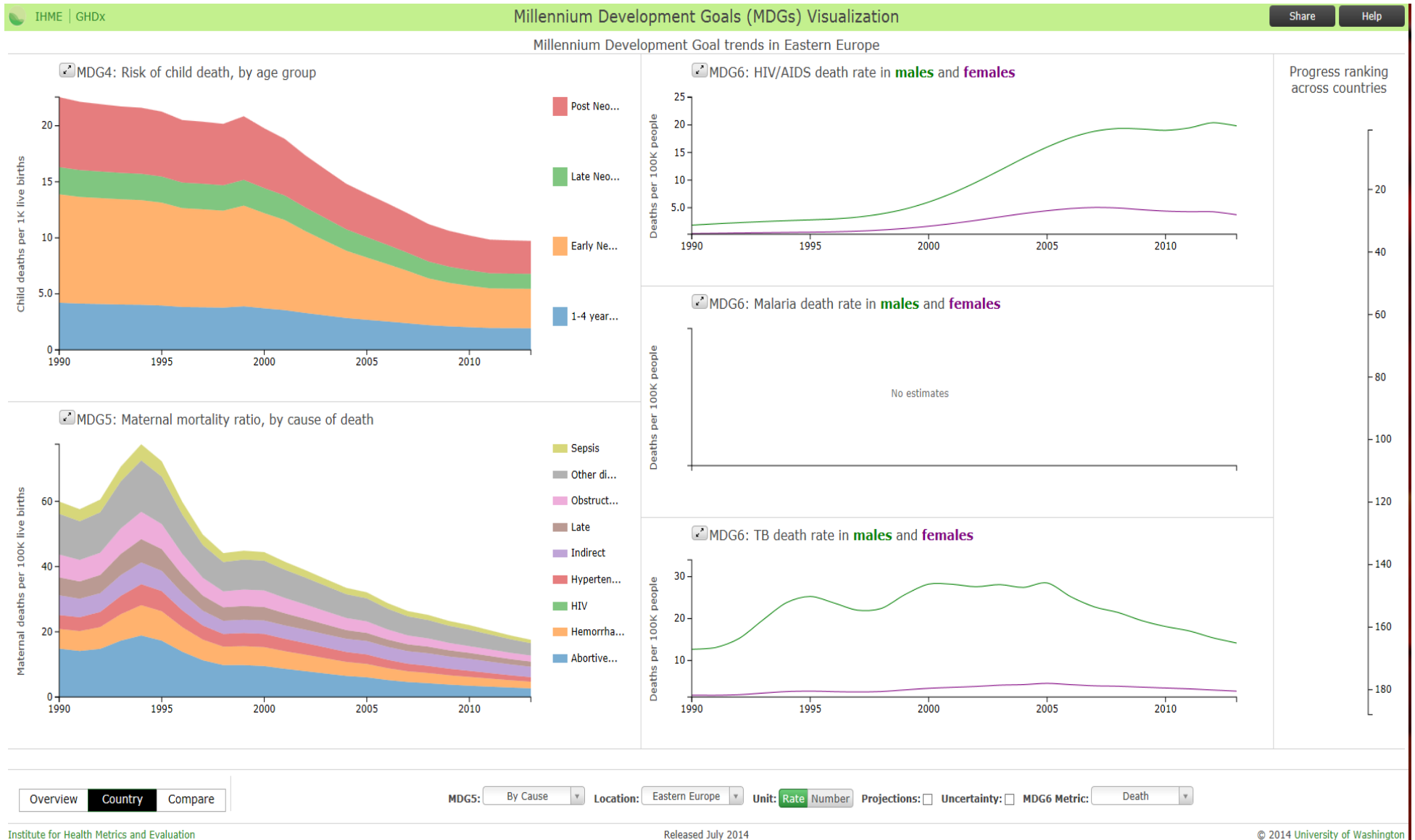
**Exhibit 9:** Asset Pentagon of the Sustainable Livelihoods Approach Framework ([25] Image Source: Department of International Development. "Sustainable Livelihoods Guidance Sheets." April 1999. Pp 15. Sec 2.3. Accessed on 14 Dec 2014 from: <http://www.eldis.org/vfile/upload/1/document/0901/section2.pdf>



**Exhibit 10:** Summary of Progress on the Millennium Development Goals for Eastern Europe, Caucasus and Central Asia [17], Source: [http://www.unece.org/fileadmin/DAM/publications/oes/UNECE\\_MDG\\_Report\\_2012.pdf](http://www.unece.org/fileadmin/DAM/publications/oes/UNECE_MDG_Report_2012.pdf)

<p>MDG 1 - Eradicate extreme hunger and poverty</p>	<ul style="list-style-type: none"> <li>• Long-term unemployed, disadvantaged ethnic minorities, indigenous peoples, single parent households and persons with chronic health problems are most likely living in extreme poverty.</li> <li>• The Great Recession of 2007-09 inhibited poverty reduction progress.</li> <li>• Almost 40 percent of Uzbekistan’s population lives in extreme poverty (less than \$1.25 a day).</li> <li>• Youth unemployment is estimated to be 19 percent for the region in 2010.</li> <li>• In 2009, an estimated 39% of Kyrgyzstan’s long-term emigration was of persons aged 20-29.</li> </ul>
<p>MDG 2 - Achieve universal primary education</p>	<ul style="list-style-type: none"> <li>• Enrollment rates are high, but dropouts persist for disadvantaged minority backgrounds.</li> <li>• Quality and equity in education remains a problem.</li> <li>• In Kyrgyzstan, 83 percent of 15-year-olds could not read at reading level 2 according to the PISA international education attainment assessment.</li> </ul>
<p>MDG 3 - Promote gender equality and empower women</p>	<ul style="list-style-type: none"> <li>• Progress in gender equality and women’s empowerment is mixed.</li> <li>• While women are going to school and in some countries continuing their education long after their male counterparts (except for Tajikistan and Uzbekistan), women work in lower paid and unstable jobs.</li> <li>• Many women in the EECCA work in the informal economy.</li> <li>• Women often face barriers in access to capital and business registration.</li> <li>• The wage differential can be between 40 and 50 percent in the EECCA, like Azerbaijan.</li> </ul>
<p>MDG 4 - Reduce child mortality</p>	<ul style="list-style-type: none"> <li>• Child mortality has fallen by as much as 50 percent in some EECCA countries.</li> <li>• The children under five mortality rate per 1,000 live births remains high in Azerbaijan, Tajikistan, Turkmenistan and Uzbekistan respectively at 46, 63, 56 and 52 in 2010.</li> </ul>
<p>MDG 5 - Improve maternal health</p>	<ul style="list-style-type: none"> <li>• Estonia, Belarus and Lithuania have already reached MDG 5.</li> <li>• Azerbaijan and Tajikistan have low coverage of women receiving antenatal care at 77% and 89% respectively compared to other countries in the region.</li> <li>• 9.7% of women in a marriage or union had an unmet need for family planning in Europe in 2008-09.</li> <li>• 500,000 unsafe abortions were performed in Europe in 2008 causing 7% of maternal deaths.</li> </ul>
<p>MDG 6 - Combat HIV/AIDS, malaria and other diseases</p>	<ul style="list-style-type: none"> <li>• MDG 6 remains the biggest challenge for EECCA countries.</li> <li>• HIV/AIDS is high in the EECCA with 1.5 million people living with HIV and the number of those living with HIV has more than tripled since 2001.</li> <li>• In Ukraine, 1.2 percent of the population aged 15 and over are infected.</li> <li>• Adequate antiretroviral treatment (ART) is largely unavailable.</li> <li>• In Kyrgyzstan, Latvia, Tajikistan and Ukraine, less than 19 percent of the eligible population received ART. In Armenia, Azerbaijan, Kazakhstan, Lithuania, Moldova, and Uzbekistan only 20 to 39 percent of the eligible population were receiving ART.</li> <li>• Tuberculosis has doubled since 1990 in the EECCA as well. Tajikistan has the highest prevalence of tuberculosis with 206 cases per 100,000 people.</li> </ul>
<p>MDG 7 - Ensure environmental sustainability</p>	<ul style="list-style-type: none"> <li>• Greenhouse gas emissions have significantly dropped in the region since 1990, but there is concern that the economies in transition need to invest in energy efficiency moving forward.</li> <li>• Half of the EECCA countries have acceded to the UNECE multilateral environmental agreements.</li> <li>• Coverage for national drinking water in 2010 dropped below the 1990 level in Kazakhstan and Uzbekistan, while Tajikistan was below the MDG target by 10 percent in 2010.</li> <li>• Over 15 million in the EECCA and southeastern Europe only have access to unimproved water sources.</li> </ul>
<p>MDG 8 - Develop a global partnership for development</p>	<ul style="list-style-type: none"> <li>• Many donor countries have failed to meet their official development assistance 2010 targets as agreed upon at the 2005 Gleneagles G8 meeting and UN Millennium+5 Summit.</li> <li>• Armenia, Georgia, Kyrgyzstan, Tajikistan and Moldova rely considerably on aid.</li> <li>• Many countries in the EECCA have not been able to diversify their exports and imports.</li> <li>• Several of the landlocked countries have not addressed obstacles to trade including coordinating regional transport, simplifying border crossings and harmonization of product and regulatory standards.</li> <li>• Foreign investment in the region also remains low.</li> </ul>

**Exhibit 11:** Progress on Millennium Development Goals 4, 5, and 6 in Eastern Europe and Central Asia. Source: Institute for Health Metrics and Evaluation (IHME). MDG Viz. Seattle, WA: IHME, University of Washington, 2014. Accessed on 20 Dec 2014 from: <http://vizhub.healthdata.org/mdg>



**Exhibit 12:** Sustainable Development Goals and their rankings by the World We Want Survey. Source: [http://dataforall.org/survey/undp\\_sdg\\_scorecard/dashboard](http://dataforall.org/survey/undp_sdg_scorecard/dashboard) and <http://sustainabledevelopment.un.org/sdgsproposal>

### **Proposed Sustainable Development Goals**

- Goal 1: End poverty in all its forms everywhere
- Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
- Goal 3: Ensure healthy lives and promote well-being for all at all ages
- Goal 4: Ensure inclusive and equitable quality education and promote life-long learning opportunities for all
- Goal 5: Achieve gender equality and empower all women and girls
- Goal 6: Ensure availability and sustainable management of water and sanitation for all
- Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all
- Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10: Reduce inequality within and among countries
- Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12: Ensure sustainable consumption and production patterns
- Goal 13: Take urgent action to combat climate change and its impacts
- Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development (UN 2014)

### **The World We Want SDG Survey**

- Goal 8: Ensure availability and sustainable management of water and sanitation for all (3.0)
- Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture (2.9)
- Goal 3: Ensure healthy lives and promote well-being for all at all ages (2.9)
- Goal 4: Ensure inclusive and equitable quality education and promote life-long learning opportunities for all (2.9)
- Goal 5: Achieve gender equality and empower all women and girls (2.9)
- Goal 1: End poverty in all its forms everywhere (2.8)
- Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable (2.8)
- Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels (2.8)
- Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (2.7)
- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (2.7)
- Goal 12: Ensure sustainable consumption and production patterns (2.7)
- Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development (2.7)
- Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development (2.7)
- Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all (2.6)
- Goal 10: Reduce inequality within and among countries (2.6)
- Goal 13: Take urgent action to combat climate change and its impacts (2.6)
- Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss (2.6)

## Acknowledgements

The Emory Global Health Case Competition Planning Committee gratefully acknowledges the dedication and contributions of each of the Writing Team members.

### Writing Team and Emory University Affiliations:

Lauren Godfrey, Laney Graduate School, Masters in Development Practice Program (*Lead*)

Jasmine Ko, Emory College (*Lead*)

Ben Aqua, Goizueta Business School (BBA)

Rachel Leff, Emory School of Law

Leslie Munoz, Laney Graduate School, Rollins School of Public Health

Kaitlyn Oelkers, Emory College

Carrilea Potter, Candler School of Theology

Alex Small, Goizueta Business School (BBA)

Robert Breiman, Rollins School of Public Health (*Faculty Advisor*)

Amy Webb Girard, Rollins School of Public Health (*Faculty Advisor*)

The Case Writing Team also recognizes valuable inputs and expert reviews from Drs. Jeffrey Koplan, Carlos Del Rio, Deborah McFarland, Liza Vertinsky, Carla Roncoli, and Mohammed K. Ali.

The Emory Global Health Case Competition Planning Committee gratefully acknowledges the logistics and leadership team, with special thanks to: Pari Chowdhary, Britton Tuck, Jasmine Ko (Case Chair), and Rebecca Baggett.

The Emory Global Health Case Competition gratefully acknowledges support from the following organizations:



**Medical School Senate**



**Lillian Carter Center  
for Global Health &  
Social Responsibility**



**College Council**



***SOCIAL ENTERPRISE @ GOIZUETA***



**Master's in  
Development Practice**