Smart Nation

A Blueprint for Modern Armenia

Gomidas Institute
London

FUNDAÇÃO
CALOUSTE
GULBENKIAN

The publication of this book was made possible with the support of the Calouste Gulbenkian Foundation.

Cover image: Designed by Shant Safarian. The cover depicts Armenia's Coat of Arms, the eagle and lion with a shield at the center. The Coats of Arms is represented in binary code with digits 0 and 1, which is used in computing and telecommunications to encode data. The cover background represents blueprint paper used for technical drawings and engineering designs.

© 2016 by the Gomidas Institute
All Rights Reserved.

2022 reprint with new front material.
© 2022 by the Gomidas Institute

ISBN 978-1-909382-72-5

05 04 03 02

Gomidas Institute
42 Blythe Rd.
London W14 0HA
United Kingdom
www.gomidas.org
info@gomidas.org

For the people of Armenia,
and my sons Areg, Vahé and Saro

CONTENTS

New Foreword (2022) vii

Author's Note ix

Maps x

Acronyms xii

Introduction xv

Chapter One: Silicon Mountain 1
Innovation 4
eArmenia 12
e-Remittances 15
Cyber Security 17
Teach Coding 20

Chapter Two: Smart Foreign Affairs 23
Armenia-Turkey Relations 23
EEU and EU 32
Georgia 36
Iran 38
China 39
United States 40
Foreign Affairs Portfolio Combined with Trade 42
Global Leadership on Genocide Prevention 43
Soft Power 47

Chapter Three: Culture 51
Women's Rights 51
Happiness and Morale 54
Creating a Sense of Urgency 56
Music 57
Chess 59

Chapter Four: Improved Governance and Combating Corruption 61
Corruption 62
Strengthening Civil Society 67

Addressing Voter Fraud 69
Monopolies 72
Cost of Living 74
Community Cabinet 75

Chapter Five: Stimulating Regional Growth 77
Agriculture 79
Tourism 80
Technology 82
Investment 83

Chapter Six: The Diaspora 95
Diaspora communities – a New Way 96
Armenia-United States Relationship 100
Armenians in Russia 102
Armenians in Turkey 104
Leveraging the Diaspora 107
Beyond Genocide Recognition 110

Chapter Seven: Karabagh – from Conflict Management to Resolution 113

Conclusion 119

Acknowledgements 121
Endnotes 123
Index 133

About the Author 139

New Foreword

Smart Nation was published in August 2016. Since then much has changed in Armenia.

Sadly, the book's premonition that the Artsakh issue required conflict resolution not management, did not eventuate, leading to a lost war and territory for Armenia. As a consequence, Armenia lost its advantageous negotiating position and its bargaining chip of territories surrounding the Republic of Artsakh. Something the book warned.

Despite this, several reforms identified in the book have materialized including:

- Establishing a special free economic zone along the Armenia-Iran border;
- Combating electoral fraud, through the purchase of equipment provided by donors;
- Anti-Corruption, the setting up of a digital platform to report corruption anonymously;
- Long term planning, with the launch of a Center for Strategic Initiatives. A public private partnership to further propel Armenia's development and economy;
- Rebalancing the relationship with the European Union. Armenia in February 2017 agreed on a new pact tightening political ties.
- Judicial reform, Armenian courts will no longer acting on government orders.
- Establishing stronger ties with Singapore with a Prime Minister's visit in 2019, a country recognized as a model for Armenia.
- The United States formally recognizing the Armenian genocide.
- Appointing Special Envoys for an Armenia-Turkey diplomatic relationship.
- Armenia's first home grown unicorn and billion dollar startup PicsArt, joining other Armenian co-founded billion dollar valued companies, including ServiceTitan and Quant Network.

Further, FAST (Foundation for Armenian Science and Technology) announced the formation of an Advisory Board and the appointment of the Chief Executive Director, very similar to the "Innovation and Technology Council" model outlined in the book.

The Hollywood movie "The Promise" has lived up to some expectations of exerting soft power.

In addition, other initiatives have been established to help with long term vision setting. One such initiative, 'The Future Armenian' led by Ruben Vardanyan, seeks to create a common framework of understanding around the sustainable development of Armenia as a country and Armenians as a nation.

These developments reflect the changing positive direction that Armenia can and should take. That does not diminish the significant challenges that continue to remain regarding governance, culture and the economy.

Sassoon Grigorian
January 2022

Author's Note

This book is called Smart Nation to reflect Armenia's most prized asset, its intellectual capability.

Armenia has one of the most literate populations on the planet, with a 99.7 percent literacy rate; it is a recognized world leader in games of strategy such as chess; Armenians around the world have been credited with many innovations and inventions used today; and Armenia's future success will in part be determined how it can leverage its intellectual property in the technology sector.

Despite being "smart", there is much Armenia can and should do to propel its economic growth and secure its future.

Armenia's complex issues cannot be solved easily. There are, however, obvious areas that need urgent attention and action.

Each chapter is dedicated to an area that will help support a "Smart Nation." These areas include technology; foreign affairs; culture; improved governance and combating corruption; stimulating regional growth; leveraging the Armenian diaspora; and seeking a resolution, not management of the Nagorno-Karabagh conflict.

I approach Armenia as an observer who has visited the nation half a dozen times, and a land that is known and at the same time distant.

I also approach this book as someone who has worked in government and has served in various capacities for four Fortune 500 global companies. I've seen success firsthand, and expect it for Armenia.

I also know Armenia is going through a fundamental shift, with an energized youth that rightly demands more, and seeks more transparency from its government. I have faith that this generation will lead Armenia to its true potential.

Armenia cannot rely on anyone but itself and its people, wherever they may be.

It has to take charge of its own destiny.

I am confident she will do so.

Stavropol
Adygea
Krasnodar
Maykop
Kabardino-Balkaria
RUSSIAN FEDERATION
Cherkesk
Karachai-
Cherkessia
Kabardino-Balkaria
Nalchik
Ingushetia
Grozni
Chechnya
Abkhazia
Soukhoumi
Nazran
Vladikavkaz
North Osseria
Daghestan
Makhachkala
Black
Sea
Caspian
Sea
South Ossetia
Tskhinvali
GEORGIA
Tbilisi
Batumi
Adjara
Akhaltsikhe
Samtskhe-
Javakheti
Hopa
Rize
ARMENIA
AZERBAIJAN
Baku
Sevan
Yerevan
Nagorno-Karabagh
Stepanakert
TURKEY
Nakhichevan (Az.)
Scale - Kilometers
0
100
200
IRAN
© 2016 Gomidas Institute

TBILISI
GEORGIA
AZERBAIJAN
ARMENIA
TURKEY
IRAN
Haghbat
Sanahin
Stepanavan
LORI
TAVUSH
Ijevan
Vanadzor
Gyumri
SHIRAK
Dilijan
Dzoravank
Ganja
Artsvashen
(Armenia)
Aparan
Tsaghgatsor
Sevan
Ani
Hrazdan
Lake Sevan
Shahumyan
Mt. Aragats
Talin
ARAGATSOTN
KOTAYK
Gavar
Ashtarak
Martakert
YEREVAN
Metsamor
Armavir
Gheghard
Echmiadzin
Garni
ARMAVIR
Vardenis
Kelbejer
KEGHARKUNIK
NAGORNO-KARABAGH (ARTSAKH)
Aghdam
Askeran
Artashat
ARARAT
Jermuk
Stepanakert
Martuni
Yegheknadzor
VAYOTS DZOR
Shushi
Mt. Ararat
Lachin
Fizuli
Hadrut
Dogubeyazit
Goris
Horadiz
SYUNIK
Tatev
Jebrail
NAKHICHEVAN
(AZERBAIJAN)
Qubadli
Kapan
Zengilan
Meghri
KEY
International borders
Current cease-fire line between
Artsakh and Azerbaijan [2016]
Territorial losses and gains following
Azerbaijani-Armenian War (1992-1994).
Capital cities
Provincial Centers
0
50
100 km
SCALE

Acronyms

ACASR – American Committee for Armenian and Syrian Relief
ACRNE – American Committee for Relief in the Near East
ADA – Armenian Development Agency
AGBU – Armenian General Benevolent Union
AI – Artificial Intelligence
AKP – Justice and Development Party (Turkey)
AML – Anti Money Laundering
ANC – Armenian National Committee
ANPO – Armenian National Philharmonic Orchestra
ARF – Armenian Revolutionary Federation
AUA – American University of Armenia
BSEC - Black Sea Economic Cooperation
CHP – Republican People's Party (Turkey)
CIS – Commonwealth of Independent States
CSO – Civil Society Organization
CSTO – Collective Security Treaty Organization
CTF – Counter Terrorism Financing
ECHR – European Court for Human Rights
ECRML – European Charter for Regional or Minority Languages
EEU – Eurasian Economic Union
EIF – Enterprise Incubator Foundation
EKENG – eGovernance Infrastructure Implementation Unit (Armenia)
ENA – Electronic Networks Armenia
ENP – European Neighborhood Policy
EPIC – Entrepreneurship and Product Innovation Center
EU – European Union
FAST - Foundation for Armenian Science and Technology
FIFA – Fédération Internationale de Football Association
GDP – Gross Domestic Product
GITC – Gyumri Information Technologies Center
GNP – Gross National Product
HDP – People's Democratic Party (Turkey)
ICT – Information Communication Technology
IDeA - Initiatives for the Development of Armenia
IDF – Israeli Defense Force

IMF – International Monetary Fund
IoT – Internet of Things
ISIS – Islamic State of Iraq and Syria
NAP – National Action Plan (Armenia)
NAS – National Academy of Sciences (Armenia)
NATO – North Atlantic Treaty Organization
NER – Near East Relief
NEF – Near East Foundation
NGO – Non-governmental Organization
NKR – Nagorno-Karabagh Republic
OCS – Office of the Chief Scientist (Israel)
OECD – Organization for Economic Cooperation and Development
OSCE – Organization for Security and Cooperation in Europe
PBS – Public Broadcasting Service (United States)
RIEC – Research Innovation Enterprise Council (Singapore)
SDHP – Social Democratic Hunchakian Party
UITE - Union of Information Technology Enterprises
UK – United Kingdom
UNDP – United Nations Development Program
UNESCO – United Nations Educational Scientific and Cultural Organization
US – United States of America
USAID – United States Agency for International Development
VAT – Value Added Tax
VC – Venture Capital
WAVE – Women against Violence Europe
WCIT – World Congress on Information Technology
WITSA – World Information Technology and Services Alliance
WTO – World Trade Organization
YCRDI – Yerevan Computer Research and Development Institute

Introduction

Armenia, officially known as the Republic of Armenia, is a sovereign state in the Caucasus. It is bordered by Turkey to the west, Georgia to the north, the de facto independent Nagorno-Karabagh Republic and Azerbaijan to the east, and Iran and the Azerbaijani enclave of Nakhichevan to the south.

Armenia is a unitary, multiparty, technically democratic nation-state with an ancient cultural heritage. The capital is Yerevan.

On top of a population of some three million people, it has a large and influential diaspora numbering some 8 million people. Many communities in the diaspora were established – or greatly expanded – after the Armenian Genocide of 1915, when 1.5 million men, women and children were murdered under the Ottoman Empire. The diaspora has grown in the years since Armenia's independence.

The Turkish government, the successor of the Ottoman Empire, to this day denies genocide took place. One cannot understand Armenia, its mindset, and its people, without understanding that pivotal crime.

In the 1st century BCE the Kingdom of Armenia reached its height under Tigranes the Great. Armenia became the first state in the world to adopt Christianity as its official religion in 301 CE. The unique Armenian alphabet was invented by Mesrop Mashtots in 405 CE.

The ancient Armenian kingdom was split between the Byzantine and Sasanian Empires around the early 5th century.

Under the Bagratuni dynasty, the kingdom of Bagratid Armenia was restored in the 9th century. The kingdom fell in 1045 and Armenia was soon after invaded by the Seljuk Turks. An Armenian principality and later a kingdom Cilician Armenia was located on the coast of the Mediterranean Sea between the 11th and 14th centuries.

Between the 16th and 19th centuries, areas composed of Eastern Armenia and Western Armenia came under the rule of the Ottoman and Persian Empires, repeatedly ruled by either of the two over the centuries. By the 19th century, Eastern Armenia had been conquered

by the Russian Empire, while most of the western parts of Armenia remained under Ottoman rule.

During World War I, Armenians in the Ottoman Empire were exterminated in the Armenian Genocide. In 1918, after the Russian Revolution, the Republic of Armenia was established in Eastern Armenia.

In late 1920 and early 1921, the state was incorporated into the Transcaucasian Socialist Federative Soviet Republic, which in 1922 became a founding member of the Soviet Union. In 1936, the Transcaucasian state was dissolved, leaving in its place its constituent entities, including the Armenian Soviet Socialist Republic. The modern Republic of Armenia became independent in 1991 during the dissolution of the Soviet Union.

Armenia is a member of the Eurasian Economic Union, the Council of Europe, and the Collective Security Treaty Organization. Armenia supports the de facto independent Nagorno-Karabagh Republic, which was proclaimed in 1991.

In 1993, Turkey began the blockade against Armenia in support of Azerbaijan over the Nagorno-Karabagh conflict.

A 1994 ceasefire in the Nagorno-Karabagh war has more or less held since it was concluded though negotiations for a permanent settlement have dragged on. An estimated 30,000 people were killed and over a million were displaced during the conflict.

As it enters the 21st century, Armenia faces many hardships and economic realities. Often it has had to focus on survival rather than undertaking much-required reforms.

Armenia is a lower-middle-income transition country that managed to reduce poverty by half in two decades, from 54 percent in 1998 to 28 percent by the time of the 2008 global economic crisis. Recovery from the crisis has been uneven, and the national poverty rate remained near stagnant at 32 percent in 2013.[1]

In 2014, its unemployment rate was 17.3 percent;[2] its gross domestic product (GDP) USD 11.64 billion;[3] GNP per capita USD 4,020; government debt 44 percent of GDP.[4] Armenia's GDP is now at around pre-global-financial-crisis levels.

On a positive note, Armenia is viewed as a technology leader in its region; has a sophisticated young population; a growing and influential civil society; and displays influence in soft power.

Its best years are yet to come.

Smart Nation

A Blueprint for Modern Armenia

Chapter One

Silicon Mountain

Armenia will develop its first USD 1 billion startup, not if but when. A plan is required to get there.

Armenia, with its highly educated and literate population, entrepreneurial spirit, legacy of research and development during Soviet times as well as in the diaspora, and a high-growth digital sector, can become a technology hub or "Silicon Mountain" in the region.

Armenia used to be a hub for the Soviet Union's scientific and research and development activities, including industrial computing, electronics, and semiconductors. Since independence, the country's focus has been on software development, outsourcing, and information-technology services.

In the Global Competitiveness Report 2015–2016, Armenia ranked below its potential among 140 countries on technological readiness including: 87th in availability of latest technologies; 113th firm level technology adoption; 79th in foreign direct investment in technology transfer; 46th in individuals using the Internet as a percentage of population; 71st in fixed broadband Internet subscriptions; 58th in Internet bandwidth; and 78th in mobile broadband subscriptions.[5]

Tech now accounts for around 15,000 jobs in Armenia. Armenia boasts around 400 tech companies, a 25 percent increase between 2014 and 2015. The technology sector in Armenia produces a combined USD 475 million per annum, around 5 percent of the nation's GDP.[6] According to TechWorm there are around 200 tech startups in Armenia.

That is why places like the Tumo Center are so important. Tumo is a new kind of afterschool learning environment where thousands of teenage students are put in charge of their own learning, in a place

where there is access to the Internet and technology. The center teaches skills necessary to succeed in the digital industry, including animation, video-game design, web development, and digital video and audio.

Since 2011 Tumo has grown to accommodate an estimated 10,000 students. Tumo was founded with a USD 50 million donation from US-based Armenians Sylva and Sam Simonian.[7]

Another organization helping prepare Armenia for its digital future is Armtech. Armtech promotes Armenia's high technology economy and encourages investment; allows for networking among high tech professionals worldwide; and organizes a leading Armenia tech conference every year. Under the patronage of the prime minister of Armenia, these conferences take place between Armenia and Silicon Valley on an annual basis.

There is a small but growing ecosystem around startups. In 2015 Impact Hub Yerevan made a positive impact on the community. Impact Hub is a global network with more than 13,000 members worldwide. Loft is another coworking space located in Yerevan.

Another organization, HIVE, aims to grow the global Armenian tech ecosystem by investing in Armenian founders or companies that hire talent in Armenia. They provide funding, operational guidance, and access to a global network of talent and advisors. The HIVE Seed Fund invests in and partners with early-stage startups worldwide, from Silicon Valley to Armenia.

Other groups include Startup Armenia, a Yerevan-based think-tank focused on policy and initiatives aimed at developing entrepreneurship in Armenia and around the world – including developing a map of the ecosystem in Yerevan; HyeTech a network of Armenian professionals, technologists, entrepreneurs, and investors; STARTITUP Center, which assists entrepreneurs through funding and supporting them with marketing, sales and network; and Techtension Armenia.

Then there have been the technology investments.

In 2000, Armenia had its first official technopark, Viasphere, in Yerevan. In 2012 a second park was opened in the second-largest city, Gyumri.

In 2011, Microsoft Corporation established an Innovation Center in Yerevan, and in the same year India set up a joint Center for Excellence in Information Communication Technologies at Yerevan State University.

In 2012, the Armenian government opened an information and high-tech office at the Plug and Play Center in Silicon Valley.

In 2015, the Innovative Solutions and Technologies Center was founded jointly by IBM, Enterprise Incubator Foundation, the Armenian government, and United States Agency for International Development (USAID). The Center works in four main areas—startup acceleration; business aggregation; educational process (innovation and economy); as well as joint research with Armenian and American universities.

The American University of Armenia (AUA) Entrepreneurship and Product Innovation Center (EPIC) is a platform for promoting entrepreneurial education, cross-disciplinary collaboration, and startup incubation at the AUA. Through classroom lectures, prototyping capabilities, and the experience of a diverse network of business and technical advisers, EPIC allows students to effectively utilize their knowledge and develop new ventures.

Following a concerted effort, Armenia was able to secure hosting rights for the 2019 World Congress on Information Technology (WCIT). The event is organized by the World Information Technology and Services Alliance (WITSA), which is a consortium of associations from information and communications technology industries around the world. The group claims that it represents over 90 percent of the world information technology market through its global membership, and has a goal of advancing the growth and development of the IT industry.

Armenia also has sound infrastructure to support a digital economy. Armenia has around 90 percent coverage of 3G network nationally, and has the highest mobile Internet penetration rate among Commonwealth of Independent States (CIS).

These are noteworthy achievements for such a small nation.

This is a good start, however, much more is needed to propel Armenia to the next level.

Innovation

Armenians around the world have a history of being innovative.

They are credited with some well renowned inventions that are used around the globe today. These include positron emission tomography (PET), the first functional brain imaging technology (Michel Poghossian); first magnetic resonance (MR) scanning machine (Raymond Vahan Damadian); automated teller machine (ATM) (Luther George Simjian); truck mounted revolving concrete drum mixer, revolutionising the concrete industry (Stephan Stepanian); first licensed vaccine against rotavirus (Albert Kapikian); pioneer of plastic surgery (Varazdat Kazanjian); pressured inhaler used for asthma, allergies, nasal sprays, eye drops (Roger Altounyan); the Soviet MiG military aircraft (Artem Ivanovich Mikoyan); automatic transmission for automobiles (Asatour Sarafian); Google's modular smartphone called Ara (Ara Knaian); and many others.

In 2013, Technology and Science Dynamics, Inc., and Armtab Technologies Company, an American-Armenian joint-venture, announced the first tablet and smartphone made in Armenia. The smartphone went on sale from June 2016.

Armenians have demonstrated the smarts for inventions and being innovative. Yet this legacy has not always been translated for modern Armenia.

According to the 2015 Global Innovation Index,[8] Armenia was ranked 61st out of 141 countries around the globe. Armenia performed better than neighboring countries Iran (106); Azerbaijan (93); and Georgia (73).

Israel

Armenia ought to look at startup nation Israel to develop a new path in the technology sector. The startup label for Israel was introduced by the book with that same name.[9]

Israel, a nation of 7.1 million, only 60 years old, in a constant state of war since its founding, with no natural resources, produces more startup companies than large, peaceful, and stable nations like Japan, China, India, Korea, Canada, and the United Kingdom.

Israel has made the most of its small land mass while leveraging the intellectual capacity of its population.

A number of factors have contributed to this, including investing within the nation on patent technologies and attracting foreign investment to build research and development centers.

Israel has the highest budget for research and development as a proportion of its GDP in the world. Israel invests about 4.5 percent of its GDP in research and development. This number goes far beyond the OECD 2.2 percent average, and much more than many other countries at the same level of income.[10]

This is not a coincidence. It is linked to the fact that successive Israeli governments have been pursuing policies to foster innovation for decades.

Israel's Office of the Chief Scientist (OCS) of the Ministry of Economy, an independent authority, is in charge of creating public policies to support the private sector by addressing market failures that could hinder innovation.

The OCS has more capacity and appetite for risk. By collaborating with the private sector, the government shares the risk that otherwise the private sector alone would be unwilling to take.

The OCS also supports incubators across Israel, which finance and host startups with innovative technologies, by providing about USD 7 for each USD 1 invested by private investors. This means the OCS effectively subsidizes about 85 percent of investments in incubators.[11]

Incubators help firms to start up, and are designed to help them to either eventually list on the NASDAQ, the second largest stock market in the world, behind only the New York Stock Exchange. These firms may also take the path of an acquisition, where a larger firm seeking to expand its customer base may find that acquiring a smaller firm is better than trying to redo what that smaller firm does in house.

Israeli entrepreneurs look for early exits, and many have achieved this. In 2014, exits from Israeli startups reached an all-time high of around USD 15 billion.[12] Armenia's first billion-dollar startup will likely occur from an acquisition.

The ecosystem in Israel goes beyond the help of government. Universities and research institutes work to patent and commercialize new technologies. Both the researchers and the institution share the profits that could come out of a successful enterprise.

Israel demonstrates many factors which Armenia could adopt: taking risks; strong private and public partnerships; effective commercialization of products; and most importantly, addressing market failure.

Singapore

Another example for Armenia to consider is Singapore. A small nation with limited natural resources, Singapore consistently strives to continually be a competitive economy. According to the Global Innovation Index,[13] Singapore was ranked 7th out of 141 economies.

In 2016, the Singaporean Government announced a USD 3.2 billion plan to invest in cutting-edge technology to help local companies increase productivity.[14] The funding includes setting up a robotics fund to develop and deploy robots in the healthcare, logistics, construction, and manufacturing sectors. The plan will provide subsidies to automate businesses; set up an industrial park to bring together entrepreneurs, researchers, and students; public sector research; and set up a new unit to support startups called SG Innovate. The unit will match entrepreneurs with mentors, venture capitalists, and research talent, with a focus on smart energy, fintech, digital health, Internet of Things, and digital manufacturing.

In the same year the Singaporean Government announced a SGD 19 billion plan to support Singapore's research and development efforts over the next five years. The Research Innovation Enterprise 2020 Plan (RIE2020) seeks to support and translate research into solutions that address national challenges, build up innovation and technology adoption in companies, and drive economic growth through value creation.

The Singaporean Government has in place a Research Innovation and Enterprise Council (RIEC), which is chaired by the prime minister of Singapore, who appoints members to two-year terms. According to its website:[15]

> The RIEC comprises Cabinet Ministers and distinguished local and foreign members from the business, science and technology communities. Set up in 2006, the RIEC provides strategic direction for national research and development. It has two main goals: advise the Singapore Cabinet on national research and innovation policies and strategies to drive the transformation of Singapore into a knowledge-based society; and lead the national drive to promote research, innovation and enterprise by encouraging new initiatives in knowledge creation in science and technology, and to catalyse new areas of long term economic growth.

Innovation and Technology Council

With a small market, Armenians cannot rely on others to provide them the services they require or need. A case in point is electronic payments to facilitate electronic commerce. The solutions to these problems have to come from Armenia, and if applied in a smart way, they may very well solve a problem that is being experienced globally.

There are several government organizations that help facilitate innovation in Armenia. The National Academy of Sciences (NAS) is the highest state scientific self-governing organization which unites NAS members and scientific staff of affiliated scientific and research institutions. The academy promotes and carries out research in different scientific fields, as well as coordinates research carried out throughout Armenia. NAS is an official scientific consultant to the highest governing bodies of Armenia.

NAS is mainly financed from the state budget. Additional finances come from different state and private foundations, as well as from direct contracts between the Academy and other organizations in Armenia and abroad.

There is also the National Center of Innovation and Entrepreneurship with four branches (Gyumri, Vanadzor, Hrazdan, Kapan) that was formed in 2009. The NCIE is a member of the Interstate Council on coordination of scientific and technical information of CIS member states. The center supports the protection and commercialization of intellectual property; and provides support to entrepreneurs.

Other existing frameworks include the Noravank scientific-educational foundation chaired by the prime minister of Armenia. The foundation aims to mobilize scientific thought in Armenia and the diaspora. It covers implementation of research and engineering; training and retraining activities; development and implementation of new teaching and learning mechanisms; creation of an information network; publishing work; holding of scientific seminars, conferences, forums; and other activities.

There also exists a Scientific Technical Council to promote innovative approaches in the economy.

These bodies need to be reinvigorated to spur Armenia's innovation, as well as a means of commercializing products or ideas that solve market failure.

It is common practice for other countries to lead trade delegations to Israel, accompanied by university leaders, leading technology companies, and other interested parties to learn more what is taking place. The Armenian government, in collaboration with private firms, needs to undertake this task, and for it to be part of a regular dialogue. These delegations should focus on key areas of specialization, such as agritech—the use of technology for agricultural practices; commercialization; cyber security; and other areas that would be of benefit to Armenia.

Armenia requires a robust innovation policy that looks beyond research and development; supports the startup ecosystem; provides tax incentives;[16] delivers e-government services; and has a laser focus on creating jobs for the future.

In order to develop this policy, there needs to be a newly formed Innovation and Technology Council, modelled on the Singaporean RIEC, to work alongside existing organizations to set and implement

Armenia's digital and innovation plan. The plan ought not only develop the sector but identify new commercial opportunities to take advantage of, whether it be robotics; cybersecurity; electronic payments; software for the Internet of Things; developing artificial intelligence (AI)—the intelligence exhibited by machines or software; big data analytics; leveraging blockchain technology (distributed public ledger); or any other area that Armenia would have a natural advantage in having a leading capability.

This proposed newly formed and reinvigorated council ought to replace the existing "Information Technology Development Support Council," which aims to promote the development of information technologies in Armenia. That council is chaired by the prime minister of Armenia and includes senior economic adviser to the president (deputy head of the council); deputy ministers of trade and economic development, education and science, and transport and communications; the executive director of the Armenian Development Agency; and experts representing the information technology sector subject to rotation every six months on the basis of the prime minister's decree.

In Armenia's case, the chair of the proposed council needs to be independent from government. The current Armenian prime minister (see "Improved Governance and Combating Corruption" chapter), is not in a position, on many fronts, to chair such a group.

The innovation plan needs to set clear goals with timelines, allocating responsibility to agencies to be accountable for its delivery. Progress of deliverables should be made available in real time.

The proposed Council would need to develop specialized committees and bring together all the various elements of the Armenian administration that currently deal with innovation and technology.

Successful innovation is a combination of factors, including having an ecosystem that includes technologists; investors and venture capitalists; supportive government programs; world-class education and research institutions; and an active community in the sector.

Armenians are no strangers to the digital sector, with Avie Tevanian, a former senior vice president and former chief software

technology officer at Apple; Alexis Ohanian, co-founder of the social news website Reddit; Lara Setrakian, co-founder of News Deeply; Raffi Krikorian, former vice president at Twitter and leader of Uber's Advanced Technologies Group; Vahé Torossian, corporate vice president of Microsoft's Worldwide Small and Mid-market Solutions and Partners (SMS&P) organization; Pixar's Katherine Safarian, an Oscar recipient; Zareh Nalbandian, co-founder and CEO of Animal Logic, one of the world's leaders in digital animation; and many others.

The Innovation and Technology Council must also include entrepreneurs in Armenia, some of whom have developed mobile apps with success. This could include founders involved in Zangi, an app which aims to provide a communication service similar to Skype and Viber; PicsArt, a mobile photo-editing application, with more than 250 million installations; and many others.

The Council must include and invite successful entrepreneurs and businesspeople who are internationally recognized, including non-Armenians. The council needs to have a global focus and needs to draw upon global experience.

Innovation District

Another area ripe for implementation is the creation of an "innovation district" in Yerevan. The innovation district is a model used in urban planning to stimulate economic growth in cities. These districts are dedicated zones exclusively for the purpose of clustering entrepreneurs, startups, business accelerators and incubators. These spaces are easily accessible via public transportation, wired for public Wi-Fi, support mixed-use development and collaboration. It is estimated there are more than 80 official innovation districts worldwide.

Innovation districts have proven to be effective for cities to modernize their economies and pivot to technology-driven services, as well as attracting investment.

Yerevan is a relatively small city, with abundant public Wi-Fi, as well as many startups within a confined area. The location of the district should be selected in consultation with all key stakeholders,

and can be part of the remit of the proposed Innovation and Technology Council.

Venture Capital Funding

Yet another area for continued development tied with innovation is venture-capital (VC) funding. Granatus Ventures is the first venture-capital firm to provide investment, expertise, and networks to startups worldwide that leverage Armenia's potential as an emerging technology hub. [17]

Granatus engages in early stages of product development and company development. They target companies in social, mobile, analytics, and cloud technologies.

They have already invested in an impressive array of companies including Menu Group, a mobile multi-restaurant food delivery service; flat club, a marketplace for booking accommodation; gg Taxi, a leading app-based taxi ordering platform; Skycryptor, protecting files in Dropbox and Google Drive; News Deeply, a new media and technology firm dedicated to improving user experience on complex global issues; among many others.

The Initiatives for the Development of Armenia (IDeA) Foundation is developing a project called the Foundation for Armenian Science and Technology (FAST), aimed at developing technological innovation in Armenia. FAST will become a platform for bringing technological breakthroughs in computer science, artificial intelligence, high-tech materials, robotics, biotechnology, advanced engineering and manufacturing technologies. It is envisaged that the Fund initially will be provided USD 10 million, with the goal of raising USD 200 million within three years, providing research grants and venture financing.[18]

In addition to VCs like Granatus, Armenia needs to have a developed plan to attract investment from other well-established global venture firms focused on technology.

These could include Salesforce Ventures, the only strategic venture fund focused 100 percent on creating the world's largest ecosystem of enterprise cloud companies, which has invested in more than 150 companies since 2009; GV, launched as Google Ventures in 2009, is

the venture capital arm of Alphabet, Inc., and has invested in more than 300 companies in the fields of life science, healthcare, artificial intelligence, robotics, transportation, cyber security, and agriculture; Menlo Ventures, which has invested in 70 public companies and more than 100 mergers and acquisitions since 1976; and Miramar Venture Partners which works on commercialization of products, and counts among its leadership Vice President Armond Hairapetian.

eArmenia

Imitation is the sincerest form of flattery. Armenia should flatter Estonia when it comes to eGovernment services.

The term eGovernment refer to the use of information and communication technologies to improve the activities of public sector organizations, and deliver services electronically.

Estonia started planning a move to digital government in 1997.[19] When the Estonian political and technical leadership began laying the foundation for eEstonia, it decided on certain principles: decentralization; no central database; interconnectivity; an open platform; and an open-ended process, as a continuous project to keep growing and improving organically.

The process is evolutionary in nature, involving multiple stages or phases of development.

Estonia's eGovernment system allows anyone to file taxes, vote, or receive a medical prescription, all in a matter of minutes and from a single website. The technology behind it is smart, but not magical.

The other key element of the Estonian system has been mandatory use of digital identification. Every Estonian citizen now carries an identity card with a chip that makes it possible to sign documents electronically.

Estonia is the first nation to offer eResidency, a transnational digital identity available to anyone in the world interested in administering a location independent business online. eResidents can digitally sign documents and contracts; verify the authenticity of signed documents; encrypt and transmit documents securely; establish an Estonian company online; administer the company from

anywhere in the world; conduct ebanking and remote money transfers; access online payment-service providers; and declare Estonian taxes online.

Digital signatures and authentication are legally equivalent to handwritten signatures and face-to-face identification in Estonia.

eResidency does not confer citizenship, tax residency, residence, or right of entry to Estonia or to the European Union. The eResident smart identification card is not a physical identification or a travel document, and does not display a photo.

Armenia has dabbled in eGovernment.

Armenia was one of the early global adopters of an eVisa. An eVisa is equivalent to a conventional visa, but no paper is inserted in your passport and there is no need to visit an Armenian diplomatic mission to submit an application. Applications for e-Visas can be submitted online and verified online.

As early as 2005, the government of Armenia was in discussions with the World Bank for the implementation of eGovernment program that would promote systematization.[20]

In 2009, the eGovernance Infrastructure Implementation Unit (EKENG) was established by the Armenian government, and chaired by the minister of the economy. This unit is responsible for the technical implementation of eGovernance in Armenia, and is the only agency in Armenia authorized to issue digital signatures to individual and legal entities in Armenia.

Armenia provides many services online. They include but are not limited to electronic tax filing, registering a business, and electronic signatures.[21]

From 2012 to 2014, a Europe Aid project, Transactional eGovernance Development in Armenia, assisted the government in its quest for better e-services for citizens.[22] The eGovernance project was aimed at improving efficiency in public-sector operations, with lower cost; greater transparency; and shifting the provision of government services for citizens and business where the public services are (almost) totally delivered remotely. The project intended to change the way the government agencies interact with each other.

All these initiatives, however, need to be coordinated to allow every citizen a digital identity, which would then allow the full complement of government services.

The Tax System

eGovernment can also go a long way toward addressing Armenia's tax system. Armenia's complex tax system was revised in 1997 and again in 2001. The top corporate profit tax rate was lowered from 30 percent to 20 percent.

The personal income tax rate in Armenia stands at 36 percent. Personal income tax rates in Armenia averaged 23.23 percent in the period from 2003 until 2015, reaching the current all-time high of 36 percent in 2014 and a record low of 20 percent in 2004.[23]

Work is underway on a new comprehensive tax code, which includes higher taxes on fuel, alcohol, and tobacco, and a lower income threshold for small businesses paying a single turnover tax. The code includes increases in income taxes levied on workers earning between AMD 120,000 and AMD 2 million per month.[24]

Like every other nation, revenues from the personal income tax rate are an important source of income for the Armenian government.

Achieving a higher level of tax collection has been an important part of Armenia's economic reform programs. A national digital identity scheme will assist in addressing matters relating to tax evasion and collection, creating a more transparent system, which is desperately required.

Furthermore, having a sophisticated and well implemented eGovernment system would improve connections with the diaspora through initiatives like eResidency.

To do this, further investment is required in infrastructure to enable the broader community to gain access to Internet-enabled services. Though there is some level of infrastructure within Yerevan, more is required in areas outside of Yerevan.

Today around half the global adult population owns a smartphone; by 2020, 80 percent will.[25] Armenia needs to ensure it is equipped with this level of access to smartphones to compete globally.

e-Remittances

The proposed Innovation and Technology Council would not only help develop Armenia's innovation plan but also identify potential areas of specialization for Armenia.

One area of possibility is e-payments and remittances.

Armenia desperately needs to have an increased penetration in e-payments. According to an Ameriabank study, only 1.3 percent of the nation's populace used such services in 2013; 2 percent did so in 2014.[26]

Further uptake of e-payments would help with the more efficient transfer of money and increased transparency and could develop a new business opportunity for Armenia for e-remittances.

A remittance is a transfer of money by a foreign worker to an individual in his or her home nation. Money sent home by migrants competes with international aid as one of the largest financial inflows to developing countries.

Workers' remittances are a significant part of international capital flows, especially with regard to labor-exporting countries. In 2014, USD 436 billion went to developing countries. Overall global remittances also totaled USD 583 billion.[27]

Some countries, such as India and China, receive tens of billions of dollars in remittances each year from their expatriates. In 2014 India received an estimated USD 70 billion and China an estimated USD 64 billion.[28] With increased penetration of smartphones and access to the Internet, it is easier than before to remit money. According to the World Bank, in 2013 the top economies for remittances in total payment volume were India, China, Philippines, Mexico, Nigeria, Egypt, Bangladesh, Pakistan, Vietnam, and Ukraine. Some of these top-ranking countries are often well serviced in terms of remittance service providers.

However, the picture for remittances as a percentage of GDP (2012) is very different. According to the World Bank the top

countries are Tajikistan, Kyrgyzstan, Nepal, Lesotho, Moldova, Armenia, Haiti, Samoa, Liberia, and Lebanon.

Around 20 percent of Armenia's GDP comprises remittances, totaling USD 2 billion.[29] The bulk of this money comes from Armenians working in Russia, who send remittances to Armenia estimated around USD 1.5 billion per year.

Three of the top six countries, including Armenia, are members of the Eurasian Economic Union. Furthermore, both Moldova and Ukraine, within Armenia's region, rely on remittances as a significant proportion of their economy.

These are not easy markets to service, because typically they may be small in total volume, and there is the issue of Anti-Money Laundering (AML) and Counter Terrorism Financing (CTF) laws to navigate.

That said, payments companies are always on the lookout to acquire companies that help expand their current base, or provide additional offerings. For example, in recent years mobile payments company PayPal acquired companies like Braintree, Venomo, and Xoom, the latter being a remittance company. PayPal said one of the reasons it acquired Xoom for USD 900 million was because it had a strong presence in markets that the company was seeking to expand into and better service, such as Mexico, India, the Philippines, China, and Brazil.[30]

If an organization can solve remittance issues in identified CIS nations, it is likely to be an acquisition target.

Furthermore, with the advent of the blockchain, payments can be made bypassing traditional methods of money transfer, such as SWIFT (which banks use), which takes days and also charges hefty fees.

Remitting money is expensive. In 2009 the G8, the eight largest economies in the world, aimed to cut the global average cost of sending funds from 10 percent (as it was then) to 5 percent over five years.

The world is not even halfway there; the average stands at 7.7 percent. That is despite the emergence of significant competition in this space such as MoneyGram and Western Union, which use networks of agents to collect and pay out cash. Peer-to-peer transfer services have emerged, slashing the cost of transferring money around the world.[31]

Even as technology boosts competition and cuts costs, regulation is pushing in the opposite direction. Guidelines intended to prevent money laundering and the financing of terrorism imply that some cross-border transfers should be treated as very risky.

The costs of complying with the rules are high, and the penalties for breaching them stringent. Compliance requires background checks, and sophisticated software that can sift through big data to identify what may be deemed a risky payment transfer. For this reason, some markets have been deemed too hard to comply, or the investment required to comply does not provide a return on investment.

In those markets, and Armenia would be one of them, that means less competition and prices higher than they would otherwise be.

This is a market failure waiting to be solved.

Cyber Security

Every nation in the world is increasingly concerned about cyber security, not only for national security purposes, but also for businesses.

Cybercrimes continue to increase. Based on a 2014 report from Ponemon Institute, the mean annualized cost of cybercrimes for 257 benchmarked organizations is USD 7.6 million per year, with companies losing up to USD 65 million.[32]

The estimated cost to the global economy from cybercrime is more than USD 400 billion, and could be as high as USD 575 billion.[33]

The cost of cybercrime will continue to increase as more business functions move online and as more companies and consumers around the world connect to the Internet.

The value of information and data is attracting the attention of adversaries looking for new ways to steal it, leverage it, and benefit from it. Adversaries could include hackers, nations, and others not necessarily seeking direct financial gain.

And there is an explosion in data. According to IBM, in the past two years, 90 percent of the world's data was created, and this will continue with the proliferation of Internet of Things (IoT). IoT is the network of physical objects, devices, vehicles, buildings, and other items embedded with electronics, software, sensors, and network connectivity that enables these objects to collect and exchange data.

Cyber security is both a threat and opportunity for Armenia.

The threat comes from other nations, particularly its adversaries. In 2016 Azerbaijan conducted a cyberattack on the official website of Permanent Mission of Armenia to NATO; Permanent Mission to the Organization for Security and Cooperation in Europe (OSCE); and Permanent Mission to the United Nations.[34] Azerbaijan has hacked websites of Armenian embassies in 40 countries.

Russia has been notorious for its cyberattacks. Russia has conducted cyber warfare on Estonia in 2007 and South Ossetia, Georgia, and Azerbaijan in 2008.

Armenia's main development in this space is the Center for High-Tech Cybersecurity. The Ministry of Defense of Armenia in collaboration with the Yerevan Computer Research and Development Institute (YCRDI) and the private sector, have established the center.

The center seeks to develop and employ high tech solutions to enhance the professional capabilities of recruits during compulsory military service, and apply high-tech solutions in Armenia's defense systems. The center, in particular, has four main areas of activity: department of training and qualification, department of solutions' development, department of cybersecurity, and department of incubation.

The opportunity for Armenia in cybersecurity is to be a potential service provider to the rest of the world.

Israel yet again proves to be a model that could be emulated. Devoted to ensuring its own survival, Israel has grown into a high-

tech epicenter built around Internet security, antivirus software, and other cyber-defense technologies.

Israel's physical challenges are also mirrored in the cyber world. Israel's cybersecurity expertise has evolved naturally from its constant vigilance.

Israel's information security ecosystem has many aspects. There are mature companies; there are venture capitalists which focus on cyber; and there are research collaborations.

Many multinational companies have a presence there to build their cybersecurity capabilities because Israel has proven to be a source where they can attract the right talent.

Like Armenia, Israel also has compulsory military service. Furthermore, there is increasing use of computing technologies in warfare.

Israel has also benefitted from first-mover advantage. In the early 1990s not many companies had properly developed in the cybersecurity space, yet in 1993, Tel Aviv–based Check Point developed one of the very first protection solutions for Internet-connected computers. The software was developed by Israeli entrepreneur Gil Shwed, who served in the Israeli Defense Force (IDF), in a unit responsible for collecting signal intelligence, and grew the company into one of the nation's biggest tech giants. Check Point foresaw a need for protecting computer networks, and more importantly, filled that need before most people were even online.

According to Israel's National Cyber Bureau, Israel accounted for 10 percent of global security technology, and sales of its security software topped USD 60 billion in 2014.

With increased attention, Israeli firms often get acquired by the larger multinationals, and those multinationals end up building research and development facilities in Israel.

For example, in 2015 microchip designer Arm Holdings announced that it will build a new hub in Israel, following its purchase of Israel-based Sansa Security, a provider of Internet of

Things (IoT) and mobile trust and security technologies, for a reported USD 100 million.[35]

Armenia will need to develop its cybersecurity not only for its survival, but also as a growth opportunity.

Teach Coding

When it comes to being a smart nation, Armenia delivers in spades when it comes to the game of chess. Armenia has one of the most chess grandmasters per capita.

Armenia has made it mandatory to teach chess in school, part of the primary school curriculum for children between the ages of seven and nine.

The Armenian government has claimed teaching chess in school is about building character, not breeding chess champions.

Half a million dollars were allocated to the national chess academy to draw up a course, create textbooks, train instructors and buy equipment. A further USD 1 million paid for furniture for chess classrooms.[36]

That same discipline needs to be applied to teaching coding in schools in Armenia.

A survey from Harvey Nash found that 60 percent of digital leaders believe they are experiencing a skills shortage preventing their company keeping up with its competitors, impeding their success.[37]

Retaining, developing, and acquiring the skills to drive growth are major priorities.

What is being done? The UK Government introduced an ICT curriculum in 2014, which has a strong emphasis on programming and coding. Students learn to write code. The purpose of coding is to find a sequence of instructions that will automate performing a specific task or solve a given problem.

Five year olds tackle fractions and computer algorithms. The UK program teaches students algorithms and how to create and debug

simple programs. They will be able to learn how to design models to try to solve real-world problems.

Estonia, a small nation with a population of 1.3 million people, has launched a nationwide scheme to teach schoolchildren from the age of seven to 19 how to write code. Elementary school students in Finland could also be adding coding and programming to their routine.

According to Code.org, a non-profit dedicated to expanding access to computer science, 27,000 teachers have begun to teach coding in the United States.

Offering coding skills beginning at primary school is something that should be considered for Armenia's national curriculum.

ONE Armenia is partnering with the Union of Information Technology Enterprises (UITE), to help students be provided the opportunity and tools to develop skills in the IT field. Since 2008 UITE has installed around 100 laboratories in Armenia and Nagorno-Karabagh. The laboratories are dedicated to programming, robotics and 3D modelling. The labs have proven to be successful with more than 500 graduates to date, 70 percent of graduates working in the IT field.

This skill is something real and tangible that can equip Armenia's children in the digital economy.

Just like math, English and science, learning how to code will have a practical use after school.

Think of all the applications that are used daily, from ordering a taxi, using social media, to search itself. They all rely on coding.

At the University level, programming should be considered to be integrated as part of other degrees.

Armenian students ought to have a basic understanding of computer science, programming, or coding, when they leave school, and in some respects the Tumo Center is filling this gap.

Armenia also needs to have teachers who can teach it, with expert advice.

The idea isn't to manufacture developers. It is to train Armenia's future workforce how to better leverage and understand technology and the Internet, and be competitive globally, in any business.

Chapter Two

Smart Foreign Affairs

Foreign affairs are critical for Armenia, a small nation of three million people, particularly when borders are blockaded on its east and west. Armenia needs a smart foreign affairs policy, one which delicately balances its self-interest against competing interests, while keeping major powers like Russia at bay.

Armenia has faced much criticism for caving in to major powers, primarily Russia, on which it is heavily reliant for its security and economic stability. Armenia needs to have strong negotiating skills to be able to deliver maximum benefit for itself, and a more nuanced and multilayered policy.

Armenia-Turkey Relations

Turkey recognized the Republic of Armenia shortly after the latter gained independence in 1991. However, the conflict in Nagorno-Karabagh hampered the establishment of formal diplomatic relations between the two countries.[1] Turkey subsequently closed its border with Armenia out of support for Azerbaijan.

Furthermore, persistent and consistent advocacy for the recognition of the Armenian Genocide has irked Turkey.

In 2009 Turkey and Armenia signed protocols which intended to set a path of normalization between the two countries.

The intent of the protocols was positive, justified, and necessary. Its execution was hopelessly poor and some of their content controversial.

A provisional roadmap for normalizing diplomatic ties between the two countries was announced in 2009, following Turkish President Abdullah Gül's visit to Armenia the year before.

The roadmap for normalizing ties was part of an accord between Armenia and Turkey that was signed by the foreign ministers of the

two countries, Ahmet Davutoğlu and Edward Nalbandian, on 10 October 2009.

The signing took place in Zürich. Armenians in Armenia and worldwide had protested against the deal because of the controversial concessions that the Armenian leadership was preparing to make, most notably in regard to the Armenian Genocide.

The deal followed more than one year of talks. It was designed to allow the opening of borders and to set up a formal diplomatic relationship. The signing was attended by the foreign ministers of France, Russia, and the United States, among others.

Then, Turkey decided to suspend the ratification process after the Turkish Prime Minister Recep Tayyip Erdoğan announced that Turkish ratification depended on a peace deal in the Nagorno-Karabagh conflict. On the same day President Sargsyan suspended Armenia's ratification process whilst announcing Armenia's intent to pursue the process of normalization with Turkey.

The protocols failed for a number of reasons.

First, the benefits of open borders were not clearly explained, particularly in economic terms.

In 2009, the Armenian Revolutionary Federation (ARF) commissioned a report outlining the economic consequences of opening the border between Armenia and Turkey.[38]

Since then, there appears no public documentation to show a comprehensive body of work or report to determine the immediate and longer-term economic benefits of both sides in opening the borders.

Both countries would inevitably see an uplift in GDP in real terms. Turkey would have a new market to export its produce, goods, and services, and be able to take advantage of Armenia's skills in the technology outsourcing space. Armenia would have immediate access to a market of 75 million people, one of the largest populations in Europe.

There would be an opportunity for cultural and educational exchange, and improved mutual understanding between both peoples.

A commissioned report into the economic benefits of open borders must be prepared. To alleviate concerns of the potential economic consequences, particularly within Armenia, that its market may be flooded with Turkish goods, the report could also suggest a staged tariff reduction process between both countries.

Second, both countries carry significant historical baggage, not least Turkey's non-recognition and denial of the 1915 Armenian Genocide.

These events continue to create deep mistrust between the two countries. The protocols stated:

> Implement a dialogue on the historical dimension with the aim to restore mutual confidence between the two nations, including an impartial and scientific examination of the historical records and archives to define existing problems and formulate recommendations.[39]

The notion of an "impartial and scientific examination of historical records" immediately questions whether the events of 1915 were genocide. Rather than establishing "mutual confidence," this wording in the Protocols only created further antagonism.

Open borders between Turkey and Armenia need not address the events of 1915 immediately. Nor should genocide recognition by Turkey be a condition of opening borders as some Armenian political parties, such as the Armenian Revolutionary Federation, have suggested.[40]

Conversely, Turkey should not stipulate the settlement of the Nagorno-Karabagh conflict as a basis for open borders.

There is no justification for such preconditions to opening the borders. The Armenian government has no such preconditions.

Should borders open, these matters will be resolved as a result of improved mutual understanding. The Turkish population has an improved understanding of the 1915 Armenian Genocide through internal advocacy within Turkey, including efforts by Orhan Pamuk, recipient of Nobel Prize in Literature; Taner Akcam a Turkish academic; the late Hrant Dink, journalist and editor; Turkey's People's Democratic Party (HDP); and many others.

The Turkish people have an improved understanding of the events of 1915 through a Turkish lens. They have heard personal stories either from their own ancestors, or those they know.

Third and finally, the opening of borders between the two countries needs to be in response to a movement that comes from both peoples, not stipulated or forced by powerful third parties, such as the United States or other countries.

A significant failure by the Armenian government with respect to the Protocols was that it did not effectively mobilize its influential diaspora numbering some eight million people worldwide. These communities, along with Armenia's population itself, were not seriously engaged as an important stakeholder.

Their suggestions or feedback were not considered, only politely listened to.

The Armenian government cannot take for granted the position of its key stakeholders. Much has been said how to bring people with you, to make change.

The Armenian government should consider appointing a Special Envoy tasked with resetting this relationship. A Special Envoy is appointed for a specific purpose, and is used widely in the international community and diplomatic circles including the United States for addressing either specific geographic areas or policy issues. This Envoy could be a serving or former Ambassador, or private citizen. Appointing such a person would also help with the task of communicating with key stakeholders.

The intention of the Protocols remains valid as open borders will improve economic growth. Getting there may not be easy, but can be achieved with a clear communicated path, which includes promoting the real benefits; bringing people with you; and not setting any preconditions.

The Armenian government should more strongly assert that it has no preconditions for the opening of borders, as compared to Turkey, which has set a precondition.

Trade & Transport

According to the Ministry of Foreign Affairs of Armenia, bilateral trade between Armenia and Turkey is heavily skewed in Turkey's favor.[41] In 2015, bilateral trade was estimated around USD 110 million, with Armenia importing the bulk of that figure, mainly in food, textile and chemical products, and household goods. Armenia exports to Turkey around USD 1 million in goods, mainly raw and processed leather, jewelry and various metal products. The unofficial figure is much higher.

These figures are a tiny fraction of what is probable and possible.

Turkey's blockade of Armenia does not allow Armenia to export to Turkey through legal routes. Vehicles bearing Armenian number plates are not permitted to enter Turkey for unloading their goods since there is no bilateral road transport agreement between the two countries.

Since there are no bilateral road transport agreements between the two countries, trucks bearing Turkish number plates are not allowed to go to Armenia. Turkish products find their way as exports to Georgia and are then sold in Armenia through Georgian companies.

A decade ago, representatives from the Organization of the Black Sea Economic Cooperation (BSEC) which included Turkey and Armenia were considering a "Ring Road" project to connect the Black Sea countries. However, this did not eventuate.

Given the lack of a bilateral road transport agreement between Armenia and Turkey, as well as lack of diplomatic relations between the two countries, the only way to enable the entry of vehicles bearing Armenian number plates into Turkey is an application by the Armenian Ministry of Transportation.

Similar to road transportation, air transport also requires bilateral agreements between countries. Flights are enabled by special permits that are renewed for each flight. Unlike road transport, flights are operated between Armenia and Turkey, but they are only limited to a few every week.

A direct flight between Istanbul and Yerevan (around 1,300 km) is around two hours, whereas travel by vehicle between the two cities

(currently undertaken via Georgia through a much-extended path of around 1,700 km) is around 24 hours.

Similarly, a direct path from Yerevan to Doğubayazıt, located in Turkey's southeast, and at the foot of Mount Ararat, is only 80 kilometers. To drive that same distance is 640 kilometers because travelers cross north into Georgia, then to Turkey and drive back south.

Even if the Turkey-Armenia border were open, the only viable transport corridor is the inactive Kars-Gyumri railway. Kars is located in Turkey's east, and Gyumri (formerly known as Leninakan) is located in Armenia's northwest. Originally completed in 1899, the railway was highly important during the Soviet era, as the only direct rail link between Turkey and the Soviet Union. The Kars-Gyumri section has not been operational since 1993.

A smart foreign affairs policy would seek to establish a bilateral agreement for road transportation with Turkey, modeled on the flight agreement between the two countries.

This would not only enable trade, but also revitalize tourism between the countries.

Tourism

Tourism to Turkey from Armenia reflects travel from the Armenian diaspora and Armenia, with Armenians visiting historic Armenian monuments and churches in Turkey. This travel has provided a much-needed economic injection for Turkey's far east, which does not receive as much tourist interest as other major sites in Turkey's west. The conflict with the Kurdish population has made travel to these areas less frequent for security reasons, and the recent hostilities in Syria have exacerbated this issue.

Other main destinations of tourist flows from Armenia to Turkey are Istanbul and the Antalya seaside resorts.

In part, tourist movements to Turkey's east have led to restoration projects of historic Armenian churches and monuments undertaken by the Turkish Government, sometimes with assistance from the United States.

One of these projects includes the historic city of Ani, also known as the City of 1,001 Churches, which at its height had a population of more than 100,000 people, and between 961 and 1045 was the capital of the Bagratid Armenian kingdom. The area is part of UNESCO's World Heritage List.

Many of the churches and buildings have been left in ruins and a state of decay. Turkish authorities claim this is from earthquakes, yet the degradation and vandalism of these buildings suggest otherwise.

The abandoned city is located exactly on the Armenia-Turkish border, only separated from Armenia by the Arax River.

Other restoration projects include the Armenian Church of the Holy Cross on Aghtamar Island in Lake Van, and a few others across Turkey. These restoration projects are far from perfect. For example, the Armenian church in Aghtamar still has traces of damage from vandalism, has been poorly restored in many respects, and is not designated as a place of worship.

This has been further complicated by the Turkish Government's recent seizure of historic Armenian churches from their owners. One example is the historic Surp Giragos Armenian Church in Diyarbakir in Turkey's southeast.

The church was closed in the 1960s due to lack of parishioners. It was, however, renovated and reopened in 2011, through funds from diasporan Armenians and the support of the city's Kurdish mayor. The church has become a gathering place for many Kurds who are rediscovering their Armenian heritage. Many people felt compelled to hide their identity following the Armenian Genocide of 1915 as their ancestors were adopted into Muslim families. Referred to as Turkey's Hidden Armenians, many are now reclaiming that identity and some have even converted to Christianity.

Seizures also extend to other churches, such as the Virgin Mary Syriac Orthodox Church; the Surp Sarkis Chaldean Catholic Church; the Diyarbakir Protestant Church; the Armenian Catholic church; and the Mar Petyun Chaldean Catholic Church.

The potential of tourism, particularly for Turkey's east, is an untapped opportunity.

Serious consideration should be given to think of new ways to break the deadlock on the border.

Creating a framework such as a "special visa free zone" could be considered. This area could cover the historic city of Ani bordering on both countries, and Mount Ararat, Armenia's national symbol, currently in Turkey.

This special zone can be designated around these areas, and allow citizens of Armenia and travelers from there to cross and visit the site without formal approvals. Currently both Armenia and Turkey offer visa on arrival from citizens from those respective countries.

A transport corridor could also be established around Mount Ararat linking to Armenia, which could help facilitate trade.

Mount Ararat currently hosts a Turkish military facility, and sometimes is blocked to travelers due to security tensions. This could complicate such a proposal.

If both Turkey and Armenia could agree, it would signal a major step of improved relations between both countries.

For Turkey it would generate significant tourist traffic and revenue from historical sites; for travelers from Armenia, it would make travel to these sites much more convenient and efficient. Above all, it would end a deadlock.

Diplomacy Initiatives

There have been some instances where Armenia and Turkey have demonstrated a more sophisticated form of diplomacy with one another.

One of those efforts was football diplomacy, the use of a common interest in football (or soccer).

In September 2008 Turkey's then-president, Abdullah Gül, became the first modern Turkish leader to visit Armenia, for a football World Cup qualifier between the two countries (which Armenia lost). Armenia waived thousands of visas for Turkish fans attending the game in Yerevan, as a gesture of goodwill.

In September 2009 President Serzh Sargsyan responded in kind, attending the game between the two countries in the western Turkish city of Bursa.

Football is the most popular sport in Armenia. In 2014, Armenia's men's football team peaked in FIFA rankings, reaching 30th in the world, a remarkable accomplishment and falling one win short in qualifying for the 2016 European Cup. Armenia's best known footballer is world leading mid fielder Henrikh Mkhitaryan, recently transferred from Bundesliga club, Borussia Dortmund to English Premier League club, Manchester United.

Another example has been Armenia's response to natural disasters in Turkey.

In 2011, following a major earthquake in the city of Van, which killed more than 500 people and left thousands homeless, Armenia offered humanitarian aid to the survivors.

The Armenian Emergency Situations Ministry announced that a transport plane would deliver 40 tons of tents, sleeping bags, blankets, and other aid. Turkish Prime Minister Recep Tayyip Erdoğan thanked foreign countries, including Armenia, for offering help, but said Turkey could cope with the disaster by itself.

In 1999, after a devastating earthquake in the Marmara region, resulting in more than 20,000 deaths, Armenia readied a team of 100 disaster specialists and loaded ten trucks with rescue and relief supplies for the stricken. Armenia offered expertise gained from its own disaster in December 1988, when a magnitude 6.9 quake killed 25,000 people. On that occasion Turkey informed Armenia that it had plenty of help already and did not need more.

Grief should not stop on the border. It is during these events one shows one's humanity.

Improved cooperation between the two countries could be expanded in the field of sharing technology capabilities to detect earthquakes early, or sharing best practices in terms of emergency response to such natural disasters. This could be expanded to include joint exercises. The region is an area which is prone to earthquakes and this form of cooperation could help improve relations.

EEU and EU

One of the most-criticized aspects of Armenia's foreign affairs policy is its heavy reliance on Russia.

Russia has been an important ally for Armenia since the early 19th century.

The two countries' historic relationship has its roots in the war (1826–28) between the Russian Empire and Qajar Persia after which Eastern Armenia was ceded to Russia. Moreover, Russia was often considered a protector of the Christian subjects of the Ottoman Empire, including the Armenians.

After the dissolution of the Soviet Union, Armenia has been regarded as the only ally of Russia among the three Caucasus nations, which also include Georgia and Azerbaijan.

Armenia and Russia are both members of a military alliance, the Collective Security Treaty Organization (CSTO), a relationship that Armenia finds essential to its security. Among the agreements there is a treaty of friendship, collaboration, and mutual aid, and details which regulate bases of Russian military units in Armenia.

Military cooperation between Armenia and Russia is based on both states being members of the military alliance as well as participants in the Joint CIS Air Defense System. Russian troops continue to patrol border posts on the boundaries of Turkey and Iran, while Armenian troops focus their attention on the border with Azerbaijan, as well as the territory of Nagorno-Karabagh.

There is a Russian military base stationed in Gyumri in the northwestern part of Armenia. The base was upgraded by a Russian-Armenian defense agreement signed in 2010. The agreement extended Russia's basing rights in Armenia until 2044.

Choosing between membership in the Eurasian Economic Union and closer ties with the EU came to a head on 3 September 2013, when Armenia's accession to the Customs Union was announced by President Serzh Sargsyan.

Until then, Armenia had been in negotiations with the EU for close to three years to sign an Association Agreement and a Comprehensive

Free Trade Agreement to be delivered at the Vilnius Summit in Lithuania later in 2013.

The Customs Union of Russia, Belarus, Kazakhstan, and Armenia is the foundation of the Eurasian Economic Union (EEU), with its own executive body. The EEU is largely seen as Russia's alternative to the European Union (EU), a political and economic union of 28 member states in Europe.

In the Customs Union, President Sargsyan is joined by Nursultan Nazarbayev, president of Kazakhstan since 1991; Alexander Lukashenko, president of Belarus since 1994; and Vladimir Putin, in power either as president or prime minister since 1999. The length of time these leaders have served indicates the type of countries Armenia has decided to join—countries that lack democracy.

Armenia became a full member of the EEU from January 2, 2015, whereupon cooperation and integration with Russia reached a new level.

Joining the EEU has come at a cost, as put forward eloquently by writer for the *Armenian Weekly*, Houry Mayissian:

> In the last two decades, Armenian leaders, both in government and in opposition, have failed to communicate to Russia that this ongoing alliance comes at a cost; and that cost is not the mere survival of Armenia and Nagorno-Karabagh, rather its growth and prosperity.[42]

Relations between the EU and Armenia are based on the EU-Armenia Partnership and Cooperation Agreement (1999), which provides for wide-ranging cooperation in the areas of political dialogue, trade, investment, economy, lawmaking, and culture.

Armenia was included in the European Neighborhood Policy (ENP) in 2004 and in the Eastern Partnership in 2009.

When Armenia joined the EEU, this was done at the cost of not signing an Association Agreement with the EU, including the establishment of a Deep and Comprehensive Free Trade Area.

Despite this, Armenia and the EU continue their political and trade dialogue in areas where this is compatible with Armenia's new

obligations to the EEU. Armenia is in negotiations with the EU on a new agreement that will replace the current EU-Armenia Partnership and Cooperation agreement. The agreement with the EU, had it been signed, would have required that Armenia gradually adopt EU regulations and standards. If implemented, these regulations would have contributed to Armenia's democratization.

In order to understand why Armenia went down this path, one must examine its perceived, as well as real, advantages for Armenia.

Armenia receives discounted and advanced military hardware as well as security provided by Russian soldiers at the Turkish and Iranian borders. In return, Russia maintains a stronghold in the strategic south Caucasus.

Armenia has become even more dependent on Russia as a result of the extraordinary increase in military spending by Azerbaijan. Azerbaijan has used oil wealth to increase its defense budget nearly tenfold over the last decade.[43]

Critics of the EU path claim the latter would not have provided a security guarantor, while also risking the alienation of Russia. Armenia's membership to the EEU will bring some customs revenue.

Membership in the EEU could help Armenians working in Russia, as well as the families they support in Armenia with around USD 1.5 billion in annual remittances. Some of these Armenian workers do not have legal status and the EEU may help address this concern.

EEU advocates also argue that Armenia's accession helps with the gas supply from Russia. Armenia has secured a preferential gas rate from Russia that will be upheld until 2018. Armenia receives the second-lowest rate for Russian gas in all of Europe, after Belarus.

Despite these advantages, the cost of joining the EEU was higher for Armenia, whereby it essentially staked its security future on Russia, making it vulnerable to Russian self-interest. Had Armenia pursued the EU, it would have been able to improve its business and government regulatory laws in line with EU standards. These regulations are intended to lead to a more independent judiciary, a freer economy, and improved civil society.

Simply agreeing to the EU Association Agreement would not have led to reform in Armenia, where corruption is a significant problem. A strong civil society would be needed, and this is emerging in Armenia's youth.

Another potential benefit of the Association Agreement was the opportunity to increase trade with the European Union, as part of the mutual and gradual tariff elimination. The European Union offers a market of about 500 million people as well as the world's largest collective economy. But along with a highly developed economy comes a higher level of competition.

The EEU obstacles include higher tariffs and more protectionist policies of the other Union members. This could negatively impact renegotiation over Armenia's membership in the World Trade Organization (WTO).

At the same time the EEU regulations may inhibit expansion of Armenia's information technology sector, accounting for around 5 percent of GDP. Much of the Armenian information technology sector relies on investment from the United States. The poor intellectual property rights of the EEU could harm this strategic sector.[44]

Furthermore, the EEU is significantly more unattractive and even less viable than when it was first conceived, for two main reasons.

The serious impact of sanctions on the Russian economy lessens the value and viability of the Union, including the fall in the value of the Russian ruble. The second factor is that the motivation for integration rests largely on coercion and pressure.[45]

Armenia has an opportunity to regain a degree of balance by reviewing its relationship with the EU, notwithstanding the result of the UK vote to exit the European Union.

Armenia cannot put all its eggs in one basket. In recent years, Russia has continued to sell arms, estimated at USD 4 billion, to Azerbaijan.[46] Russia has also agreed to a north-south rail line in the Caucasus, bypassing Armenia and going through Azerbaijan. The Russia-Iran-Azerbaijan-India railroad accord has been portrayed as Russia's ongoing effort to improve relations with Azerbaijan.[47]

Over the past decade, Armenia has allowed Russian control over many strategic assets, including the Armenian Nuclear Power Plant; Armsberbank (The Armenian State Savings Bank); the Hrazdan Thermal Power Plant, and other assets.[48]

Armenia needs to assert a "smart" foreign affairs policy, and be able to extract the maximum benefit it can acquire from multiple parties. It is wrong to think that Armenia's security will be salvaged by Russia, because nations will do what is in their best interest. Armenia can acquire gas and energy from Iran at more competitive rates, but is unable to because of its compact with Russia.

Delivering a foreign affairs policy that is in the best interest of Armenia is simpler said than done. No one doubts that this is a very delicate balancing act—but that is exactly what is required, rather than tipping the scales in one direction.

Georgia

If there is a nation that Armenia should have good relations with, it is its northern neighbor Georgia.

The two have much in common: Christian nations neighboring Muslim countries (Turkey and Azerbaijan); Armenians constitute one of the largest minority populations in Georgia, occupying many positions of influence; the Armenian priest Mesrop Mashtots is believed to have invented the Georgian alphabet in the 5th century (he also invented the Armenian alphabet); and living together side by side for many centuries.

Despite the similarities, relations between the two countries are not as good as they could or should be.

Georgia is burdened by its own challenges. It has separatist movements within its borders, including Abkhazia and South Ossetia (both territories recognized by Russia as independent), as well as Ajaria. Armenia has not recognized South Ossetia and Abkhazia as independent states.

Georgia's province of Samtskhe-Javakheti, located in the nation's south, is majority Armenian. Local Armenians have been advocating improved recognition of their rights. These include campaigning

against appropriation of Armenian churches by the Georgian government and teaching of the Armenian language. Georgia has failed to sign and ratify the Council of Europe's European Charter for Regional or Minority Languages (ECRML).

Georgia supports the resolution of the Nagorno-Karabagh conflict in a manner that maintains Azerbaijan's territorial integrity (consistent with its own separatist concerns), and Georgia has a level of discomfort regarding the alliance between Armenia and Russia.

Further, Armenia is a member of the EEU, while Georgia prefers integration with the EU and membership in NATO.

The other Caucasus nation, Azerbaijan, complicates Georgia-Armenia relations. Azerbaijan uses its energy resources and the fact that it is an alternative to Russia as a supply source for Georgia. Azerbaijani investments in the gas distribution system of Georgia and the sale of oil and gas are tied to conditions of limiting access for Armenia.

For example, Azerbaijan has influenced the routes of key corridors such the Baku-Tbilisi-Ceyhan oil pipeline and the Baku-Tbilisi-Kars railroad construction, both bypassing Armenia.

Georgia offers Armenia its only land connection with Europe and access to its Black Sea ports, and most Armenian trade with Turkey currently goes through Georgia.

As the Nagorno-Karabagh conflict continues, it is difficult to see how the Georgia-Armenia relationship can reach its potential. But Armenia is not in a position to pick and choose its neighbors and needs to works toward reinvigorating the relationship. This gesture needs to be reciprocal.

Armenia does have the advantage of having an influential diaspora community in Georgia. This community cannot be viewed as homogenous; differences exist between many Armenians integrated in Georgia and those that reside in Javakheti, who continue to uphold and value Armenian traditions. There are also Armenian communities in Abkhazia and South Ossetia.

Nevertheless, this community ought to be further mobilized.

A positive initiative is the Leadership School, which brings together more than 100 Georgian and Armenian students and future leaders

for its open biannual lesson in Tbilisi. The Leadership School Foundation is a not-for-profit organization and features guest speakers from a variety of industries.

Consideration should be given how to promote closer relations in new and different ways. Armenians in Georgia's capital, Tbilisi, constituted 40 percent of its population early in the 19th century. Many significant cultural Armenian icons were from Tbilisi, such as composer Sayat-Nova; internationally acclaimed composer Aram Khachaturian; world chess champion Tigran Petrossian; and many others.

This monumental legacy that Armenia-Georgia share should be celebrated as a historic link.

Iran

Despite religious and ideological differences, relations between Armenia and the Islamic Republic of Iran remain strong and both Armenia and Iran are strategic partners in the region.

For many years Iran was a lifeline to Armenia, particularly during the Nagorno-Karabagh conflict, when the borders of Turkey and Azerbaijan was closed and Georgia unstable.

The Armenian diaspora in Iran is one of the oldest Armenian diaspora communities in the world (other than Jerusalem). Iran's Armenian community emerged when Shah Abbas, ruler of the Safavid dynasty, relocated hundreds of thousands of Armenians from Nakhichevan, in the 17th century.

Iran, a significant economy with more than 75 million people, has the world's second largest energy supply. Despite this, because of Armenia's relationship with Russia and EEU, this has meant Armenia has been limited in the amount of gas and oil it imports from Iran.

Russian-owned companies control an estimated 80 percent of Armenia's energy sector.[49] The Russian company Gazprom runs the gas pipelines from Iran and on to Georgia, and it is wary of competitors who might try to infiltrate on their markets.

A trading corridor which has not been considered because of the conflict in Nagorno-Karabagh is the route between Armenia and Iran

through Azerbaijan's exclave of Nakhichevan, located to Armenia's south, geographically separate from Azerbaijan.

If this transport corridor were available, it would significantly reduce travel times to Iran, one of Armenia's largest export and import markets. The current corridor involves going through mountainous terrain. (Nakhichevan, just like Nagorno-Karabagh, has long and historic links with Armenia).

Iran's north is predominately populated by Turkic-speaking Azeris, the largest ethnic minority behind Iranians, and estimated to have a population of some 15 million (more than the Republic of Azerbaijan). Provinces in Iran's north include West Azerbaijan and East Azerbaijan. The large presence of ethnic Azeris in Iran has meant Iran is very conscious not to have a strong and influential Azerbaijan, as that could destabilize internal politics in Iran.

The embargoes placed on Iran may have been an economic gain in disguise for Armenia, as some Iranian companies may have set up operations in Armenia to avoid the embargo.

Furthermore, many Iranians visit Armenia, not only for the freedom they enjoy; they also attend concerts performed by international Iranians in Armenia (because they are not permitted to perform in Iran), and many Iranians apply for visas in the U.S. Embassy in Armenia (as Iran does not have a U.S. embassy).

Iran should be considered one of those countries which Armenia can expand and deepen its relationship outside the EEU orbit.

China

Armenia and China have strong bilateral relations. These relations have the potential of becoming much stronger.

There has been a notable increase in Armenian exports to China, from USD 16 million in 2011 to USD 171 million in 2014.[50] By comparison, Armenia's exports to neighboring Iran amounted to half of that volume. It should be noted that like other countries Armenia imports significantly more from China in bilateral trade.

The most visible sign of the partnership is buses donated by China roaming the streets of Yerevan, and publicized as such. In 2011 China announced it was allocating 250 buses to Armenia.

China has remained politically neutral in the dispute between Armenia and Azerbaijan, abstaining during a vote on the Nagorno-Karabagh conflict at the UN General Assembly in 2008.

For the 100th anniversary of the Armenian Genocide commemoration, China gifted Armenia 40 tons of equipment required for live broadcast around the world, including a portable power generator.

The most important aspect of relations is the military agreement between both countries. In 2013 China agreed to provide around USD 1 million in military aid per year.

One might wonder what interest the Chinese have in relations with Armenia in the Caucasus. One of the reasons for their interest is China's Xinjiang Uyghur Autonomous Region, in China's northwest. It is the largest Chinese administrative division, and contains many Uyghurs, members of a Turkic ethnic group. In recent years there have been tensions between the Chinese government and Uyghurs seeking more autonomy.

Both Turkey and Azerbaijan, Armenia's neighbors and themselves with majority Turkic populations, support Uyghurs' claim for increased autonomy. Therefore, it is in China's perceived interests to have strong relations in the Caucasus that balance that view.

A case should be made for a special partnership between Armenia and China, outlined Simon Saradzhyan, a fellow at the Belfer Center for Science and International Affairs.[51]

The special partnership should be comprehensive and seek to cover education, military, technology, and trade partnerships. Armenia needs to broaden and deepen its relationship with many other parties to deliver maximum benefits for itself.

United States

When the new Embassy of the United States of America in Yerevan was completed in 2005, located adjacent to Lake Yerevan along the

Yerevan-Etchmiadzin highway, it was considered the largest U.S. embassy in the world by area.

The United States, like in many other countries, has an active role in Armenian affairs.

It was behind the Armenia-Turkey protocols, and is conscious of the close relationship Armenia has with Russia.

Partly due to an active Armenian-American community, the United States government has provided significant aid to Armenia, which is considered to receive one of the highest amounts of aid per capita from the United States in the world.

Armenia's relationship with the United States is complicated by the very good relations the United States has with Turkey and Azerbaijan, both of whom blockade the border with Armenia.

Turkey is a critical ally of the United States, particularly with NATO, and Azerbaijan is an important partner, due to its energy resources and its cooperation on intelligence services as it borders Iran.

Armenia has also complicated the relationship by joining the EEU, rather than forging closer relations with the EU, an ally of the United States.

Overall, there remains a potential to deepen the partnership, and it can be done without upsetting Russia.

One area where the United States can and should play a more active role is to help in specific areas that would advantage Armenia.

A clear area is the technology sphere, outlined in the "Silicon Mountain" chapter of this book.

The United States is a leader in commercialization of products, having a robust venture-capital industry; strong patent and intellectual property frameworks; and an abundance of expertise. Several U.S. technology firms have invested in and have a presence in Armenia, yet this needs to be much deeper, and specific initiatives in this space that would be of benefit to both parties.

Another area is governance and corruption. U.S. firms have very robust policies and compliance programs around corruption,

particularly in the private sector. This is an area where both governments can benefit with specific targeted programs.

Foreign Affairs Portfolio Combined with Trade

A case should be made to combine Armenia's Foreign Affairs portfolio with Trade.

Armenia has a minister for foreign affairs and a minister of economy.

Armenia's Ministry of Economy encompasses trade. The ministry covers industrial policy, aviation policy, civil aviation, trade and market regulation, export control, tourism, and many more matters.

This ministry is so strategically important that serious consideration should be given to combining it with the Foreign Affairs Ministry. The actions of the Foreign Ministry have a direct impact on the Ministry of Economy, and the two are inexplicably linked. One must drive the other.

Foreign affairs responsibility is not limited to only improving international relations and ensuring Armenia is represented and complies with international forums and frameworks; the Foreign Ministry also directly influences trade outcomes.

The opening of the Armenian-Turkish border is merely one example. Armenia's foreign relations priorities needs to work in harmony with its trade priorities and this should be reflected by Armenia's international presence through embassies and consulates.

Other countries that take this approach include Canada. Global Affairs Canada is a government department that manages Canada's diplomatic and consular relations, while encouraging the nation's international trade, and leading Canada's international development and humanitarian assistance. It is also responsible for maintaining Canadian government offices abroad with diplomatic and consular status on behalf of all government departments.

Both Australia and New Zealand have departments or ministries that combine foreign affairs and trade, though they assign separate ministers to those portfolios.

Armenia's foreign affairs need to be tied with its trade priorities. Currently that should reflect its top export destinations, Russia, China, Canada, Germany, and the United States, and its top import markets, which are Russia, China, Georgia, Turkey, and Iran.[52]

Global Leadership on Genocide Prevention

Armenians have not only experienced genocide; they continue to seek formal recognition of this past injustice.

The past decade has seen improved collaboration with Greek and Assyrian communities to also have their genocides recognized, along with the Armenian Genocide, which took place over the same time period.

As more countries become increasingly aware of the Armenian Genocide, Armenia can take the opportunity to assume a leadership role in educating the world on genocide prevention, and avoid a victim mentality.

Armenians are playing a more prominent role in recognizing humanitarian workers around the globe, through an initiative by Ruben Vardanyan, a successful Armenian businessperson who established the Aurora Prize for Awakening Humanity.

The prize is granted annually to an individual whose actions have had an exceptional impact on preserving human life and advancing humanitarian causes. The Aurora Prize Laureate is honored with a USD 100,000 grant. In addition, that individual has the unique opportunity to continue the cycle of giving by nominating organizations that inspired their work to receive a USD 1 million award. The inaugural Aurora Prize was awarded on April 24, 2016, in Yerevan, with special guest and internationally renowned actor George Clooney in attendance.

Marguerite Barankitse from Maison Shalom and REMA Hospital in Burundi was named as the inaugural Laureate of the Aurora Prize. Barankitse was recognized for the extraordinary impact she has had in saving thousands of lives and caring for orphans and refugees during the years of civil war in Burundi.

The prize is in memory of the survivors of the Armenian Genocide and in gratitude to their saviors.

There is another aspect to this prize. Because of Turkey's nonrecognition of the Armenian Genocide, it has been hard for Armenians to acknowledge or even recognize those Turks and Kurds who risked their lives by defying authorities to save Armenians.

There will be those who correctly argue that many Armenians saved in these circumstances became servants, concubines, sex slaves, or even young wives, unwillingly converted to Islam. Yet there have also been instances where genuine heroism and kindness prevailed.

In an article detailing such acts of heroism, Raffi Bedrosyan[53] explains how Faik Ali (Ozansoy) Bey, the governor of Kutahya, a central Anatolian province, refused to implement a deportation order during the Armenian Genocide. Faik Ali Bey was not removed from his post despite his offers of resignation. He ended up protecting the Armenian population of Kutahya.

Mustafa Bey (Azizoglu) was the district governor of Malatya, a transit point on the deportation route. Although he was unable to prevent the deportations, he managed to hide several Armenians in his own home. He was murdered by his own son, a zealous member of the Ittihat ve Terakki Party, for looking after "infidels."

Other government officials who defied the deportation orders included Reshit Pasha, the governor of Kastamonu; Tahsin Bey, the governor of Erzurum; Ferit Bey, the governor of Basra; Mehmet Cemal Bey, the district governor of Yozgat; and Sabit Bey, the district governor of Batman [Beshiri]. These officials were eventually removed from their posts and replaced by more obedient civil servants, who carried out the task of wiping out the Armenians from these locations.

To date, there has been no formal recognition or acknowledgement of these efforts.

These acts of humanitarianism should be acknowledged with other international individuals and organizations who helped Armenians.

Above all, this would demonstrate that acts of humanitarianism defy ethnic boundaries, and would show that despite facing denial,

Armenians can acknowledge and recognize acts of bravery and kindness, whatever their origin.

A concerted effort is also required by Armenians worldwide to not only advocate for recognition, but also present the Armenian Genocide in a manner that is digestible and understandable in a local context.

The Armenian Genocide was not only a scar that befell the Armenian people, but a tragedy that affected humankind.

Many diaspora communities, and the people of the countries they live in, are unaware of the sheer volume of the international humanitarian assistance provided to help Armenians in need during and after the Genocide.

Coverage of the Armenian Genocide as it occurred received worldwide media attention. Newspapers such as *The Times of London*, *The New York Times*, *The Washington Post*, *The Los Angeles Times*, *The Globe and Mail*, *The Toronto Star*, *The Montreal Gazette*, and many others reported extensively about the events. It is believed that *The New York Times* published thousands of articles pertaining to the Armenian massacres between 1894 and 1922.[54] Newspapers such as *The Washington Post* and *The New York Times* reported on the Armenian massacres almost daily for over a year.[55]

The world did react in response. Founded in 1915, Near East Relief, the United States' oldest nonsectarian international development organization and the second American humanitarian organization to be chartered by an act of Congress, organized the world's first large-scale, modern humanitarian project in response to the Armenian Genocide.[56]

Most developed countries' first major international humanitarian relief effort centered around helping orphans and survivors of the Armenian Genocide.

Many stories of humanitarian heroism have been unearthed in the book titled *Australia, Armenia and the Great War*, coauthored by Peter Stanley and Vicken Babkenian.[57]

For the first time Australians are having a better appreciation of what their forebears did in World War I. This is even more poignant

for a nation like Australia, which defines its national identity around the invasion of Gallipoli (Turkey), which took place on 25 April 1915, one day after the commencement of the Armenian Genocide.

Similarly, Peter Balakian's book *The Burning Tigris* portrays acts of humanitarianism by Americans, particularly Near East Relief.[58]

A book by Aram Adjemian titled, *The Call from Armenia: Canada's Response to the Armenian Genocide*, describes the Canadian experience.[59]

There are thousands of similar untold stories from countries in Europe, South America, and Asia. What is being done to tell those stories?

This ought to be a task that is undertaken by Armenia's Ministry of Diaspora and should be on the agenda of its Advisory Board. The objective of the ministry is to develop, implement, and continuously improve state policy on the development of the Armenia-Diaspora partnership and coordinate the activities of state bodies.

The ministry has an opportunity to take a leadership role and work with local communities to bring these stories to life, thereby presenting the Armenian Genocide in a local context, not just a distant historical chapter, but a directly relevant one for that particular nation.

Other examples of leading in genocide awareness include the Armenian government initiated Global Forum against the Crime of Genocide. The inaugural forum took place in April 2015 in Yerevan.

The forum brought together leading advocates from around the world on fighting the crime of genocide, and survivors who continue to bear witness to this horrific crime. In addition, the forum was attended by representatives of governments, parliaments, major international and human rights organizations, acclaimed experts in international law, media representatives, and others.

In April 2016, the government hosted the second Global Forum against the Crime of Genocide.

The forum is intended to bring forth solutions for the prevention of genocide and stop it being part of our present and future.

Armenians have a responsibility to bring awareness of not only what happened in 1915, but also the genocides committed against Pontian Greeks, Assyrians, Jews, Cambodians, Rwandans, Bosnians, the people of Darfur, the Yazidis now, and many others.

At the second Global Forum against the Crime of Genocide, Yazidi survivor Nadia Murad outlined how the Islamic State has abducted more than 6,000 Yazidi women and children for slavery. She was abducted when the Islamic State of Iraq and Syria (ISIS) attacked the area of Sinjar (Shengal), where the majority of Yazidis live. It is claimed that 3,500 women and girls are in captivity, and more than a thousand Yazidi children are being trained to be jihadists in ISIS' military camps in Syria. As I write this, this genocide is still happening—a century after the Armenian Genocide.

This current genocide is a consequence, at least in part, of a failure by the international community to recognize and punish past crimes. Impunity will also result in future genocides that could happen anywhere and any time. The threat remains.

The world must be vigilant and Armenia has a responsibility to act as a leader to raise awareness and advocate on behalf of other victim groups.

Soft Power

Armenia has at its disposal many resources to project soft power, particularly through its well-connected diaspora, and highly tech-savvy Armenian youth, even more so with the advent and increased influence of social media.

Soft power is a concept that describes the ability to attract and coopt rather than coerce (hard power), using force or giving money as a means of persuasion.

Soft power is the ability to shape the preferences of others through appeal and attraction. A defining feature of soft power is that it is noncoercive; the currency of soft power is culture, political values, and foreign policies. Credibility is a valuable resource.

According to the 2015 Soft Power World Rankings report, the United Kingdom currently holds the top spot in soft power, followed

by Germany in second place. The top ten also features the United States, France, Canada, Australia, Switzerland, Japan, Sweden, and the Netherlands.[60]

According to the 2014 Monocle Soft Power Survey, the United States holds the top spot in soft power.[61] The Elcano Global Presence Report scores the European Union highest for soft presence when considered as a whole, and ranks the United States first among sovereign states.[62] It includes China, Russia, Spain, and Italy in the top ten.

Social media has allowed anyone to reach a much larger international audience than has ever been possible. It also allows individuals, companies, media outlets, and civil society groups to reach people across boundaries, and build international links.

The Internet's principles of transparency, open data, and authenticity help bring attention to issues that previously may have been exposed to a more limited audience.

Armenian-American celebrity Kim Kardashian was able to mobilize global hashtag Twitter trends by visiting the homeland of her ancestors in April 2015, where she updated us on her activities, including a visit to the Armenian Genocide memorial in Yerevan. The visit occurred on the eve of the 100th anniversary commemorations, which in and of itself also drew worldwide attention.

Whatever one thinks of Kim Kardashian, collectively across all the social media platforms, she has around 100 million followers, and this does not include other members of the Kardashian family who also have significant social media followings themselves.

Her visit, which was broadcast on her reality television show, generated endless media commentary, which if measured by a public relations agency with details such as circulation, numbers reached, message and tone, would match the impact and reach of a multimillion-dollar marketing and advertising global campaign. In one simple word, this is influence, real influence.

She also promoted the social media campaign #savekessab, which became a worldwide trend on Twitter, bringing global attention to the plight of Armenians in Kessab, Syria, when in 2014 rebel groups took over and forced the majority Armenian town to flee.

No wonder Kim made *Time* magazine's 2015 100 Most Influential List, together with her husband Kayne West.

Before the Internet, this simply was not possible in this way.

The Turkish government spends tens of millions of dollars actively campaigning to deny and distort the historical record on the Armenian Genocide; they are now challenged in this digital era.

For the voiceless, ignored, overlooked, and forgotten, the Internet repositions the David and Goliath.

Other examples that have projected Armenia through these channels include the American television series, "The Amazing Race," broadcast by CBS, which traveled to Armenia in 2016. The show had clips on YouTube and other social media generating millions of views from across the globe.

American television media and comedy personality Conan O'Brien decided to travel to Armenia in November 2015, with his Armenian-American assistant, Sona Movsesian.

The excursion broadcast to millions of international viewers, spurred by Movsesian's Armenian heritage and O'Brien's yearning to learn more about it, included adventures at an Armenian market, an appearance on a popular soap opera, a Yerevan Day celebration, and a visit to the Armenian Genocide memorial.

This broadcast exposed Armenia to all sorts of audiences that may have never encountered the nation otherwise.

George and Amal Clooney represent star power. George Clooney is an Oscar-winning actor who played a lead role in announcing the Aurora prize awarded to humanitarians, and attended the inaugural ceremony in Armenia in April 2016. George Clooney has been included several times in *Time* magazine's 100 most influential people.

Amal Clooney is a British-Lebanese lawyer specializing in international law and human rights. She is an activist, author, and the wife of George Clooney.

Amal Clooney brought worldwide attention to Armenian issues by representing Armenia before the European Court of Human Rights in a case against Dogu Perincek, the chair of the Turkish Workers'

Party, who was convicted in Switzerland in 2005 for denying the Armenian Genocide.

Through her efforts, she highlighted to the international community the ugly face of denial. Denial of genocide impacts communities that have been victims of the crime, dealing them a double blow: atop the enormous loss inflicted by the crime itself, they experience efforts to have the facts erased from the historical record, or reclassified to a lesser definition of "massacres" or "deportations."

While both have publicly shone the spotlight on awareness of the Armenian Genocide for legitimate reasons, their support has led to increased attention and awareness never experienced before.

Soft power is the new power, and Armenia's Ministry of Foreign Affairs should take advantage of this.

Chapter Three

Culture

Armenia has a rich culture and a proud civilization.

It takes pride in literature, food, dance, architecture, religion, art, music, language, and even sports.

Armenia excels in many fields in a unique way. Yet it has its shortcomings, which it needs to overcome, to be worthy of the moniker "Smart Nation."

Women's Rights

The first Armenian republic of 1918–20 was one of the first nations in the world to give women the right to vote, and 8 percent of the elected members of its parliament were women. The first female ambassador in the world was Dr. Diana Abgar (Abgaryan), ambassador of Armenia in Japan during Armenia's first republic.

Mother Armenia, a large statue symbolizing the female personification of Armenia, stands majestically overlooking the city of Yerevan. The Mother Armenia statue symbolizes peace through strength and is reminiscent of some of the prominent female figures in Armenian history.

However, domestic violence and the treatment of women in Armenia is a serious problem. It is a national shame, underreported, and unseen.

A survey in 2011 on domestic violence in Armenia by Proactive Society found that around 60 percent of its respondents had been subjected to domestic violence in their lifetime.

A United Nations Population Fund (UNFPA) study released in 2010 found that domestic violence accounted "for the greatest share of physical and psychological" violence suffered by women in Armenia.[63] Of the women surveyed, 9 percent acknowledged experiencing physical violence, 25 percent psychological

intimidation, 61 percent controlling behavior, and 3.3 percent sexual violence, all at the hands of their domestic partners.

Women may be reluctant to come forward on domestic violence for fear or shame for endangering family unity and stability, according to the 2014 report by the Council of Europe Commissioner on Human Rights.[64]

And to top it off, according to the Global Gender Gap Report for 2013, Armenia ranks 94th out of 136 countries for gender equality.[65]

Armenia lacks comprehensive laws on domestic violence that would make domestic violence itself a crime or provide a victim with an order for a protection remedy. The Criminal Code does not specifically prohibit domestic violence. General provisions in the criminal laws pertaining to crimes against the person may be applied to certain cases of domestic violence.

Armenia's Criminal Procedure Code classifies several crimes relevant to domestic violence as private prosecution cases, which means they may only be prosecuted on the basis of an injured party's complaint.[66]

This makes it difficult when the victim can be intimidated.

In 2009, the UN Committee to Eliminate Discrimination against Women (CEDAW) urged Armenia to adopt comprehensive measures to address violence against women, including strong civil and criminal domestic violence laws.[67]

In May 2013, the Armenian government affirmatively rejected a domestic violence bill that had been in the drafting stages since 2007.[68]

Sadly, Armenia may change a law because of an inducement rather than its own will. The European Union offered a 11 million Euro grant that it calls the Human Rights Budget Support Program, contingent on Armenia adopting a domestic violence law. The financing covers the years 2016 to 2018.

According to Women against Violence Europe (WAVE) and the OSCE, Armenia provides no government funding for shelter or other

services for domestic violence victims, or women victims of other forms of violence.

The nation has two privately (foundation) funded shelters serving women victims of violence, including domestic violence, and they only offer a few spaces. Based on Council of Europe recommendations on minimum standards for victim-support services, Armenia requires more shelter spaces to adequately serve women victims of violence.

A poor reflection of Armenians' view toward females is the birth ratio, which is heavily skewed to males at birth: 114 males for every 100 females, one of the worst in the world.[69] Many families abort the pregnancy if the prospective child is not a male.

There are many problems associated with treating half your population poorly.

First, the next generation will learn the bad habits of the past if things do not change. Second, the failure to properly deal with the problem of domestic violence in Armenia creates a very poor international image. Third, Armenia is held back when it cannot harness a core asset, its women, not only in the workforce but in many other areas to make the nation more productive. Finally, it is a reflection on the culture itself, which needs renewal and change through a comprehensive national education campaign backed by legislative instruments to protect women.

Domestic violence and the poor treatment of women in Armenia has become a national shame and must end.

Armenia is also a transit and source country for victims of trafficking. Penalties for persons convicted of trafficking-related offences increase depending on the degree of organization of the trafficking group, the violence with which the victims are trafficked, and the age of the persons trafficked.

Armenia has developed and adopted four National Action Plans (NAP); the most recent NAP is the National Action Plan on Fight against Trafficking in Persons during 2013–2015. According to the government, the main goal of the fourth NAP is to "further concentrate the government's efforts on improving the identification

of and support to victims of trafficking in persons by means of implementing the necessary sub-legislative reforms, creating a financial foundation, and building the capacity of the relevant stakeholders."

The Armenian Government should consider appointing a minister for women, to be responsible not only for the protection of women from domestic abuse and trafficking, but also to foster and encourage women into leadership positions.

The Minister for Women, rather than the Prime Minister, ought to chair the Council on Affairs of Ensuring Equal Rights and Equal Opportunities between Men and Women in Armenia. The council was established in 2014. The council is meant to deal with gender equality, sex-based discrimination, and violence-related issues.

There are a number of programs in Armenia promoting women's empowerment, including Oxfam and UNDP. Such a minister can help in the promotion of their initiatives, as well as ensure representation of women in decision-making roles, whether in government or business.

Empowering women not only helps with diversity but makes good business sense. According to the Peterson Institute for International Economics, a study of 22,000 publicly traded companies across 91 countries found that having women in the highest corporate offices is correlated with increased profitability.[70]

Currently the Ministry of Labor and Social Affairs has a Department of Family, Women, and Children. However, there needs to be a dedicated emphasis on the issue of women's rights in Armenia.

Happiness and Morale

In the World Happiness report of 2016, Armenia ranked 121st out of 157 countries.[71] This is a poor result by many standards.[72]

Some of the key measurements include GDP per capita; social support; health; life expectancy; freedom to make life choices; generosity; and trust.

Armenia ranks extremely poorly in the categories of generosity and trust. One of the reasons for this is related to the public's perception of poor governance and corruption in the government.

This matters because happiness or emotional well-being can play a direct role in a nation's productivity.

When people think about human happiness, they could be thinking of personal and family relationships; personal income; personal freedoms; public trust; constitutional order; and the control of corruption.

Yet happiness could encompass all these things, and no single issue by itself delivers the happiness we seek.

In the workplace, happy employees can contribute to higher productivity, sales, and creativity. A study in the *Harvard Business Review* found that happy employees demonstrated on average 31 percent higher productivity, 37 percent higher sales, with creativity three times higher.[73]

How does this apply to nations? Think of the citizen as the employee – or as many governments may now refer to them, when they use their services, customers. And consider the government as the employer.

The report found that inequality was strongly associated with unhappiness, a stark finding for rich countries like the United States, where rising disparities in income, wealth, health, and wellbeing have fueled political discontent.

A goal and plan is required to have Armenia ranked in the top 50 by 2020, and aim to reach to top 20 in the decade thereafter.

An improved result will demonstrate Armenia has made strides toward equality and improved many of its governance structures,

which will result in increased productivity and a reflection of improved living standards.

Creating a Sense of Urgency

For those who travel to Armenia, particularly from western nations, one thing becomes apparent very quickly: there appears to be a lack of urgency.

This attitude is displayed in various forms. It is most apparent in late-morning starts to work and lax customer service, and occasionally comes across as general apathy.

Walking the streets of major global cities, people appear rushed; they walk with a sense of purpose and urgency.

For some, Armenia's mindset may appear a refreshing one. Not having to worry about small things, there may be some sense to this thinking. However, many successful people, be it in sport, business, or otherwise, set themselves apart by creating a sense of urgency.

Without urgency, mediocrity and complacency prevails, which leads to failure.

With the rapid pace of technology that has an impact on every facet of our lives, the world is moving faster, and Armenia needs to keep pace. It has made great strides in technology, as covered in the Silicon Mountain chapter, but it also needs to change cultural behavior.

Creating a sense of urgency does not mean working frantically and appearing busy. It's about being driven, being committed, and having purpose.

Leaders need to demonstrate this behavior to be able to influence their organization, and this needs to occur in Armenia's government, business, and civil society.

Urgency needs to be ignited and then maintained.

A number of steps are required to create a sense of urgency, as conveyed by John Kotter, author of a Sense of Urgency.[74] First, bring the outside in. A view that "we know best" reduces urgency. Second, behave with urgency every day. Third, find opportunity in crises.

People often view a crisis as a time to limit damage control, but in fact it is an opportunity. Fourth, counter the view that the current situation is fine.

Time is limited. People must make the best use of it. Armenia, the Smart Nation, cannot be left behind.

Music

Armenia has a long and proud musical tradition.

Internationally recognizable Armenian musicians include composer Aram Khachaturian; duduk (an indigenous Armenian flute made of apricot wood) player Djivan Gasparyan; composer Ara Gevorgyan; lead singer and songwriter of System of a Down Serj Tankian; and many others.

Music is also a means of projecting soft power (see Smart Foreign Affairs Policy chapter).

An example of this is when Armenia entered the Eurovision song contest for the first time in 2006.

The contest is the longest-running annual international television song competition. Most participants are from Europe but it also includes Israel, and more recently, Australia.

The contest, broadcast to more than one billion viewers across the globe, is one of the few opportunities Armenia has to showcase its talent and culture to a global audience.

Armenia has performed admirably at the contest having regularly made the top ten, and has attained 4^{th} at least on two occasions.

In 2016, Armenia's Iveta Mukuchyan caused a stir when she displayed the Nagorno-Karabagh flag during the live broadcast. Organizers claimed this violated rules for displaying regional flags.

Armenia was threatened with sanctions and other penalties.

Eurovision organizers claim its rules prohibit politics from the contest, with the focus of the show and the competition firmly on music. Artists and delegations are expressly forbidden from using their songs or their participation for political ends.

Armenians were reminded of this again when their 2015 entry, originally titled "Don't Deny," had to be renamed, "Face the Shadow." The original title subtly referred to the ongoing denial of the Armenian Genocide, 100 years on.

Despite the rules, Eurovision showed blatant inconsistency by allowing Ukraine's 2016 entrant, Jamala, who herself has a mixed origin of Armenian (mother's side), and Crimean Tatar (father's side), to sing her song titled "1944," about the forced migration of Crimean Tatars to Central Asia in that year.

The song contest itself is highly political in how countries award points to one another, which forms part of the scoring system. Allied countries often award the highest points to one another – but not always.

As a signal in geopolitics, in 2007 Armenia received 12 points from Turkey, the maximum it could receive, and again in 2014.

In the 2016 Eurovision contest, Russia awarded 10 points to Azerbaijan (second highest) and 12 points to Armenia (the highest), coincidentally around the time hostilities occurred in the four-day war in Nagorno-Karabagh.

Armenia has gained much by being part of Eurovision. Should it win the contest, and its talent suggests this is a firm possibility, it will be granted hosting rights the following year, which will be a projected boom to the economy.

Another one of Armenia's major assets and international ambassadors is its National Philharmonic Orchestra.

The Armenian National Philharmonic Orchestra (ANPO) regularly performs at its residence at the Yerevan Opera Theatre, one of Armenia's most recognizable buildings.

In the past decade the ANPO has also conducted international tours in the United States, Europe, and Asia (Japan).

The orchestra can play a vital role in strengthening ties between nations that Armenia intends to pursue closer relations with. It is also an important way of disarming preconceived views on Armenia.

The orchestra is part of Armenia's Ministry of Culture. It is a valuable ambassador and its international exposure should be determined wisely.

Just like sports diplomacy was used between Armenia and Turkey in football (soccer; see Smart Foreign Affairs Policy chapter), Armenia needs to leverage cultural diplomacy.

Chess

One of the areas where Armenia is an international standout, and has a skill that it can export, is its people's world-renowned ability in chess. Armenia has one of the most chess grandmasters per capita.

Since independence in 1991, the Armenian men's chess team has won the European Team Championship (1999), the World Team Championship, and the Chess Olympiad. The women's teams have also attained the European championship.

World champions of Armenian heritage include Garry Kasparov and Tigran Petrosian.

Petrosian, who was a dominant player in the 1960s, and is given credit for popularizing the game of chess in Armenia, was world champion for six years, from 1963 to 1969. Petrosian won the Chess Olympiad nine times with the Soviet team, from 1958 to 1974.

Such is the interest in chess that Armenia has made it mandatory to teach chess in school, part of the primary school curriculum for children between the ages of seven and nine.

While Armenia should learn from other countries how to teach children coding in schools (explained in the Silicon Mountain chapter), Armenia can play an important role in showing other countries how to teach chess in schools as an academic subject.

A former president of the Association of Teachers and Lecturers in the United Kingdom has called to embrace the Armenian model in teaching chess.[75]

In addition to social benefits, chess has been credited with improving students' memory, reading skills, spatial reasoning and

numerical abilities, concentration, visualizing, making decisions, analysis, abstract thinking, as well as planning ahead.

Armenia could establish exchange programs with schools, and share best practices.

Chapter Four

Improved Governance and Combating Corruption

No Smart Nation can succeed without a solid governance foundation, and a framework that eliminates corruption. Corruption in Armenia is endemic and widespread, permeating all levels of society.

In July 2016, an armed group called Sasna Dzrer (Daredevils of Sassoon) seized Erebuni police station in Yerevan, taking several policemen hostage, and calling for the resignation of President Sargsyan and release of Jirair Sefilyan, charged with illegal procurement, transportation and storing of weapons.

The armed group were former soldiers who fought in the Karabagh war. The two week siege, resulted in the deaths of two police officers, and many more injuries, was emblematic of the frustration and desperation facing Armenian citizens regarding corruption and governance, shown by subsequent mass demonstrations in Yerevan. Seeking change through violence, sets a dangerous precedent.

In response to this incident, the Armenian government argued that the constitutional changes scheduled for the 2017-18 electoral cycle, adopted following a constitutional referendum in December 2015, will bring the much required reforms the public have been advocating. The constitutional reforms would change Armenia from having a semi-Presidential system to a Parliamentary Republic.[76]

This will enable the Prime Minister to have the executive power, with the President having a more ceremonial role, being head of state.

In addition to having seats allocated for ethnic minorities, the reform will include a proportional electoral system for the election of the National Assembly.

The new constitution also includes changes to the judiciary, including how the Prosecutor General is appointed. According to the new constitution, even without the suggestion of the President, the National Assembly has the power to impeach the Prosecutor General.

These constitutional changes alone do not go far enough to address community concerns. This chapter explores why such frustration has emerged and additional steps to bring about much required reforms.

Corruption

According to Transparency International, an international non-governmental organization that works with governments, businesses and citizens to stop the abuse of power, bribery, and secret deals, Armenia ranks 95th out of 168 countries in the 2015 corruption perceptions index.[77] More than half of people surveyed (54 percent) feel their government's efforts to fight corruption are ineffective.

The United Nations Development Program (UNDP) views corruption in Armenia as a serious challenge to its development. The selective and non-transparent application of tax, customs and regulatory rules, as well as weak enforcement of court decisions fuels opportunities for corruption.

Armenia's Anti-Corruption Council, which receives funds from the EU and USAID, formally began operations in July 2015. It is supposed to have opposition, and civil society representatives, but they have not joined because of skepticism about its credibility.[78]

The projection of poor governance and corruption is allegedly represented in Armenia's leadership.

Armenia's Prime Minister Hovik Abrahamyan, formerly parliamentary Speaker, presidential chief of staff, and minister of home affairs, is alleged to have taken expensive private flights for non essential travel, costing hundreds of thousands of dollars, as reported by Civilnet.am.[79]

In 2015 Prime Minister Abrahamyan faced severe criticism after documents revealed that he had redecorated his office, at a cost of more than half a million dollars, without issuing a public tender. The Prime Minister's personal wealth has also come under scrutiny. Under Armenia's constitution, to avoid conflicts of interest, members of the government are not allowed to be involved in business to avoid conflicts of interest. Abrahamyan is alleged to control scores of private

companies, ranging from gas stations to casinos, and thousands of hectares of land, in the names of relatives.

Joseph Pennington, Deputy Chief of Mission at the U.S. Embassy in Yerevan in 2009, in a confidential memo scathingly characterized Abrahamyan, then Speaker of parliament, as follows:

> Where a reform agenda collides with his personal or political interests, as with a draft law requiring him to reveal his considerable business holdings, he reverts to what most suspect is his true, thuggish form.[80]

In 2008, U.S. Ambassador to Armenia Marie Yovanovitch, said (in a confidential memo) Abrahamyan typifies "the type of Republican politician that makes up a large chunk of the parliament and of the ruling party establishment: politico-oligarchs who use political power to advance their business interests and vice versa."[81]

Abrahamyan is not alone with such alleged connections and conflicts of interest but is representative of a broken system.

Disclosures from the Panama papers only reinforced these negative attributes.

The three Armenians named in the disclosures included justice official Mihran Poghosyan and his uncles Grigor and Mikhail Haroutyunyan who used shell companies set up in Panama to obtain Armenian government contracts. That is at the least a conflict of interest for Poghosyan.[82]

Poghosyan, at the time of writing heads the nation's Compulsory Enforcement Service. The service ensures that all court judgments are carried out, which makes the chief's position one of the most powerful in the Armenian judiciary.

In April 2016 the national Ethics Committee for High-Level Officials refused to look into the Panama Papers disclosures. It maintained that someone needed to file a complaint before it could pursue an investigation. That prompted Armenia's Transparency International Anti-Corruption Center to file a complaint.

The Panama Papers disclosures could have a broader impact in Armenia. By exposing such officials, they may eventually make the country become more serious in tackling this problem.

The Panama paper disclosures came through a leak to a German newspaper, which eventually was shared with more than 100 news organizations across 80 countries investigating and writing about the disclosures. One was Armenia's Hetq news organization.

Hetq online has been published in Yerevan since 2001 by the Association of Investigative Journalists NGO. Among its many achievements, Hetq online is the first publication in Armenia to adopt a Code of Ethics for its journalists, and has been recognized by Transparency International for its contribution to raising awareness of corruption.

Corruption also extends to Armenia's armed forces.

In May 2016, an army general and two other senior Armenian Defense Ministry officials were arrested following separate corruption investigations.[83]

The Defense officials were responsible for the Department on Armaments, which deals with storage, maintenance, and repair of weapons and ammunition supplied to the Armenian Armed Forces, as well as arms procurements.

It is claimed that certain purchases were made at inflated prices.

Armenia needs to wipe the slate clean when it comes to corruption. The ineffective nature of current bodies may mean it requires a new Council or Commission specifically set up for this purpose to ensure public officials do not have conflicts of interest in business.

When President Sargsyan was elected in 2009, he made public calls to end corruption practices, and initially small steps were taken. The government publicized, for the first time, the price list for imported goods, thus depriving customs officials the chance to set prices as they wished and extort money from importers.

The customs licensing system was improved with the introduction of an online service, which meant importers no longer had to meet customs officers in person, reducing the opportunities for a bribe.

Also targeted were traffic police, who symbolized bribery for many years, selectively stopping some cars while allowing others to pass. In the first month after the President's imposed order to reform the area, 22,310 citations were issued in Yerevan, 8,000 more than previous monthly averages.[84] These reforms in particular were regarded as a positive step.

However, such efforts become a distant memory, when senior officials in the current Government are alleged to be corrupt, and Armenia continues to rank poorly on international indexes concerning corruption.

Civil servants or government officials in Armenia are forbidden to accept gifts that are in any way connected to carrying out their assigned duties. Often government officials in Armenia do not disclose the source of those gifts.

The only Minister who has officially disclosed any gift while in office has been Arpineh Hovhannisyan, Armenia's Minister of Justice. In 2012, when a Republican Party of Armenia MP, she received a gift to the value of USD 6,300. Often gifts are provided to the relatives of government officials. Deputy Ministers in Armenia have also received gifts, often larger ones.[85]

A pecuniary interest register that is publicly available should be a requirement for all Armenian government officials, so that any perceived or real conflict of interest is visible to all.

The register would provide information about any financial interest, including assets which a government official has, or any benefit which they receive, which others might reasonably consider to influence his or her actions or words as a government official.

In normal circumstances, this type of register may suffice; however, noting the widespread allegation of corruption also involving the relatives of officials, this register may need to be broadened to include extended family members.

Another measure to improve transparency is to publish external meetings (that are not national security sensitive) of the President of Armenia and Ministers. The diary should state whom they met and why. Both the US President and British Prime Minister publish their diaries online.

Ideally, a single site would publish pecuniary interests; gifts; hospitality received; overseas travel; and non-sensitive external meetings, and be updated on a quarterly basis.

The newly formed Council and Commission to deal with corruption may require an interim head who is completely independent from Armenia, such as a non-citizen. This may be cause for concern for those protective of Armenia's sovereignty, however, this body needs to be fully independent of the current apparatus.

Furthermore, the prosecution of alleged corruption should take place in a Special Court that can administer punishments and serious penalties should breaches be found. This should occur in view of the state of Armenia's judiciary, which Armenia's ombudsman has alleged is corrupt from top to bottom.[86] In the Global Competitive Report 2015-2016, Armenia ranked 106th out of 140 countries for judicial independence.[87]

Policy Forum Armenia has also identified a proper process Armenia should adopt on confiscating proceeds of crime. According to the Forum,

> the process of identification of stolen property both in and outside Armenia should be conducted by the Preparatory Commission (PC) . . . . The PC should make public its annual reports of activities and report to the Parliament. Once the tasks of identification of assets and preparation of legal grounds for their nationalization are completed, a National Commission on Management of Confiscated Assets (NCMCA) should be created to proceed with the rest of this process towards the final denationalization of the assets.[88]

Many laws exist to combat corruption; however, the challenge has been enforcement. This is the key stumbling block when it comes to reform.

Compliance training should be conducted formally with all public officials. Many employees of private sector companies have to undertake such training as it is mandated and compulsory. There is no reason this should not occur within Armenia.

Combating corruption must be everyone's business in Armenia. After all, those most impacted by corruption are working people and the most vulnerable. Corruption cannot be defeated simply through instruments; an entire population needs to be mobilized to stamp it out. The public must demand higher standards and transparency from its public officials.

Strengthening Civil Society

A strengthening of Armenia's governance will be reflected in the health of its civil society organizations. Often covering the non-governmental sector, civil society represents organizations that are distinct from government and business.

Civil society organizations (CSOs) operate in Armenia in three legal forms: public organizations, foundations, and legal entity unions.

According to the Ministry of Justice, 4,066 public organizations, 902 foundations, and 296 legal entity unions were registered in Armenia as of October 2014. However, many estimate that only 15 to 20 percent of these groups are consistently active.[89]

Alongside registered civil society organizations, Armenia has a new type of civil society: activists (mostly young, urban, and educated) brought together by online networking to participate in protests that gather public support and have impact on policymaking.

This phenomenon was most visible in the so called Electric Yerevan protests in 2015, fueled by Armenia's youth who opposed hikes in electricity prices. The protest was in response to a decision by Electric Networks of Armenia (ENA, which had been acquired by Russian Inter RAO UES in 2006). At the time ENA held an exclusive license to distribute electricity in Armenia, doing so at tariffs approved by Armenia's Public Services Regulatory Commission. ENA has since been acquired by the Tashir group, owned by Russian Armenian business person Samvel Karapetyan.

The price hike was justified by ENA by arguing that it had experienced losses, blaming the Armenian government for having

ignored the situation and not having carried out long-due market reforms in the Armenian electricity sector.

The protest demonstrated a deep mistrust of the Armenian government, due to perceived corruption and mismanagement, but also of Russia, which acted against the interest of local customers.

Another example was a series of protests in 2015 following the brutal murder of a family of seven in Gyumri, committed by a deserter from the city's Russian military base, Valery Permyakov. In the end, the public's demands were met with an agreement to try Permyakov in an Armenian court (rather than Russian) for murder.

In 2013, there were protests against the increase of tariffs for public transport, 50 percent for minibuses and 100 percent for buses. After days of mass protests, the Mayor of Yerevan issued a statement canceling the new fares.

Accompanying civil society is the media, and media watchdogs that play an important role in governance.

Such organizations inform the community about public issues and may involve: fact checking; interviewing public figures; and investigative journalism which involves information-gathering on a single story for an extended period, often involving breaking stories.

According to Reporters Without Borders 2016 World Press Freedom Index[90] which was released in May 2016, Armenia was ranked 74th out of 180 countries surveyed. This ranking is a small improvement on the previous year, when it was ranked 78th. Georgia had a better rating (64), while Azerbaijan (163) and Russia (148) faired more poorly.

The Report stated:

> The print media are diverse and polarized, investigative journalism prospers on the Internet, but pluralism lags behind in the broadcast media. In the crucial transition to digital TV, a future space for critical broadcasters will depend on the impartiality of the frequency bidding process.

Hetq online (www.hetq.am) is one of those media organizations that can play a crucial role, and led the effort to disclose alleged corruption of Armenian officials following the Panama papers scandal.

Others include the Civilitas Foundation, which is responsible for Civilnet, its media arm, which promotes democratic principles, and is seen to be a critic of the Armenian government; and ePress.am, part of the Independent Journalists Network.

A sustainable funding model is required for such organizations to operate, particularly investigative journalism which can be a costly but effective way to create accountability and transparency.

One area for consideration is a funded public broadcaster, particularly in television, as Reporters Without Borders indicated a lack of pluralism in the Armenian broadcast media. Television is the main media platform in Armenia, and most channels are controlled by or friendly with the government, as broadcast media requires a license.

Most countries have some form of public broadcasting, particularly television. In the United States this is the Public Broadcasting Service (PBS), is an independently operated non-profit organization which is the most prominent provider of television programs to public television stations in the United States. PBS receives around half of its funding from private donors.

There should be a dedicated budget allocation within Government for such initiatives. In certain countries, government-funded media organizations do have programs dedicated to investigative journalism.

In a nation that has sparse resource for such initiatives this could be seen as an unaffordable luxury; however, the return on investment for creating a more transparent system, thereby reducing corruption, inefficiencies and inequality, would far outweigh any potential costs, and should be seen as a worthwhile investment.

Addressing Voter Fraud

Armenia's major challenge has been combating voter fraud and voting irregularities.

This has taken place in many instances including in every Presidential election since independence.

In the 2013 Presidential election, President Sargsyan's main opponent Raffi Hovannisian claimed that he had won victory, which was denied to him due to alleged electoral fraud. In the days following the election, mass protests took place both in Yerevan and other cities and towns throughout Armenia.

During and after the election, numerous cases of the violation of the Armenian electoral code were reported. The Opposition reported numerous violations, including open ballot (non-secret) voting, voter pressuring, and multiple voting.

Amnesty International issued a public statement listing numerous irregularities during the elections and saying: [91]

> Amnesty International calls on the relevant authorities to carry out prompt and impartial investigations into all allegations of rights' violations during the elections and hold those responsible to account.

The OSCE election observers' report pointed out that mainly in rural areas, the turnout was "implausibly high." The opposition claims that this is a result of excessive use of administrative resources in remote rural areas.

Among the concerns raised by the OSCE was the misuse of administrative resources in the form of the involvement of a large number of public and civil servants in the campaign of the incumbent.[92]

Voter fraud was also reported during the referendum for the new constitution held in Armenia on 6 December 2015. The referendum passed with two-thirds of voters supporting it. Voter turnout was around 50 percent.

Opponents of the new constitution argued that the amendment was a way for President Sargsyan to stay in power, as the constitution limited Presidents to two five-year terms. (Similar criticism were raised in Russia in 2008 when they undertook parliamentary reform, which allowed President Putin to return to the Presidency, after serving in an earlier capacity and extending the presidential term from four years to six.)

Ivan Ardhaldjian, who acted as a proxy on behalf of the Armenian Revolutionary Federation (ARF) at polling station 4/32, saw firsthand how 677 votes at one polling station were illegally tampered with.[93]

In his testimony he wrote:

> At the end, based on the 3 counts, and a margin of error of 3 votes, we registered 404 "no" votes, 229 "yes" votes, and 31 invalid ballots.
>
> Yet, when the members of the committee began counting the votes, somehow the number of "no" votes went down to 117, the "yes" votes went up to 523, and the invalid ballots became 34.

In response to these acts of fraud, a number of Opposition parties and civil organizations, such as Transparency International Anti-Corruption Center, issued a joint list of demands regarding Armenia's draft bill on the new electoral code.[94]

The signatories argued that the additions must be made in order to minimize reoccurring electoral violations that have marred successive elections.

Other recommendations included: signed voter rolls and amended voter lists be published; voter rolls in Armenia be purged of those no longer residing in the country; a minimum of five cameras be placed in each polling station in order to record the vote process and counting; and implementation of a fingerprint system or to have voters' fingers marked with indelible ink to guard against voter fraud.

In June 2016, the National Assembly approved major amendments to the electoral code which included demands by the Opposition – on the condition that foreign donors pay for the purchase of special equipment needed for their implementation. The total cost of the special equipment required by the amended Electoral Code is estimated at USD 16 million. The Government has agreed to foot only a small part of the bill, a poor reflection of its commitment.[95]

Another option is electronic voting. Estonia became the first nation to hold legally binding general elections over the internet with their pilot project for municipal elections in 2005. The 2007 Estonian parliamentary election also used internet voting, a second world-first. Electronic voting technology can speed the counting of ballots, reduce

the cost of paying staff to count votes manually, and provide improved accessibility for disabled voters. However, critics argue electronic voting could facilitate electoral fraud and may not be fully auditable.

For this reason electronic voting should be a complimentary alternative rather than a substitute. Risks should be managed by introducing electronic voting incrementally, with the awareness that risks can never be fully eliminated and should be managed proportionately.

A number of measures need to be introduced to reduce and to eliminate voter fraud. A number of practical steps have been outlined. Instances of breach need to be heavily penalized to deter reoccurrence.

Monopolies

The definition of a monopoly is the exclusive possession or control by a single entity of the supply or trade in a commodity or service.

Monopolies can have negative consequences for an economy, including higher prices; higher inflation; impeding small and medium businesses; and limiting competitiveness.

Legislation regulating economic competition in Armenia began with the law on the Protection of Economic Competition, which was adopted on 6 November 2000. The aim of the legislation is to protect and promote free economic competition, to safeguard fair competition, and facilitate business development and consumer protection in Armenia.[96]

During a visit to Yerevan in 2009, World Bank Managing Director Ngozi Okonjo-Iweala warned that Armenia will not reach a higher level of development unless its leadership changes the "oligopolistic" structure of the national economy.[97] She then added that Armenia is a lower-middle-income country. If it wants to become a high-income or upper-middle-income country, it cannot do so with this kind of economic structure.

This is reflected in the 2015-2016 Global Competitiveness Report,[98] where Armenia ranked 82nd among 140 countries.

The ineffectiveness of anti-monopoly policies is among the most serious shortcomings of competitiveness in Armenia.

Monopolies do not focus on investment in research and development, or innovation. Moreover, their existence and anti-competitive practices have negatively impacted labor productivity.[99]

There exists a high concentration, and lack of competition in certain commodity markets in Armenia, including wheat flour, sugar, butter, chicken eggs, frozen fish, rice; tires and fuel.

Take the example of sugar, which is the most notorious monopoly in Armenia. From 2004 the monopoly has constantly controlled over 90 percent of the market, reaching 99.9 percent in 2011.[100]

For wheat flour, an essential staple, it has been estimated for 2014 alone that monopolists earned USD 110 million in pre-tax profits, charging a 93 percent markup on their costs.[101]

The agency developing policies for the protection of economic competition is the Ministry of Economy. The State Commission for the Protection of Economic Competition and the Public Services Regulatory Commission regulate monopolies.

The goals of the State Commission for the Protection of Economic Competition is the protection and promotion of economic competition, fair competition, and consumer rights in Armenia. The Public Services Regulatory Commission covers a wide variety of sectors. Its services include issuing licenses, allocating radio frequencies, issuing permits to use water systems, the regulation of the postal sector, and other services.

The Hrayr Maroukhian Foundation, a social-democratic think tank, argued that these agencies have shortcomings and limitations, including legal provisions to prevent potential abuse. One option argued is the unification of these commissions in one regulatory entity – to improve performance, reduce costs, and mitigate the compliance burden.[102]

The effectiveness of such a Commission needs to be measured on how many successful prosecutions have taken place, and that includes being able to conduct proper assessments. The Minister of Economy says it is unable to assess separate markets, such as sugar.[103]

People reporting monopolistic behavior need to be able to do so anonymously, and the Commissions need to be assessed on actions, not words or legislative text.

Armenia, with a small market may be limited how much competition it can truly facilitate, but on current measurements, there is much need to foster a more competitive business environment.

Cost of Living

One of the factors influencing endemic corruption levels in Armenia is the large discrepancy between wages and cost of living expenses.

Many Armenians in Armenia rely on remittances, which contributes more than 20 percent of the country's USD 10 billion GDP.

Armenia's minimum wage in 2015 was AMD 55,000, amounting to a little more than USD 100 per month.

There is no easy solution in addressing the gap. Globally many levers are used by governments, including robust and fair labor laws; social security policies; an effective competition policy; price controls on essentials such as staple foods, energy, water and utilities; housing support; and, more recently, digital access.

In Armenia's case, a lack of competition in certain markets, coupled with corruption in government procurement, has had a direct bearing on the cost of living.

Addressing cost of living issues will take more than a generation. It will need to address the immediate issues as well as laying a foundation that addresses cost-of-living issues in a preventative way, such as having plans for improved jobs for the future.

The issue of the cost-of-living in Armenia should be treated as a national emergency.

In addition to the reforms already outlined to address governance and corruption, consideration should be given to form a Presidential Advisory Board to deal with this issue.

Armenia's Social Investment Fund, chaired by the Prime Minister of Armenia, is meant to "improve living standards" among other

objectives.[104] It is difficult to comprehend how such a Fund can be credible when the Chair is facing allegations of impropriety (see Improving Governance and Combating Corruption chapter), contributing to cost-of-living issues in the country.

This board needs to represent a cross section of interests including legitimate business and civil society organizations. There needs to be short, medium, and longer term goals, and the matter needs to be a permanent fixture for the President's agenda.

Community Cabinet

The Armenian Government can improve its consultation process and increase transparency through Community Cabinets.

Community Cabinets have taken place in various democracies. A Community Cabinet takes place following a meeting of the Cabinet and is an opportunity for the government to listen to local businesses, families and workers, and to discuss the issues that are important to them directly with a Minister or government official.

The Armenian Government should schedule a series of Cabinet meetings across the country, including key regional areas. Following a Cabinet meeting (which by convention are formal, closed and confidential) – a town hall meeting could be arranged with the entire Cabinet, with arrangements made for separate meetings with Ministers and members of the local community, arranged beforehand.

There should be a level of consistency for such Community Cabinets whether it be a monthly or bi-monthly basis.

Such a process would allow citizens to express grievances directly with the Minister, or government official responsible, thereby improving transparency.

Community Cabinets also help Minister's crystallize their focus for a given region or issue, depending where the meeting is held.

Armenia requires more participatory governance mechanisms, to give citizens greater access to the processes of government, and more meaningful engagement with the policymakers and decision makers themselves.

Community Cabinets will incur an additional cost, by having to host them at various locations in Armenia. Nevertheless, it would demonstrate an important step towards improved governance and consultation with the citizens of Armenia.

Chapter Five

Stimulating Regional Growth

Armenia ought to have a special focus on economic growth in the regions, effectively all areas outside the special administrative area of Yerevan.

Armenia is divided into ten provinces (*marzer*), with the city of Yerevan having a special administrative status as the nation's capital. The chief executive in each of the ten provinces is the *marzpet* (*marz* governor), appointed by the government of Armenia. In Yerevan, the chief executive is the mayor.

Within each province are communities (*hamaynkner*). Each community is self-governing and consists of one or more settlements (*bnakavayrer*).

Yerevan is by far the largest in terms of population, which numbers around one million people.

Before independence, Armenia's economy was largely industry-based: chemicals, electronics, machinery, processed food, synthetic rubber, and textiles. It was highly dependent on resources from outside the country and from other Soviet republics. Soviet Armenia had developed a modern industrial sector, supplying machine tools, textiles, and other manufactured goods to Soviet republics in exchange for raw materials and energy.

Today, many of these manufacturing plants lie idle or in decay, having been abandoned.

Agriculture accounted for less than 20 percent of both output and total employment before independence in 1991. After independence, the importance of agriculture in the economy increased markedly, its share at the end of the 1990's rising to more than 30 percent of GDP and more than 40 percent of employment.[105]

This increase in the importance of agriculture was attributable to food security needs at the time. As things stabilized, the share of agriculture in GDP dropped to slightly over 20 percent (2006), although the share of agriculture in employment remained more than 40 percent.[106]

Armenian mines produce copper, zinc, gold, and lead. The vast majority of energy is produced with fuel imported from Russia, including gas and nuclear fuel (for the Metsamor nuclear power plant); the main domestic energy source is hydroelectric. Small deposits of coal, gas, and petroleum exist but have not yet been developed.

The closure of Azerbaijani and Turkish borders in the early 1990s has had a strong impact on the economy.

During the Nagorno-Karabagh conflict, GDP fell nearly 60 percent between 1989 and 1993, but then robust growth resumed. The national currency, the dram, suffered hyperinflation for the first years after its introduction in 1993; these fluctuations were more acute in Armenia's regions.

Armenia has had strong economic growth since 1995, and performed strongly compared to other CIS nations, before the economy collapsed following the 2008 global financial crisis. In 2009 Armenia's GDP growth was negative 14 percent.[107]

Sectors such as precious-stone processing and jewelry making, information and communication technology, and even tourism are beginning to supplement more traditional sectors of the economy, such as agriculture.

The International Monetary Fund (IMF), World Bank, European Bank for Reconstruction and Development (EBRD), and other international financial institutions and foreign countries are extending considerable grants and loans. Loans to Armenia since 1993 exceed USD 1.1 billion.

These loans are targeted at reducing the budget deficit and stabilizing the currency; developing private businesses; energy; agriculture; food processing; transportation; the health and education sectors; and ongoing rehabilitation in the earthquake zone.

Agriculture

Agriculture is an important part of the regional economy in Armenia. Due to borders being closed on east and west, it limits markets available for distribution and sale.

There remain environmental challenges in agriculture such as water losses in irrigation systems, soil salinization, erosion, improper irrigation, overgrazing, and cultivation practices; and land contamination.

Armenia has the advantage of micro climates, which allows for the production of different produce.

Armenia has had an agricultural sector composed of mainly subsistence small farms with fragmented plots, primarily utilized for subsistence agriculture, impacting growth.

As a result Armenian farmers have begun to move out of subsistence farming by diversifying into higher-value-added products, such as fruits, vegetables, wine, and eggs. And there are products with strong export potential such as cured meats, brandy, and high quality cheeses.

A way to navigate this current predicament is using air freight to transport produce that has net high value, and is a high demand product in certain markets.

Armenia's produce is of high quality and many instances organic, another advantage for international buyers.

Russia has long been the main market for Armenian fruits, vegetables, meat and dairy products.

There are many other markets in Europe and Asia that could be tapped into to cater to local tastes. An audit of high demand and high net value produce should be conducted with a view of how Armenia could help meet that demand.

Yerevan is only a three hour flight away from the Dubai headquarters of one of the largest cargo airlines in the world, Emirates SkyCargo. This represents a geographic advantage to an international network that needs to be leveraged effectively.

Tourism

One area for significant growth opportunity in Armenia's regional areas is tourism, which is significantly underutilized.

Tourism has been growing in Armenia. According to The World Bank, inbound tourists increased from 758,000 in 2011 to 1.2 million in 2014, representing around a 60 percent increase in three years.

In 2016, *National Geographic*, the world-renowned magazine, ranked Armenia first for places that deserve more travelers.

Armenia has many places that attract tourists to regional areas.

Lake Sevan, the world's largest mountain lake, is a popular summer tourist spot. The Tsaghkadzor ski resort is open for skiing in the winter and hiking the rest of the year, and has attracted leading accommodation providers like the Tsaghkadzor Marriott Hotel.

Though relatively small in size, Armenia has UNESCO world heritage sites, including the cathedral and churches of Etchmiadzin, Armenia's religious headquarters; the archaeological site of Zvartnots; the monastery of Geghard in the Upper Azat Valley; and the monasteries of Haghpat and Sanahin, located in Armenia's north near Alaverdi.

Continued investment in the regions with better infrastructure will continue to generate more tourism. Russian-Armenian businessperson Ruben Vardanyan and private donors invested in the Tatev cableway, a 5.7 km cableway between Halidzor and Tatev monastery in Armenia, located in the southern part of Armenia, near the border with Iran.

Construction was completed in 2010, and soon after it was officially recorded by Guinness World Records as the world's longest non-stop double-track cable car.

The cableway provides access to Armenia's 9th century Tatev monastery complex, one of the nation's most important religious centers and major tourist attractions. The cableway cost USD 18 million, according to the National Competitiveness Foundation of Armenia, which oversaw the project. The infrastructure has been an economic boost for the region.

Another regional attraction is Jermuk, a mountain spa town in southern Armenia. It is famous for its hot springs and mineral water brands bottled in the town. Its attractions include waterfalls, artificial lakes, walking trails, forests and mineral water pools. To cater to tourists, facilities like Hyatt Place Jermuk, part of the Hyatt hotel group, have been established. The hotel is just minutes away from Jermuk's main attractions, and within two hours of Tatev monastery.

Dilijan in Armenia's north east is a well-known resort town, sometimes known as "Armenia's Switzerland" with an alpine mountain air of unspoiled forests, a preserved national park, lakes, and natural healing springs. Dilijan mineral water is bottled and marketed throughout the country.

Over the last few years, para-gliding has developed in Armenia. Armenia has favorable conditions both for independent and tandem flights. Due to the height of the Armenian highland (which is also known as the central part of the Caucasus Mountains), the nation has various micro climates, which creates perfect circumstances for para-gliding.

Plans are well underway for the first national hiking trail, connecting the Black Sea and the Caspian Sea through Georgia, Armenia, and Iran.

Particular focus is required around Armenia's second largest city, Gyumri. The Kumayri historic district, the old part of Gyumri, has a unique architectural style. It has more than a thousand buildings dating back to the 18th and 19th centuries. The district is one of few places in Armenia, and the world, with authentic urban Armenian architecture. Almost all the structures of the Kumayri district have survived the 1988 earthquake. Continued restoration and preservation of this area with targeted marketing should make it more attractive for tourists.

Armenia is a relatively small nation, and most excursions outside of Yerevan can take place in one day. To increase regional investment in tourism, increased infrastructure is required to encourage tourists to spend more than one night outside of Yerevan.

This will mean further investment in places to stay, which makes the regions attractive for tourists. There should be expansion of eco

resorts and spas, where facilities make use of the natural environs around them, and having the accommodation blend in, particularly in Armenia's northern lush environs.

Further development is also required around Lake Sevan, to make best use of recreational facilities around the world's highest freshwater lake.

A proper plan is required for how to not only build infrastructure to attract more tourists in the regions, but also making them stay for more than a day, and generate economic growth for communities around them. This requires a dedicated plan, and effective implementation.

Technology

There is potential to boost employment opportunities in the technology sector, particularly outsourcing.

The Gyumri Information Technologies Center (GITC), a non-profit, scientific and educational foundation, provides postgraduate ICT workforce training. It was established in 2005 by the Enterprise Incubator Foundation (EIF), Fund of Armenian Relief, and Shirak Technologies LLC.

GITC helps to develop the information technology sector in Gyumri, introducing advanced learning methodologies, and creating jobs. The center focuses on programs in software engineering and electrical engineering, and covers areas such as web development. Around 75 percent of graduates of the center proceed to jobs in the ICT sector.

The Center also houses an incubation facility for companies to establish a presence.

As covered in the Silicon Mountain chapter, Tumo is a new kind of after-school learning environment where thousands of teenage students are put in charge of their own learning, in a place where there is access to the Internet and technology. Tumo has facilities in regional areas including Gyumri, Dilijan, and Stepanakert in Nagorno-Karabagh, and working to expand beyond these areas as well.

Tumo is well positioned to help train Armenia's young generation in the skills it needs for today's jobs. Tumo has been successful in Yerevan in housing technology companies within its facility, to be able to recruit some Tumo graduates into their firms.

Further work is required to close the gap between training Armenia's youth with the necessary skills, and providing them job opportunities in Armenia and the regions. This is an area which could be considered by the proposed Innovation and Technology Council discussed in the Silicon Mountain chapter.

Investment

Since independence Armenia has had liberal laws concerning foreign investment and has one of the most open investment regimes among emerging market countries.

In the 2008 Index of Economic Freedom, Armenia ranked 28th, ahead of countries like Austria, France, Portugal and Italy.[108]

Surveys suggest that Armenia is a relatively easy nation in which to do business. The World Bank study, Doing Business 2012, ranked Armenia as the 55th (compared to 61st in 2011) easiest nation to do business in, out of 183 countries surveyed.

Armenia's cumulative rating according to the Heritage Foundation "Index of Economic Freedom" is considered "moderately free", making its economy the 39th freest economy in the 2012 index. Armenia is ranked 19th freest among the 43 countries in Europe, and its score puts it above the world average.

Investment is one of the key arms of Armenia's economic policy. It helps provide incentives to foreign investors with the goals of increasing the nation's exports and stimulating employment.

In addition, the Armenian Development Agency (ADA) has been created to facilitate foreign direct investments and promote exports. It acts as a "one-stop-shop" agency for investors, assisting them in setting up their businesses in Armenia. Its influence is limited in that it only has offices in Armenia.

Major sources of investment in the Armenian economy in order of precedence include Russia, France, Greece, United States, Lebanon, Germany, and Argentina.[109]

The three most important sectors where foreign investments were directed in 2011 included the processing industry, telecommunications, and electricity and gas. The information technology sector has major investment potential as well.

There are no restrictions on the participation of foreign investors in any economic activity in Armenia or on the percentage of ownership of a local business that foreign investors can acquire.

The only exception is that foreign citizens and persons without citizenship have no right to own land in Armenia. However, foreigners are allowed to use land through long-term lease contracts.

Furthermore, foreigners have the right to own structures built on Armenian land, and to exploit renewable and non-renewable natural resources through concession contracts granted by the Government.

Foreign investors and employees are guaranteed the right to freely repatriate their property, profits or other assets that result from their investment after payment of all taxes due.

While investment is welcome, the Armenian government needs to place safeguards on industries that could impact its national security and strategic assets– particularly those that may be majority owned by foreign interests. The example of a hike in electricity prices, in the so-called "Electric Yerevan" protests, illustrated how the position of foreign owners may run counter to local concerns and interests.

As a means of further injecting investment, the Armenian government has announced its intention to establish two free economic zones. One of them targets the agricultural sector, in the area adjacent to Zvartnots International Airport. This free economic zone will focus on the storage, grading, deep freezing and packaging of fresh fruit and vegetables.

The second free economic zone will specialize in the production and export of innovative technologies in the areas of electronics, precision engineering, pharmaceuticals and biotechnology,

information technologies, alternative energy, industrial design and telecommunication.

Companies operating in free economic zones are fully relieved from income tax, property tax, profit tax, and custom duties, as well as VAT.

Free economic zones have been successful improving trade and investment in many countries. For example, China has had great success in designating the Special Economy Zone of Guangdong Province and Shenzhen Special Economy Zone. These corridors are located in strategic manufacturing bases and are therefore part of a highly active trading corridor.

The Armenian government should consider extending free economic zones in regional areas to promote further investment and work toward creating business parks that align with Armenia's strengths, such as the technology industry.

Some of these zones could be located along key trading borders such as Iran, Georgia, and Turkey – should borders open.

(Above) Majestic Mount Ararat overlooking Armenia's capital, Yerevan. Courtesy Sassoon Grigorian.

(Below) Armenians are world leaders in mind games such as chess, Yerevan. Courtesy Teny Aghamalian.

(Above) Teaching Armenia's next generation the required digital skills, Tumo Center for Creative Technologies, Yerevan.
Courtesy Tumo Center.

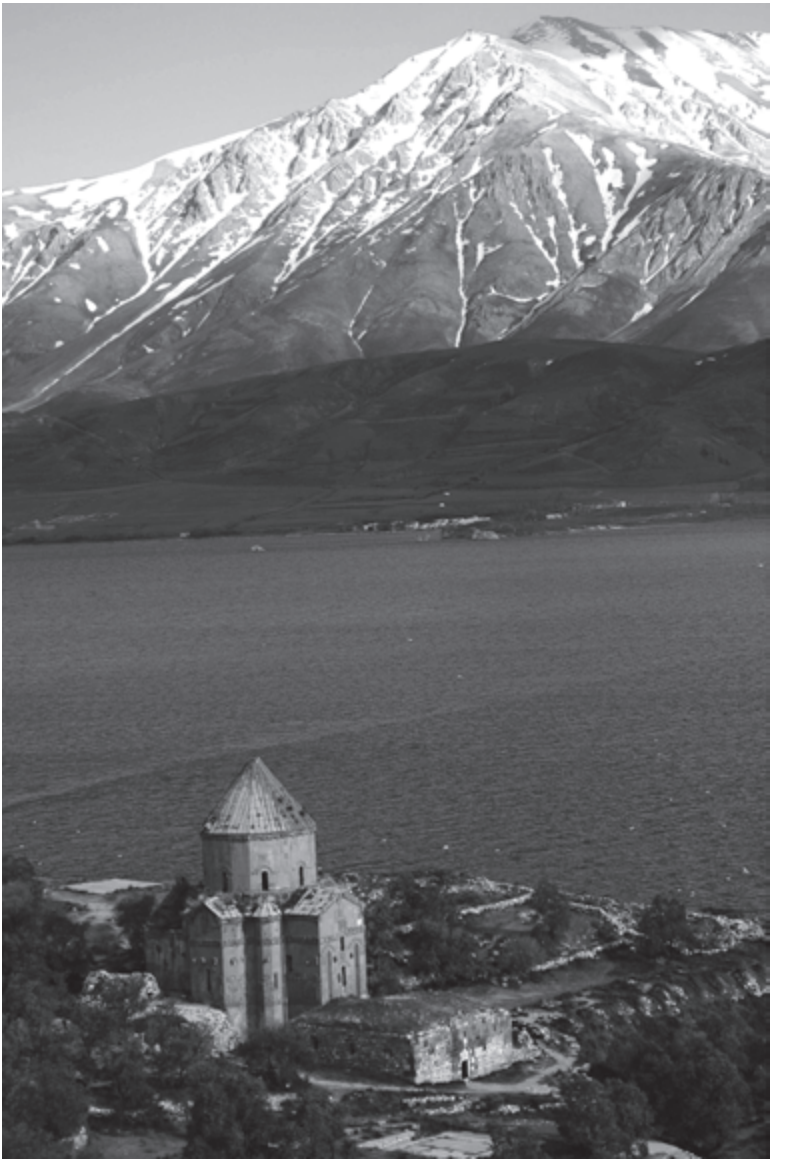
(Below) Armenia's Opera Theater, one of country's most recognizable buildings, and home of cultural diplomacy, Yerevan.
Courtesy Nuran Zorlu.

(Above) Armenian women at Jazzve bakery in Yerevan, women's rights in Armenia is a major issue. Courtesy Teny Aghamalian.

(Below) People in Yerevan raising hands with open palm to show they need no weapons for change, demonstrations during siege of Erebuni police station, July 2016. Courtesy Narek Aleksanyan.

The 9th century Tatev monastery located in southern Armenia, in the foreground the cable station of the world's longest non-stop double track cable car. Courtesy Nuran Zorlu.

Shrouded in mist, the restored Cathedral of Ghazanchetsots, Shushi, Nagorno Karabagh. Courtesy Shahe Simonian



The 10th century Armenian Church of the Holy Cross on Aghtamar Island in Lake Van, before restoration, Turkey. Courtesy Nuran Zorlu.

(Above) The 11th century Cathedral of Ani, part of the historic ruins of Ani, bordering Armenia and part of the proposed "special visa free zone." Courtesy Nuran Zorlu.
(Below) Great grandchildren of genocide survivors, brothers Saro, Areg and Vahé Grigorian at the Armenian Genocide Memorial, Tsitsernakaberd in Yerevan, 2012. Courtesy Nora Grigorian.

Members of the Australian Armenian community commemorating the 100th anniversary of the Armenian Genocide, Sydney.
Courtesy Nuran Zorlu.

Strength in numbers, more than 100,000 Armenians march towards the Turkish Consulate, commemorating the 100th anniversary of the Armenian Genocide, Los Angeles. Courtesy *Asbarez* newspaper.

Chapter Six

The Diaspora

A "Smart Nation" needs to utilize all its resources, wherever they may be. For Armenia, this includes the Armenian diaspora.

The Armenian diaspora refers to the communities of Armenians outside of Armenia and Nagorno-Karabagh.

Before the Armenian Genocide of 1915, there were diaspora communities in Iran, Israel, Russia, Europe, and Asia, notably India, where many Armenians were engaged in trade and business, acting as a go-between for local populations and colonizers.

After the Genocide, Armenians spread to all corners of the globe and now number some eight million people in more than 80 countries, with the largest concentrations in Russia, the United States, France, and Georgia.

With conflict in the Middle East, notably in Iraq and Syria, as well as the deteriorating economic situation in places like Iran, Armenians communities have yet again migrated – some to Armenia and many more to Western countries.

Armenians in the diaspora are able to obtain an Armenian passport, thus having dual nationality, but are unable to vote in elections, and are not required to undertake military service.

Diaspora communities have been vocal advocates for international recognition of the Armenian Genocide. Many community members are direct descendants of survivors.

Armenia and its diaspora need one another. Each relies on the other to succeed. For Armenia truly to flourish, any perceived separation must end, and both groups need to work towards a single objective of strengthening Armenia.

Disapora communities have been responsible for contributing towards infrastructure projects in Armenia; notably the road access between Armenia and Nagorno-Karabagh, development of Zvartnots

airport in Armenia, and more recently assisting with resettlement of Syrian refugees into Armenia.

They have also represented Armenia at international sporting events. A recent example being Houry Gebeshian, a 27 year old physician's assistant from Cleveland and granddaughter of Armenian refugees – representing Armenia in gymnastics at the Rio 2016 Olympic Games.

This is just the surface.

Some Armenians from the diaspora have repatriated to Armenia, and organizations like Repat Armenia have emerged to help those resettling, providing a number of support services.

Armenia's Ministry of Diaspora also has an advisory board to improve linkages between Armenia and the diaspora. The ministry has signed agreements for cooperation with various Armenian organizations, including: the Union of Armenians of Russia and the World Armenian Congress; Hamazkaine Armenian Educational and Cultural Society; Homenetmen; the Armenian Relief Society; the Calouste Gulbenkian Foundation; and the Union of Volunteer Land Defenders.

Diaspora Communities – a New Way

Armenian communities in the diaspora are modelled on organizations that were set up more than a hundred years ago.

Most organizations are built around the main diaspora political parties, the Armenian Revolutionary Federation (ARF), the Social Democrat Hunchakian party (SDHP), and the Armenian Democratic Liberal party (also known as Ramgavar party) – as well as the Armenian General Benevolent Union (AGBU).

The ARF was formed in 1890 in Tbilisi, Georgia.The party operates in Armenia, Nagorno-Karabagh, and the diaspora. The ARF has traditionally advocated democratic socialism and is a full member of the Socialist International. It possesses the largest number of members among the political parties present in the Armenian

diaspora. It has affiliate organizations that focus on culture, sports, relief, and public affairs advocacy.

The Armenian National Committee, the public affairs advocacy wing of the ARF, has played an influential role in countries around the world advocating for the recognition of the Armenian Genocide; aid to Armenia; closer trade ties with Armenia; and awareness of issues of concern to Armenia or government stakeholders, often in the absence of diplomatic representation of Armenia in certain diasporan countries.

The SDHP is the second oldest Armenian political party, founded in 1887. Its original goal was attaining Armenia's independence from the Ottoman Empire. It is a left leaning organization.

The Armenian Democratic Liberal Party (named as Armenakan party until 1921) was established in the Ottoman Empire as part of the national movement in Van in 1885. The party is on the right of the political spectrum, advocating liberalism and capitalism.

The Armenian General Benevolent Union (AGBU) is a non-profit organization devoted to upholding the Armenian heritage through educational, cultural, sporting, and humanitarian programs. Formed in 1906, it operates with an annual budget of over USD 45 million. Headquartered in New York City, AGBU has an active presence in more than 30 countries.

In addition to these groups, communities also form around churches, the largest in terms of members being the Armenian Apostolic church, in addition to the Catholic, Protestant, and Evangelical churches. In most communities, Armenian schools are run and managed by the Armenian Apostolic church.

Outside of these structures, there are many non-aligned Armenians, or Armenians by heritage. People have varying levels of affiliation with community structures. Often the longer a diaspora community is settled in a particular country, and with increased integration, many of these people may become unaligned. So having a form of representation which includes these community members needs to be addressed.

The concern with so many groups is that in small diaspora communities, the community is often divided.

Precious resources are spread across multiple cultural centers, schools, and other assets, rather than pooled together for maximum use and efficiency.

In the past, efforts were made in various countries to form a Council, as an umbrella organization to represent all these different groups. However, none have succeeded.

Armenian diaspora community organizations ought to look at other communities for how to effectively mobilize different groups into a stronger advocacy channel.

An example is Jewish organizations which have councils that represent the breadth and depth of their communities. As structures, for larger communities, they have a peak body for their representative State/Province, which then feeds into a national executive. These organizations also represent their places of worship, or synagogues.

Each Council has a representative from an elected plenum, which meets monthly to consider issues of communal importance. There are variations on how membership on the Council is determined. Some are appointed by constituent organizations, and some by members, serving for fixed period terms. Often they have an executive director and other paid administrative staff.

Often these councils will have separate committees focusing on specific matters of importance whether it be education, public affairs, community relations, or something else.

This model would be most effective in Armenian diaspora communities where there are diverse organizations like the United States, Europe and Australia. In some communities like Iran, and parts of the Middle East, most organizations are aligned to the ARF.

This type of model may also challenge existing structures of representation such as the Armenian National Committee, which have been highly effective in political advocacy.

That challenge can also bring an opportunity of being able to represent an even broader cross section of the community. For example, an ANC-like body could represent this cross representative

council for public affairs, or the ANC itself could continue that role, if such a council so chooses.

More importantly, the establishment of national councils or executives can better leverage existing assets of communities, some of which may be underutilized.

There is no need for small communities to have multiple cultural centers, schools, halls, or other facilities to service the community. Better leveraging of assets can assist in improving the sustainability of a community, and if managed well, surplus funds could be used and directed for specific causes to assist Armenia.

Improved structures can also better assist targeted fundraising efforts.

Again taking the Jewish community example, the United Israel Appeal, a not-for-profit humanitarian international fund-raising organization, has a presence in 40 countries throughout the world. In partnership with the global Jewish community, they work to help achieve the national priorities of the State of Israel and Israeli society, with an emphasis on disadvantaged communities, marginalized youth, and connecting diaspora Jews to Israel and Jewish life.

A somewhat similar structure for Armenians exists with the Hayastan All-Armenian Fund, which has helped Armenia and Nagorno-Karabagh with infrastructure projects.

An improved model would more efficiently direct fundraising campaigns for specific causes.

When crises erupt, such as Syrian refugees emigrating to Armenia, many organizations individually run campaigns to assist in the relief effort. Many, including the Hayastan All-Armenian Fund, are not formally registered as non-governmental or charity organizations to enable tax deductibility.

Under the umbrella of a newly formed Appeal or a remodeled Fund, a proper registered NGO could be formed to direct efforts to address a single cause much more effectively. Furthermore, if done properly funds raised could come not just from the Armenian community, but from the broader communities that diaspora Armenians live in.

Ideally, each community could organize a major event once a year for fundraising purposes. This event could raise funds for a dedicated project for Armenia that year, whatever that may be, and another percentage of funds could be dedicated to support local community organizations. This would negate the need for dozens and dozens of events during the course of the year.

All this requires strong leadership and people prepared to work together to achieve a common goal. All this involves compromise among smart people.

Armenia-United States Relationship

The Armenia-United States relationship has heavily been influenced by the diaspora community that resides there.

They form the second-largest community in the Armenian diaspora after Armenians in Russia. The first major wave of Armenian immigration to the United States took place in late 19th and early 20th centuries. Thousands of Armenians settled in the United States following the Hamidian massacres of the mid-1890s and the Armenian Genocide of 1915 in the Ottoman Empire.

Many waves have continued since the 1960s from the Middle East and Iran, and from Armenia following independence in 1991.

It is estimated that up to one million Armenians reside in the United States, with the largest concentration in Los Angeles, California.

The community, primarily through advocacy organizations like the Armenian National Committee, has been credited with many successes, including persuading the U.S. Congress to grant millions in aid annually for Armenia, one of the highest per capita amounts in the world; and the continuation of Section 907 of the Freedom Support Act which blocks aid to Azerbaijan.

They continue to advocate on matters such as a tax treaty between Armenia and the United States; suspension of military aid to Azerbaijan; return of seized Armenian churches in Turkey; and ensuring a dedicated percentage of aid to Georgia to the Armenian populated area of Samtskhe-Javakheti (Javakhk) in south-central Georgia, including job-creation programs, improvements to transportation and infrastructure.

According to the US Department of State,[110]

> The United States and Armenia convene a strategic dialogue on economic issues. The U.S.–Armenia Joint Economic Task Force (USATF) meets to discuss mutual areas of cooperation in energy, trade, and investment . . . . Armenia and the United States belong to a number of the same international organizations, including the United Nations, Euro-Atlantic Partnership Council, Organization for Security and Cooperation in Europe, International Monetary Fund, World Bank, and World Trade Organization. Armenia also is an observer to the Organization of American States and a participant in the North Atlantic Treaty Organization's (NATO) Partnership for Peace program.

The Armenian-American community have been vocal advocates for genocide recognition.

While the United States' formal position currently does not recognize the Armenian Genocide, it has previously been on record as confirming the Genocide. As Harut Sassounian[111] has pointed out, these acts of recognition include a document filed by the United States with the International Court of Justice in 1951; President Ronald Reagan issuing a Presidential Proclamation in 1981, in which he acknowledged the Armenian Genocide; resolutions in the US House of Representatives in 1975 and 1984; as well as at least three federal court rulings concerning the Armenian Genocide.

Courageously while still serving as United States Ambassador of Armenia in 2005, John Evans refused to toe the official U.S. Department of State position, calling the Genocide for what it was, detailed in his memoir, *Truth Held Hostage: America and the Armenian Genocide - What then? What now?*[112]

Despite rightful criticism directed at President Obama for failing on his pre-election promise to recognize the Armenian Genocide, his choice of words has been the strongest from a U.S. leader. As a Senator, Barack Obama said: "The occurrence of the Armenian Genocide in 1915 is not an 'allegation', a 'personal opinion' or a 'point of view'… it is a widely documented fact."

In 2009, addressing a question concerning his position on the Armenian Genocide, at a press conference standing alongside Turkish President Abdullah Gül, President Obama said, "My views are on the record and I have not changed views." By saying this he implied genocide without saying it, using verbal gymnastics.

Further, not enough has been done to leverage the position of the U.S. Ambassador to the United Nations, Samantha Power, who powerfully wrote of the world's neglect of the Armenian Genocide, outlined in her book *A Problem from Hell: America and the Age of Genocide*.[113]

The next U.S. President is unlikely to come close to this position, and the challenge for the community will be how that will be overcome.

Armenians in Russia

Armenians in Russia constitute the largest Armenian diaspora community. It is estimated the community is more than two million people strong with large concentrations in Moscow, Saint Petersburg, Krasnodar, the North Caucasus and as far as Vladivostok in the east.

There has been an Armenian community in Russia for hundreds of years. Since the collapse of the Soviet Union, many more have

emigrated from Armenia, Azerbaijan, Georgia (including Abkhazia), and Central Asia.

The Russian government encourages Armenians to immigrate and settle in Russia, and provides financial and settlement incentives.

With Armenia's heavy reliance on Russia, covered in the smart foreign affairs policy chapter, this community's role is ever more important.

This community injects around USD 1.5 billion in remittances to Armenia every year, forming a significant portion of Armenia's GDP.

With the ruble and the Russian economy weakening, due to sanctions following the Russian invasion of Crimea and Ukraine, this reliance is even more exposed.

The Armenians of Russia today fall into three categories. There are those who trace their heritage in Russia for many generations. There are those who lived in Russia during the Soviet Union and hold Russian citizenship. The next group, and largest, is those who settled in Russia following the collapse of the Soviet Union. This latter group is mainly composed of guest workers, and many do not have Russian citizenship.

Armenians in Russia have traditionally not operated like other functioning diaspora communities. Reasons for this include the Soviet influence which did not encourage communities along ethnic lines; many Armenians were already integrated in Russia for many generations; and the wide disparity between the community already in Russia and those newly arrived from former Soviet republics.

Efforts to better galvanize the community have been led by Ara Abrahamyan, a prominent Armenian Russian businessman who set up the Union of Armenians in Russia in the year 2000.

The union has represented community interests and engaged in political advocacy, education and promoting Armenian culture.

The size of this diaspora community has yet to be leveraged to its true potential. Recent developments include the opening in 2013 of the Holy Transfiguration Cathedral and monastery, the largest Armenian church complex outside Armenia, complete with a museum focused on the Armenian people. This gathering place could help galvanize a focal point for the community and enable them to have a more influential voice in Russia-Armenia affairs.

Armenians in Turkey

Armenians in Turkey are estimated to be more than 50,000 in number, a fraction of the estimated two million prior to the Armenian Genocide.

In recent decades the community has grown because of emigration from Armenia to Turkey, mainly by those seeking work opportunities.

The community is complex. It has not been easy being an Armenian in Turkey. Many have walked a tightrope on calls for recognition of the Armenian Genocide, and are careful not to aggravate a Turkish government that has appropriated many churches and other assets of the community.

Descendants of Armenians who converted to Sunni Islam in the 18th century and have evolved into a distinct ethnic group, knowns as Hemshins, mainly reside in Turkey's Black Sea coast of Rize and Hopa. What makes them very distinct is the use of some Armenian words in their dialect, and exhibiting certain aspects of Armenian culture. There are also Christian Armenian Hemshins who live in Abkhazia and Russia's Krasnodar District.

Then there are the hidden Armenians, a term used to describe people in Turkey of full or partial Armenian heritage who conceal their Armenian identity from wider Turkish society. They are descendants of Armenians in Turkey who were Islamized and identify as Kurds or Turks. Recent novels by Fethiye Çetin, who wrote *My Grandmother: A Memoir*, have drawn attention to this community.[114]

The book is a very moving account of how Çetin's grandmother revealed that she was by birth a Christian and an Armenian, that her name was not Seher but Heranush, and that most of the men in her village had been slaughtered in 1915. Many Turks were exposed to the Armenian Genocide through stories such as these.

A noted journalist in Turkey, Ahmet Abakay, wrote a book in 2013 titled, *The Last Words of Hosana,* which describes the life of his mother.[115] In the book, Abakay revealed that his mother had told him of her Armenian identity weeks before her death. She had kept her identity a secret for more than 80 years. Abakay states his mother was saved from the Armenian Genocide because she was dropped off in front of the door of an Alevi Turk.

Many hidden Armenians are totally unaware of their Armenian ethnicity, living as Turks or Kurds. Some know they are Armenian but hide it out of fear of discrimination. It is estimated that there are up to 2.5 million Muslim Armenians in Turkey.[116]

There needs to be a way of helping these people to connect with their heritage more freely, and this will mean a shift in the definition of being Armenian. One could be Armenian without belonging to a church or being Christian.

Many hidden Armenians may continue to practice Islam, and Armenians all around the world need to embrace this community if such Muslims choose to identify themselves as Armenians.

A small step in this direction is the Ari Tun (come home) program organized by the Armenian Ministry of Diaspora. The program introduces diaspora youth to Armenian history, culture, public life, religion, and family traditions. Participants visit historical and cultural sites in Armenia, and attend concerts, festivals, exhibitions, and plays. Around fifty "hidden Armenians" from Diyarbakir participated in the program in 2014.[117] In the following year, a group of such Armenians represented Diyarbakir and Dersim in the Pan-Armenian games in Yerevan, an event that takes place every four years, where Armenians around the world participate in sporting competitions.

Those who played an influential role within the Armenian community in Turkey included Hrant Dink, a journalist, editor, and activist. Assassinated in 2007 by a Turkish nationalist, his death led to a 100,000 strong funeral procession condemning his assassination, with people chanting, "We are all Hrant Dink! We are all Armenian!"

Dink was a unifying figure for many Armenians and those Turks advocating for democracy, free speech and for repealing repressive laws such as Article 301. Article 301 is a controversial section of the Turkish penal code making it illegal to insult Turkey, Turkish ethnicity, or government institutions. Among those charged under Article 301 are Dink and Orhan Pamuk, the Turkish writer and recipient of the Nobel Prize for Literature in 2006. Pamuk was charged following comments he made in an interview about the mass killings of Kurds and Armenians in the Ottoman Empire.

In a speech delivered in May 2006, at a seminar organized by the Turkish Journalists' Association and the Konrad Adenauer Foundation, Dink said: "I think the fundamental problems in Turkey exist for the majority as well. Therefore . . . I will speak for the majority, including myself in it and dwell on where, we, as Turkey, are headed."

A segment of the population wants a restoration of diplomatic relations between Turkey and Armenia, but there exist many different paths to getting there amid continuing deep distrust. Dink had an ability to bring people together to a common ground. That is what is needed now.

In 2014, Turkish Prime Minister Recep Tayyip Erdogan appeared to show a conciliatory tone offering condolences for the first time on the eve of the 99th anniversary of the Armenian Genocide. However, he also said "millions of people of all religions and ethnicities lost their lives in the First World War," and that it was "inadmissible" for Armenia to use the 1915 events "as an excuse for hostility against Turkey" and to turn the issue "into a matter of political conflict," even though Turkey's denial has made the matter political.[118] What could

have been seen as a small positive step, instead became political point scoring.

In 2015, the Armenian community experienced another significant change. The 550 members elected to Turkey's Parliament included three Armenians Garabed (Garo) Paylan, who ran on the pro-Kurdish People's Democratic Party (HDP) ticket; Markar Esayan from the ruling Justice and Development Party (AKP); and Selina Özuzun Doğan from the Republican People's Party (CHP).

Of the three, Garo Paylan has been most vocal on Armenian issues, which has angered some in the Turkish Parliament.

Paylan vowed to fight against Armenian Genocide denial and has demanded that the Armenian Genocide be acknowledged in Turkey. In April 2016, during a speech in Parliament on the occasion of the 101st anniversary of the Armenian Genocide, Paylan recounted the names of Armenian politicians who were deported and killed. Days after the speech he was entangled in brawls with other Parliamentarians, incited by governing AKP members. Paylan has since been the target of vilification because of his ethnicity.

The Human Rights Association of Turkey and other international organizations condemned the violence against Paylan.

Garo Paylan is very courageous to take the stand he has in Turkey. Unfortunately, the Turkish government responds aggressively and defensively to such demands. Furthermore, there is increasing concern over the safety of Paylan, who has faced many death threats.

Turkey needs to have a mature conversation about its past without acrimony or animosity. Much of the public has become increasingly aware of these issues through its own citizens, academics, and authors.

A key opportunity is the opening of the Armenia-Turkey border, as that would eventually result in a halt of stereotypes from both sides, and deepen cultural exchange.

Leveraging the Diaspora

The diaspora has a wealth of talent that is simply underutilized and underused to help develop the "Smart Nation."

And that fault is reciprocal.

In the Silicon Mountain chapter it is outlined how talented Armenians in the technology space can be utilized in that sector to create more jobs, by establishing a leading Innovation and Technology Council to work alongside existing organizations to set and implement Armenia's digital and innovation plan, to not only develop the sector but identify new opportunities.

There have been individual examples of best practice of diaspora contributions. In 2001, prominent Argentinian Armenian businessperson Eduardo Eurnekian signed a 30-year concession agreement with the Armenian government for the management of operations of Zvartnots International Airport, Armenia's largest airport. The agreement meant the construction of a new terminal which brought the airport into conformity with international standards. The total cost of the project was more than USD 50 million. The infrastructure helped support increased tourism and aerial traffic into Armenia.

The late U.S. businessperson Kirk Kerkorian donated an estimated USD 200 million in projects to Armenia through the Lincy Foundation. After two decades of support for schools, hospitals, infrastructure, scientific research projects and other charitable endeavors, the Foundation closed operations in Armenia in 2011.

One of Kerkorian's major achievements was the improvement of many roads in Armenia and Nagorno-Karabagh. In a sad indictment, there were allegations that the Armenian Government mismanaged some funds which led the Foundation to cease operations in Armenia.[119]

Other than direct investments, the diaspora can also contribute to Armenia by providing a diverse range of skill sets.

Armenia, with a market of three million people, often suffers from skills' shortages which limit the growth of businesses, particularly globally.

Take the technology sector as an example. Setting up a startup, one needs a good idea, then technologists such as engineers and developers to build the product. So far so good for Armenia. To grow a business, a range of skill sets is required. This includes an effective sales and

distribution arm that is familiar with markets around Armenia and Europe; marketers, including those versed in social media; legal advice, particularly for patents and intellectual property; and other skills.

A better way is needed to connect job opportunities in Armenia where diasporans can fill a need, and for Armenian companies to meet a demand that may exist elsewhere in the world. There are many online marketplaces where companies can procure a service that can be transferred digitally. These services include graphic design, editing, web design, video editing, and translations.

Diaspora Armenians who have companies should use such a service to procure these digital services in Armenia, and reciprocally such a marketplace could be used by Armenian firms that may seek expertise available in the diaspora. Such marketplaces already exist, such as Fiverr and Freelancer, but none that specifically cater to connecting Armenians.

Another area for consideration is leveraging the diaspora when projecting a global message or developing a global marketing campaign.

The tourism campaign titled "Noah's Route: Your Route" with picturesque videos promoting Armenia as a tourist destination was widely circulated by diaspora communities.

Such a campaign could be developed with the assistance of the diaspora. An international tourism competition could be developed, where organizations, individuals, and companies would be invited to submit the best short video promoting Armenia, and the winner to be determined by online voting mechanisms. These videos can be made viral, becoming popular through a viral process such as Internet sharing, typically through social media platforms.

Another area is Armenia's brand. The Armenian National Competitiveness Foundation, working with the Embassy of the United States in Armenia, has been tasked by the Armenian government to market Armenia and its people under the assignment

"Brand Armenia." Brand Armenia is a project driven by research that explores the ways and means to properly showcase Armenia and its people on the world stage.

As outlined in the smart foreign affairs policy chapter, the diaspora can help with soft power, influencing others through an ability to attract and co-opt rather than coerce.

Beyond Genocide Recognition

A day will come when the genocide will be recognized by Turkey and Armenians will be caught by surprise and ask themselves, "What next?"

The Armenian Genocide, by and large, is recognized internationally by respected academics and more than twenty countries including Canada, France, Russia, and Germany.

This is not to say genocide recognition is not important. It is, and should continue to be pursued. However, diaspora advocacy requires a pivot now. It should rebalance its efforts towards the opening of Armenia-Turkey borders; and seek reparations from insurers and Turkey.

These issues need to be treated distinctly and separately.

Open borders will lead to a Turkish public more informed of the events of 1915.

Armenia has no preconditions for the opening of the border – Turkey has cited the Nagorno-Karabagh conflict and its support for Azerbaijan to keep the border closed.

Turkey cannot expect to be part of European structures such as the EU if it makes unilateral decisions to keep some of its borders closed.

The closing of the borders is in contradiction of what the WTO stands for. Turkey is a member since 1995, and Armenia has been a member since 2003.

The WTO clearly states that "A country should not discriminate between its trading partners and it should not discriminate between its own and foreign products, services or nationals."[120]

The closing of the border is a rejection of more open trade, despite bilateral trade between Turkey-Armenia in favor to Turkey at a rate of ten to one.

This rebuff to WTO principles should be challenged and more vigorously pursued.

The challenge for the diaspora is to overcome its own doubts as to whether the border should be opened. Some would continue to argue that until recognition of the Genocide, the border should not be opened; others would argue for a restitution of lands lost, or reparations, before opening the border; and others would fear Turkish imports flooding the Armenian market.

The focus should be on the immediate, not a distant horizon. The immediate challenge is to lift Armenia's economic growth by trading with its largest immediate neighbor (in terms of GDP). Increased stability will additionally have a flow-on effect of attracting more investment to the region.

The significance of open borders should not be underestimated. The diaspora has an opportunity to play an influential role in making this a reality.

With respect to reparations, there has been some progress, and the past decade has seen lawsuits filed, with limited success.

In 2004, New York Life Insurance agreed to pay USD 20 million to settle a lawsuit filed in Los Angeles by heirs of Armenian Genocide victims who accused the company of failing to honor valid claims. In the following year, the French insurance company AXA, following a class-action lawsuit, agreed to pay USD 17 million dollars to descendants and Armenian philanthropic groups.

In 2006, a class action lawsuit was filed by descendants of policy holders who perished in the Armenian Genocide against Deutsche Bank and Dresdner Bank, and in 2010, diaspora Armenians from the United States filed a federal lawsuit against the Turkish government, the Central Bank of the Republic of Turkey, and Ziraat Bankası (a state owned bank in Turkey), seeking compensation for the descendants of Armenians whose property was seized during the Armenian Genocide.

A comprehensive report released in March 2015, titled "Reparations for the Armenian Genocide," included numerous recommendations including calculating various financial compensations, some of which exceeded USD 100 billion.[121]

Just like the study into the Armenian Genocide by academics became more widespread from the 1960s onward, so too must the pursuit and study of proper reparations.

It should be acknowledged that the diaspora role in a formal resolution may be limited. For the matter to be determined in the International Court of Justice, consent between parties, in this case Armenia and Turkey would be required.

With respect to the European Court for Human Rights (ECHR), Turkey could be brought before the court without its own consent. It is established to rule on individual claims against states regarding the European Convention on Human Rights. However, it is not helpful in the issue of reparations.

Chapter Seven

Karabagh – from Conflict Management to Resolution

"Karabagh is a matter of honor for Azeris, but a matter of survival for Armenians," the late Russian activist Andrei Sakharov said.

Karabagh is a word of Turkic and Persian origin meaning "black garden," while "Nagorno" is a Russian word meaning mountainous. Armenians prefer to call the region Artsakh, an ancient Armenian name for the area.

A critical factor in Armenia's future is whether the Nagorno-Karabagh conflict can be resolved.

To understand the conflict one must revisit the past.

In 1921 the National Council of Soviet Azerbaijan, on the basis of an agreement between the Azerbaijan Revcom (Revolutionary Committee, the main Bolshevik instrument of power at that time) and the governments of Soviet Azerbaijan and Soviet Armenia, proclaimed Nagorno-Karabagh an integral part of Soviet Armenia.

Following this agreement, later that year in Tbilisi, Georgia, the Caucasian Bureau of the Communist Party of Russia convened a plenary session, during which it reconfirmed Nagorno-Karabagh part of Soviet Armenia.

With Stalin's direct interference, on the night of July 5th, the decision of the previous day was reviewed and reversed. Nagorno-Karabagh was now integrated into Azerbaijan, forming part of its territory as an autonomous oblast (region), without any legal basis.

A narrow strip of land separated the Nagorno-Karabagh Autonomous Oblast from Soviet Armenia, thus depriving the region of a common border with Armenia; it lay entirely within Soviet Azerbaijan.

In 1923 Armenians amounted to around 95 percent of Nagorno-Karabagh's population. In 1989 the figure had dropped to around 75 percent.

Throughout Soviet times, Armenians in Nagorno-Karabagh made representations to authorities for the decision to be located within Soviet Azerbaijan be reversed.

In the 1980s, with the emergence of perestroika, a political movement for reformation within the Communist Party of the Soviet Union, the stage was set to express more freedoms.

In 1988 the majority Armenian population of Nagorno-Karabagh sought to claim independence from Azerbaijan. This led to large scale protests in Nagorno-Karabagh and Armenia, and Armenian diaspora communities throughout the world.

As Soviet control loosened, and following the Karabagh Parliament's decision to join Armenia, war broke out between Armenia and Azerbaijan.

On December 10 1991, the Nagorno-Karabagh population declared the establishment of the Nagorno-Karabagh Republic (NKR) by plebiscite.

This decision further escalated the conflict into a full-scale war. The conflict, from 1988 to 1994, led up to 30,000 deaths, including pogroms directed against Armenians living in Azerbaijan, notably in Sumgait and Baku.

While Armenia itself has never officially recognized Karabagh's independence, it has become its main financial and military backer.

In May 1994 Azerbaijan, Nagorno-Karabagh, and Armenia signed a ceasefire.

Conflict settlement negotiations were held in the framework of the OSCE Minsk Group, principally the Madrid Principles. The original version of the principles was presented to the Armenian and Azerbaijani foreign ministers at the OSCE ministerial conference in Madrid in November 2007. In the last decade, several options for the settlement proposed by the co-chairs (representing Russia, the United States, and France) were rejected by Azerbaijan.

Negotiations have focused on a range of options including the removal of all Armenian military forces from the buffer territories beyond Nagorno-Karabagh (Cabrayil, Kelbejer, Qubadli, Lachin, Zengilan, Aghdam, and Fuzuli); the right of return of displaced

people; a secure corridor connecting Armenia with Nagorno-Karabagh, together with a guaranteed corridor for Azerbaijan through southern Armenia connecting Azerbaijan with its Nakhichevan exclave; granting self-governing status to Armenians until such time when a vote to determine the final status of Nagorno-Karabagh would take place.

Following the ceasefire, significant construction took place in Nagorno-Karabagh, given the destruction of many towns and villages. Furthermore, as Nagorno-Karabagh had been part of Soviet Azerbaijan, there were no efficient transport routes connecting Karabagh's north and south, and all roads between these villages required going through Azerbaijan. This was also the case with transport corridors with Armenia itself.

The four days of fighting in early April 2016 between Armenian and Azerbaijani forces over Nagorno-Karabagh was the largest eruption of hostilities since the ceasefire in 1994. Despite a fragile ceasefire, there is a sense that violence could reignite.

Azerbaijani forces sought to capture key territory by launching attacks along the northern sectors of the line of contact as well as incursions along the southern end. Despite an apparently well-coordinated campaign and presumed military superiority, Azerbaijani forces made only limited headway by the time the fighting had largely concluded.

The timing of the clashes, initiated only hours after the Azerbaijani delegation's final meeting in Washington during the Nuclear Security Summit, gave the appearance of having broader geopolitical undertones.

Speculation persists that Russia played a less than helpful role. It is hard to conceive Russia not being aware of Azerbaijan's intentions, and this state of heightened tension only helps Russia have a more influential role between Armenia and Azerbaijan, as the powerbroker in the conflict.

In this climate, both Armenia and Azerbaijan would claim the upper hand. Azerbaijan has consistently threatened to use force. Azerbaijan has used its oil wealth to increase its defense budget nearly ten fold over the last decade.[122] Armenia would claim it defended

against the attack from Azerbaijan and continues to protect the people of Nagorno-Karabagh.

The outlook does not look positive, with Russia's economic woes, Azerbaijan's internal political repression, and Armenia's awareness that despite a twenty-year ceasefire, they can never rely on stability.

Antagonism between Russia and Turkey looms over all of this, making the prospect of renewed fighting more concerning. Tensions have been heightened ever since the Turkish air force shot down a Russian military plane flying over Turkish airspace in 2015. Russia prefers a tense situation in Karabagh, not having the conflict resolved.

Armenia under no circumstances is likely to negotiate on the territory of Nagorno-Karabagh. It has paid a heavy price thus far, and this is so important that it affects its survival. The buffer zones around Karabagh could be negotiated; however, there would be a clear requirement to have a direct uninterrupted land passage linking Armenia and Nagorno-Karabagh. This passage is known as the Lachin corridor.

Any resolution would require the security of Nagorno-Karabagh be internationally guaranteed.

Nagorno-Karabagh has no future as a part of Azerbaijan and whatever the solution, it must emanate from the will of the Karabagh people. That is the essence of the right of peoples to self-determination.

There must be a genuine desire for peace in order to reach an agreement. Azerbaijan is playing the politics of pride over Nagorno-Karabagh, an enclave which for no logical reason should have been in Azerbaijan. It has seen its national currency the manat fall in value, along with the value of its largest natural resource, oil. It has also flaunted violations of the ceasefire, repeatedly breaching it through sniper fire, without any significant consequences.

Azerbaijan's President Ilham Aliyev has staked his leadership on the return of the enclave.

One could argue that the international community should continue to pursue a diplomatic solution through the OSCE; however, the composition of the Minsk Group (currently consisting

of Belarus, Germany, Italy, Sweden, Finland, Turkey, Armenia, and Azerbaijan, as well as a rotating OSCE troika member) and its co-chairs should be changed and reduced in number. This would lessen the complexity of having numerous parties involved, and would allow the involvement of countries that have a genuine interest in having the conflict resolved.

There needs to be strengthened mechanisms to deal with breaches of the ceasefire. Sniper fire continues, and such violations pass without consequences.

Proposed solutions for conflict settlement need to be clearly articulated to the public of Armenia, Nagorno-Karabagh and Azerbaijan, so negotiators aren't proposing positions that the public would not support. The solution cannot appear as a surprise. And guarantees need to be provided by third parties that any proposed agreement is enforceable.

Finally, declarations by outside parties recognizing "Azerbaijan's national sovereignty and borders," and thereby Nagorno-Karabagh within such territories, represent a crude indifference to history and the initial cause of the conflict.

The international community has experience in resolving rightful claims for self-determination and independence. They are selective.

Kosovo declared independence from Serbia in 2008. The country had been administered by the United Nations since 1999, when NATO bombed Serbia and forced President Slobodan Milosevic to withdraw his troops from the area. Kosovo's independence was opposed by Russia and Serbia.

East Timor, now also known as Timor-Leste, achieved independence in 2002. The nation had voted for independence years before, when a referendum delivered a vote that clearly rejected the proposed "special autonomy" within Indonesia. After that referendum, there was violence in the region with pro-Indonesian militias attacking citizens, and a special UN force had to be deployed to the nation.

South Sudan, also known as the Republic of Sudan, gained independence from Sudan in 2011. The nation became independent

following a referendum. South Sudan, however, continues to suffer from internal conflict.

If there is resolve, a meaningful peace can be achieved, which would be in the interests of all parties. This is far better than having an unstable position of imminent war.

Former U.S. Ambassador Edward Djerejian put it simply:

> The international community and the parties of this conflict have to move from conflict management to conflict resolution . . . . Armenia is in an advantageous negotiating position (on Nagorno-Karabagh) because it won the war and is occupying these Azeri districts. It has a huge bargaining chip in this equation of land, peace, self-determination of the people of Nagorno-Karabagh. Use it before it's too late.[123]

Conclusion

Armenia is at a critical juncture. It needs to aspire to truly become the "Smart Nation."

Small countries with limited resources can succeed, as shown by examples in this book regarding Israel, Estonia and Singapore. These are economies that are more developed that Armenia's, but each of those countries had more humble beginnings.

Armenia's challenges are complex, whether they be economic, security related, or cultural. The only way to overcome these challenges is to better leverage Armenia's most important and valuable asset – its people – wherever they may be.

This book has proposed many public policy ideas for consideration including establishing a reinvigorated National Innovation and Technology Council that includes global business leaders; developing a comprehensive innovation plan; creating an innovation district in Yerevan; teaching coding from primary school; revisiting the Turkey-Armenia border opening, including the creation of "special visa free zones" and the appointment of a Special Envoy; establishing new transport agreements with Turkey; rebalancing the relationship with Russia; being a leader in soft power; having a more active Diaspora Ministry; respecting Armenia's women, including proper laws and mechanisms against domestic violence; appointing a Minister for Women; lifting Armenia's rankings in the happiness index to reflect improved productivity; setting up a new independent Commission against corruption with a special court; mandating a single site that details government officials' pecuniary interests, gifts, hospitality, overseas travel, and non-sensitive external meetings, and be updated on a quarterly basis; funding a public broadcaster to increase transparency and balance in the media and support investigative journalism; gradual introduction of electronic voting; establishing a Presidential advisory board to deal with cost-of-living issues and be treated as a national emergency; establishing Community Cabinets;

demarcating special economic zones for Armenia's regions located on key borders; taking initiatives to promote tourism and related services outside of Yerevan; restructuring diaspora communities and leadership; and moving from conflict management to conflict resolution for Nagorno-Karabagh; among others.

These policy ideas are just that – ideas. Further analysis and detail is required to make them a reality. The intention is to spark robust debate, with a view of implementation.

Armenia's complex issues cannot be solved easily, but Armenians have the smarts to be able to address them effectively.

The nature of a global economy means many factors influence whether a nation can succeed; so Armenia can only influence certain areas within its means.

Armenia must address its governance issues seriously and aggressively. These issues lay the foundation for all the areas discussed in this book. One cannot build a solid home without a strong foundation. Governance reform for Armenia must be treated in this context.

There is no easy remedy. No superpower will save Armenia from its current predicament. Salvation must come from within.

Armenia's democracy is new; its heritage ancient. It has always survived. Now is the time for Armenia to prosper.

Acknowledgements

I was fortunate throughout the development of this book that I had the support of many people to bring this project to reality.

Firstly, I want to thank Ara Sarafian from the Gomidas Institute for his unstinting support. Everything from minor details to the big picture, Gomidas Institute have been part of the journey in every way.

Many people provided either assistance, input, advise or reviewed various manuscripts and I thank them for it including my brother Meher Grigorian; Houry Mayissian; Varant Meguerditchian; Maria Titizian; Pierre Hennes; Robert Barron, and Nic Jarvis.

Sourcing professional photos for the book was done through the assistance and dedication of many to whom I am grateful including Nuran Zorlu; Teny Aghamalian; Narek Aleksanyan; Ara Khachatourian from *Asbarez* newspaper; and Zarine Budaghyan from Tumo Center for Creative Technologies.

I want to specially thank Nuran for spending many hours and being so gracious with his time.

The unique creative cover design which neatly captures the title of the book is thanks to Shant Safarian. I thank him for his patience in adjusting several versions till we landed with the final version.

Thanks to Ambassador Edward Djerejian; Stepan Kerkyasharian; and Maria Titizian for lending their voices to the book.

I am particularly honored that Ambassador Djerejian (former United States Ambassador to Israel and Syria, and US Assistant Secretary of State for Near Eastern Affairs) and Stepan Kerkyasharian AO (former Chair of the NSW Community Relations Commission and President of the NSW Anti-Discrimination Board) lent their support. Both of whom have been global pioneers in public policy excellence.

I would like to thank my wife Nora for her patience and support while I was writing the book. I appreciated her input and advice, we may not always agree but I respect her point of view.

Finally, I want to thank my parents Ayvaz and Hasmik for their influence in my upbringing which has impacted how I approach matters addressed in this book.

Sassoon Grigorian

24 August 2016

Endnotes

Introduction

1. Michael Moritz, "How to better understand poverty in Armenia," World Economic Forum, 17 April 2015. https://www.weforum.org/agenda/2015/04/how-to-better-understand-poverty-in-armenia/
2. Central Intelligence Agency, "Armenia," *The World Fact Book*.
3. The World Bank: http://data.worldbank.org/country/armenia
4. International Monetary Fund.

Chapter One: Silicon Mountain

5. Klaus Schwab, *The Global Innovation Report 2015-2016*, World Economic Forum. http://www3.weforum.org/docs/gcr/2015-2016/Global_Competitiveness_ Report_2015-2016.pdf
6. Sean Williams, "From Downed tools to tablets, how tech is reinvigorating Armenia", *Red Herring*, 13 July 2015. http://www.redherring.com/startups/downed-tools-tablets-tech-reinvigorating-armenia/
7. Ibid.
8. Schwab, *The Global Innovation Report*.
9. Dan Senor and Saul Singer, *Start-up Nation: The Story of Israel's Economic Miracle*, 2011.
10. Dany Bahar, "Israel's innovation paradise: Where risk-sharing and public investment are paying off," Brookings, 3 April 2015. http://www.brookings.edu/blogs/up-front/posts/2015/04/03-israel-innovation-paradise-bahar
11. Ibid.
12. Ibid.
13. Schwab, *The Global Innovation Report*.
14. Medha Basu, "Singapore announces US$3.2 billion innovation plan," GovInsider, 24 March 2016. https://govinsider.asia/innovation/singapore-announces-us3-2-billion-innovation-plan/
15. National Research Foundation Singapore website, http://www.nrf.gov.sg/about-nrf/governance/research-innovation-and-enterprise-council-(riec)

16. The Armenian Government recently offered IT startups 0 percent tax on profits for three years, and a fixed income tax of 10 percent.
17. Granatus Ventures website, http://www.granatusventures.com/
18. Arka News Agency, "Ruben Vardanyan to invest $10 million in Foundation for Armenian Science and Technology," 11 July 2016. http://arka.am/en/news/technology/ruben_vardanyan_to_invest_10_million_in_foundation_for_armenian_science_and_technology_/
19. Leonid Bershidsky, "Envying Estonia's Digital Government," *Bloomberg View*, 4 March 2015. http://www.bloombergview.com/articles/2015-03-04/envying-estonia-s-digital-government
20. Pan Armenian Network, "World Bank will Assist Armenia To Implement E-Government," 19 July 2005.
21. Artak Barseghyan, "e-Government Summary of Armenia," 21 June 2013. http://workspace.unpan.org/sites/Internet/Documents/UNPAN090189.pdf
22. eGovernance Academy, "e-Governance Development in Armenia. http://ega.ee/project/e-governance-development-in-armenia/"
23. Trading Economics, "Armenia Personal Income Tax Rate." http://www.tradingeconomics.com/armenia/personal-income-tax-rate
24. Anush Mkrtichian, "Armenian Business Groups Object to New Tax Law," azatutyn.am, 17 June 2016. http://www.azatutyun.am/content/article/27805505.html
25. "Planet of the Phones," *The Economist*, 28 February 2015. http://www.economist.com/news/leaders/21645180-smartphone-ubiquitous-addictive-and-transformative-planet-phones
26. Kristine Aghalaryan, "Online Banking Little Used In Armenia: Some Banks Face Security Issues," *Hetq*, 30 October 2015, http://hetq.am/eng/news/63397/online-banking-little-used-in-armenia-some-banks-face-security-issues.html
27. "India receives top remittance of US$ 70 billion in 2014: World Bank," *Business Standard*, 14 April 2015. http://www.business-standard.com/article/news-cm/india-receives-top-remittance-of-us-70-billion-in-2014-world-bank-115041400216_1.html
28. Ibid.
29. The World Bank's World Databank. http://databank. worldbank.org/data/reports.aspx?source=2&country=ARM&series=&period=
30. Xoom, "PayPal to acquire Xoom," 1 July 2015. https://www.xoom.com/news/paypal-to-acquire-xoom-07012015

31. "Costly cash," *The Economist*, 5 September 2015. http://www.economist.com/news/leaders/21663227-regulation-raising-cost-sending-money-worlds-poor-reform-it-costly-cash

32. "2015 Ponemon Institute Cyber Crime Study." http://www8.hp.com/au/en/software-solutions/ponemon-cyber-security-report/index.html

33. Center for Strategic and International Studies, "Net Losses: Estimating the Global Cost of Cybercrime," June 2014. http://www.mcafee.com/au/resources/reports/rp-economic-impact-cybercrime2.pdf

34. Hackread," Azerbaijani Hackers Deface NATO-Armenia, Embassy Websites in 40 Countries," 24 January 2016. https://www.hackread.com/azerbaijani-hackers-defac-nato-armenia-embassy-sites/

35. Peter Suciu, "Why Israel dominates in cyber security," *Fortune*, 1 September 2015. http://fortune.com/2015/09/01/why-israel-dominates-in-cyber-security/

36. Associated press, "Armenia makes chess compulsory in schools," *The Guardian*, 15 November 2011. http://www.theguardian.com/world/2011/nov/15/armenia-chess-compulsory-schools

37. Harvey Nash 2014 CIO Survey. http://www.harveynash.com/group/mediacentre/2014/05/investment_in_new_technology_is_growing_at_a_faster_rate_than_at_any_time_since_2006_but_digital_ski/index.asp

Chapter Two: Smart Foreign Affairs Policy

38. "ARF presents report on economic consequences of Turkey-Armenia border opening," *Asbarez*, 23 June 2009. http://asbarez.com/65166/arf-presents-report-on-economic-consequences-of-turkey-armenia-border-opening/

39. Ministry of Foreign Affairs Turkey website. http://www.mfa.gov.tr/site_media/html/zurih-protokolleri-en.pdf

40. Armenian Revolutionary Federation,"ARF Issues Announcement on Armenia-Turkey Protocols," 1 September 2009. http://www.arfd.info/2009/09/01/arf-d-issues-announcement-on-armenia-turkey-protocols/

41. Ministry of Foreign Affairs Republic of Armenia website. http://mfa.am/en/country-by-country/tr/

42. Houry Mayissian, "Democracy, Sovereignty and Armenia's Eurasian path," *Armenian Weekly*, 12 September 2013. http://

armenianweekly.com/2013/09/12/democracy-sovereignty-and-armenias-eurasian-path/

43. Milda Seputyte, "Oil riches help Azerbaijan outgun Armenia in military spending," Bloomberg, 6 April 2016. http://www.bloomberg.com/news/articles/2016-04-06/oil-riches-help-azerbaijan-outgun-armenia-in-military-spending

44. Richard Giragosian, "Armenia and the Eurasian Economic Union: The view from Yerevan," European Council on Foreign Relations, 2014. http://www.ecfr.eu/article/commentary_armenia_and_the_eurasian_economic_union_the_view_from_yerevan387

45. Ibid.

46. "Russia will continue to supply arms to Azerbaijan," *The Armenian Weekly*, 8 April 2016. http://armenianweekly.com/2016/04/08/russia-azerbaijan/

47. Paul Goble, "Moscow bypassing Armenia to reach Azerbaijan, Iran and India," Eurasia Daily Monitor Volume 13 Issue 130, 19 July 2016. http://www.jamestown.org/single/?tx_ttnews%5Btt_news%5D=45647&no_cache=1#.V7BtFk195D-

48. Grigor Atanesian, "Armenia Revolts: Forget Social Protest, This Time it's Serious," *The Moscow Times*, 27 July 2016. https://themoscowtimes.com/articles/armenia-revolts-forget-social-protest-people-demand-regime-change-54745

49. Gayane Abrahamyan," Armenia: Looking to Receive an Economic Boost from Iran", Eurasianet.org, 10 February 2016. http://www.eurasianet.org/node/77266

50. Emil Sanamyan, "China in the Caucasus," *The Diplomat*, 6 February 2016. http://thediplomat.com/2016/02/china-in-the-caucasus/

51. Simon Saradzhyan, "Armenia, China – Case for a Special Partnership," Noravank Foundation, 2 April 2012. http://noravank.am/eng/articles/detail.php?ELEMENT_ID=6385

52. "Armenia," The Observatory of Economic Complexity. http://atlas.media.mit.edu/en/profile/country/arm/

53. Raffi Bedrosyan, "The Real Turkish heroes of 1915," *The Armenian Weekly*, 29 July 2013. http://armenianweekly.com/2013/07/29/the-real-turkish-heroes-of-1915/

54. Richard Kloian, The Armenian Genocide: News Accounts from the American Press, 1915-1922, 1988.

55. Ashford, Karen The Globe's representation of the Armenian Genocide and Canada's acknowledgement, 2012

56. The Near East Foundation (NEF), formerly the American Committee for Armenian and Syrian Relief (ACASR), then the American Committee for Relief in the Near East (ACRNE), and later Near East Relief (NER).

57. Vicken Babkenian& Peter Stanley, *Armenia, Australia and the Great War*, NewSouth, 2016.

58. Peter Balakian, *The Burning Tigris*, HarperCollins, 2004.

59. Aram Adjemian, *The Call from Armenia: Canada's Response to the Armenian Genocide*, Corridor books, 2015.

60. Jonathan McClory, *The Soft Power 30 World Rankings*, 14 August 2015.

61. Soft Power Survey 2014/15, Monocle, 2015.

Chapter Three: Culture

62. *Elcano Global Presence Report 2015*, Real Instituto Elcano, 2015.

63. United Nations Population Fund, Combatting Gender-Based Violence in the South Caucasus Project, "Nationwide Survey On Domestic Violence Against Women In Armenia 2008-2009."

64. Nils MuizNieks, Commissioner for Human Rights of the Council of Europe, "Report Following his Visit to Armenia from 5 to 9 October 2014," Council of Europe, 10 March 2015.

65. World Economic Forum, *The Global Gender Gap Report 2013*.

66. Criminal Procedure Code of the Republic of Armenia, 1998.

67. UN Committee on the Elimination of Discrimination against Women, "Concluding observations of the Committee on the Elimination of Discrimination against Women: Armenia," 2 February, 2009. http://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/countries.aspx?CountryCode=ARM&Lang=EN

68. "Officials Reject Proposed Bill on Domestic Violence," StopVAW.org, May 23, 2013. http://www.stopvaw.org/officials_reject_proposed_bill_on_domestic_violence.html

69. Asian Development Bank, "Armenia: Country Gender Assessment," 2015.

70. Peterson Institute for International Economics, "Is Gender Diversity Profitable? Evidence from a Global Survey," February 2016. https://piie.com/publications/wp/wp16-3.pdf

71. United Nations, *World Happiness Report 2016*, Volume One. http://web.archive.org/web/20160317224417/http:/worldhappiness.report/ed/2016/

72. The first *World Happiness Report* was published in April 2012, in support of the High Level Meeting at the United Nations on happiness and well-being. Increasingly, happiness is considered to be the proper measure of social progress and the goal of public policy. The 2016 report is the fourth *World Happiness Report*.

73. Harvard Business Review, "The Happiness Dividend," 23 June 2011. https://hbr.org/2011/06/the-happiness-dividend/

74. John Kotter, *A Sense of Urgency*, Harvard Business School Press, 2008.

75. Anoosh Chakelian, "A checkered history: Why Armenia dominates the chess world," *New Statesman*, 21 May 2014. http://www.newstatesman.com/world-affairs/2014/05/checkered-history-why-armenia-dominates-chess-world

Chapter Four: Improved Governance and Combating Corruption

76. A semi-presidential system is one which a President exists along with a Prime Minister and a Cabinet, with the latter two being responsible to the legislature of the state. It differs from a parliamentary republic in that it has a popularly elected head of state, who is more than a purely ceremonial figurehead.

77. Transparency International, "Corruption by country: Armenia," 2016. https://www.transparency.org/country/#ARM

78. Marianna Grigoryan, "Armenia's anti-corruption council accused of lavish spending," *The Guardian*, 12 August 2015. http://www.theguardian.com/world/2015/aug/12/armenia-corruption-lavish-spending

79. Civilnet.am is a project of the Civilitas Foundation, a non-profit organization which seeks to strengthen civil society by engaging in civil society development, economic development, education, media and other public activities.

80. Wikileaks, U.S. cable," Armenian National Assembly Speaker weighs in on foreign policy and domestic reform," 22 December 2009. https://www.wikileaks.org/plusd/cables/09YEREVAN885_a.html

81. Wikileaks, U.S. cable, "New Speaker to Ambassador: Government innocent, Opposition guilty," 29 October 2008. https://wikileaks.org/plusd/cables/08YEREVAN864_a.html

82. Armine Sahakyan, "Panama Papers's *[sic]* Armenia Disclosures Could Help the Country Address Graft," *The World Post*, 13 March 2016. http://www.huffingtonpost.com/armine-sahakyan/panama-papers-armenia-dis_b_9684784.html

83. "Armenian Defense Ministry Officials Arrested," *Asbarez*, 31 May 2016. http://asbarez.com/151089/armenian-defense-ministry-officials-arrested/

84. Gayane Abrahamyan, "Tough job: Sargsyan government takes up challenge of corruption," *AGBU magazine*, 1 November 2009. http://agbu.org/news-item/tough-job-sargsyan-government-takes-up-challenge-of-corruption/

85. Hrant Galstyan, "Gifts as Bribes? Financial Disclosures of Top Armenian Officials Fail to List Sources," *Hetq*, 29 July 2016. http://hetq.am/eng/news/69066/gifts-as-bribes-financial-disclosures-of-top-armenian-officials-fail-to-list-sources.html

86. Vahe Harutyunyan, "Armenian Courts Accused of Systemic Corruption," Institute for War and Peace reporting, 24 January 2014. https://iwpr.net/global-voices/armenian-courts-accused-systemic-corruption

87. Schwab, *The Global Innovation Report*.

88. Policy Forum Armenia, "Corruption in Armenia," October 2013. https://www.pf-armenia.org/sites/default/files/documents/files/PFA_Corruption_Report.pdf

89. USAID, "The 2014 CSO Sustainability Index for Central and Eastern Europe and Eurasia," Legal Resources Center, 2014.

90. Reporters Without Borders, "2016 World Press Freedom Index," May 2016.

91. Amnesty International, "Armenia: Authorities Must Investigate Election-Related Human Rights Violations," 28 February 2013.

92. OSCE, "Armenian Election Generally Well-Administered with Fundamental Freedoms Respected, But Some Key Concerns Remain, International Election Observers Say," 19 February 2013. http://www.osce.org/odihr/elections/99676

93. Ivan Ardhaldjian, "Yes, but No: How the Rights of 677 Citizens Were Trampled," *The Armenian Weekly*, 8 December 2015. http://armenianweekly.com/2015/12/08/yes-but-no/

94. "Opposition parties and civic groups issue list of demands regarding electoral code," *Hetq*, 22 March 2016, http://hetq.am/eng/news/

66623/opposition-parties-and-civic-groups-issue-list-of-demands-regarding-electoral-code.html

95. Tatevik Lazarian, "Armenian Electoral Deal Approved by Parliament," *Azatyutyn*, 29 June 2016. http://www.azatutyun.am/a/27828413.html

96. Hrayr Maroukhian Foundation, "Monopolies in Armenia," February 2013. http://www.maroukhianfoundation.org/english/wp-content/uploads/2013/02/Monopolies-eng-web.pdf

97. Emil Danielyan,"Armenia Warned to End Oligopoly," *Azatutyun*, 19 October 2009. http://www.armenialiberty.org/content/article/1855547.html

98. Schwab, *The Global Innovation Report*.

99. Atom Margaryan, "National Innovation System in the Context of Development Challenges," VEM, July-September 2009.

100. Hrayr Maroukhian Foundation, "Monopolies in Armenia."

101. Policy Forum Armenia, "Monopoly Profits in the Wheat Flour Market in Armenia," 14 June 2016.

102. Hrayr Maroukhian Foundation, "Monopolies in Armenia."

103. "Armenian Minister for Economy: Constitution is main tool for fighting corruption in Armenia," *Armenpress*, 12 May 2016. https://armenpress.am/eng/news/847037/armenian-minister-of-economy-constitution-is-main-tool-for-fighting-corruption-in-armenia.html

Chapter Five: Stimulating Regional Growth

104. Government of the Republic of Armenia website. http://www.gov.am/en/councils/

105. Zvi Lerman and Astghik Mirzakhanian, *Private Agriculture in Armenia*, Lexington Books, 2001.

106. *Statistical Yearbook 2007*, Armenia National Statistical Service, Yerevan.

107. The World Bank's Databank. http://databank.worldbank.org/data/reports.aspx?source=2&country=ARM&series=&period=

108. The Heritage Foundation, "2016 Index of Economic Freedom," 2016.

109. Global SPC, "Invest in Armenia," 2016. http://investinarmenia.am/en/foreign-direct-investment-and-free-economic-zones?display=2

Chapter Six: The Diaspora

110. U.S. Department of State, "U.S. Relations with Armenia: Fact Sheet," 20 March 2015. http://www.state.gov/r/pa/ei/bgn/5275.htm
111. Harut Sassounian "All three branches of U.S. Government recognize Armenian Genocide," *The Armenian Weekly*, 5 June 2012. http://armenianweekly.com/2012/06/05/sassounian-all-3-branches-of-us-government-recognize-armenian-genocide/
112. John Evans, *Truth Held Hostage: America and the Armenian Genocide – What then? What now?*, Gomidas Institute, 2016.
113. Samantha Power, *A Problem from Hell: America and the Age of Genocide*, Perennial Books, 2003.
114. Feithiye Cetin, *My Grandmother: A Memoir*, Verso, 2012.
115. Ahmet Abakay*, The Last Words of Hosana*, 2013.
116. "2.5 million Muslim live in Turkey," *Horizon Weekly*, 28 October 2014. http://www.horizonweekly.ca/news/details/51752
117. Rupen Jambazian, "Diyarbakir, Dersim to Participate in Pan-Armenian Games," *The Armenian Weekly*, 29 July 2015. http://armenianweekly.com/2015/07/29/diyarbakir-dersim-to-participate-in-pan-armenian-games/
118. "Turkey Offers Condolences to Armenia Over WWI Killings," *BBC News*, 23 April 2014. http://www.bbc.com/news/world-europe-27131543
119. Gayane Abrahamyan, "Lost Opportunity? Lincy Closure Seen by Some as Indictment," *Armenianow.com*, 17 February 2011, https://www.armenianow.com/social/27738/
lincy_foundation_shutdown_armenia
120. World Trade Organsiation website, "What We Stand for." https://www.wto.org/english/thewto_e/whatis_e/what_stand_for_e.htm
121. Armenian Genocide Reparations Study Group, "Reparations for the Armenian Genocide," March 2015.

Chapter Seven: Karabagh – from Conflict Management to Resolution

122. Milda Seputyte "Oil Riches Help Azerbaijan Outgun Armenia in Military Spending, Bloomberg, 6 April 2016. http://www.bloomberg.com/news/articles/2016-04-06/oil-riches-help-azerbaijan-outgun-armenia-in-military-spending
123. Edward Djerejian,"Chaos in Caucasus is Not In Putin's Interest," Mediamax.am, 4 May 2016. http://www.mediamax.am/en/news/interviews/18130/

INDEX

A
Abakay, Ahmet 105
Abgar (Abgaryan), Dr. Diana 51
Abkhazia 36, 37, 103, 104
Abrahamyan, Ara 103
Abrahamyan, Prime Minister Hovik 62, 63
Adjemian, Aram 46
Aghdam 114
Ajaria 36
Akcam, Taner 25
Alevis 105
Aliyev, President Ilham 116
Altounyan, Roger 4
American University of Armenia (AUA) 3
Ani 29, 30, 92
Antalya 28
Armenian Democratic Liberal Party 96
Armenian Development Agency (ADA) 83
Armenian General Benevolent Union (AGBU) 96, 97
Armenian National Committee (ANC) 97, 98, 100, 133
Armenian National Philharmonic Orchestra (ANPO) 58
Armenian Relief Society 96
Armenian Revolutionary Federation (ARF) 24, 25, 71, 96, 97, 98
Armtab Technologies Company 4
Armtech 2
Assyrians 43, 47
Aurora Prize 43
Australia 42, 46, 48, 57, 93, 98
Azerbaijan 4, 18, 23, 32, 34, 35, 36, 37, 38, 39, 40, 41, 58, 68, 78, 100, 101, 103, 110, 113, 114, 115, 116, 117
B
Babkenian, Vicken 45
Baku-Tbilisi-Ceyhan oil pipeline 37
Baku-Tbilisi-Kars railroad 37
Balakian, Peter 46
Barankitse, Marguerite 43
Bedrosyan, Raffi 44
Belarus 33, 34
Bolsheviks 113
C
Cabrayil 114
Calouste Gulbenkian Foundation 96
Canada 5, 42, 43, 48, 110
Center for High-Tech Cybersecurity 18
Çetin, Fethiye 104
Civilitas Foundation 69

Clooney, George and Amal 43, 49
Commonwealth of Independent States (CIS) 3, 8, 16, 32, 78
Crimea 58, 103
D
Damadian, Raymond Vahan 4
Davutoğlu, Ahmet 24
Dilijan 81, 82
Dink, Hrant 25, 106
Diyarbakir 105
Diyarbekir 29
Djerejian, Edward 118
Doğubayazıt 28
E
East Timor (Timor-Leste) 117
Electric Networks of Armenia (ENA) 67, 68
Electric Yerevan protest (2015) 67, 84
Enterprise Incubator Foundation 3
Erdoğan, President Recep Tayyip 24, 31, 106
Esayan, Markar 107
Estonia 12, 13, 18, 21, 71, 118
Etchmiadzin 41
Eurasian Economic Union (EEU) 16, 32, 33, 34, 35, 37, 38, 39, 41
Eurnekian, Eduardo 108
European Charter for Regional or Minority Languages (ECRML) 37
European Neighborhood Policy (ENP) 33
European Union (EU) 13, 33, 35, 48, 52
Evans, John 102
F
Faik Ali (Ozansoy) (Kutahya) 44
Ferit Bey (Basra) 44
Foundation for Armenian Science and Technology (FAST) 11
France 24, 48, 83, 84, 95, 110, 114
Freedom Support Act (Section 907) 100
Fuzuli 114
G
Gasparyan, Djivan 57
Gazprom 38
Gebeshian, Houry 96
Geghard monastery 80
Georgia 4, 18, 27, 28, 32, 36, 37, 38, 43, 68, 81, 85, 95, 96, 101, 103, 113
Gevorgyan, Ara 57
Global Forum against the Crime of Genocide 46, 47
Granatus Ventures 11
Greeks 43, 47
Gül, President Abdullah 23, 30, 102
Gyumri 2, 8, 28, 32, 68, 81, 82
Gyumri Information Technologies Center (GITC) 82
H
Haghpat monastery 80
Halidzor 80
Hamazkaine Armenian Educational and Cultural Society 96
Haroutyunyan, Grigor and Mikhail 63
Hayastan All-Armenian Fund 99

Hemshins 104
Hetq (news organization) 64, 69
HIVE 2
Holy Cross (Aghtamar, Van) 29, 91
Holy Transfiguration Cathedral and monastery, Moscow 104
Homenetmen 96
Hovannisian, Raffi 70
Hovhannisyan, Arpineh 65
Hrayr Maroukhian Foundation 73
Hrazdan 8, 36
Hye Tech 2
I
IBM 3
Impact Hub 2
Indonesia 117
Initiatives for the Development of Armenia (IDeA) 11
Iran 4, 32, 34, 35, 36, 38, 39, 41, 43, 80, 81, 85, 95, 98, 100
Islamic State of Iraq and Syria (ISIS) 47
Israel 4, 5, 6, 8, 18, 19, 57, 95, 99, 118
Istanbul 27, 28
J
Jamala (Susana Alimivna Jamaladinova) 58
Japan 5, 48, 51, 58
Jerusalem 38
Jewish communities and organization 98, 99
K
Kapan 8
Kapikian, Albert 4
Karapetyan, Samvel 67
Kardashian, Kim 48, 49
Kars-Gyumri railway 28
Kasparov, Garry 59
Kazakhstan 33
Kazanjian, Varazdat 4
Kelbejer 114
Kerkorian, Kirk 108
Kessab (Syria) 48
Khachaturian, Aram 38, 57
Knaian, Ara 4
Kosovo 117
Krasnodar 102, 104
Krikorian, Raffi 10
Kurds 29, 44, 104, 106
L
Lachin 114
Lukashenko, President Alexander 33
M
Malatya 44
Mar Petyun Chaldean Catholic Church (Diyarbakir) 29
Mashtots, Mesrop 36
Mayissian, Houry 33
Mehmet Cemal Bey (Yozgat) 44
Microsoft Corporation 3
Mikoyan, Artem Ivanovich 4
Milosevic, President Slobodan 117
Minsk Group 116
Mkhitaryan, Henrikh 31
Moscow 102
Mount Ararat 28, 30, 86
Movsesian, Sona 49
Mukuchyan, Iveta 57
Muslim Armenians 29, 105
Mustafa Bey (Azizoglu) (Malatya) 44
N
Nakhichevan 38, 39, 115

Nalbandian, Edward 24
Nalbandian, Zareh 10
National Academy of Sciences (NAS) 7
Nazarbayev, President Nursultan 33
Near East Relief 45, 46
Netherlands 48
Noravank (scientific-educational foundation) 8
O
O'Brien, Conan 49
Obama, President Barack 102
of Volunteer Land Defenders 96
Ohanian, Alexis 10
Okonjo-Iweala, Ngozi 72
Organization for Security and Cooperation in Europe (OSCE) 18
Organization of the Black Sea Economic Cooperation (BSEC) 27
OSCE Minsk Group 70, 114, 116, 117
Özuzun, Selina 107
P
Pamuk, Orhan 25, 106
Paylan, Garabed (Garo) 107
Pennington, Joseph 63
People's Democratic Party (HDP) 25, 107
Perincek, Dogu 49
Permyakov, Valery 68
Petrosian, Tigran 59
Petrossian, Tigran 38
Poghossian, Michel 4
Poghosyan, Mihran 63
Power, Samantha 102
Protocols, Turkey-Armenia (Zürich) 25, 26
Putin, President Vladimir 33, 70
Q
Qubadli 114
R
Reporters Without Borders 68, 69
Reshit Pasha (Kastamonu) 44
RIEC (Singapore) 8
Rize 104
Russia 33
S
Sabit Bey (Beshiri) 44
Safarian, Katherine 10
Saint Petersburg 102
Samtskhe-Javakheti (Javakhk) 36, 37, 101
Sanahin monastery 80
Sarafian, Asatour 4
Sargsyan, President Serzh 24, 31, 32, 33, 61, 64, 70
Sasna Dzrer 61
Sayat-Nova 38
Sefilyan, Jirair 61
Serbia 117
Setrakian, Lara 10
Shushi 90
Simjian, Luther George 4
Simonian, Sylva and Sam 2
Singapore 6, 7, 8, 118
Social Democrat Hunchakian Party (SDHP) 96, 97
South Ossetia 18, 36, 37
South Sudan 117, 118
Stanley, Peter 45
Startup Armenia 2
Stepanakert 82
Stepanian, Stephan 4

Sudan 117
Surp Giragos Armenian Church (Diyarbakir) 29
Surp Sarkis Chaldean Catholic Church (Diyarbakir) 29
Sweden 48, 117
Switzerland 48, 50, 81
T
Tahsin Bey (Erzurum) 44
Tankian, Serj 57
Tatev monastery 80, 81, 89
Tbilisi 37, 38, 96, 113
Tevanian, Avie 9
Torossian, Vahé 10
Transactional eGovernance Development in Armenia (project) 13
Transparency International Anti-Corruption Center 62, 63, 64, 71
Tsaghkadzor 80
Tumo Center for Creative Technologies 1, 2, 21, 82, 83
Turkey 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 36, 37, 38, 40, 41, 43, 44, 46, 58, 85, 91, 101, 104, 106, 107, 110, 111, 116, 117, 118
U
Ukraine 103
United Nations 18, 51, 62, 101, 102, 117
United States Agency for International Development (USAID) 3, 62
United States of America 21, 24, 26, 28, 35, 39, 40, 41, 43, 45, 48, 55, 58, 63, 69, 84, 95, 98, 100, 101, 102, 108, 109, 111, 114, 118
V
Vanadzor 8
Vardanyan, Ruben 43, 80
Viasphere (Yerevan) 2
Vilnius Summit 33
Virgin Mary Syriac Orthodox Church (Diyarbakir)) 29
Vladivostok 102
W
West, Kayne 49
Women against Violence Europe (WAVE) 52
World Armenian Congress 96
World Bank 13, 15, 72, 78, 80, 83, 101
World Congress on Information Technology (WCIT) 3
World Information Technology and Services Alliance (WITSA) 3
Y
Yazidis 47
Yerevan Computer Research and Development Institute (YCRDI) 18
Yerevan State University 3
Yovanovitch, Marie 63
Z
Zengilan 114
Zvartnots International Airport 80, 84, 95, 108

About the Author

Sassoon Grigorian is a leading public policy professional in the technology space, notably commerce, payments and software sectors, and advised global businesses that have disrupted existing business models.

With more than twenty years of public policy experience, Sassoon has worked for four Fortune 500 companies; one of the world's largest public affairs consultancies; and served as a political adviser in Government.

Sassoon Grigorian has served on numerous industry boards and associations, and has previously served on the Armenian National Committee of Australia board, and briefly as an intern in Armenia's Ministry of Foreign Affairs.

Sassoon holds a Bachelor of Arts (Politics) from Macquarie University and Masters in International Relations from the University of NSW.

Gomidas Institute
42 Blythe Rd.
London W14 0HA
www.gomidas.org