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ARMENIA 2030: TRANSFORMING THE DEVELOPMENT LANDSCAPE

SKOLKOVO Institute for Emerging Market Studies (IEMS)
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Content

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DEAR FRIENDS,

I am happy to present this report by the SKOLKOVO Institute for Emerging Market Studies on the economic and social development of Armenia.

SKOLKOVO Business School is committed to studying business practices in the Eurasian context, and to increasing the awareness of the international business community about ways of doing business in our part of the world. This report goes beyond pure business and explores the evolving domain of international development in a specifically Armenian context.

The importance of international development initiatives for Armenia cannot be overstated. They have made a huge impact over the last 15-20 years. We are convinced that, in the Sustainable Development Goals era, such development not only has the potential to make a significant social impact, but also offers unprecedented market opportunities for a wide range of actors, including the private sector. We are very much inspired by the possibilities which business participation in the development market opens up for Armenia. We also believe that Armenia is a perfect showcase for the practical operation of private development models, and we hope their experience will inspire positive changes in other emerging-market economies.

Like many of us here in SKOLKOVO Business School, I have many Armenian friends. I would like to acknowledge that we all feel very connected to Armenia. This report includes a long list of contributors, many of whom are high-profile international and Armenian development practitioners with a deep understanding of the country's development landscape. I would like to thank them all for their collaboration with SKOLKOVO Business School. I hope that the insights which we present in this report will be of interest to government, policymakers, private investors and the international financial institutions who work both for the benefit of Armenia and for the prosperity of its people.

Andrei SHARONOV,

President,
Moscow School of Management SKOLKOVO

DEAR FRIENDS,

I am glad to present you this report on the transformation of the development landscape of Armenia. It has been prepared by SKOLKOVO HKUST Institute for Emerging Market Studies.

I feel very special about this work for three reasons. First, the report discusses one of the most significant transformations of the business landscape in recent years. The introduction of UN Sustainable Development Goals opens up tremendous opportunities for conventional development financing institutions as well as a whole new universe of private development actors and impact investors. This change will bring hope to many nations across the globe that are still facing social and environmental challenges.

Secondly, Armenia is, in many ways, a regional showcase which illustrates how international development institutions and private impact investors could work together with government and local communities by addressing social, economic and environmental problems. Being relatively small, landlocked and with a complex geopolitical context, Armenia demonstrates how international development initiatives create substantial economic opportunities not only in traditional sectors of the national economy, such as agriculture, tourism, and hospitality, but also in digital and finance.

Finally, Armenia is a truly global nation. Armenians are part of one of the largest and most resourceful diasporas in the world, with the majority of ethnic Armenians living outside their motherland. This nation has produced a record number of globally-recognized ambassadors in culture, business, and science who act as the key contributors to the development of Armenia. I strongly believe that the entrepreneurial spirit of the nation and its openness to the world will being Armenia success and sustainable prosperity.

Armenia has been a home for EY since 1999. During all these years we have been assisting local and international businesses and the Armenian public sector by building a better environment and stronger communities. The many Armenians working in EY all over the world are essential parts of our family, and make great contributors to our global service. EY is a proud supporter of the Aurora Prize for Awakening Humanity - a global Armenian initiative that supports individuals across the globe who made an exceptional impact in preserving human life and advancing humanity.

EY is also a founding strategic partner of SKOLKOVO Institute for Emerging Market Studies (IEMS) as well as similar IEMS programs at Hong Kong University of Science and Technology (HKUST) and the India School of Business (ISB). We are very happy to support research endeavors as this one.

I hope you will enjoy reading this report.

Jay NIBBE,
Global Vice-Chair, Tax, EY

Executive Summary

By 2015 the global development landscape had evolved from the limited activities of the United Nations and the World Bank Group to a booming and diverse arena where multiple actors collaborate and work towards the achievement of a universal development vision. SKOLKOVO Institute for Emerging Market Studies (IEMS) has estimated that the global 'development market' demarcated first by the Millennium Development Goals (MDG) and then by the Sustainable Development Goals (SDG) grew at a compound annual rate of at least 10.2% between 2000 and 2015.

Armenia features on the global 'development market' map as an interesting phenomenon due to the high concentration of diverse development actors, and also to its unique factor endowment. With regard to the market evolution, Armenia made significant economic progress between 2000 and 2015. After a decade of economic stagnation during the 1990s, Armenia recorded the economic growth rates above many of its Commonwealth of Independent States (CIS) peers. The country's Gross Domestic Product (GDP) per capita almost quadrupled, growing from US$2,313 in 2000 to US$8,419 in 2015[1]. More than a decade of uninterrupted economic growth before 2008 supported job creation and income generation. A certain degree of economic 'trickle-down effect' from the GDP growth boosted household income in Armenia, as indicated by the increase in the monthly nominal wages and household final consumption, as well as by expenditure patterns.

Social change measured by the reduction in poverty and social marginalization cannot be captured by GDP metrics alone. Although during the 2000s the national agenda primarily prioritized levers for economic growth, such as export promotion and a Foreign Direct Investment (FDI)-enabling business environment, the country as a whole made considerable progress in some of the 'beyond-GDP' metrics between 2000 and 2015, primarily thanks to the implementation of national targets within the MDGs framework.

Armenia's economic and social progress before 2015 can be credited partially to the capacity-building efforts of multiple international donors, including the diaspora organizations. In the mid-1990s when the country was going through a transitional stage, the Official Development Assistance flows exceeded 18%[2] of GDP, as at that time the country's internal resources were extremely strained. Within the South Caucasus region Armenia has been the largest recipient of remittances, with a cumulative remittances' volume of US$20 billion received between 2000 and 2015. This figure can be compared to the cumulative volume of cooperation grants and 164 standalone loans extended by international financial institutions to Armenian borrowers during the same period, which amounted to the total of US$4.8 billion.

2015 marked the transition from the MDG to the SDG agenda. The magnitude of the current social problems, especially regional disparities, critical poverty levels and certain fragilities of the Armenian economy, gives momentum to the Development 2.0 movement in Armenia. Further strengthening of the long-term sustainability and resilience of economic and societal progress achieved by 2015 is still needed. While development assistance and external aid have successfully catalyzed Armenia's economic growth during the MDG era, today the self-reinforcing mechanism of development inflows is not feasible, and there is a need for a comprehensive government-led development policy in Armenia.

A revised far-sighted development-oriented vector has already been conceptualized in certain business-led action-oriented initiatives in Armenia. In 2002 a group of prominent diasporan business leaders from the U.S.A., Europe and Russia launched a scenario-building initiative – Armenia 2020. This private sector-led exercise was implemented with analytical support from the consulting firm, McKinsey & Company. The objective was to generate cluster-based alternative development models for Armenia by 2020. The results of that exercise have been instrumental for the emergence of the Initiatives for Development of Armenia (IDeA) Foundation and the follow-up Armenia 2030 initiative. They also served as a navigator for business action in Armenia during the entire MDG era. The McKinsey Global Growth Model's assumptions suggested that a growth rate of 5% could be achievable and sustainable for the Armenian economy over a period of 15 years, given public and private investment in the six identified priority sectors with the highest economic growth potential, namely: IT, agroprocessing, tourism, healthcare, finance, and mining.

Today it is time for Armenian policy makers to seize the opportunities which development might offer for the country's far-sighted prosperity vector in the 2015-2030 horizon. This process has to be strategized, measured and managed accordingly, as the creation of enabling conditions for social capital investors will attract greater funding inflows into Armenia. In previous decades the country has successfully accumulated a wealth of technical expertise in implementing different types of development interventions, as manifested by six models (outlined in the interview-based case studies). These are (1) One-Village One-Product (OVOP), (2) 'Pay-It-Forward' ('Passing on the Gift/POG'), (3) 'Housing Revolving Loan Fund for Development', (4) Technology-for-Development, (5) Integrated Area-Based Development, and (6) Private Agency for Social and Economic Development (PASED)*.

Any national development-oriented strategy is likely to be shaped not only by country-specific factors, but also by external ones. Research into the global and Armenian development context has resulted in the conceptualization of the '5 + 5' framework which consists of five global game-changers and five national basic principles.

This research has produced some evidence for a compelling and quantified business case for mobilization of private capital for development. Earlier this year, the Business and Sustainable Development Commission estimated that four sectors alone, namely food and agriculture, cities, energy and resources, and health and well-being, offer approximately US$12 trillion of new market opportunities to investors[3]. A comprehensive analysis of the global landscape has identified five key game-changers which are likely to transform the 'modus operandi' of all development actors during the next fifteen-year time period. These are:

1. Emergence of new segments, new actors and new instruments within the development market;
2. Transition from charity to an impact-oriented mindset;
3. Unprecedented opportunities for the private sector;
4. Blended finance;
5. 'Innovation-for-development'.

* A nation-building development model based on humanity and prosperity pillars applied by the IDeA Foundation.

Analysis of the country-specific economic and social strengths and weaknesses, supported by the findings from the global game-changers and case studies' insights, has generated five basic principles for development-oriented strategic planning, some of which are unique and specific to the Armenian development context:

1. Reversing migration flows;
2. Engaging diaspora;
3. Seizing 'innovation-for-development' opportunities;
4. Seizing 'development-as-a-business' opportunities;
5. Adopting new tripartite social contract (mandate-for-development).

Armenia's unique development-oriented trajectory, as enabled by state-level policies and strategies, would allow for the incubation of the most innovative technology-driven social solutions which can be later transferred to other comparable countries. In that case, development would become not only a standalone 'market' in Armenia, but also a viable export item.

Introduction

Over the past two decades the field of social sciences has been enriched with newly-emerging disciplines and terms such as 'development studies' and 'development economics', 'social capitalism' and 'sustainable development', 'venture philanthropy' and 'impact investment'. All these terms are positioned within a large space defined as 'development' which IEMS defines as **"a holistic and multi-disciplinary concept concerning sustainable growth and processes leading to enhancements in human development, quality of life and subjective well-being"**.

Many schools of thought refer to 'development' as the basis for the country classification into developed, developing and least developed groups. As a branch of social sciences, the modern definition of development studies is the multidisciplinary one, covering a plethora of issues which range from migration studies to public health, and from community development to rural agriculture. Among different development theories, some of which overlap with economic development models, studying how desirable societal changes can be best achieved, some are more prevalent than others.

For example, according to the **resource endowment theory**, development is dependent on the natural and human resources the country has available for exploitation. Introduced by the International Labour Organization in 1976, the **basic needs model** focuses more on the absolute poverty elimination rather than on the investment in economically-productive activities. Under the basic needs theory, the concept of a poverty line as the "absolute minimum of resources necessary for long-term physical well-being" has been proposed. Pioneered by renowned economists, Amartya Sen and Mahbub ul Haq, with the launch of the Human Development Report in 1990, capabilities-focused **human development theory** studies "how social capital and instructional capital can be deployed to optimize the overall value of human capital in an economy"[4]. The **'cycle of poverty'** theory has been applied in the countries' development context, as certain developing countries can be seen stuck in a 'poverty trap' which is defined as "a vicious self-reinforcing mechanism causing intergenerational poverty to persist". The phenomenon of a 'poverty trap' can be observed in Sub-Saharan Africa and other regions of the world in which development is impeded by multiple barriers, such as disease ecology, malnourishment, violent conflicts and insecurity, lack of public health care and a poor education system, poor sanitation and corrupt governments. Irrespective of the fact that 'development' is a term commonly-used in our daily life, demarcating the boundaries of this 'development space' is a challenge for reasons related to factors like intentionality and effects.

First of all, the development perspective directly penetrates virtually all regular services provided by the public sector, such as sanitation, utilities, education, and health. Secondly, development-oriented effects are also generated by many of the commercial activities in some of the traditional economic sectors, such as agriculture, forestry, housing and power, although in most cases such effects impacting immediate environment and communities are unintentional. In order to pinpoint the research focus, IEMS has introduced the notion of **'development intervention'** as a unit of development activity, which can be conceptualized as follows:

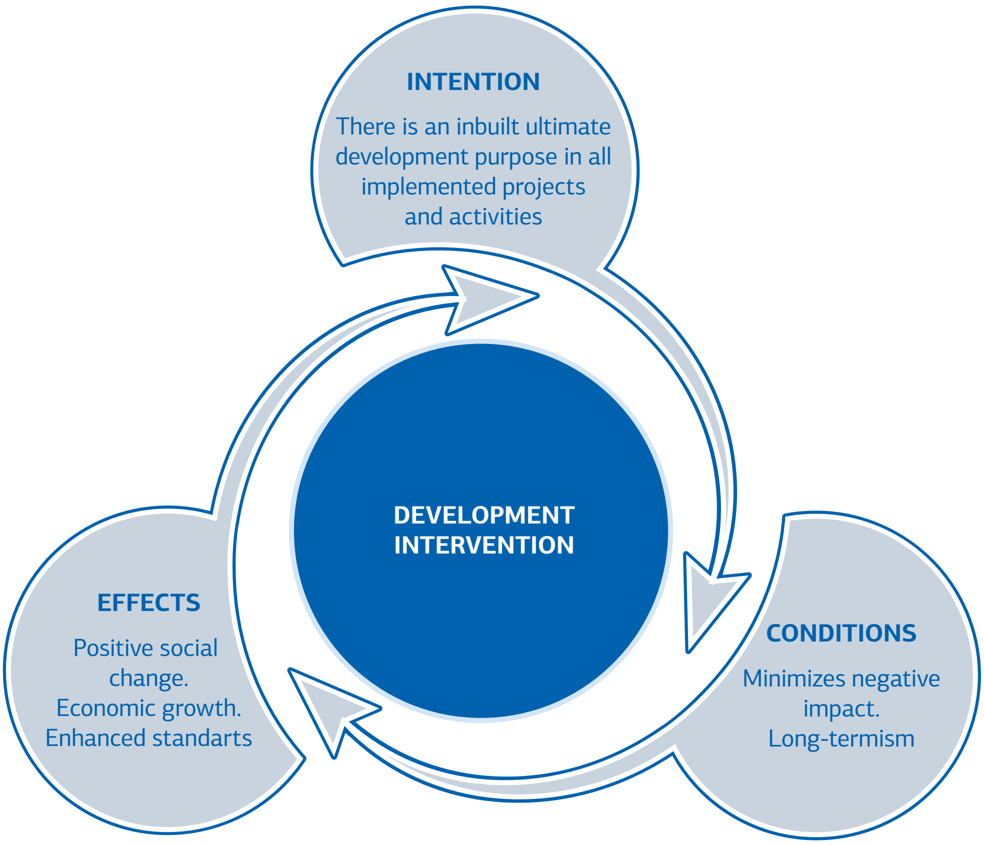
In order to demarcate the boundaries of the research space even further, IEMS has decided to utilize the set of 17 Sustainable Development Goals* which replaced the Millennium Development Goals as the global shared vision for sustainable development between 2015 and 2030. SDGs became the so-called roadmap towards a better and more prosperous world for all actors in the development space, as they can assess their performance against the most

* Officially known as Transforming Our World: the 2030 Agenda for Sustainable Development

relevant and 'material' goals, either at country or institution level. Since their adoption in 2015, SDGs have been repeatedly labelled as a 'vision', a 'navigator', a 'compass', and a 'roadmap', however the use of the term 'market' in relation to the development space represents a novel approach.

Because of the evident growth rates and categories outlined in Chapter 1 of this publication, IEMS has decided to treat the entire development landscape as a so-called 'market' which has supply and demand sides, volumes and a governance structure. There are two approaches to quantifying the supply and demand sides of the development market. The first one entails having the providers of goods and services on one side, and businesses and individuals in the capacity of consumers of these goods and services on another. The second approach implies capital flows from providers of development finance to implementers of development interventions. For the purpose of this research, IEMS will adopt the second approach. Publicly-reported sizes of financial transactions and project budgets will

Figure 1. Components of a Development Intervention



Source: IEMS

be used as valid proxies for quantifying the supply and demand levels. The concept of **'development as a market'** can be encountered at two levels, global and national. The development landscape across geographies tends to differ in terms of distinct trends, types of actors and types of development interventions.

The research project ARMENIA 2030: TRANSFORMING THE DEVELOPMENT LANDSCAPE has been launched with the objective of contributing to the existing body of knowledge on the South Caucasus region, and Armenia in particular. IEMS is convinced that the comprehensive analysis of the Armenian country specifics from the perspective of implemented development interventions would contribute to the entire science of regional development studies. Generally speaking, there is just a handful of publications covering development trends which have a geographical focus on the CIS region. Due to its transitional status, this region has not been prioritized by both international donor organizations and research institutes to the same extent as other aid recipient regions, such as South-East Asia or Sub-Saharan Africa. IEMS research assesses the Armenian development market from two perspectives: a top-down country context analysis with links to the global development market, and a bottom-up approach based on interview-based case studies concerning standalone interventions implemented by different types of development actors, namely the state, intergovernmental organizations* (IGOs), non-governmental organizations (NGOs) or charities, technological start-ups and a 'hybrid' foundation. The value-added in the report stems from the all-encompassing structure of the research, which attempts to quantify and describe different segments within the Armenian development market, though without comparing or contrasting them with each other. Existing literature on the Armenian development market seems to focus on standalone segments, without including all of them into one research framework. For example, EV Consulting's report entitled "Armenia: Diaspora Assisted Growth" or Impact Hub's report entitled "Analysis of Social Enterprises and Their Ecosystem in Armenia" adopted a narrow focus on one type of development actor, either diasporan or social enterprise. This research project studies a wide spectrum of development interventions implemented in Armenia between 2000 and 2015, some of which are still in progress.

The report consists of three chapters which are structured as follows:

Chapter 1 presents five global game-changing trends which emerged around the SDG adoption time, and which are likely to determine the 'modus operandi' of all development actors during the SDG era from 2015 till 2030.

Chapter 2 summarizes and classifies the different types of development finance flows which were injected into Armenia between 2000 and 2015, and also analyses the country's economic and social progress achieved by the end of that period.

Chapter 3 presents five basic principles of the Armenian, post-2015 development agenda which IEMS is proposing to Armenian policy makers, and which are based on the findings presented in Chapters 1 and 2, plus insights from the case studies included in the appendix to the report.

The report should be useful for all development practitioners working in the South Caucasus region, including academic researchers, donor organizations, and Armenian policy makers. It is not intended to serve as a comprehensive policy paper, but rather to pin-point certain country-specific forces which perhaps should be taken into account when strategizing the Development 2.0 movement in Armenia.

* In the context of this research the terms of IGO and multilateral aid agency can be used interchangeably, with the former being used to describe the actor operating on the demand side, and the latter referring to the same actor on the supply side.

CHAPTER 1.
Development as a Market: 5 Global Game-Changers in the SDG Era

Although 'development' has never been recognized as a standalone market, and has not been quantified for that reason yet, the demarcated space can be characterized by certain attributes which suggest its existence. Statistics on actuals and estimates of expenditures incurred to achieve MDGs and later SDGs indicate the presence of a double-digit growth market, based on suggested growth rates which can be derived from expenditure figures. One year after the MDGs' adoption the United Nations estimated the costs of achieving these goals at US$61 billion[5] per annum. The World Bank's chief economist for Africa, Shantayanan, revised that cost estimate in 2002 and arrived at an estimated annual cost range of US$63-72 billion[5]. In 2005, the Millennium Project pushed that cost estimate up again to a range between US$82 billion and US$152 billion[5]. By 2015, the actual annual expenditure just from the two sources of funding, Official Development Assistance (ODA) and development finance from international financial institutions (IFI) exceeded US$250 billion[6], which surpassed even the highest cost estimates a decade earlier. Based on an analysis of this publicly-available data, IEMS has estimated that the compound annual growth rate (CAGR) of the development market during the MDG era was at least 10.2%, and that figure excludes less tangible finance flows, such as grants from private foundations or private sector lending.

The double-digit growth in the development market is caused by two interconnected factors: an increase in the magnitude of the unaddressed economic, social and environmental problems; and the market-based opportunities which the solutions to those problems present. Many private actors have been able to see opportunities, and have already tapped into that market successfully. For example, D.light for-profit social enterprise has responded to the development problem of the inaccessibility of reliable electricity supply in many developing countries and reports an annual growth rate of 60-70%[7] for the period of 2013-2016. The company estimates the total size of their global target market at 2 billion potential customers who demand affordable off-grid solar products[7]. D.light operates in the 'niche' segment entitled **'bottom of the pyramid*'** or 'BOP' which represents an annual US$5 trillion market (in purchasing power parity terms)[8], consisting of currently under-served people who can be transformed from aid beneficiaries to potential customers of tailor-made products and services. Another development segment, which emerged only in 2007 and exhibited double-digit growth between 2013 and 2015, is the impact investment industry, which has 18% CAGR in terms of assets under management[9].

In addition to designated segments, the 'development' market also features a particular governance structure which consists of multiple actors. In order to conceptualize the global development architecture, one needs to adopt the 'follow the money' approach. The sources and destinations of the development funding flows indicate a segmentation within the development market into the supply and demand sides. The capital providers operating within the 'financing for development' space represent the supply side of the development market, according to the IEMS classification. The achievement of development goals requires the mobilization of international and domestic financial resources, with the latter being considered more financially-sustainable for the recipient country than the former.

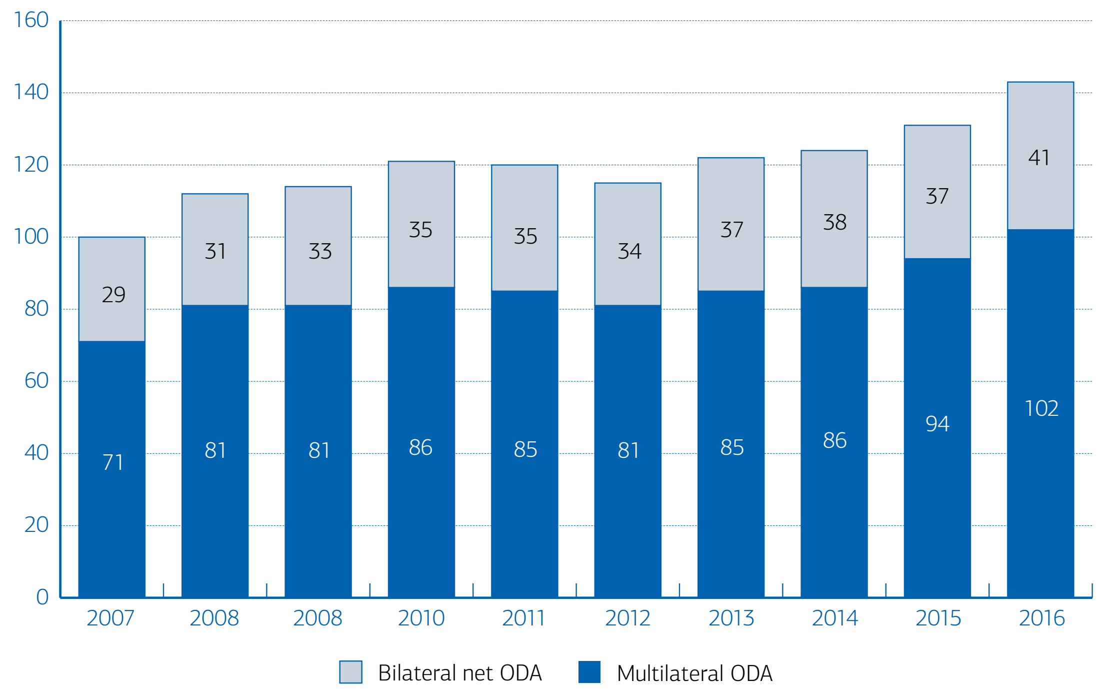
By the end of the MDG era all types of development finance (such as international, domestic, public, private and blended), as well as the global cumulative figure, have increased in absolute terms. At the same time, overall aid dependency of emerging and developing

* The largest and poorest socio-economic group which includes people living on less than US$2.5 a day

countries had lowered, as those countries became more self-reliant thanks to an increase in annual domestic revenues by US$6 trillion in comparison to the levels recorded in 2000[10]. Nevertheless, mobilizing domestic public resources remains a challenge for these countries, as the problem of low tax-to-GDP ratios is still very critical there. As an example illustrating this positive trend, in 2010 the Sub-Saharan African countries collected nearly US$10 in domestic revenues for every dollar of foreign assistance received[10]. Nevertheless, development aid is still essential to countries where private investment is limited.

From 2000 onwards ODA has been a significant source of development financing for the most fragile economies with limited or no access to international capital markets, such as small island developing states and landlocked developing countries. There, ODA amounted to 40%[10] of the total financial inflows, followed by remittances and FDI. Although global ODA flows from member countries of the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD), which includes the United States, the United Kingdom, Germany and Japan among others, have more than doubled, from US$64.8 billion in 2000 to US$132 billion in 2015[10], this type of development finance has shrunk as a proportion of the total financial flows into the recipient countries. Today, as well as a decade ago, DAC donor countries

Figure 2. Total Multilateral and Bilateral ODA from DAC Donors



Source: http://devinit.org/post/aid-spending-by-development-assistance-committee-dac-donors-in-2016/

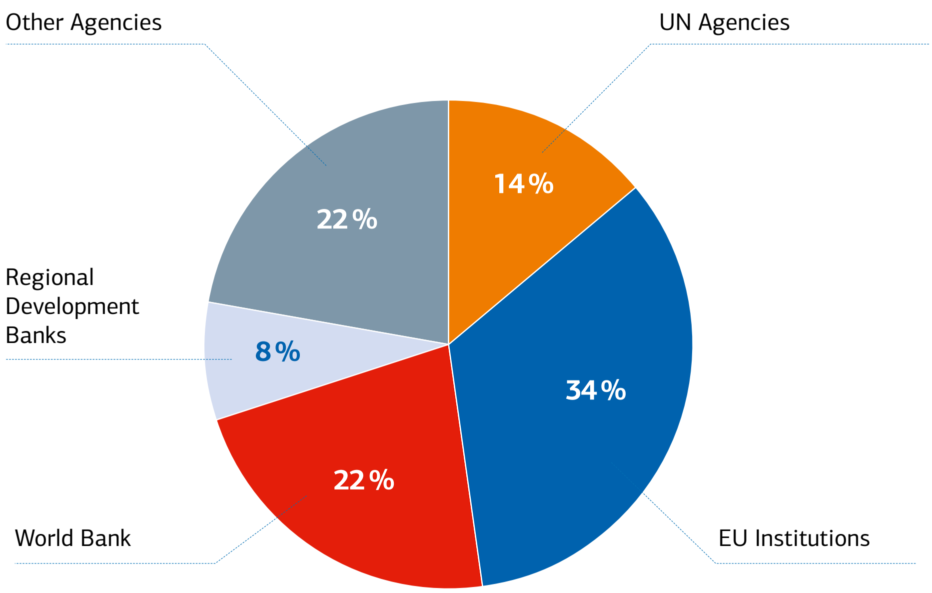
still opt for bilateral rather than multilateral aid mechanisms, and favor EU institutions as the main multilateral aid vehicle.

As organizations with a mandate for development, IFIs represent another prominent actor operating on the supply side of the development market. During the 15-year period of trying to reach MDGs, IFI support increased from US$50 billion to US$127 billion annually in grants, concessional and non-concessional loans, risk-sharing instruments, guarantees and equity instruments[11]. With regard to the private capital providers, injections of private philanthropic capital today amount to approximately half of the annual cumulative ODA disbursement, and are estimated at approximately US$60-70 billion per year[12]. For the purpose of this research, commercial fixed income instruments from traditional corporate banks and FDI, which is the most dominant private financing modality in most developing countries, are not classified as development finance flows.

Within the private finance space global diaspora resources represent another key source of funding for development. It has been estimated that the annual savings of the diasporas from developing countries amount to US$400 billion[12], and these resources can be mobilized for the development of their origin countries.

Before discussing any country-specific context, it is necessary to analyse the most current trends in the evolving development landscape, which determined the prerequisites for

Figure 3. Breakdown of ODA by Multilateral Organization Type, 2016



Source: http://devinit.org/post/aid-spending-by-development-assistance-committee-dac-donors-in-2016/

Figure 4. Global Development Architecture

SUPPLY SIDE (development capital holders)	PROBLEMS TO BE SOLVED	DEMAND SIDE (implementers of development interventions)
Public • Governments, • National and regional development banks, • Multilateral and bilateral aid agencies, • IFIs, • Religious organizations, including the church **Pooled/Blended** • Innovative partnerships, including global health funds and public-private infrastructure funds **Private** • Corporate business, • Foundations, • Financial institutions, including asset management firms and corporate banks, • Diaspora, • Impact investors, • Philanthropists, • Individual donors	 **Instruments** • Domestic public spending, • Grants, • Subsidies, • Loans (concessional and non-concessional), • PPPs, • Guarantees, • Bonds, • Equity (direct and portfolio)	**Public** • Governments, including sovereign and quasi-sovereign agencies, • IGOs **'Hybrid'** • 'Hybrids' **Private** • NGOs, • Foundations, • Social enterprises, including start-ups

Source: IEMS

the emergence of a more inclusive vision for the global prosperity within the SDG framework. The 2015 year became the turning point in the global development paradigm, as it marked the end of the MDG era and the beginning of the SDG era. At about the same time as the SDGs were adopted in 2015, the world order was witnessing the emergence of several new landmark trends, all of which would impact the global development architecture during the next fifteen years. Because of the fact that the world has become even a more interconnected place today, and because such substantial dynamic transformations in the global development landscape have been observed recently, all the identified game-changing trends would to some extent have an impact on the development trajectory of any country worldwide during the next fifteen-year time period.

1. Emergence of New Segments, new Actors and new Instruments within the Development Market

The development landscape was dominated by only a few actors during the MDG era, namely, multilateral and bilateral aid agencies, national governments, business, foundations and NGOs. They operated in the capacity of development capital providers and implementers of development interventions. Towards the end of the MDG era certain transformations of the international development governance started taking place, with the emergence of new actors both in the public and the private domain.

On the public side, these transformations primarily concern the segment of bilateral aid agencies where new non-OECD country donors start increasingly seeing themselves as development partners facilitating **Emerging Markets-to-Emerging Markets cooperation**. Recently the largest non-OECD providers of development aid have been Saudi Arabia, the United Arab Emirates (UAE), Kuwait, Russia, Turkey and China. Starting from 2010, Russia has positioned itself as a 're-emerging*' development aid donor, as there was a revival of development assistance aspirations. In key strategic documents, Russian authorities have listed Abkhazia, South Ossetia and other countries pursuing neighborhood policy with Russia as the country's regional priorities where the assistance programs would be channeled. In 2013 Russia's ODA budget was US$713 million, which represented a 40% increase over the 2012 level. Since 2011 the country has allocated over US$20 million to development assistance through UNDP projects and initiatives worldwide[13]. Until recently, more than 60% of ODA had been channeled through multilateral sources, such as UN agencies or World Bank trust funds. However, this trend is expected to shift towards bilateral assistance in the near future[14].

Africa has created a geopolitical rationale behind aid injections into the region. China's investment primarily in 'hard' infrastructure in Africa has increased from US$210 million in 2000 to US$3.17 billion in 2011[15], and the country has announced plans to inject a total of US$1 trillion of financing by 2025[16] (see Figure 5).

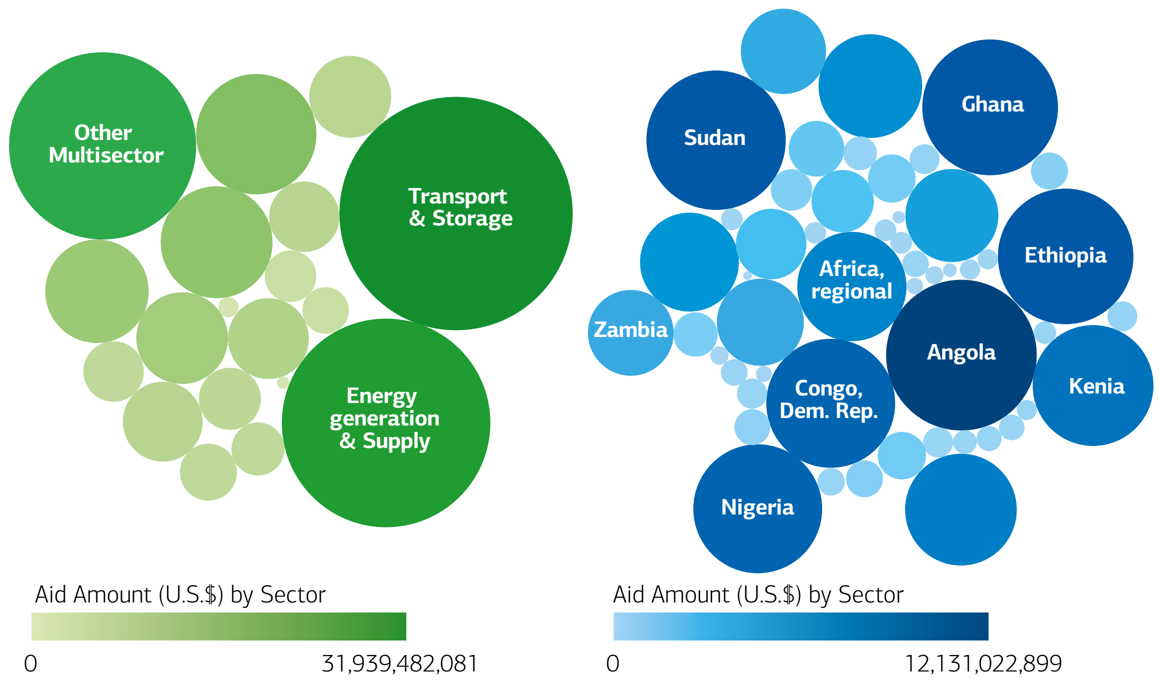
On the private side, the most progressive developments have taken place in the financial services industry. Traditionally, private financial institutions have contributed to the sustainable development agenda through commercial loans for large infrastructural projects which had sizable economic and social impact on the developing countries' growth, although those loans could not have been classified as a type of development finance. After the adoption of the MDG vision

* The term 're-emerging' is applied in relation to the Russian Federation, as the Soviet Union used to be one of the largest donor countries in the world, while its legal successor, the Russian Federation, became a recipient country in the 1990s (included in Part II of the DAC list of aid recipient countries between 1990 and 2005) before transforming into the donor country again in the middle of the 2000s.

for sustainable development, institutional investors and investment industry as a whole have started making efforts to incorporate social and environmental concerns as objectives alongside financial returns. Investors started applying **Socially Responsible Investing (SRI)** strategies, first, by utilizing negative screening criteria to limit their exposure to certain industries and companies which had a certain percentage of their revenues generated from 'sinful' areas associated with weapons, tobacco, alcohol, and gambling. **Environmental, Social and Governance Investing (ESG)** has taken portfolio investment one step further, as the ESG investment strategy adopts a more pro-active approach by targeting those companies which have demonstrated stronger commitments to sustainability principles, and have higher standards of corporate social responsibility (CSR). ESG investment strategies are deeply rooted in business rationale, as numerous research studies have found that companies which adhere to high quality environmental, social and governance standards are likely in the long run to outperform financially those which do not.

Impact investment, a term coined by the Rockefeller Foundation's Bellagio Center in 2007, became the most advanced of all past iterations of the concept of investing to accelerate social and/or environmental change. It is probably the fastest-growing segment in the development finance market at the moment. In comparison to other types of

Figure 5. Sector and Country Allocation of Cumulative China Aid to Africa (2000 – 2013)



Source: http://china.aiddata.org

sustainable investing strategies, impact investment goes beyond mere portfolio investment, as it also includes direct investment through private equity instruments in promising social enterprises, as well as in private debt and grant instruments. The size of the impact investment segment has not been fully quantified yet. However, the traceable pool of aggregate assets under management amounts to US$114 billion[17], and indicates that the market is substantial, with significant potential for growth. Some impact investors have emerged as spin-offs from existing not-for-profit organizations, for example, Cordaid Investment Management BV, which is an investment branch of an international Catholic NGO, Cordaid.

Impact Investors are especially rigorous in their impact measurement practices. For example, Swiss asset manager, RobecoSAM, collects data on 100 non-financial impact metrics, which are mapped to 16 out of 17 SDGs[18]. Impact investment can be classified more as a sub-set of development finance instruments which are usually contrasted with traditional grant-making, rather than as a development actor type. Impact investment strategies can be applied by a wide spectrum of development actors, which are not only limited to private institutional investors, although private investment fund managers together with IFIs are the sources of nearly 80% of all impact investments[19]. For example, in the simultaneous pursuit of financial returns and intentional measurable social returns, the global humanitarian organization, Catholic Relief Services, announced plans in 2016 to invest US$0.5m in Lafaza, an agriculture company that sells vanilla sourced directly from smallholder farmers in Madagascar[20]. Private philanthropists also utilize impact investment strategies, primarily through their charitable foundation vehicles. In 2016 the Chan Zuckerberg Initiative (CZI), associated with the Facebook's founder, Mark Zuckerberg, participated in a Series B round with an investment of US$24 million in Andela, a company that trains and deploys software developers in Nigeria[21].

The growing trend of impact investment which catalyzes the participation of novel actors in the global development architecture has brought in philanthropists (including corporate and private foundations) and institutional investors as significant new partners in the development process. They have coined new terms describing their quasi-commercial approaches to development issues, i.e. angel philanthropy, enterprise philanthropy, catalytic philanthropy and the most widely-used one: **venture philanthropy**. Venture philanthropy, a term coined by Harvard Business Review in 1997[22], represents exactly the type of strategy used by such development actors as the Novartis Foundation for Sustainable Development and the Rockefeller Foundation, as these foundations still rely extensively on 'impact-first' grant-making, with 'financial-first' impact investments constituting only a small proportion of their portfolios.

Venture philanthropy has evolved from traditional private giving as foundations have adopted a more long-term, market-based, systematic approach to the use of philanthropic capital by providing organizations with financial support coupled with non-financial technical capacity-building, in order to increase their societal impact. The OECD has defined venture philanthropy in the development context as "an entrepreneurial approach to philanthropy that combines a variety of financial and non-financial resources to identify, analyze, co-ordinate and support self-sustaining, systemic and scalable (for- and not-for profit) solutions to development challenges aimed at achieving the greatest impact[23]." Grants to local communities for the purchase of cash-generating assets, such as equipment or machinery, can be classified as a model example of venture philanthropy. Venture philanthropy and impact investments are comparable to the traditional venture capital industry, as investors execute 'angel stage investing' and 'exit strategies' in relation to grantees and investees. The Harvard Business School has suggested[24] that venture philanthropy has been a key driver in the development of the global social entrepreneurship movement, as one has been the provider of development capital to another.

Historically, the majority of sustainable corporations, charities and social enterprises have been excluded from debt capital markets. The transformation in the role of the financial services industry in the development context has not only entailed the emergence of novel actors and strategies, but also of new social finance instruments, such as green bonds, social impact bonds, and charity bonds. Some of these instruments have been issued in the form of capital market securities, others in the form of performance-based contractual arrangements. **Green bonds** were the pioneer in the field of social finance, as the debt capital markets were tapped for the first time to finance projects that bring environmental gains. They were first issued by the World Bank in 2008, and then joined by other IFIs, national and local governments, cities, corporate sector entities (including Apple and Toyota). Green bond issuance has soared in the last few years, and the proceeds have been injected into renewable energy, energy efficiency, sustainability, biodiversity and clean infrastructure. According to the Climate Bonds Initiative, the annual issuance of green bonds quadrupled between 2013 and 2015, and stood at US$81 billion as of the end of 2016[25]. At the moment green bonds are a tool to implement commitments undertaken under the Paris climate agreement.

Debt securities issued by charities and social enterprises are known as **charity bonds**. So far, GBP121 million has been raised using such instruments in the UK[26]. There is no evidence in online resources that this instrument is used anywhere outside of the UK. In their pursuit of improved outcomes for beneficiaries using the same or fewer resources, governments and donors have started exploring the field of outcome-based contracting with delivery partners. **Social impact bonds** (SIBs) have become an effective instrument for achieving that objective across multiple social issues, ranging from prisoner recidivism to homelessness. Issued for the first time in 2010, by 2016 over 40 social impact bonds are defined as "a contract with the public sector or governing authority whereby it pays for better social outcomes in certain areas and passes on part of the savings achieved to investors." They have been set up in 11 countries, and represent an investment of over EUR200 million[27]. SIBs are usually based on the pay-for-success mechanism, under which private investors receive a payout by the issuer, usually the government, only when the public social programs deliver the promised results. SIB design represents a groundbreaking social finance instrument which revolves around the concept of 'evidenced impact', and not outputs or outcomes.

Innovative instruments have emerged not only in the social finance field, but also as certification and legal tools on the corporate side. Pioneered in the U.S.A. in 2010, and then transferred to Italy, new legal forms have been introduced so that for-profit companies can participate in not-for-profit activities more effectively. In the U.S.A. such for-profit corporate entities were named **benefit corporations**, and in Italy Società Benefit. By its legal status a benefit corporation's executive management is required "to balance the financial interests of shareholders with the best interests of those materially affected by the corporation's conduct"[28] in their managerial decisions. The best-known benefit corporation is probably mission-driven Patagonia, which changed its legal status on the first day the benefit corporation law went into effect in the state of California in 2012. It should be noted that the benefit corporation is a different movement to the B Corp one. **B Corp** is a certification scheme applied by more than

2,100 for-profit companies from 50 countries. They combine social purpose with corporate mission and that have been certified as a verification of sustainability efforts by the nonprofit B Lab[29]. As of June 2017, four companies from China, three from India, and one from Russia – a producer of children's cosmetics, Babyonica[30] - have been certified as B Corps.

All the aforementioned examples illustrate a reorientation of different kinds of markets, primarily financial ones, towards sustainable development. While most of these segments and instruments are still in their infancy, current growth rates indicate a potential to become 'hotspot' markets by 2030.

2. Transition From Charity to the Impact-Oriented Mindset

For decades businesses, including multinational corporations, have been implementing corporate social responsibility activities in the charity format, assisting local communities and protecting natural resources. Financial grants coupled with the 'giving back to the community' idea have proved to be highly effective as standalone development interventions. They were simple to measure at the output level, and corporate sustainability officers have been able to communicate success stories and easily report to external stakeholders on the number of assisted orphans, or planted trees. All the global game-changes discussed in this section of the report have also pushed corporate actors to explore new ways of tackling societal and environmental problems more effectively. Businesses have started shifting their mindset towards the creation of transformational changes, which is how the term **'impact'** has entered the vocabulary of corporate sustainability officers.

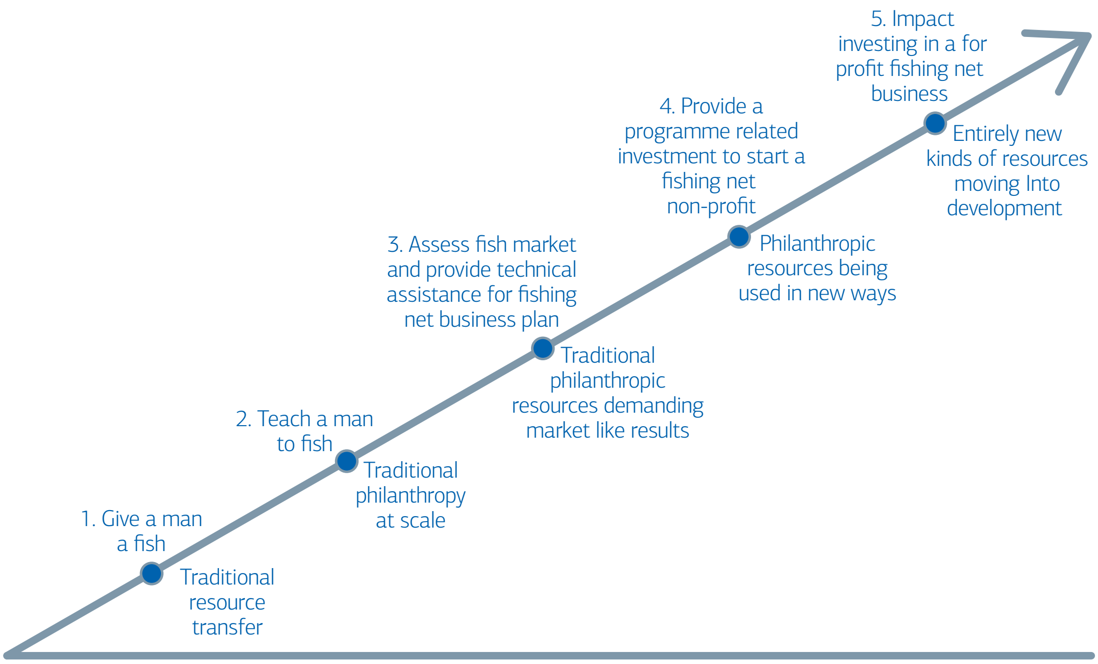
Companies started questioning whether their financial investments actually create substantial impacts for the beneficiaries, and whether such impact can be quantified and measured. Today the mere delivery of training to marginalized female entrepreneurs is not sufficient, as corporate donors require indicators measuring the outcomes resulting from receiving such training sessions. They could measure the number of established small and medium-sized enterprises (SMEs), written business plans or even the impact on the beneficiaries' incomes. As the corporate sustainability industry evolved, new and more financially sustainable models have emerged. These have proved to have a higher impact as they have generated a 'multiplier effect' through multiple cycles of reinvestment in comparison to standalone grants.

Today, the **most forward-thinking corporations** which have adopted an impact focus operate as social investors rather than corporate philanthropists. Through their development assistance, these corporations create employment and income-generation opportunities in local communities, enabling beneficiaries to become self-sufficient. For example, the world's largest furniture retailer, IKEA, has announced plans to employ refugees at its production centers in Jordan as a part of corporate plan to create employment through social entrepreneurship programs[31]. That trend is currently being localized in the CIS region as well. Armenia-based VivaCell-MTS, a mobile phone operator, mentioned in one of the case studies reports its CSR-type activities under the website's section entitled 'social investment' which employs a social investment approach to its engagement with local communities.

Globally, businesses have started to shift their focus from traditional CSR to more innovative and sustainable social investment models. For example, in 2014 the EKOCENTER project was launched jointly by the Coca-Cola corporation and the company SOLARKIOSK with the aim of bringing sustainable development to under-served communities. SOLARKIOSK designs, manufactures and distributes an energy-autonomous business hub ('E-HUBB') which offers such stationary services as solar power, mobile connectivity and battery charging, cooling, safe drinking water, TV and internet, to individuals in BoP markets. SOLARKIOSK is based on a franchise model which allows a local entrepreneur to be the operator and to build a small business with the potential of employing up to four people. EKOCENTERS are designed around a self-sustaining business model, as each hub includes a market place where consumers are able to purchase a wide range of goods and services, such as fee-based phone charging or Coca-Cola products. Also, each EKOCENTER includes a community center on its premises, and by providing all these goods and services to under-served communities, EKOCENTERS boost community growth. This mutually-beneficial-for-both-parties partnership enhances Coca-Cola's market presence by building strong community ties and last-mile distribution, while SOLARKIOSK has generated financial revenues as the main supplier of the kiosks. As of 2016, over 100 EKOCENTERs operated throughout Africa and Asia[32].

The second emerging process is the **transformation of traditional nonprofits** pursuing a charitable purpose towards more 'hybrid'*

Figure 6. Evolution of Philanthropy: Raymond's 'Arc of Innovation'



Source: Raymond, S. (2012) 'The Paradigm Shift in Philanthropy: The Arc of Innovation. In the Index of Global Philanthropy and Remittances'

* Hybrid organization - a legal entity that mixes elements, value systems and action logics (i.e. profit generation and social impact) of the private and not-for-profit sectors.

models. In their pursuit of more financially-sustainable and impactful operating models, NGOs and charities are being pushed to combine social welfare and revenue generation models. One of the examples of a typical 'hybrid' organization is the U.S.-headquartered Embrace nonprofit social enterprise. It has equity in the India-based for-profit Embrace Innovations firm which is a spin-off entity focused on the design, manufacturing and commercial sale of infant warmers.

One of the most progressive 'hybrid' actors in this field is the Aga Khan Development Network (AKDN) which implements community-driven solutions in over 30 countries around the world. Within the structure of all Aga Khan institutions, which are registered as nonprofit entities in Switzerland, the Aga Khan Fund for Economic Development (AKFED) is incorporated as a for-profit development agency with project companies operating as commercial entities. In the past, AKFED has had exposure to the following sectors: banking, power generation, tourism, manufacturing and agriculture. In its capacity as a private development agency, AKFED operates a network of affiliates with more than 90 separate project companies in 18 countries, employing over 47,000 people. The fund has the development-oriented mandate to promote entrepreneurship and build economically sound enterprises through equity investments, often in the form of seed capital, in developing countries. The fund adopts a 'hands-on' approach by providing managerial and technical expertise to its investees. In 2015 AKFED generated revenues of US$4.1 billion[33], with all profits being reinvested in further development.

One of the private-sector-led flagship projects of the Aga Khan Development Network involved the establishment of University of Central Asia campuses outside the capital cities in three countries of Central Asia, namely Naryn in Kyrgyzstan, Khorog in Tajikistan and Tekeli in Kazakhstan. The project represents the intervention focused on developing Central Asia's educational and intellectual infrastructure which has strong potential to generate a positive economic and social impact in the areas surrounding the campuses in those isolated, underdeveloped mountainous locations. The vision for the University of Central Asia involves the provision of world-class education to the next generation of leaders in the region coupled with territorial development. Instead of granting scholarships to aspiring talented applicants for their pursuit of higher education in the U.S. or Europe and sending qualified job-seekers abroad, AKDN has opted for the option of the massive institution-building project in rural areas. A key component of the university's strategy concerns the applicability of received education to the socio-economic development of regions where the three campuses are located, and where there is a greater demand for geologists or exploration technicians than for lawyers. The university has the capacity to graduate 3,000+ students with relevant expertise each year and to employ up to 300 faculty staff across all its three campuses[34].

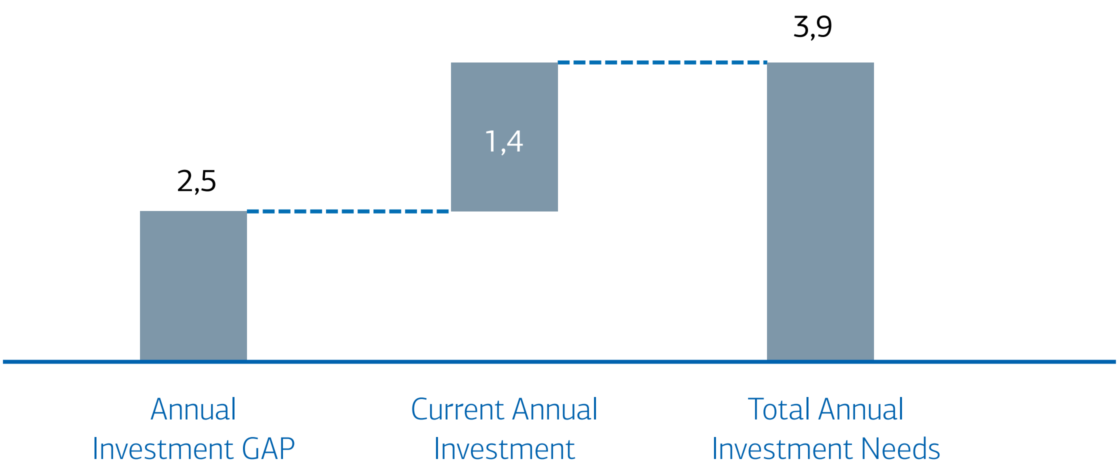
Irrespective of their legal form, whether a corporation, social enterprise or NGO, all these actors employ more complex strategies which combine elements of 'territorial development', 'financial return', 'transformational change' and 'social impact'. As a result, they create a much greater impact for beneficiaries than traditional charitable interventions.

3. Unprecedented Opportunities for the Private Sector

The most widely-cited estimates suggest that financing the 2030 Agenda for Sustainable Development would require annual investments of nearly US$6 trillion, or the cumulative investment of US$90 trillion over the 15 years between 2015 and 2030[35]. These quantified investment needs indicate the magnitude of all unsolved economic, social and environmental problems which are to be addressed in the pursuit of achieving global prosperity (in developed and developing countries) by 2030. In comparison to the previous fifteen-year time period, a major escalation in the financing efforts is necessary for the achievement of a more ambitious SDG development vision. Adopted in 2015, the Addis Ababa Action Agenda on Financing for Development defined the framework for global cooperation on the implementation of the 2030 Agenda for Sustainable Development, primarily focusing on collective action and private sector participation. The 2015 Addis Ababa Financing for Development conference became one of the first public platforms where the arguments about the shift from billions to trillions in financing commitments and the resulting need for the mobilization of private sector financial resources were presented.

A year earlier, UNCTAD estimated that the total annual investment needs in developing countries alone totaled US$3.9 trillion[36]. The traditional donors alone would not be able to address needs of such magnitude, as at the 2014 level of investment only US$1.4 trillion of annual investment had been secured which could be mobilized on a 'business-as-usual' basis, leaving an annual investment gap of US$2.5 trillion. At the 2014 level of private sector participation, businesses would contribute only US$900 billion to closing that funding gap. That would create excessive pressure on public budgets, including the ODA which in 2014 amounted to US$135 billion[37]. The result has been a call for the mobilization of private funds to be channeled into the SDG sectors. In the same report, UNCTAD estimated that private investors had sufficient funds which could potentially cover some of the investment needs associated with the development agenda, e.g. the cash holdings of multinational corporations were approximated in the order of US$5 trillion, the total assets-under-management

Figure 7. Estimated Annual Investment Needs in Key SDG Sectors in Developing Countries (2015 – 2030)



Source: UNCTAD (2014) [36]

size of the United Nations Principles for Responsible Investment's signatories was almost US$35 trillion.

Usually, when practitioners refer to the existing funding gap in the context of sustainable development, they are referring to the need for investment in **economic infrastructure**, such as power, transport, telecommunications, water and sanitation. Hence, the gaps mentioned have primarily related to infrastructure deficits, which are especially large in the least-developed countries. At the moment, private investment is lower in the social infrastructure segment due often to the promise of lower financial returns. Historically high levels of public investment in certain infrastructural segments indicate that the risk-return profile of these projects might be insufficient to attract private finance without additional sovereign guarantees and incentives.

Although there is a global call for a greater involvement of the private sector in shaping sustainable development processes, it is not always clear what role business can play beyond being public private partnership (PPP) contractors, donors or implementers of CSR activities. Those were the roles in which global businesses were active during the MDG period. IEMS has identified several novel niches which private businesses can occupy in the development space:

1. Servicing the **BoP** segment through products and services (see reference to the D.light example earlier in this report);

2. Providing **public services** wherever the state is incapable of delivering them, i.e. the business model for low-cost private education launched by Bridge International Academies and backed by reputable impact investors, such as International Finance Corporation (IFC), Bill Gates, Mark Zuckerberg and the Omidyar Network;

3. Tapping socially and environmentally-responsible customers through **sustainable and low-carbon products and services**.

Improved resource efficiency and green growth will indisputably become imperatives in the near future, especially in more advanced economies. The trend of emerging cutting-edge sustainable entrepreneurship solutions has been manifested by the selection of finalists in the Richard Branson 2016 Virgin VOOM competition for start-ups, for which a large number of entrepreneurial ideas were submitted with an integral sustainability element, including

- MacRebur – an innovative company that uses a patented method to produce new road asphalt out of waste plastic;

- Bio-Bean – a clean technology company that recycles waste coffee grounds into sustainable biofuels;

- FoodCloud – a social enterprise that connects businesses having surplus food with charities that need it through a technology platform[38].

All these examples illustrate that the Sustainable Development Goals not only create additional investment needs, but also unlock market opportunities for the private sector. According to the Business & Sustainable Development Commission, 60 sustainable and inclusive market 'hotspots' in just four key economic areas could open up economic opportunities worth at least US$12 trillion in business savings and revenue, as well as create up to 380 million jobs by 2030[39]. The report has been released as a call for business leaders to shift towards more inclusive green growth. The evidence for the existence of business models for sustainability amounts to a compelling incentive. The success in unlocking these latent market opportunities is conditional on two factors: mobilization of innovative

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Figure 8. Current Investment, Investment Needs and Gaps and Private Sector Participation in Key SDG Sectors in Developing Countries

Sector	Description	Estimated current investment (latest aval-abte year) $ bilion	2015–2030 Total in-vestment required	2015–2030 Invest-ment Gap	Average private sector participation in current investment: Developing countries	Average private sector participation in current investment: Developed countries
			Amuafeed $ bllon (constant price)			
		A	B	C = B – A	Per cent	
Power	Investment in generation, transmission and distribu-tion of electricity	–260	630-950	370-690	40-50	80-100
Transport	Investment in roads, air-ports, ports and rad	–300	350-770	50-470	30-40	60-80
Telecommunica-tions	Investment in infrastruc-ture (fixed lines, mobile and internet)	–160	230-400	70-240	40-80	60-100
Water and sanitation	Provision of water and sanitation to industry and households	–150	–410	–260	0-20	20-80
Food security and agriculture	Investment in agriculture, research, rural develop-ment, safety nets. etc.	–220	–480	–260	–75	–90
Climate change mitigation	Investment in relevant infrastructure, renewable energy generation, research and deployment of climate-friendly technologies, etc.	170	550-350	380-680	–40	–90
Climate change adaptation	Investment to cope with impact of climate change in agriculture, infrastruc-ture, water management, coastal zones, etc.	–20	80-120	60-100	0-20	0-20
Eco-systems/ biodiversity	Investment in conservation and safeguarding eco-systems, marine resource management, sustainable forestry, etc.		70-210			
Heath	Infrastructural investment, e.g. new hospitals	–70	–210	–140	–20	–40
Education	Infrastructural investment, e.g. new schools	–80	–330	–250	–15	0-20

Source: UNCTAD (2014) [36]

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Figure 9. 60 Biggest Market Opportunities Related to Delivering 17 SDGs

	Food and Agriculture	Cities	Energy and Materials	Health and Well-Being
1	Reducing food waste in value chain	Affordable housing	Circular models - automotive	Risk pooling
2	Forest ecosystem services	Energy efficiency - buildings	Expansion of renewables	Remote patient monitoring
3	Low-income food markets	Electric and hybrid vehicles	Circular models - appliances	Telehealth
4	Reducing consumer food waste	Public transport in urban areas	Circular models - electronics	Advanced genomics
5	Product reformulation	Car sharing	Energy efficiency - non-energy intensive industries	Activity services
6	Technology in large-scale farms	Road safety equipment	Energy storage systems	Detection of counterfeit drugs
7	Dietary switch	Autonomous vehicles	Resource recovery	Tobacco control
8	Sustainable aquaculture	ICE vehicle fuel efficiency	End-use steel efficiency	Weight management programs
9	Technology in smallholder farms	Building resilient cities	Energy efficiency - energy intensive industries	Better disease management
10	Micro-irrigation	Municipal water leakage	Carbon capture and storage	Electronic medical records
11	Restoring degraded land	Cultural tourism	Energy access	Better maternal and child health
12	Reducing packaging waste	Smart metering	Green chemicals	Healthcare training
13	Cattle intensification	Water and sanitation infrastructure	Additive manufacturing	Low-cost surgery
14	Urban agriculture	Office sharing	Local content in extractives	
15		Timber buildings	Shared infrastructure	
16		Durable and modular buildings	Mine rehabilitation	
17			Grid interconnection	

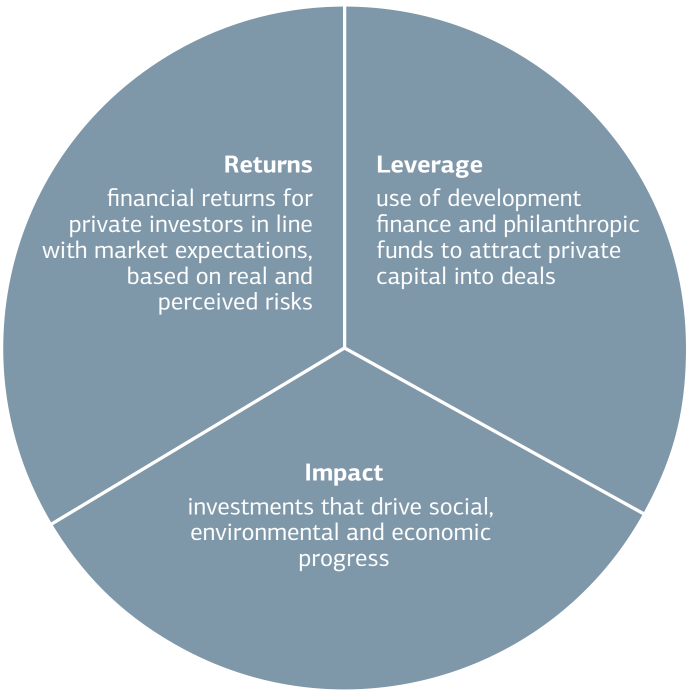
Source: Business & Sustainable Development Commission (2017) [39] financing from public and private sources, and adoption of a 'new social contract' between government, business and society.

4. Blended Finance

Creating innovative structures which have the inherent potential to mobilize new sources of social capital appears to be one of the few viable financing solutions for covering the SDG funding shortfall. Out of this emerging way of thinking, which presumes a blend of public, philanthropic and private resources, a new term of 'blended finance' has been coined—which the Economist once labelled as a 'fad'[40]. In a report jointly released by the World Economic Forum and OECD, 'blended finance' is defined as "the strategic use of development finance and philanthropic funds to direct private capital flows to emerging and frontier markets"[41]. In the report, blended finance was recognized as an instrument for unlocking additional resources for development through the inclusion of a larger number of development actors. It was based on three main pillars:

It should be noted that the terms 'blended finance' and 'public private partnerships' cannot be used interchangeably, as PPPs represent only one segment within the blended finance spectrum of funding models. They apply when a private sector actor delivers services and infrastructure which delivery is

Figure 10. Pillars of Blended Finance



Source: WEF/OECD (2015) [41]

conventionally the responsibility of the public sector. Blended finance also entails enabling mechanisms for engaging **private capital** in development projects, rather than the other way around, i.e. bringing public funding into the business-led development interventions.

At the moment, some private investors might be deterred from entering certain development projects because of concerns like lower anticipated returns or higher perceived risk, e.g. early-stage ventures or an untested market. By offering supporting mechanisms, such as guarantees, concessional debt or junior equity*, IFIs can deploy more private capital to development interventions by enhancing their credibility. In June 2015, at the panel discussion "What Should Tomorrow's Aid Agencies Look Like?" organized by the Global Development Network (GDN) and the Center for Global Development (CGD), Wade Warren, Assistant to the Administrator for the Bureau for Policy, Planning and Learning, USAID, suggested that the future role of the aid agencies would involve catalyzing other resources rather than providing direct funding, and especially mobilizing private finance, as multilateral and bilateral organizations themselves have a low tolerance for financial risk, and they are not able to risk taxpayers' money. Representatives of the World Bank have already suggested[42] that international aid agencies might assume the role of catalysts rather than direct 'doers', and assist project developers during the planning and design stage, verifying the project with a so-called 'stamp of approval' and handing it over to the private sector for financing and implementation. Different public and private development actors could start gradually employing blended finance instruments. For example, established under the umbrella of the multi-donor Partnership for Infrastructure Development facility, GuarantCo has guaranteed part of an Islamic bond issued by the Mobilink telecommunication firm in 2014, proceeds from which were to be used for the telecommunications firm's expansion into the remoter parts of Pakistan.

Figure 11. Blended Finance Enablers

Technical Assistance (Technical/Operational Expertise)	Technical Assistance addresses risks in new, uncertain and fragmented markets for investors. Costs and risks associated with exposure to new markets, technical uncertainty, and the inability to build a pipeline can be reduced through this mechanism, lowering the high transaction costs for investors and reducing operational risks which often dissuade a commitment of funds.
Risk Underwriting (Capital Preservation)	Risk Underwriting reduces specific risks associated with a transaction. This mechanism provides direct compensation or assumes losses for specific negative events, addressing the concern of private capital providers to ensure their capital can be preserved related to macro and project/company specific risks.
Market Incentives (Results-based Financing/Price Guarantees)	Market Incentives address critical sectors that do not support market fundamentals. This helps new and distressed markets that require either scale to be commercially viable or reduced volatility, by providing fixed pricing for products in order for private capital to justify committing to the sector.

Source: WEF/OECD (2015) [41]

* Junior Equity, accepts higher risk for lower financial returns in exchange for social, environmental and economic impact, typically in a position to take the first losses.

IFIs have already launched certain blended finance initiatives, such as the MIGA Conflict Affected Fragile Economies Facility which offers political risk insurance for private investments in challenging markets. Another successful example of a blended finance arrangement is the European Fund for Strategic Investments (EFSI) which to date has mobilized 4 euros of private finance for every 1 euro of its own investments in projects across Europe*[43]. The UNDP Innovation Facility has also generated remarkable results in Burkina Faso, where a supported solar energy initiative has attracted 3.5 times its seed capital in co-financing from government and the private sector, as well as in Egypt, where the Smarter Citizens initiative has attracted twice the UNDP funding received from the private sector, national government and civil society[44].

These reported results are consistent with a similar conclusion reached on the basis of the WEF/OECD survey[45] in the Economist magazine. It stated that "every dollar of public money invested typically attracts a further US$1-20 in private investment"[40]. The limited experience of private impact investment in Armenia also illustrates the 'crowding in' effect, as the few impact investors with exposure in Armenia have participated exclusively in development interventions which were already financially supported by reputable IFIs.

5. 'Innovation-For-Development'

While the MDG era was marked by the emergence of only a few innovative breakthroughs, with the pooled funding mechanisms for global health being the most spectacular achievement of that decade, the vast majority of traditional development organizations preferred a 'business-as-usual' approach. The much more ambitious and broader 'development for all' 2030 Agenda for Sustainable Development requires all development actors to step up in their efforts and become even more efficient, resourceful and innovative in response to the more complex challenges of the period up to 2030. In response to the more demanding external environment, there is a growing need to define and operationalize innovation for use in the development context, and to experiment with solutions which can be scaled up to play a key role in such innovation. Irrespective of their bureaucratic nature, the traditional development organizations are currently being pushed to rethink how they operate and employ innovation theory and human-centered design.

Today the global consensus stipulates that innovation can be instrumental for the achievement of the new global development agenda, with technology being a powerful enabler for it. UN agencies have been investing in innovation-for-development experiments for years, and recently there has been a growing movement to establish 'innovation spaces' or 'innovation labs', both in physical and virtual forms. UNDP has defined 'innovation for development' as "identifying more effective solutions that add value for the people affected by development challenges – people and their governments, users and clients"[46]. Launched in 2014, UNDP's Innovation Facility became a dedicated funding mechanism for fostering promising grassroots development interventions, and testing scaling solutions to development issues. In 2014 and 2015 UNDP invested in over 100 initiatives, testing 14 innovation approaches (see Figure 12) across 16 SDGs, which included 13 innovation labs. One of the supported projects was UNDP's support for Baidu Recycle, a mobile app developed as a test initiative to improve China's e-waste recycling by linking individuals interested in the disposal of old electronic gadgets and recycling service vendors.

The 'innovation-for-development' approach

* "At this stage, as much as EUR163.9 billion have been estimated as total investment mobilized to finance EFSI-backed projects, thanks to the EUR22.4 billion and EUR8.1 billion made available through the EIB and EIF respectively".

has filtered through to other UN agencies, including UNICEF, which championed the first innovation lab within the UN system in Kosovo in 2010, and mandated-to-protect-and-support-refugees UNHCR. UNHCR tests the applicability of innovation-driven solutions in the humanitarian context via its four thematic virtual Innovation Labs: Emergency Lab, Learn Lab, Link Lab, and Energy Lab. One of the innovation-driven initiatives is UNHCR's pilot project on linking Malian artisans from two refugee camps in Burkina Faso to the international markets through Afrika Tiss, a social enterprise working to develop a responsible handmade textile sector in West Africa. Assisted by French designers, refugees have been able to develop new products made of palm, wood, leather, copper, natural fibers and fabric, which were later displayed on a marketing platform set up by Afrika Tiss.

The UNHCR Innovation Unit partners not only with social enterprises, but also with corporations. It has an ongoing successful partnership with the IKEA Foundation in devising innovative solutions to solve the most pressing problems faced by vulnerable refugees and displaced communities. The Foundation, which is one of UNHCR's long-standing donors, has funded the development of the "Better Shelter" product, an alternative flat-packed emergency shelter which is distributed to displaced communities through the UNHCR field operations. IKEA's temporary

Figure 12. UNDP Innovation Approaches

Source: UNDP

shelter designed for refugees won the 2016 Beazley Design of the Year in the architecture category.

Different innovation-for-development approaches are not only tested by the multilateral aid agencies, but also by some bilateral aid organizations. For example, in 2014 USAID established the U.S. Global Development Lab as an innovation hub for sourcing, testing and scaling solutions which accelerate development impact. The Lab integrates the mechanisms of digital inclusion, digital finance, development informatics, advanced geographic and data analysis to make development more adaptive, efficient and responsive. Together with other donor and multilateral organizations, USAID co-drafted the Principles for Digital Development. The Lab's Development Informatics team has contributed to the scaling-up of mHero, a mobile message-based tool for health workers, which has already been employed in Liberia and Sierra Leone.

Traditional development actors innovate not only in the fields of science and technology, but also through the mobilization of private start-up businesses and entrepreneurship by acting as a venture capitalist (VC). Similar examples are IFC's Startup Catalyst initiative and TechEmerge acceleration and matchmaking program for proven technology companies. Through IFC's Startup Catalyst equity (and quasi-equity) investments are made in a number of commercially-oriented incubators, accelerators, seed funds, and similar vehicles and structures in emerging markets. IFC's venture capital portfolio includes investments in the less-traditional-for-IFI internet, e-logistics, health, EdTech and cleantech sectors. For example, in 2014 IFC invested EUR10 million in Lamoda.ru, Russia's leading online fashion retailer[47]. IFC's VC investment strategy has been defined as equity investment of the minimum stake equal to US$5 million in a Series B round. IFC is currently looking to expand its early-stage venture portfolio from US$30 million to US$100 million[48].

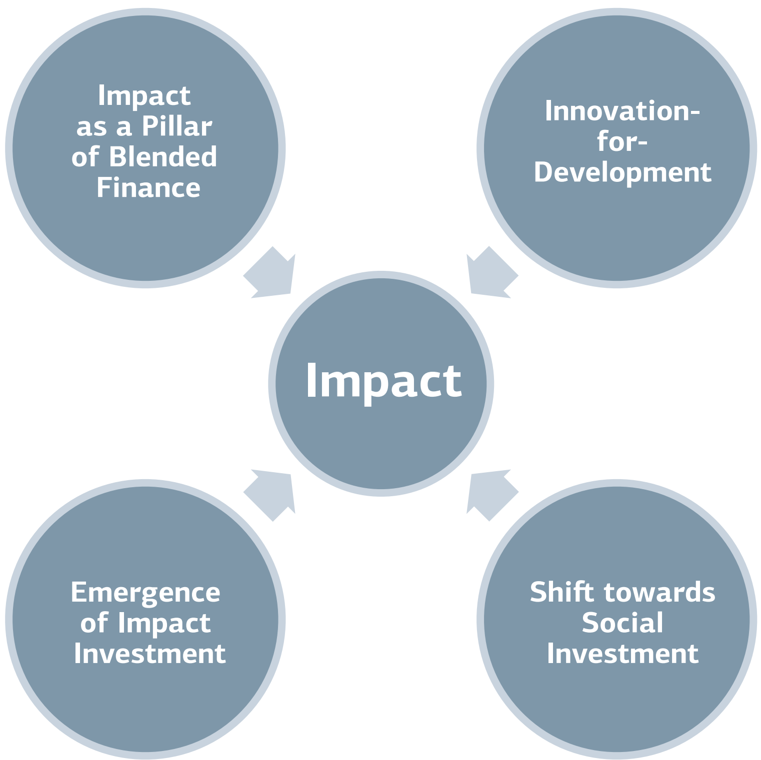
This transformation in the strategies of the traditional development actors indicates a convergence between the two extremes of the development spectrum which have been contrasted in the past – i.e. aid and business, development organizations and start-ups. This trend is likely to gain momentum in the foreseeable future. Although still in its infancy, the global movement to create innovation spaces has already spread beyond the IGO space, as various grassroots community-led spaces housing experimental activities have emerged recently which bring people, ideas and technologies together, and these include various co-working networks, accelerators and incubators. As an example, it has been reported that there are currently thought to be nearly 200 'tech hubs' across Africa[49].

Impact as a Central Cornerstone of the new Paradigm

Although it might not be evident, all five of these game-changers are highly interconnected. For example, as the innovation movement expands, there is a growing desire to understand how the outcomes of innovation practices may be measured and proven to work. Although being more advanced in their attempts to evaluate the results of the development interventions, traditional aid agencies are increasingly being urged to extend their scope of work past output and outcome indicators and incorporate the impact perspective. As corporations start shifting away from the traditional charity approach to more complex community assistance programs, they are starting to employ some of the technological innovations which also have to generate evidence of **social impact***. Those companies and social enterprises which are in the process of becoming a certified B Corporation also need to measure and manage value for their customers, employees, community, and the environment. It appears that **impact measurement** across all sectors of work in international development will be the cornerstone of the entire development industry during the SDG era.

In the post-2015 operational reality it is not sufficient to merely implement development interventions. In the light of constrained financial resources, especially after the 2008 economic crisis, all external and internal stakeholders, especially the emerging class of private impact investors, require resource optimization. Designing appropriate proxies, benchmarks and metrics which can measure social change and quantify impact per dollar invested is likely to become a top priority for all public and private development actors in the foreseeable future. Certain industry-wide impact reporting standards are already widely used, for example, B Impact Assessment[50], which is more oriented towards corporations, and IRIS performance metrics[51], which seem more applicable for social enterprises, microfinance institutions and impact investors. Nevertheless, most development practitioners testify that knowledge on impact measurement is still scarce. Unless this situation is addressed successfully, it might impede progress in the achievement of SDGs.

Figure 13. Game-Changers as Drivers of Impact Measurement



Source: IEMS

* Defined in this context as the sustained effect of an activity on the social fabric of the community and the well-being of the individuals and families.

Chapter 2.
Development as a Market: Armenia

Being a nation with a strong sense of national, ethnic and religious identity, Armenia is a country following its unique development trajectory which is deeply rooted in its extremely rich cultural legacy. Armenia's educated labor force and highly-advanced human capital, and its track record in incubating innovative solutions to the development problems, makes the country an interesting subject for studying the supply and demand sides of the development market at a country level.

Conventionally, territorial development has been positioned within the State mandate to address all existing economic, social and environmental problems. In the most economically-advanced states, the social welfare system is highly effective, and there is no need for any form of external aid. The provision of social services is funded exclusively by domestic resources. However, such a reliance solely on domestic resources is exceptional in the global development scene. Most countries have a more diverse structure of development finance flows. The case of Armenia is even more unusual as, in addition to traditional organizations, its diaspora has historically been the provider of sizable development funding flows into the country.

Measuring Development

In order to make a rational claim about the level of a country's development, the subjective phenomenon of 'well-being' has to be quantified. The approach of IEMS to assessing

Table 1. Eight Well-Being Dimensions

Well-Being Dimensions	Well-Being Pillars	IEMS Focus
Material living standards (income, consumption and wealth)	Economic Growth	X
Health	Beyond-GDP	X
Education	Beyond-GDP	X
Personal activities including work	Beyond-GDP	
Political voice and governance	Beyond-GDP	
Social connections and relationships	Beyond-GDP	
Environment (present and future conditions)	Beyond-GDP	
Insecurity, of an economic as well as a physical nature	Beyond-GDP	

Source: Stiglitz, J. E., Sen, A., Fitoussi, J.P. (2009) [56]

* Which includes non-economic metrics, such as social indicators.

the snapshot status of Armenia's development market has been guided by the following list of criteria which are considered to be 'material' for citizens' well-being. They are put in the context of sustainability:

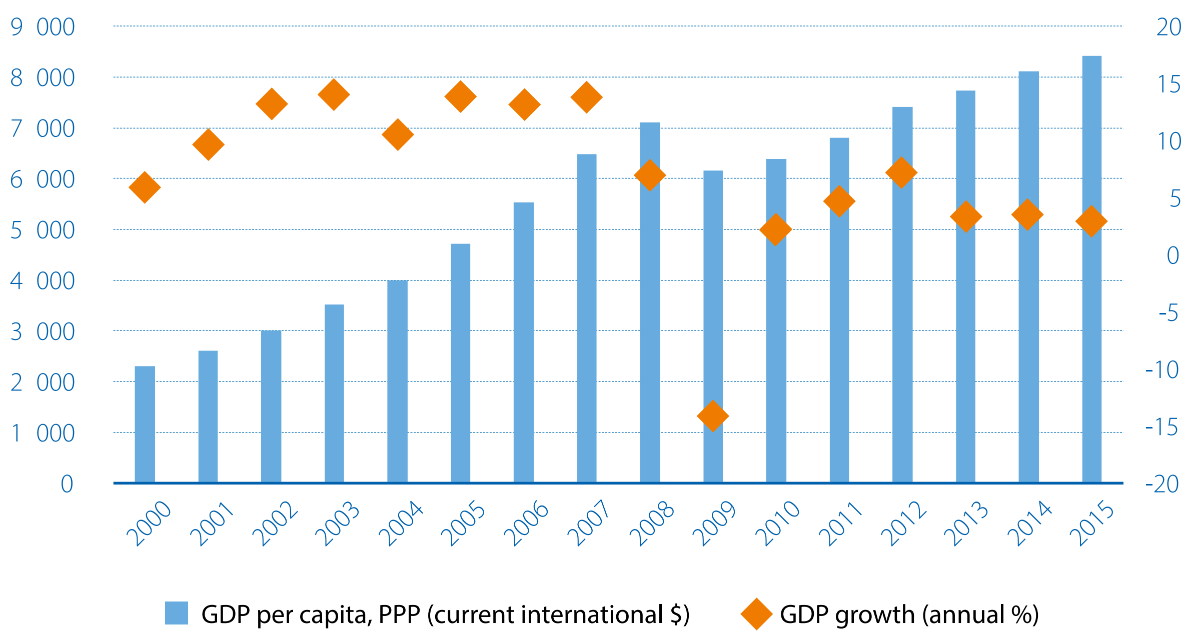
Because of the measurability issue and the unavailability of certain national level statistical data, IEMS has decided to focus its analysis only on three out of eight dimensions which can be classified under two distinct pillars: (1) economic growth and (2) beyond-GDP*.

ECONOMIC GROWTH DURING THE MDG ERA

After a deep economic recession in the early 1990s, when the country had to reorient itself in the direction of a market economy, and the struggle with the aftermath of a disastrous 1988 earthquake, and a conflict with neighboring Azerbaijan, Armenia eventually managed to start growing at a modest average rate of 5% per annum during the late 1990s. Nevertheless, the GDP level in 2000 was still only two-thirds of its 1990 level[52]. According to the 1996 data, 54.7% of the population was classified as poor, half of whom had per capita expenditures below the food poverty line at a time[53]. As in all other CIS states, the decline in output and the resulting increase in poverty was the inevitable outcome of the market transition.

In addition to other negative economic effects, such as the lack of a reliable electricity supply and the high incidence of unemployment, which were experienced by all other transition

Figure 14. Armenia: Historical GDP and GDP Growth (2000 – 2015)



Source: data.worldbank.org

countries, Armenia was also hit by alarmingly high rates of emigration. From 1988 to 1995, almost 800-900,000 people, about 25% of the total population, emigrated from Armenia[54]. In the next five years, another 600,000 people emigrated from the country, primarily to Russia, Ukraine, USA and Europe[55]. Such large-scale outflows, especially of skilled professionals and workers, put significant pressure on Armenia's human capital. All these economic, social and demographic processes contributed to Armenia's 'baseline' position just before the country entered the MDG era in 2000.

Over the next fifteen years, from 2000 to 2015, Armenia has succeeded in achieving remarkable economic growth and social progress. It has been able to transition into the group of middle-income economies. The country grew at a record annual average growth rate of 11.2%

Table 2. Economic Growth of All Former Soviet Union States During the MDG Era

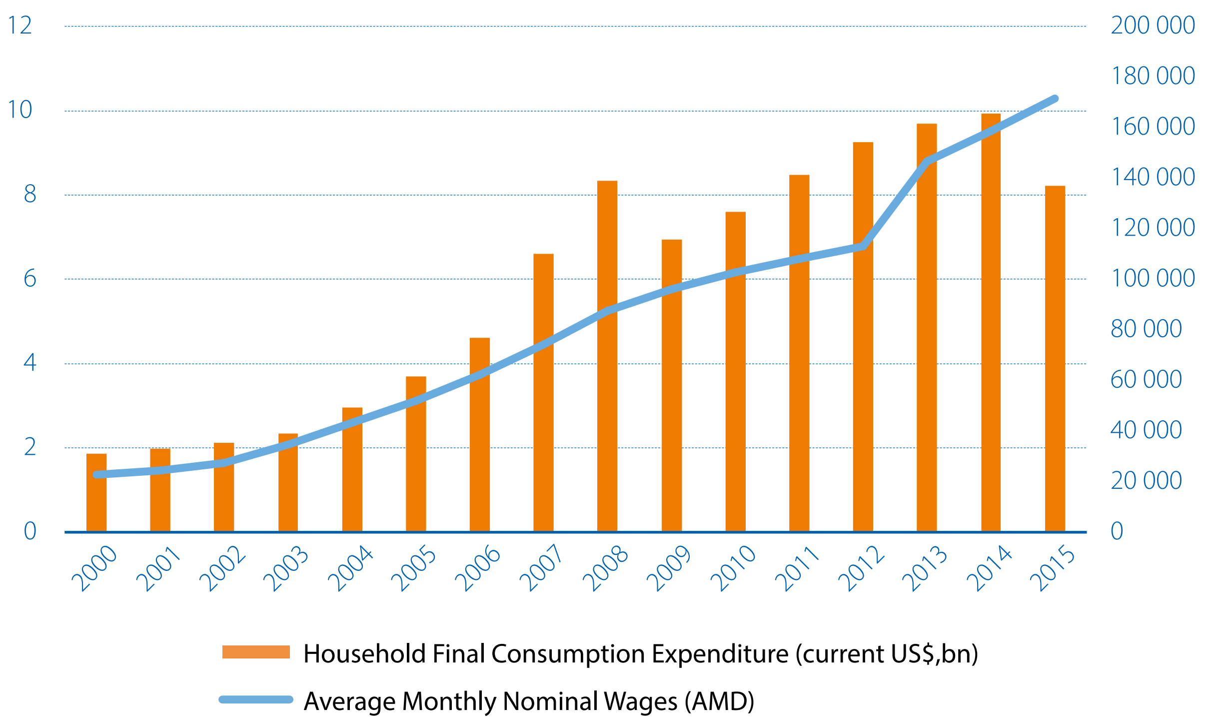
Country Name	2000 GDP per capita, PPP (current international $)	2015 GDP per capita, PPP (current international $)	CAGR (%)
Azerbaijan	3 534	17 780	11,4%
Turkmenistan	4 241	16 532	9,5%
Georgia	2 590	9 599	9,1%
Russian Federation	6 825	25 186	9,1%
Armenia	2 313	8 419	9,0%
Lithuania	8 451	28 936	8,6%
Kazakhstan	7 888	25 045	8,0%
Latvia	8 013	24 899	7,9%
Estonia	9 414	28 988	7,8%
Uzbekistan	1 984	6 087	7,8%
Belarus	5 801	17 741	7,7%
Tajikistan	940	2 834	7,6%
Moldova	1 840	5 049	7,0%
Kyrgyz Republic	1 644	3 434	5,0%
Ukraine	3 803	7 940	5,0%

Source: data.worldbank.org

between 2000 and 2008, and that boom was cut short only by the economic crisis of 2008, which brought the GDP growth rate from 6.9% recorded in 2008 to -14.1% one year later[1]. During the period of growth, Armenia was on a par with such countries as Nigeria (9.2%), Cambodia (9.3%), Kazakhstan (9.4%), China (10.4%), Myanmar (12.6%), and Qatar (12.9%). It was one of the fastest-growing transition and developing countries. Because of the economic slowdown after 2008, the average GDP growth rate for the entire MDG period amounted only to 6.9%. In absolute terms, Armenia's GDP per capita almost quadrupled from US$2,313 in 2000 to US$8,419 in 2015. However, that uptrend was consistent with the economic growth recorded in all former Soviet Union states, with Armenia being the fifth fastest growing country in the region.

Although GDP is the most widely-used measure of economic activity, some economists suggest that income and consumption are more appropriate metrics for evaluating material well-being than production, as "material living standards are more closely associated

Figure 15. Armenia's Household Income and Expenditure Performance During the MDG Era



Source: data.worldbank.org and National Statistical Service of the Republic of Armenia

* From US$41 in 2000 to US$355 in 2015, according to the National Statistical Service of the Republic of Armenia
** From US$6.9bn in 2000 to US$19.4bn in 2015 (PPP, current international $). Source: data.worldbank.org

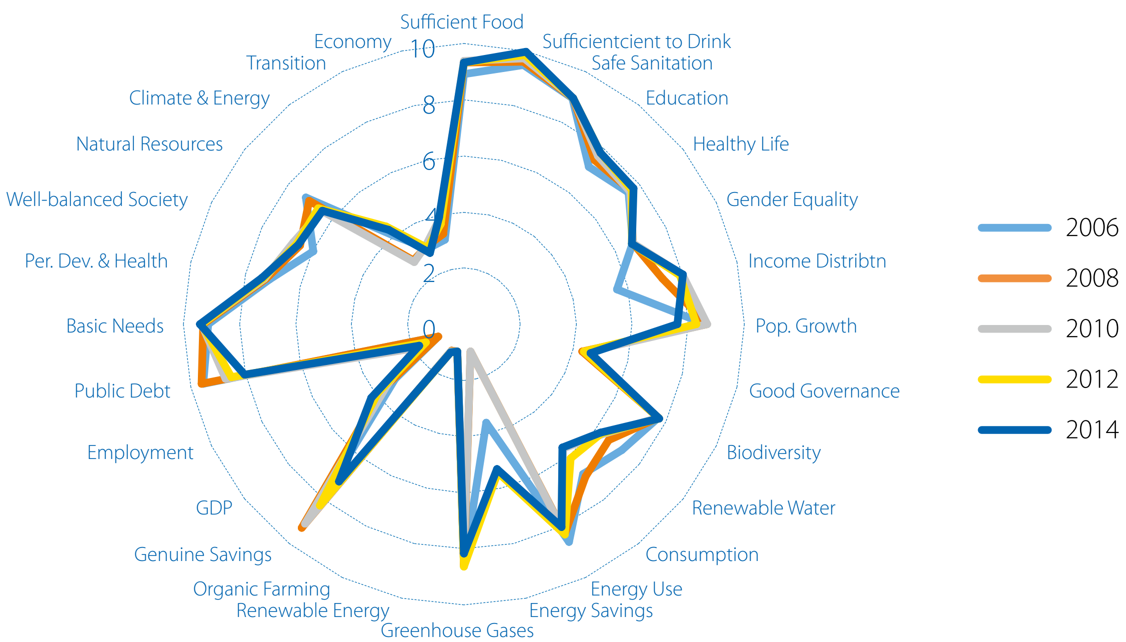
with measures of net national income, real household income and consumption"[56]. Professors Stiglitz, Sen and Fitoussi recommend measuring trends in citizens' material living standards in this way[56].

In Armenia, the improved economic performance indicated by the absolute GDP and GDP growth rate metrics have gradually translated into enhanced living conditions for the Armenian population. A certain degree of automatic economic trickle-down effect of the GDP growth on the household income has been observed in Armenia, as monthly nominal wages have increased more than eightfold*, and household final consumption expenditure has increased almost threefold** during the same period. It is worth noting that the consumption expenditure of Armenian households has exceeded the 9% GDP CAGR level, and reached an annual growth rate of 10.4%, demonstrating the economic multiplier effect. The evident improvement in household prosperity has been reflected by changes in expenditure patterns. For example, according to some Armenian experts' estimates, in 2004 more than half of the total consumption expenditure was spent on food (56.1%), while in 2015 that was reduced to only 43.6%.

BEYOND-GDP GROWTH DURING THE MDG ERA

The multi-dimensional notion of 'development' requires a shift in research emphasis from measuring economic production to

Figure 16. Sustainable Society Index: Historical Dynamics in Armenia (2006 – 2014)



Source: http://www.ssfindex.com

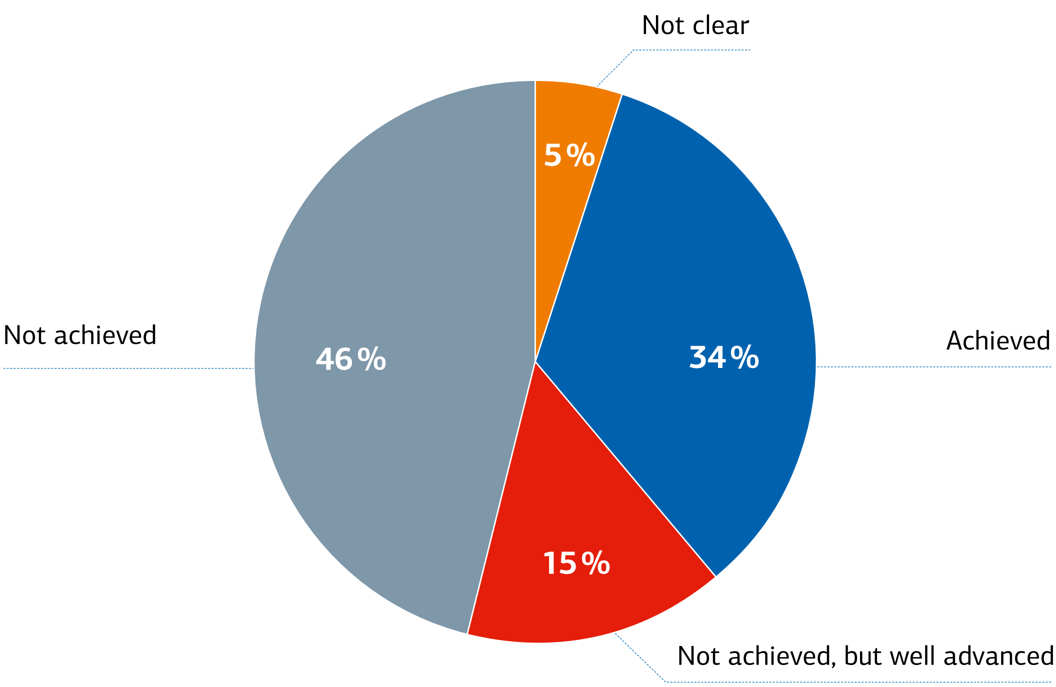
measuring public well-being. Conventional measures of GDP, household consumption and income patterns cannot fully indicate a country's development performance. So, what is non-material well-being, and how can it be measured at a country level?

The state of social and environmental systems is crucial:

"A sustainable society is a society that (a) meets the needs of the present generation; (b) does not compromise the ability of future generations to meet their own needs, and (c) in which each human being has the opportunity to develop itself in freedom within a well-balanced society and in harmony with its surroundings"[57].

Armenia has not been included in most sovereign sustainability ratings, with the exception of a few, such as Sustainable Society Index and Happy Planet Index. In the Sustainable Society Index, between 2006 and 2014, Armenia improved its performance in the economic and human wellbeing dimensions from 3.1 to 3.4 and from 7.3 to 7.7 respectively, while the country's environmental stance has deteriorated from 5.2 to 5.13. With regard to the individual index components, eight out of twenty-one indicators, namely gender equality, population growth, renewable water resources, natural resources consumption, energy use, greenhouse gases, genuine savings, and public debt have experienced a decline during those eight years (see Figure 16).

Figure 17. Armenia's MDG Performance (2000 – 2015)



Source: EV Consulting (2015) [59]

According to its definition, the Happy Planet Index (HPI) measures "how well nations are doing at achieving long, happy, sustainable lives". In 2006 Armenia was ranked 130th out of 178 countries, with an HPI score of 36.1 which corresponded with the 'medium' color-coded indicator. The lowest 'red' color-coded indicator was recorded for the life satisfaction variable. In the course of six years, the country made remarkable progress, as the country was ranked 53rd out of 151 constituent countries in 2012, with its average HPI score of 46.0, although the experienced well-being component was assessed as 'poor', in the deep red color.

The United Nations' Human Development Index (HDI) is another appropriate proxy for measuring country's 'beyond-GDP' performance. In terms of human development, Armenia's HDI score increased from 0.64 in 2000 to 0.74 in 2015[58].

With regard to the overall assessment of the country's achievement of MDGs, the 2015 National Progress Report commissioned by the United Nations Office in Armenia reported modest results. The country had achieved 22 out of the total of 65 target indicators (see Figure 17).

MDGs as a framework primarily focused on poverty alleviation has succeeded in reducing the number of extreme poor and undernourished almost eight times between 1999 and 2013, i.e. from 21% to 2.7%[59]. During that period, the proportion of people living below the national poverty line has decreased from 56.1% to 32%[59]. However, it is worth mentioning that both indicators have experienced an uptrend if the levels of 2008 and 2013 are compared. With regard to the education-related goal, Armenia has not met its targets in relation to enrolment ratios in basic and high schools, nor to state budget allocations. All these indicators have experienced a downtrend during the MDG era. These results are alarming, as historically Armenia's population has been highly literate, and the country has had high primary school enrolment ratios, reaching almost 100%. Armenia achieved its MDG target of providing employment to more than half of the working-age population. The unemployment rate almost halved, from 38% in 2001 to 18% in 201459. With regard to improved housing conditions, the proportion of gas-supplied dwellings increased from 47% in 2005 to 77% in 2014[59]. Despite certain positive results, the economic growth recorded between 2009 and 2013 has not been labelled as 'pro-poor'[59], hence indicating a limited 'trickle-down' effect. Overall, Armenia's results in achieving its MDG commitments have been comparable to other CIS countries, however the country still lags behind OECD or EU averages across indicators related to basic human needs, such as child mortality rates.

Development Enablers. Supply Side of Armenia's Development Market

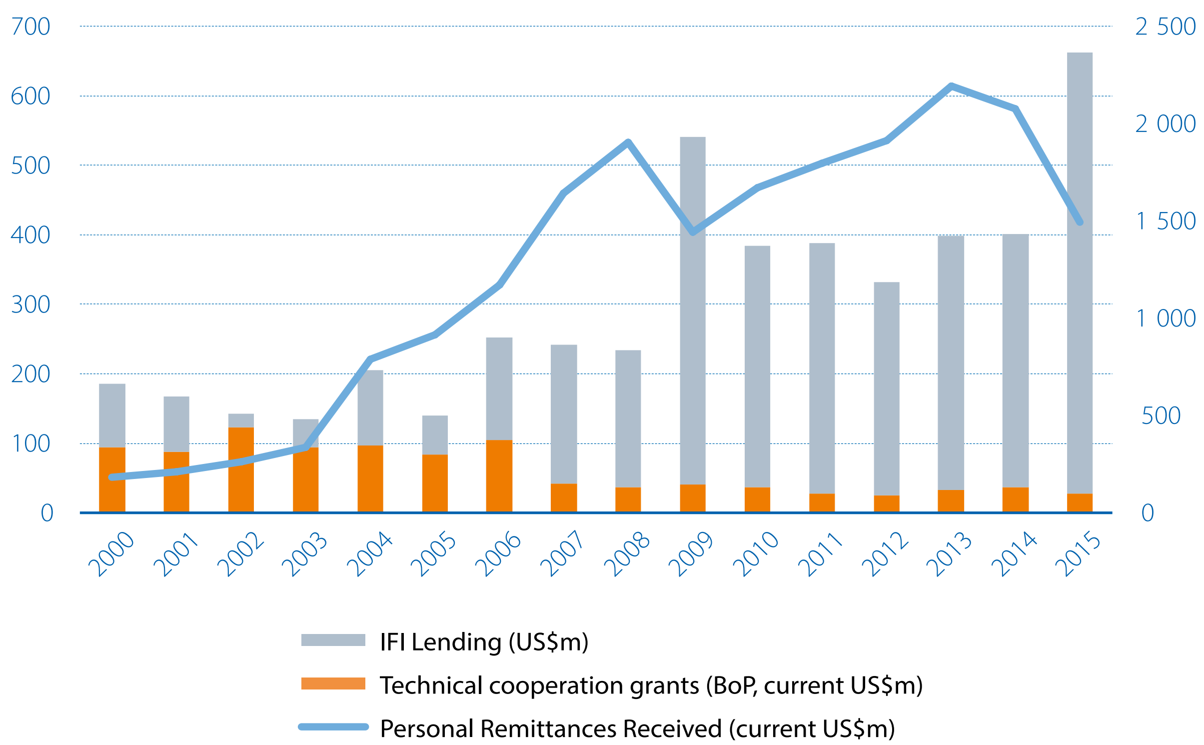
The partial achievement of the Millennium Development Goals in Armenia between 2000 and 2015 can be credited to the cooperative efforts of multiple development actors, all of which also operate in the global arena, such as the state, multilateral and bilateral donors, including IFIs, foundations, NGOs, diaspora organizations and private individuals. To a much lesser extent than during the 1990s though still quite significantly, Armenia's economic growth in the MDG era has been enabled by external development finance injections, which included family transfers, remittances and humanitarian assistance. For the purpose of this research, all the development enablers have been classified into five distinct categories: (1) multilateral aid agencies, (2) bilateral aid agencies, (3) diaspora, (4) social investors and (5) the state. This excludes funding provided by private foundations, CSR budgets and FDI, although all those external and internal funding inflows have also contributed to the societal progress recorded in Armenia between 2000 and 2015.

INTRAREGIONAL COMPARISONS

In order to make some cross-country comparisons on external aid volumes within the South Caucasus region, IEMS has decided to analyze the volume of cumulative development inflows injected for the achievement of MDGs in Armenia and compare the total figure to the respective investments in Azerbaijan and Georgia, using a consistent methodology with the same time horizon of 2000-2015. The cumulative development inflows into each country have been calculated as the sum of the following three components: (1) technical cooperation grants, (2) personal remittances received, and (3) loans received from four IFIs: World Bank, International Finance Corporation (IFC), European Bank for Reconstruction and Development (EBRD), and Asian Development Bank (ADB).

Because the data on private flows from foundations, individuals and impact investors is fragmented, it was decided to exclude selected deals which have been traced from the cross-country analysis. Based on this methodology, the overall figure for the external public development aid (calculated as the sum of technical cooperation grants and cumulative lending by IFIs) to the South Caucasus region

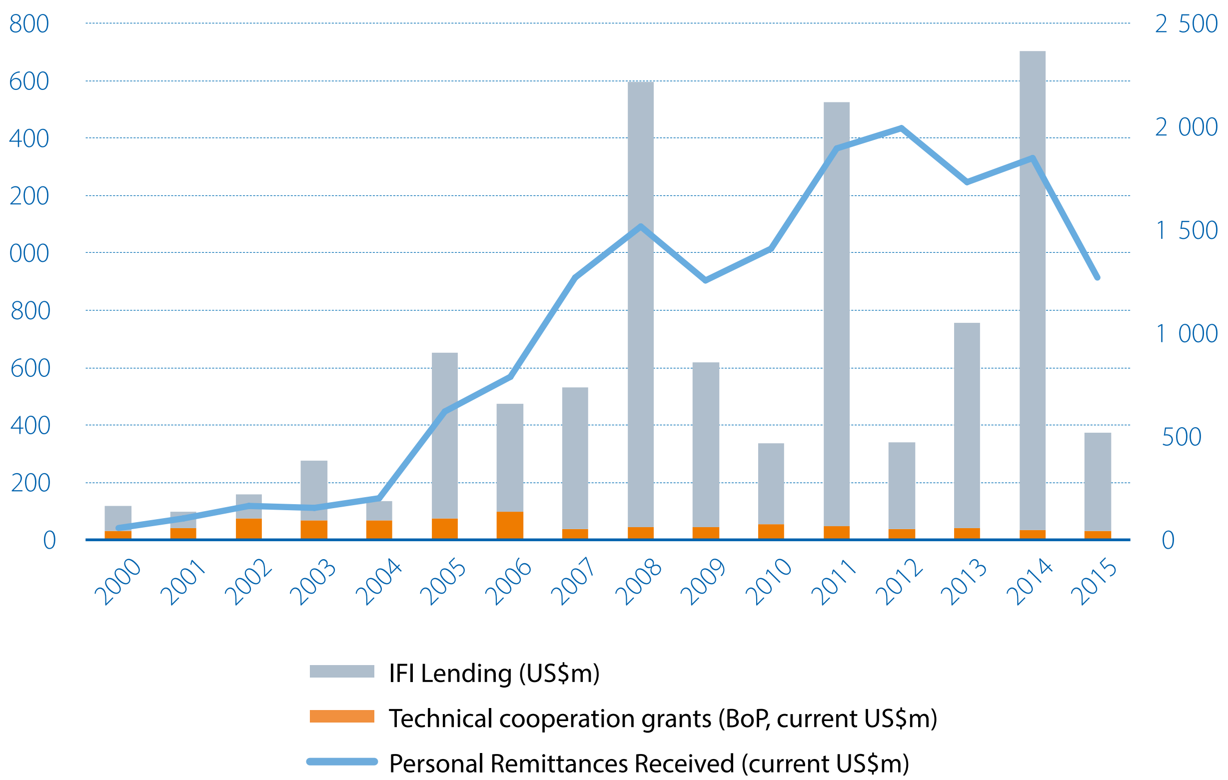
Figure 18. External Financing Mobilized for the Achievement of MDGs in Armenia



Source: data.worldbank.org, project sections of the World Bank, EBRD, IFC, and ADB websites totaled US$22.2bn* during the MDG period of 2000-2015. Simultaneously, the cumulative private remittances received by all three countries amounted to US$51.6bn*, exceeding the levels of public development assistance. This methodology has been constrained by the data availability factor. For example, it was not possible to detach only the ODA inflows into the countries from the Net ODA metrics, and it would not have been accurate to use the statistics on Net ODA, because in 2013 ODA outflows exceeded ODA inflows in Azerbaijan; hence it would have been inaccurate to add a negative value to other positive aid flows.

The assessment of IFI lending to three countries of the South Caucasus region is based on the bottom-up analysis of 465 standalone loans extended by IFIs to borrowers from Armenia (164 transactions), Azerbaijan (127 transactions) and Georgia (174 transactions) between 2000 and 2015. In absolute terms, Azerbaijan

Figure 19. External Financing Mobilized for the Achievement of MDGs in Azerbaijan



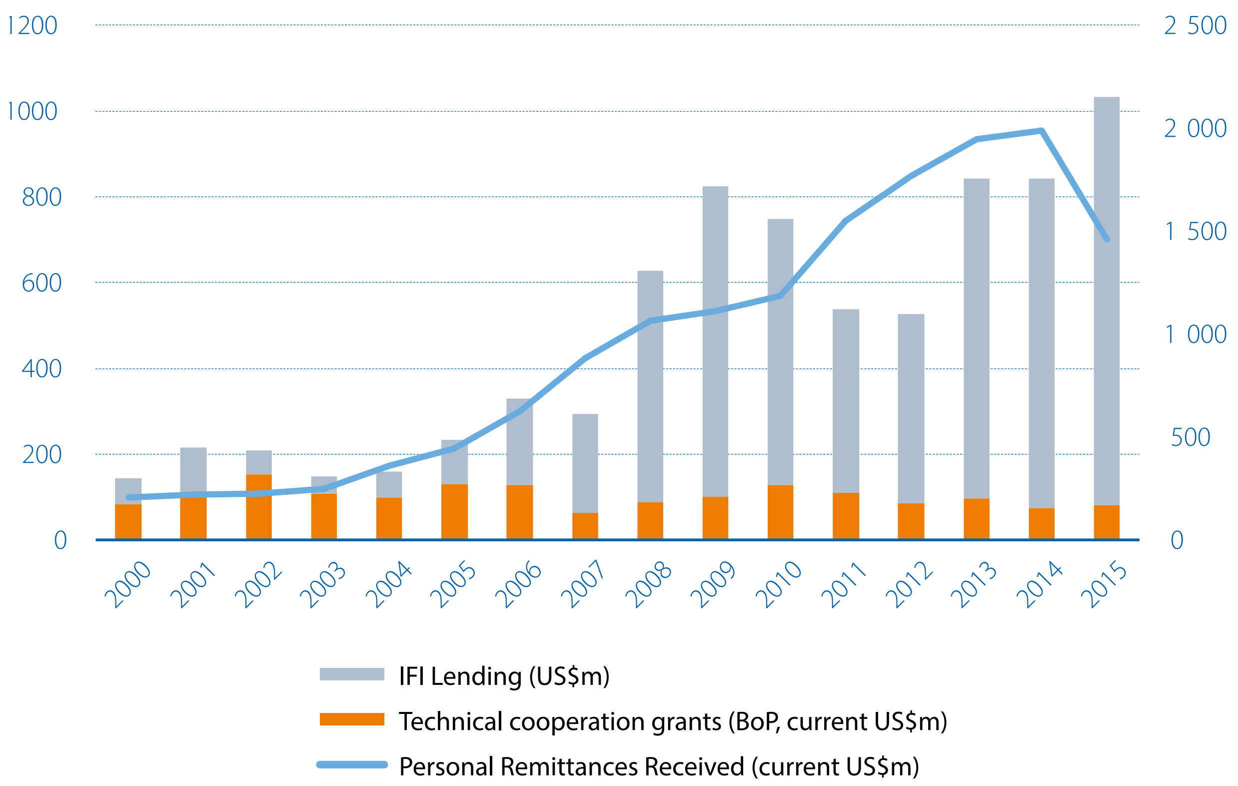
Source: data.worldbank.org, project sections of the World Bank, EBRD, IFC, and ADB websites

* US$4.8bn in Armenia, US$9.7bn in Azerbaijan and US$7.7bn in Georgia
* US$20.0bn in Armenia, US$16.3bn in Azerbaijan and US$15.3bn in Georgia

has been the largest recipient of loans from IFIs, totaling US$8.9bn, followed by Georgia with cumulative loans of US$6.1bn, and Armenia with US$3.8bn.

In terms of comparative analysis, certain country-specific trends in IFI lending have been observed. For example, the peaks and troughs in cumulative lending did not seem to follow an identical trend in all three countries Neither did they appear to be correlated with either global, regional or national economic cycles, as IFI lending has exhibited little immediate sensitivity to the 2008 economic crisis during the subsequent years. Lending to Azerbaijani borrowers has been especially sporadic. The average deal size in Azerbaijan (i.e. US$69.81m) was almost the double the average deal size in Georgia (US$34.94m) and triple the Armenian figure (US$23.37m). Azerbaijan's data range has been considerably skewed by the EBRD's 'jumbo' US$1bn loan to the subsidiary of Russia's oil exploration and production company, LUKOIL, a US$750m loan from the EBRD to the quasi-sovereign Azeri Roads Service (now renamed Azeravtoyol), and a US$450m loan from the World Bank to the Government of Azerbaijan for railway

Figure 20. External Financing Mobilized for the Achievement of MDGs in Georgia

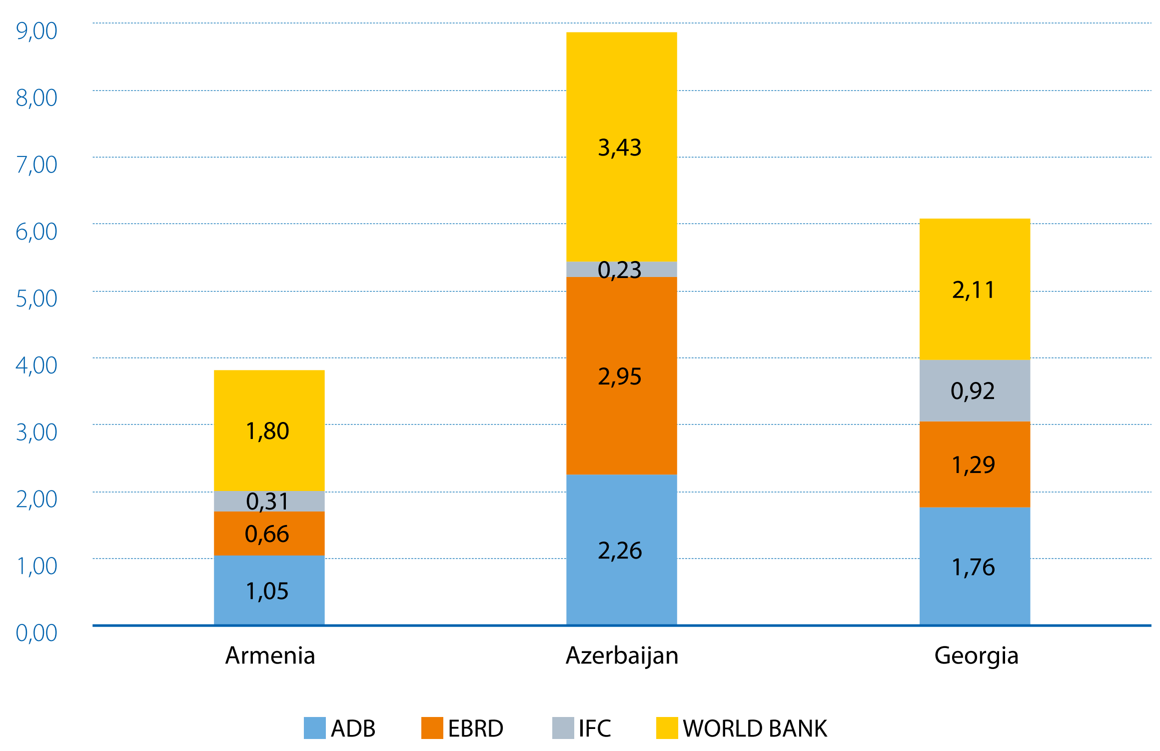


Source: data.worldbank.org, project sections of the World Bank, EBRD, IFC, and ADB websites reconstruction. In comparison, none of the Armenian or Georgian loans have exceeded the maximum threshold of US$180m.

With regard to sectoral distribution, the most concentrated lending portfolio has been observed in Azerbaijan, as 81% of all loans have been extended to borrowers from the real sectors of the economy, such as infrastructure, power, transport and utilities. In Armenia and Georgia, a sizable proportion, 20-25%, of the total lending, has been allocated to the finance and public administration sectors, which has not been the case in Azerbaijan. In comparison to Azerbaijan and Georgia, a lower proportion of lending has been allocated to the power and utilities sectors in Armenia – 14% in Armenia vs. 39% in Azerbaijan and 26% in Georgia.

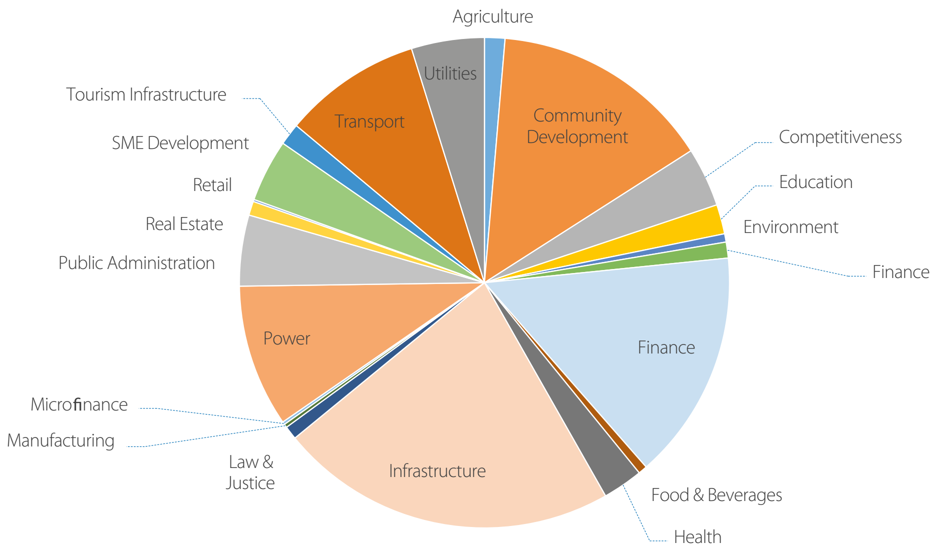
Throughout the region, direct lending into the social sectors of health and education has been insignificant in relative terms, which has not reflected the sectoral focus of the MDG agenda and global development finance trends. Generally speaking, IFI lending has exhibited different trends in all three countries of the South Caucasus region, and those trends depended on different needs, as well as different strategic priorities of each state and of the respective donors.

Figure 21. South Caucasus: Cumulative Lending by IFIs (US$bn, 2000 – 2015)



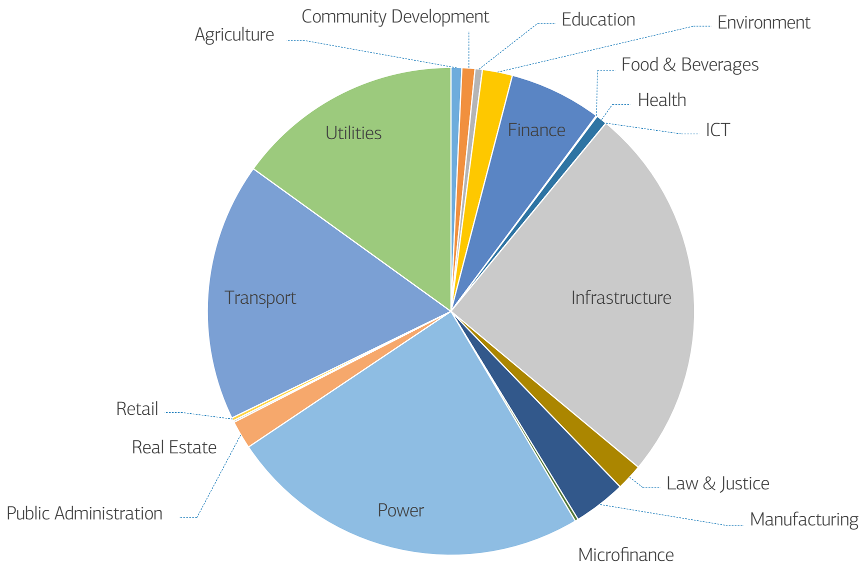
Source: project sections of the World Bank, EBRD, IFC, and ADB websites

Figure 22. Cumulative IFI Lending Distribution by Industry in Armenia



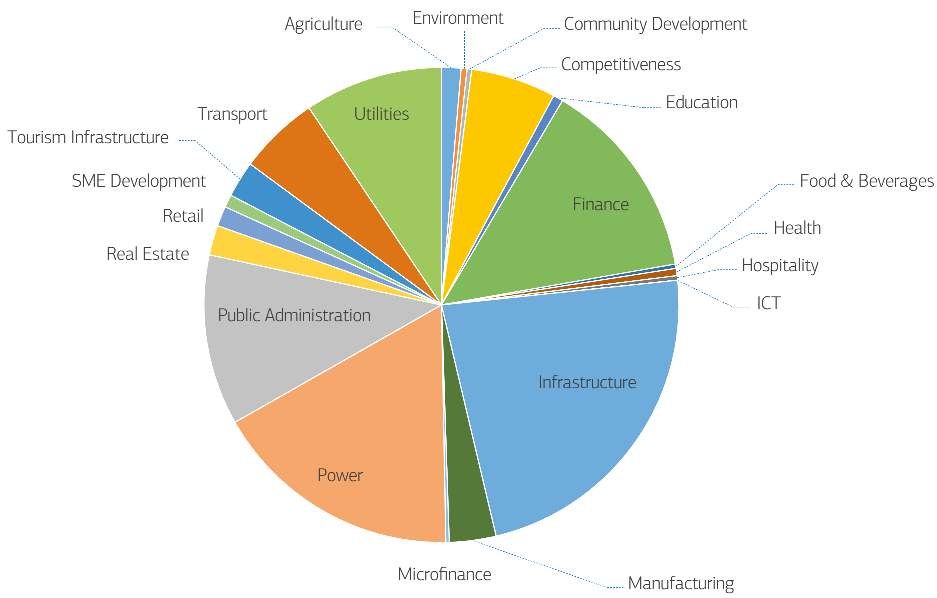
Source: project sections of the World Bank, EBRD, IFC, and ADB websites

Figure 23. Cumulative IFI Lending Distribution by Industry in Azerbaijan



Source: project sections of the World Bank, EBRD, IFC, and ADB websites

Figure 24. Cumulative IFI Lending Distribution by Industry in Georgia



Source: project sections of the World Bank, E BRD, IFC, and ADB websites

DONOR-ASSISTED GROWTH. MULTILATERAL DEVELOPMENT AID

Multilateral aid agencies, including the IFIs outlined in the previous section of this publication, can be present both on the supply and the demand sides of the development market. On the supply side, those funding flows which are extended to external project implementers in the form of loans, credits and grants can be attributed to the multilateral development aid segment. On the demand side, the segment is classified by the technical assistance budgets of those projects which are implemented directly by the IGOs themselves, e.g. UNDP Armenia. In the multilateral and bilateral development aid segments (supply-side) all funding can be categorized into humanitarian, military, stabilization and development aid. This research attempts to quantify the latter, although there are some references to other types of aid in the text.

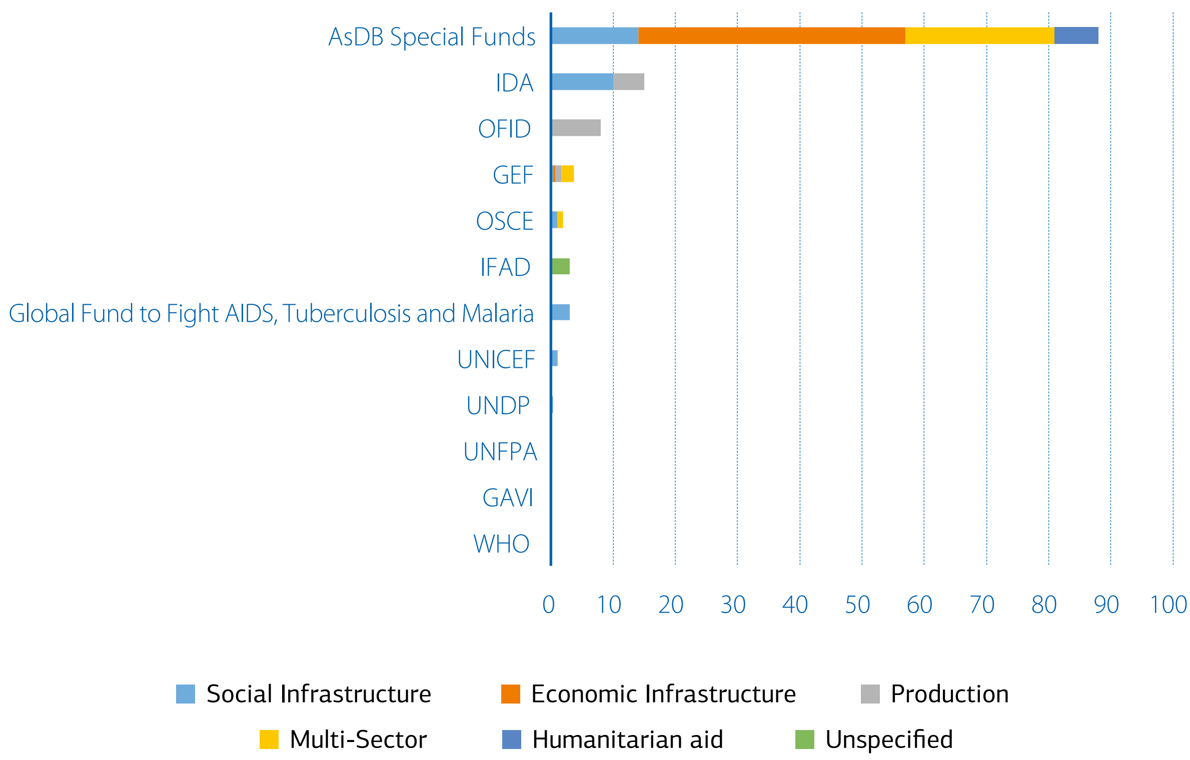
In the aftermath of the 1988 earthquake and throughout the Nagorno-Karabakh War, when the country's prosperity was shattered, Armenia's economy was largely fueled by humanitarian and development aid provided by foreign donors, in the absence of sizable FDI and private transfer flows. From the early 1990s the World Bank and the IMF assisted Armenia's transition to a market economy and to capacity-building in the public sector through their economic stabilization and structural reform lending facilities, e.g. the IMF's Systemic Transformation Facility and Enhanced Structural Adjustment Facility, and the World Bank's Rehabilitation Credit. In 2000s the focus of the Government of Armenia shifted from economic stabilization to poverty alleviation and sustainable development.

In consultation with IGOs, NGOs, scientists and the private sector, the government drafted a Poverty Reduction Strategy Paper in 2003. This documented a commitment on the part of the state to allocate a larger proportion of the state budget to social, educational, health and science expenditures. A revised edition of the Poverty Reduction Strategy Paper was adopted under the name of the Sustainable Development Program in 2008. Multilateral organizations have provided technical assistance to the Government of Armenia in all those policy-related developments.

In 2015 Armenia became the recipient of over US$120m of multilateral aid channeled through the ODA mechanism, with the following breakdown (see Figure 25).

These multilateral development flows exclude loans, credits and banks extended by the IFIs, such as the World Bank, IFC, Asian Development Bank and EBRD. In 2015 those four multilateral development banks alone reported cumulative investment amounts of US$688m,

Figure 25. Gross Multilateral ODA Disbursements by Donor to Armenia in 2015

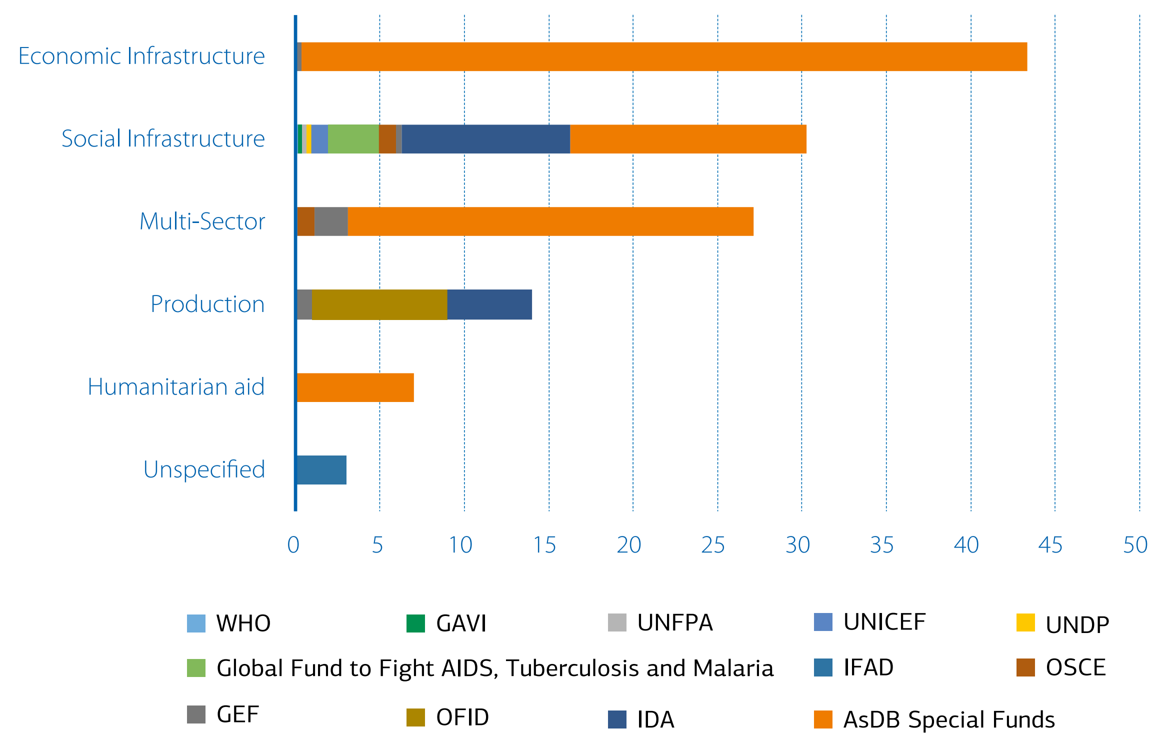


Source: OECD Statistics Data Lab

made up as follows: (1) US$256.55m[60] by the World Bank, (2) US$150.2m[61] by the EBRD, (3) US$80m by the IFC[62], and (4) US$201.47m[63] by the Asian Development Bank. Hence, the cumulative multilateral aid* channeled to Armenia in 2015 was estimated at US$808m, however it should be noted that not all development funding deals can be traceable.

Despite its lower funding volume, the Eurasian Development Bank (EDB) has established itself as a prominent regional player. Together with Russia, Kazakhstan, Kyrgyzstan, Tajikistan and Belarus, Armenia is one of the member states of this regional multilateral development bank. Since its establishment in 2006, EDB has extended financing to Armenia, having supported the country's integration into the Eurasian Economic Union and funded major infrastructure projects. Another vehicle of the Eurasian integration architecture is the Eurasian Fund for Stabilization and Development (EFSD) whose funds are managed by the EDB. Established in 2009, the EFSD assists member states through the use of such financial instruments as financial credits, investment loans and grants. During the MDG era the EFSD's current commitment to Armenian

Figure 26. Gross Multilateral ODA Disbursements by Theme to Armenia in 2015



Source: OECD Statistics Data Lab

* Including flows through the ODA mechanism

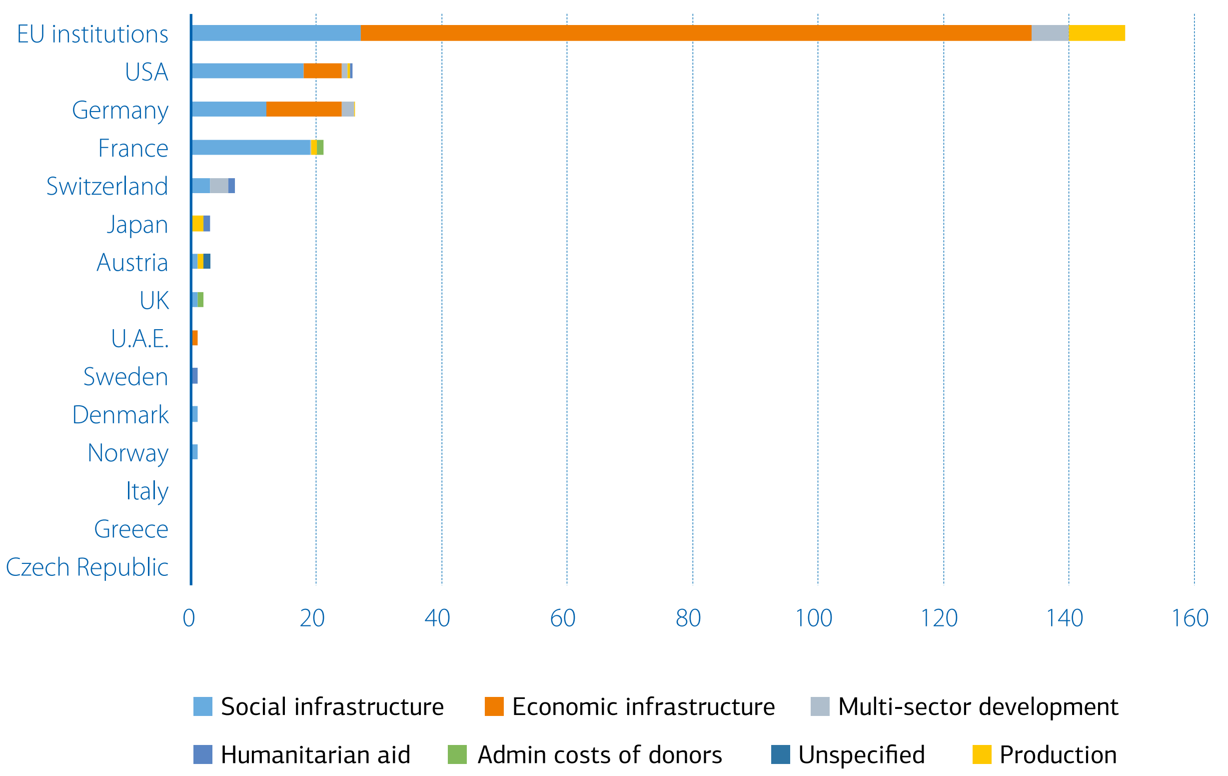
investees totaled US$490m for three approved projects: (1) US$150m for the "Construction of the North-South Road Transport Corridor (Phase 4)", (2) US$40m for the "Modernization and Development of Institutional Capacity of Irrigation Systems", and (3) US$300m budget support credit to Armenia[64].

DONOR-ASSISTED GROWTH. BILATERAL DEVELOPMENT AID

Most bilateral aid is channeled via multiple mechanisms. Most of the bilateral aid to Armenia has taken the form of ODA gross disbursements. In 2015 Armenia was the recipient of over US$240m of bilateral aid with the following breakdown (see Figure 27).

Globally, there is an emerging trend towards non-DAC donor countries, such as Saudi Arabia, UAE, Turkey, Russia, India and China, becoming key players in certain regions. In case of Armenia, China and Russia have started playing a major role in the country's development scene. With regard to Russia's donor role in the Armenian development scene, its aid has been primarily structured around direct forms of development assistance and military aid, as

Figure 27. Gross Bilateral ODA Disbursements by Donor to Armenia in 2015

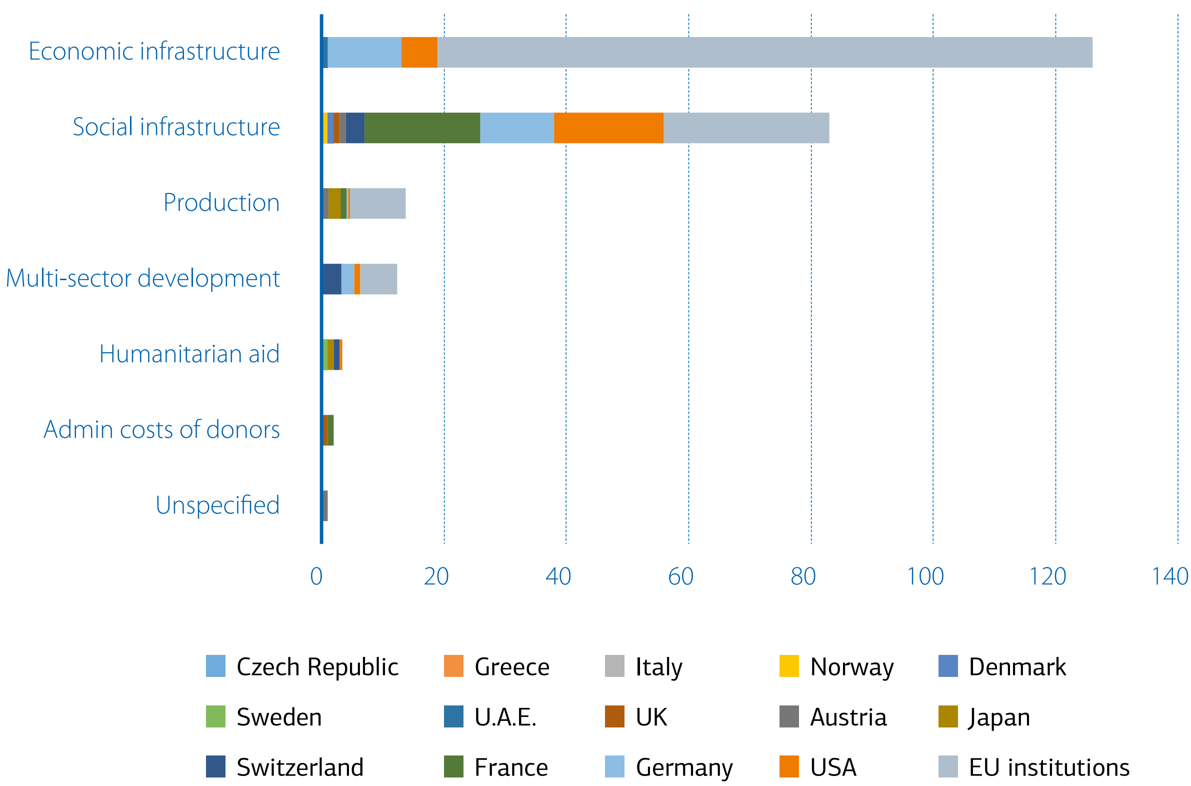


Source: OECD Statistics Data Lab

well as indirectly through financial contributions to the Eurasian Economic Union's multilateral vehicles. For example, Russia holds a participatory interest amounting to two thirds of the Eurasian Development Bank's charter capital of US$1bn[65]. Certain funding flows extended by the Russian Federation cannot be classified as direct development aid, irrespective of resulting socio-economic effects, for example, Russia's US$500m loan to the Central Bank of Armenia, transferred for economic stabilization purposes in 2009 in the aftermath of the global financial crisis. Using the UNDP-affiliated mechanisms, such as Russia-UNDP Trust Fund vehicle Russia has supported two UNDP-Armenia projects with a total budget of US$8m.

Towards the end of the MDG era, China established itself as one of the top suppliers of humanitarian aid to Armenia (10-11%[66] of the total). This was delivered primarily in kind, in the form of vehicles, devices, textile goods, industrial products, food, etc. In 2010, the governments of Armenia and China signed an official technical cooperation agreement for the provision of CY20m[67] of free technical assistance, and donation of 88 ambulances, by China.

Figure 28. Gross Bilateral ODA Disbursements by Theme to Armenia in 2015



Source: OECD Statistics Data Lab

U.S.A. as a Donor

Thanks to the effective lobbying efforts of the Armenian diaspora, the U.S. has been one of the most active bilateral donors on the Armenian development scene during the past decades, having provided technical assistance as development assistance and humanitarian aid, primarily via the USAID vehicle. The humanitarian aid flowed into Armenia even before the fall of the U.S.S.R., in 1988 thanks to the lobbying efforts of the Armenian Assembly of America (the Assembly) the U.S. Congress mandated the first-ever earthquake relief funding to then Soviet Armenia[68]. That was the first time U.S. humanitarian aid was sent to the Soviet Union since the end of World War II[69]. In total, US$6.6m in public and private aid was extended by the U.S. to the Soviet Union on that occasion[70]. Zbigniew Brzezinski, President Carter's national-security adviser, praised the Armenian-American lobby as one of the three most 'effective-in-assertiveness' foreign-ethnic lobbies in the U.S.A[71]. Between 2011 and 2015 the USAID's spending in Armenia reached US$142.2m[72]. Since 1992, more than 990 Peace Corps volunteers have been working in Armenia, serving the local communities via projects in youth development and English-language education.

One of the largest funding deals sponsored by the U.S. Department of State in the history of the U.S.-Armenian bilateral relations was the Millennium Challenge Corporation's (MCC) US$235.6[73] million five-year agreement (the "Compact") which was signed with the Government of Armenia in 2006, with the goals of reducing rural poverty and increasing productivity of the country's agricultural sector. The funding was extended in the format of a conditional grant which required the recipient country to adhere to the requirement of a demonstrated commitment to democratic practices assessed against 17 independent eligibility criteria*. The MCC-Armenia compact became the country's largest grant investment in the irrigation infrastructure in more than 30 years. It was estimated that almost 427,000 rural residents representing one-third of Armenia's farming households in approximately 350 communities were to benefit from the MCC's social investment[74]. The intervention design assumed that for every US$1.00 of MCC investments, rural beneficiary incomes were expected to increase by US$1.69. The MCC-Armenia intervention was structured in the umbrella program format which included two projects: (1) Rural Roads Rehabilitation Project and (2) Irrigated Agriculture Project

MCC-Armenia program has not delivered all anticipated results in terms of quantitative output indicators, as MCC placed a hold on funding as a result of country's deteriorated performance on MCC's Ruling Justly indicators during the 2008 post-election events. In 2009 the government of Armenia had to start accessing loans for work on roads which had originally been included in the projects under the MCC-Armenia compact. In the end, the delivered activities were significantly reduced in scope and became subject to construction delays, which resulted in only US$177m out of the initially-budgeted US$235.6m being disbursed. With regard to the outreach to beneficiaries, the program has benefitted over 45,000 farmers via increased supply of irrigated water, and it has also provided training to farmers. Because of Armenia's perceived retreat from democracy, the country was denied eligibility for a second compact, unlike its immediate neighbor**, Georgia[75].

Germany as a Donor

In addition to its financial contribution via the EU development cooperation mechanisms, Germany has been one of Armenia's major donors on a bilateral basis. Between 1992 and

* At the time of the program implementation the MCC Ruling Justly criterion included six indicators: political rights, civil liberties, control of corruption, government effectiveness, rule of law, and voice and accountability.

** At its winter quarterly meeting on January 5, 2011, MCC chose Georgia and Ghana as eligible to apply for second compacts, which are "contingent on successful completion of first compacts and continued good policy performance".

2016* Germany injected over EUR750m of development assistance into Armenia**.[76] Since 2010, official development cooperation with Armenia has been implemented exclusively through regional programs under the Federal Government's Caucasus Initiative which targets Armenia, Azerbaijan and Georgia. It operates in three main areas: (1) sustainable economic development, (2) energy and environment, and (3) democracy, community development and the rule of law. In 2016 Germany pledged up to EUR54m for development cooperation with Armenia[77].

The German government-development bank KfW has acted as the implementing organization for the financial cooperation component of the bilateral development assistance. A cumulative commitment of EUR787m has been reported for the KfW portfolio in Armenia between 1998 and 2014 in the public online sources, without any breakdown into the individual deals. EUR170m went into the financial sector, EUR200m into municipal infrastructure, EUR396m into energy, EUR10.5m into nature protection, EUR6m into health, and EUR4m was given for studies and the funding for experts[78]. One specific trend, i.e. risk sharing via **lending syndicate**, can be illustrated with several KfW-sponsored deals, which is also applicable to many other multilateral and bilateral donors. In most cases, particular donors are unwilling to undertake 100% of the risk exposure in financial transactions. For this reason, most of the deals tend to be funded by a lending syndicate. For example, in the Caucasus Transmission Network Phase I project, which had a total budget of EUR134m, KfW financed only EUR85m, with EIB and EU Neighborhood Facility both contributing EUR10m to the project. With the deals funded by the World Bank, instead of spreading the risk among several lending institutions, it preferred to impose a **co-funding requirement** on its sovereign or quasi-sovereign borrowers.

One of the flagship initiatives, which has been funded by Germany with the aim of supporting the financial sector of Armenia, is the German-Armenian Fund (GAF). Set up in 1999, GAF was established by the Central Bank of Armenia, with the funds provided by the German Federal Government, as a financial bank specialized in lending to small and medium-sized enterprises, agricultural businesses and private households. In 2006 the portfolio of available financial products expanded to include loans aimed at financing renewable energy projects. In 2009, the Fund started offering housing finance products. By 2014 GAF has extended loans with a cumulative volume of EUR375m to small and medium-sized enterprises. So far, two agricultural financing programs, with the total volume of approximately EUR23m, have been implemented through the GAF vehicle. The project was later joined by other co-funding donors: World Bank, Asian Development Bank and European Investment Bank.

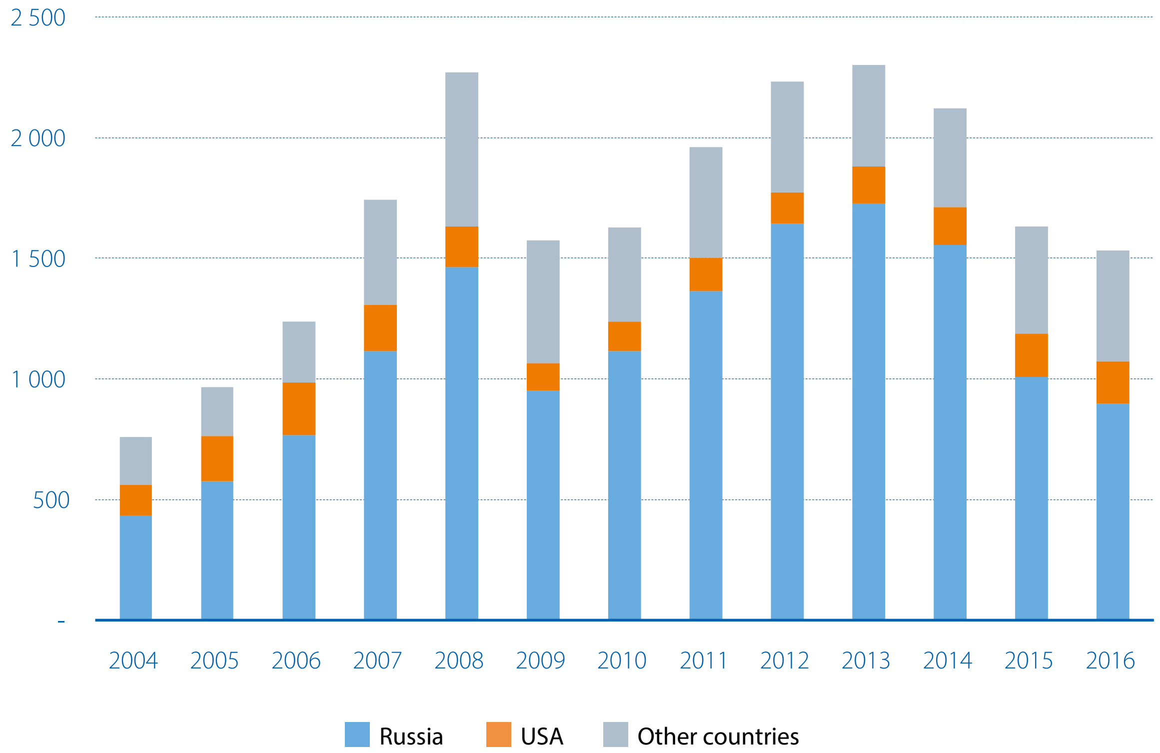
DIASPORA-ASSISTED GROWTH

The Armenian diaspora has become one of the key actors in the development market. It has been estimated that approximately 8 million ethnic Armenians currently reside outside of the country, with the largest communities living in the U.S., France and Russia. In addition to facilitating aid flows from multilateral and bilateral aid agencies via effective lobbying activities, the Armenian diaspora has channeled vast amounts of funding towards Armenian prosperity using the diaspora-affiliated mechanisms such as dedicated private donations and private transfers***. According to published research[79], approximately 69% of direct investors in the Armenian economy between 1998 and 2004 were affiliated with the diaspora, and that figure reached 84% in 2004, when many of the state-owned assets were being privatized.

* It has not been possible to detach the data with the time horizon until 2015 because of the KfW reporting format.
** The figure includes both financial cooperation (loans and grants) and technical cooperation (consulting services) components.
*** Commercial ventures launched by the diaspora businessmen are not included in the research scope. For example, diamond-cutting Arslanian Cutting Work (Belgium/UK) became the first foreign company associated with the diaspora family, which entered the Armenian market in 1992.

Over the past decade, remittances have become a key economic growth factor which have generated sizable social and economic benefits for Armenia. As in many other CIS countries, such as Tajikistan and Kyrgyzstan, the ratio of remittances to GDP has been relatively high in Armenia. Within the South Caucasus region, Armenia was the largest recipient of remittances during the MDG era, with a cumulative volume of US$20bn, which compares with Azerbaijan (US$16.3bn) and Georgia (US$15.3bn)[1]. In 2015 alone Armenia received remittances that were almost **four times** the total ODA inflows (i.e. US$1.5bn vs. US$409m)[80]. Russia remains the main source of these funds, even though its share in the total volume of transfers has decreased from 75% in 2013 to 59% in 2016. Throughout the 1990s development aid from foreign donors exceeded any other types of development-related funding in Armenia. The situation reversed in 2000s, as remittances overtook ODA flows in 2003 in absolute terms, and have been accounting for 17% of GDP on average during the past decade. The impact of remittances is likely to continue, even though Armenia's growth trajectory has been challenged by the economic slowdown in Russia recently. As in other CIS countries, in Armenia

Figure 29. Total Money Transfers Received Through Armenian Commercial Banks (US$m) by Sending Countries



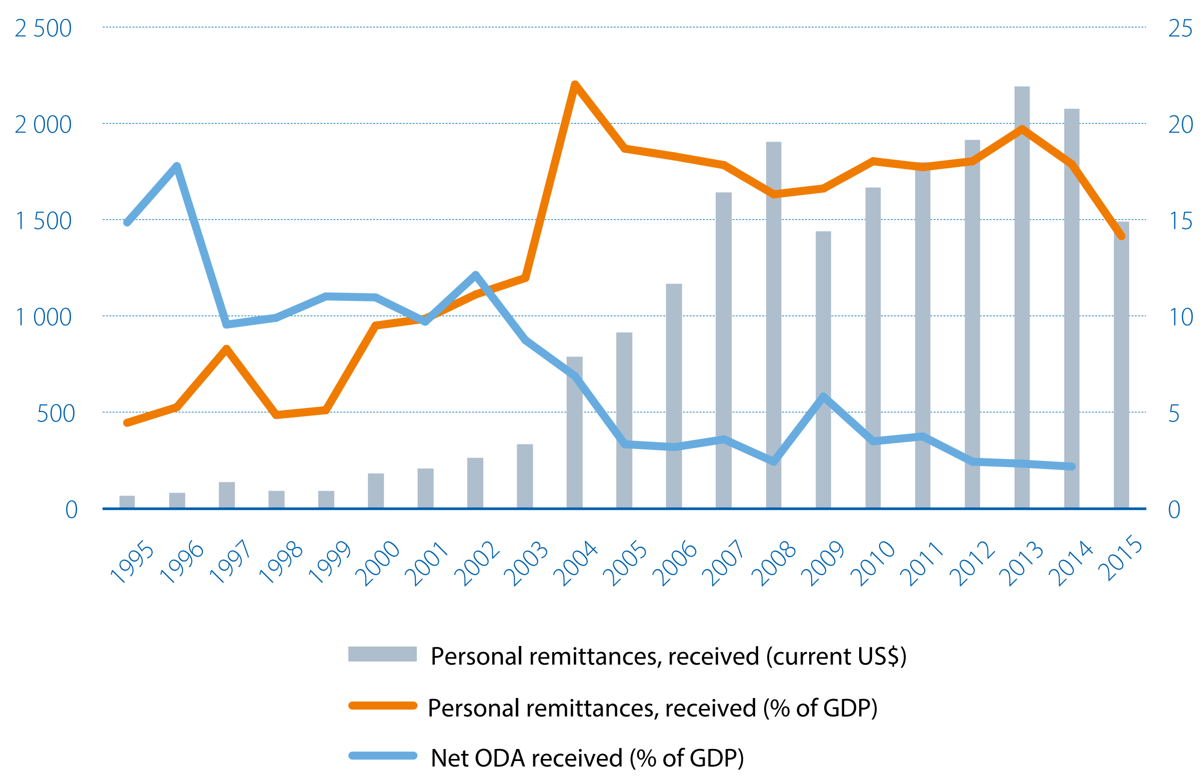
Source: Central Bank of Armenia

remittances have proven to be less volatile than official flows, for example, FDIs[81].

For the purpose of IEMS research, remittances are considered to be a part of development funding due to their positive effect on economic growth and social development through investment in physical and human capital. The Asian Development Bank estimated that in the absence of remittances the poverty level would have reached 54% in Armenia in 2006, which would have been 8.9% higher than the recorded statistics for that year[82]. Academic research[81] has established that in Armenia 36% of all households receive remittances from abroad, and 40% of households receiving remittances are classified as either poor or extremely poor. In general, 72% of all received remittances are spent on current consumption, rather than on savings, housing, entrepreneurship, health or education.

In addition to remittances, the Armenian diaspora supports the country's economic development through donations to private foundations. The very first diaspora organizations were founded in the U.S. in the beginning of the XXth century, in the aftermath of the

Figure 30. Historical Dynamics in Remittances into Armenia (1995 – 2015)



Source: http://data.worldbank.org/

Armenian Genocide, with the goal of delivering humanitarian relief to refugees. Another major trigger was the 1988 earthquake in Spitak, which mobilized the resources of the Armenian diaspora all over the world. A large number of development activists and foundations emerged, as many U.S. and Europe-based Armenian foundations, such as Armenian General Benevolent Union (AGBU), Armenian Relief Society (ARS), the Lincy Foundation, and Azanvour pour l'Armenie, launched fundraising campaigns for in-kind humanitarian aid for the reconstruction of destroyed residential districts in the earthquake zone. Furthermore, private foundations also delivered in-kind humanitarian aid, including basic goods and fuel, to support Armenia during the 1988-1994 Nagorno-Karabakh War. Historically, much diaspora fundraising for emergency and humanitarian relief was done by regular telethons. The very first of them was held in the early 1990s to raise funds for assisting the Armenian public sector, and for covering their operational costs, including heating, power and the fuel bills of public hospitals, schools, utilities and transport services.

Established in New York in 1906, the AGBU still operates, positioning itself as the world's largest non-profit organization devoted to upholding the Armenian heritage. The organization has an annual budget of over US$46m[83], and an all-encompassing thematic portfolio which includes projects in education, vocational training, medical access, agricultural development, cultural heritage, humanitarian relief, and aid to the orphans and vulnerable groups. In late 1980s, AGBU supported the global fundraising campaign which mobilized approximately US$10m for the victims of the Spitak earthquake. In the early 1990s, AGBU became one of the founding organizations of the American University of Armenia (AUA), having provided the major financial support for its operations and undertaken fundraising on behalf of the University to establish a permanent endowment fund. This was augmented by a U.S. federal grant of US$9 million[84]. Recently the organization entered into partnership with the Yerevan-based TUMO Center for Creative Technologies, having supported the establishment of TUMOxAGBU Centers in Gyumri and Stepanakert. In recent years, AGBU Humanitarian Emergency Relief Fund has been supporting Armenians affected by the conflicts in Syria, Iraq and Nagorno-Karabakh and has raised more than US$1.64m[85].

Another prominent U.S.-based diaspora organization founded at the beginning of the XXth century was the Armenian Red Cross, which later changed its name to the Armenian Relief Society. The organization was established in New York in 1910 with the original mission of empowering women, thought this later changed to "serving the humanitarian, social and educational needs of Armenian and non-Armenians alike". Since 1998 ARS has held consultative status in the Roster category with the United Nations Economic and Social Council.

Being more of a political lobby group than a development foundation, with its headquarters in Washington D.C., the Armenian Assembly of America (or the Assembly) which was initiated as a "new Armenian organization in which leaders from various Armenian groups would participate for the benefit of the community as a whole"[84], was founded in the U.S.A. in 1972. The Assembly emerged as a humanitarian aid actor in the late 1980s, when it got actively involved in coordinating the Spitak earthquake relief activities within the U.S. Later, it continued operating in the Armenian sustainable development space, in addition to its work in the foreign policy field. As well as ARS, the Assembly maintains close relations with the United Nations organization, having launched a refugee-focused initiative with UNHCR in 1997 and being granted a special consultative status at the United Nations Economic and Social Council in 1999. In 1994 the Assembly initiated a Yerevan-based NGO Training and Resource Center (NGOC) which seeks to "help Armenians and their recently established organizations shape positive social, political and economic transformation in Armenia". To build the capacity of the Armenian NGO industry, NGOC was funded by USAID through a Cooperative Agreement with an international non-profit organization: Save the Children.

The U.S.-based Fund for Armenian Relief (FAR) and the United Armenian Fund (UAF) were legal entities initially founded in 1988 in order to solicit relief funds for the earthquake zone. Headquartered in New York, U.S., FAR concentrates its efforts on humanitarian aid, social and economic opportunity and development, child protection, healthcare and education. Over the years, FAR has implemented more than 250 relief, social, educational and cultural projects valued at over US$300m[86]. FAR serves more than 12,000 direct beneficiaries and 50,000 indirect beneficiaries[87] through its development programs.

The United Armenian Fund was a U.S.-based non-profit organization operating between 1988 and 2015 which represented a coalition of five major Armenian-American religious and charitable organizations. In the 27 years of its existence, the UAF delivered to Armenia and Nagorno-Karabakh a total of US$720m worth of in-kind relief supplies via airlifts and sea containers[88]. During the Nagorno-Karabakh War, the UAF delivered the equivalent of US$350m of humanitarian aid to Armenia[89]. The organization was affiliated with a prominent American Armenian businessman, Kirk Kerkorian, who was its main benefactor. Kirk Kerkorian who was ranked by Forbes as the world's wealthiest Armenian was also the founder of private Lincy Foundation which ceased operating in 2011. Between 1989 and 2010 the U.S.-based Lincy Foundation donated over US$1bn to hospitals, health care-related organizations, schools, and scientific research within Armenia and beyond[90].

In Armenia, the Foundation donated significant funds for the development of Armenia's economic infrastructure, particularly, telecommunications, construction and restoration of roads. In 2001-2003 it provided grants to the Government of Armenia for construction projects, with the cumulative value of US$151m: US$73m for reconstruction of 275 miles of highways, tunnels, and bridges; US$15m for renovation of streets in Yerevan; US$45m for construction of 4,000 apartment units earthquake zone; US$18m for renovation of 40 cultural institutions[89]. Upon the fund's closure, all the remaining assets were donated to the University of California, Los Angeles (UCLA)'s donor-advised Dream Fund. Over their lifetime, UAF and Lincy Foundation cooperated in their assistance activities in Armenia. For example, in 2011 UAF received a US$10.5m grant from the Lincy Foundation for the reconstruction of six schools in Northern Armenia within the framework of the project, which the foundation initiated in 2010, after which it handed the remaining implementation over to another organization[91].

While most of the diaspora-led foundations are registered and headquartered outside of Armenia, such as FAR with its four offices in Yerevan, Gyumri, Berd and Vanadzor, some diaspora members shifted their approach from detached funding to action-oriented assistance, and opted for a stronger grassroots presence by setting up headquarters in Armenia. Based in Yerevan and registered under its current name in 2014, the Initiatives for Development of Armenia (IDeA) Foundation and its predecessor, the Tatev Revival Foundation, were founded by an Armenian-Russian entrepreneur, Ruben Vardanian, and his spouse, Veronika Zonabend. Since the launch of the first development interventions, IDeA has invested a total of over US$500m* in its ten development models built around sectors and themes: financial infrastructure, agroecology, mining**,

* Including affiliated projects
** Untapped sector at the moment

healthcare infrastructure, urban development, education, cultural heritage preservation, tourism development, technology and identity engagement. IDeA Foundation has also funded development interventions outside of Armenia, having launched the Armenian religious and cultural centers in the capitals of Georgia and Russia.

Overall, during the past decade diasporans and repatriants have contributed to Armenia's development landscape by direct funding, transferring best practices and establishing branches of such global social ventures, as Teach for All and Impact Hub.

PRIVATE SECTOR-ASSISTED GROWTH

In Armenia, social investments made by private foundations, lobal and local businesses, financial institutions and high-net-worth-individuals have been very difficult to trace in the absence of a global universal database on social investment and grant funding. Only some references to past social investment deals of fragmented nature with Armenian investees have been found in open sources. Just 13 deals with the cumulative volume of US$99m have been traced. Because of the limited data available on private deals, it has been decided to modify the time horizon from the specified date range of 2000-2015.

Despite the inherent limitations in sampling methodology and small sample sizes, certain trends in social investment inflows to Armenia have become evident. Literature for practitioners suggests[92] that global impact investors have wide exposure to such sectors as healthcare, education, energy efficiency, water and sanitation via debt or equity investments in social enterprises with a grassroots* presence. As for IEMS research on the private social investments in Armenia, the first observation is related to the fact that social investments currently concentrate exclusively in the finance and microfinance industries. In the research sample, foreign social investors do not seem to fund particular enterprises or development interventions from the 'real' sectors of the economy, but rather utilize the financial institutions as intermediaries for on-going lending to SMEs and entrepreneurs which have limited access to commercial funding.

In this situation, impact is achieved through the socio-economic effects generated from the commercial activities of beneficiary SMEs in urban and rural areas. It is important, especially for impact investors, to be able to measure their impact through quantitative indicators, such as the number of borrowers, the amount of disbursed loans, and the number of jobs created by beneficiaries. At the moment, foreign social investors do not put binding requirements on investees with regard to the nature of the business of the final funding beneficiaries. In other words, there is no inbuilt condition for funding social enterprises in the region, hence local financial institutions are able to provide lending to SMEs of a commercial nature.

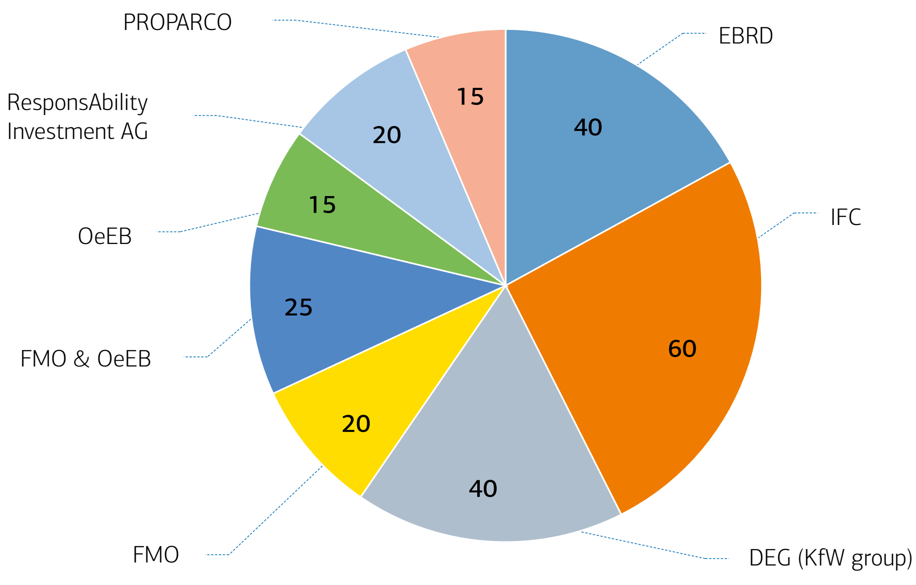
Second, analysis of the past experience of sampled social investors and investees in Armenia has identified the presence of 'crowding in' and 'stamp of approval' phenomena in the Armenian social investment space, as IFIs have seemingly mobilized the private impact investment by validating investees' credibility, and their participation in the capacity of equity holders and lenders is perceived as a so-called 'stamp of approval'. Private social investors tend to ensure accountability and proper use of their funds by investing predominantly in entities that are affiliated with, or controlled by, other global impact investors, global commercial banks, NGOs or multinational development institutions (see

* In this context 'grassroots' entails 'on-the-ground'.

Table 3). For example, a microfinance institution, FINCA Armenia, which is a 100% subsidiary of U.S.-based FINCA International, and which has a total portfolio size of US$38m, has received funding from a comparatively large number of international development institutions, commercial banks and impact investors, namely BlueOrchard, Developing World Markets, Symbiotics, responsAbility Investments AG, EBRD, Oikocredit, Triple Jump, IFC, Deutsche Bank and the Black Sea Trade and Development Bank.

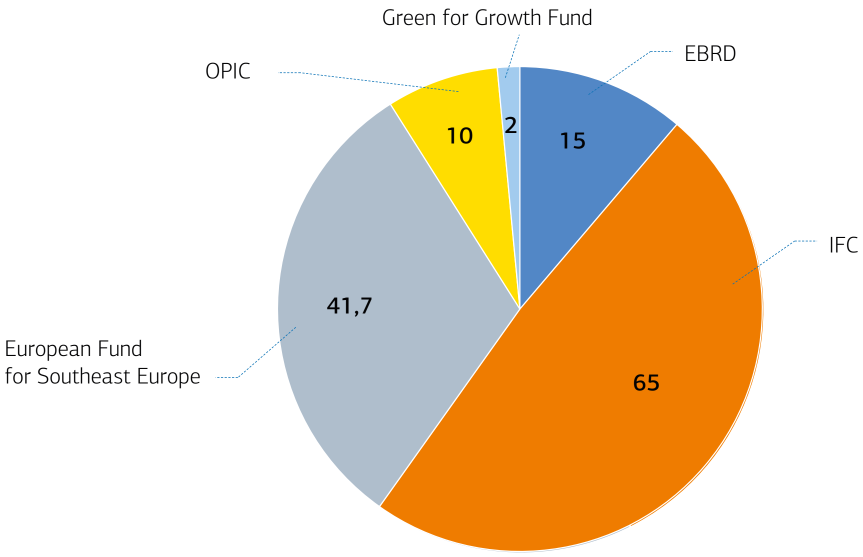
The investment approach of the leading IFIs and private impact investors ensures rigid compliance and transparency of the investees, as funding in the format of equity and debt is provided on a conditional basis. An equity investment by at least one reputable investor in local enterprises ensures not only financial soundness and long-term stability of operations but also guarantees a level of accountability and transparency for the investee that is subjected to shareholders' policies and procedures (financial reporting, procurement, sustainability etc.). Because of 'crowding in' phenomenon, a number of adverse effects might result, as certain entities and sectors might be underinvested due to social investors' reluctance to take on the risk of becoming the first social venture investor in an 'untapped' investee.

Figure 31. Selected Debt and Equity Deals. Distribution of Investments into Ameriabank by Investor (2011 – 2016). Total: US$235m



Source: open online sources

Figure 32. Selected Debt and Equity Deals. Distribution of Investments into ACBA Credit Agricole by Investor (2011 – 2016). Total: US$133.7m



Source: open online sources

Table 3. A List of Selected Impact Investments in Armenia between 2011 and 2016

Deal Year	Project Name or Project Description	Investor	Investee Name	Investee Ownership Structure	Investee Industry	Instru-ment Type	Amount (US$)
2011	**Bank's expansion in rural areas and agricultural lending**	EBRD/ Incofin Investment Management syndicate via Belgian VDK Spaarbank/ OJSC Promsvyazbank/ Lebanese Byblos Bank S.A.L.	Araratbank	FLASH LLC – 64.24% (90% controlled by individuals); EBRD - 25.00%; RURAL IMPULSE FUND II SA SICAV SIF – 10.00% (owned by Incofin)	Finance	Syndi-cated loan	12m
2012	**Bank's expansion in rural areas and agricultural lending**	Incofin Investment Management via the Rural Impulse Fund II	Araratbank	FLASH LLC – 64.24% (90% controlled by individuals); EBRD – 25.00%; RURAL IMPULSE FUND II SA SICAV SIF – 10.00% (owned by Incofin)	Finance	Equity invest-ment	10%
2012	**Loans for farmers, sole proprietors and small enterprises, renovation and consumer loans**	Incofin Investment Management	Small Enterprise Fund	Vision Fund International religious non-commercial corporation (U.S.A.) – 100% (Microfinance vehicle of World Vision)	Microfi-nance	Loan	1m

Source: open online sources

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Table 3. *Continue*

Deal Year	Project Name or Project Description	Investor	Investee Name	Investee Ownership Structure	Investee Industry	Instru-ment Type	Amount (US$)
2012	**Development of agricultural sector**	Citi Group/OPIC syndicate	ACBA Credit Agricole Bank (formerly Agricultural Cooperative Bank of Armenia)	Agricultural cooperative regional unions – 71%, Credit Agricole S.A. (France) – 15.56%, Sacam International (France) – 12.44%, Samson Gishyan – 1%	Finance	Loan	5m
2013	**Loans to enterprises operating in production, trade, services and agriculture**	BlueOrchard	Araratbank	FLASH LLC – 64.24% (90% controlled by individuals); EBRD – 25.00%; RURAL IMPULSE FUND II SA SICAV SIF – 10.00% (owned by Incofin)	Finance	Loan	4m
2013	**SME financing**	PROPARCO	Ameriabank	EBRD - 20.7 %; AmeriaGroup - 79.3%	Finance	Loan	15m
2014	**Loans to consumers, entrepreneurs and small businesses**	OikoCredit	Kamurj UCO	Micro Entrepreneurship Development Charitable Fund - 100% (Armenian NGO)	Microfi-nance	Loan	1m
2015	**Support to SMEs with focus on rural areas**	Bank im Bistum Essen eG (BIB)	FINCA Armenia	FINCA MICROFINANCE HOLDING COMPANY – LLC 100%, owned by FINCA International (U.S.A.): FINCA foundation (NGO) – 62.64%; IFC - 14.38%; KfW – 8.94%; Nederlandse Financierings Maatschappij voor Ontwikkelingslanden N.V. (FMO) – 7.30%; Credit Suisse Microfinance Fund Management Company, acting for responsAbility Global Microfinance Fund – 2.98%; Triple Jump B.V. – 1.68%; Triodos Fair Share Fund – 1.04%; Triodos Microfinance Fund – 1.04%	Microfi-nance	Loan	2m
2016	**Lending to SMEs and financing of renewable energy and energy efficiency projects**	ResponsAbility Investment AG via four Luxembourg-based funds	Ameriabank	EBRD - 20.7 %; AmeriaGroup - 79.3%	Finance	Debt securities	20m
2016	**Micro loans**	ResponsAbility Investment AG	Inecobank	Avetis Baloyan - 27.40%; Karen Safaryan - 23.67%; EBRD - 22,70%; Deutsche Investitions und Entwicklungsgesellschaft (DEG) - 9,58%; IFC - 7,10%	Finance	Loan	22m

Source: open online sources

Other research publications on Armenia[93] confirm the IEMS finding about the limited presence of international impact investors, including diaspora foundations and private individuals, in the Armenian development scene. The Impact Hub Yerevan report noted that international impact investors do not have significant exposure to Armenian social enterprises in their portfolios at the moment. This is mainly because of "the lack of a pipeline of viable and investment-ready initiatives" which can be scaled up.

STATE-ASSISTED GROWTH

Although a large proportion of the economic and social progress achieved by 2015 can be credited to external development assistance, regular state expenditures on such budgetary items as agriculture, health, education, or utilities can be also classified as domestic development finance, and the vast majority of development effects have been enabled by regular public-sector activities.

The overall enhancement in Armenia's economic health recorded between 2000 and 2008 enabled the government to channel more resources into social sectors, thus allowing for a better alignment of state budget expenditures with poverty reduction strategy priorities. The resulting access to quality health care, education and social services eventually leads to the improvement of living conditions of vulnerable population groups. In Armenia, the government has increased the total spending on health and education in absolute terms, but in relative terms a downward trend was noted between 2005 and 2014. Cumulative spending on these two items has decreased from 23% to 16% of the total public expenditure. It was the public social spending which was particularly hindered by the economic slowdown of 2008 in Armenia.

In line with the World Bank's global practices, project agreements for all loans and credits extended under the umbrella of the World Bank have been exclusively signed with Armenian sovereign or quasi-sovereign borrowers, such as the High Voltage Electric Networks Closed Joint Stock Company of the Republic of Armenia, the Yerevan Distribution Company or the Armenia Water and Sanitation Company. For this reason, it is hard to avoid double-counting development finance volumes across the international and domestic supply segments. External development aid from IFIs and commercial loans* have been used to subsidize state public budget because of 'below-regional-average' tax collection rates (e.g. 16.3% tax-to-GDP ratio in 2012)[94]. Certain academics have argued that the relatively high share of aid in government budgets in some countries has raised concerns about the detrimental effects of aid dependency on domestic revenue collection efforts and public expenditures[95]. The argument about the 'crowding out effect'[96] can indisputably be applied to Armenia.

In the project implementation side, there have been two most active sovereign structures in Armenia during the MDG era, those being diaspora-oriented Hayastan All-Armenian Fund and the foreign donor-oriented Armenian Territorial Development Fund. Each of them taps different sources of development funding.

To coordinate the inflows of diaspora assistance, a Presidential Decree established the subordinated-to-the-state Hayastan All-Armenian Fund in 1992. The fund utilizes a global network of 25 affiliates which coordinate fundraising efforts in their respective diaspora communities. So far, projects with a total budget of US$330m[97] have been implemented by the fund in Armenia and Nagorno-Karabakh. They included the construction and renovation of hard infrastructure, such as roads, schools, kindergartens, hospitals, water and gas networks. The fund's work has been heavily criticized[98] by certain members of the public for non-transparent tendering processes in the

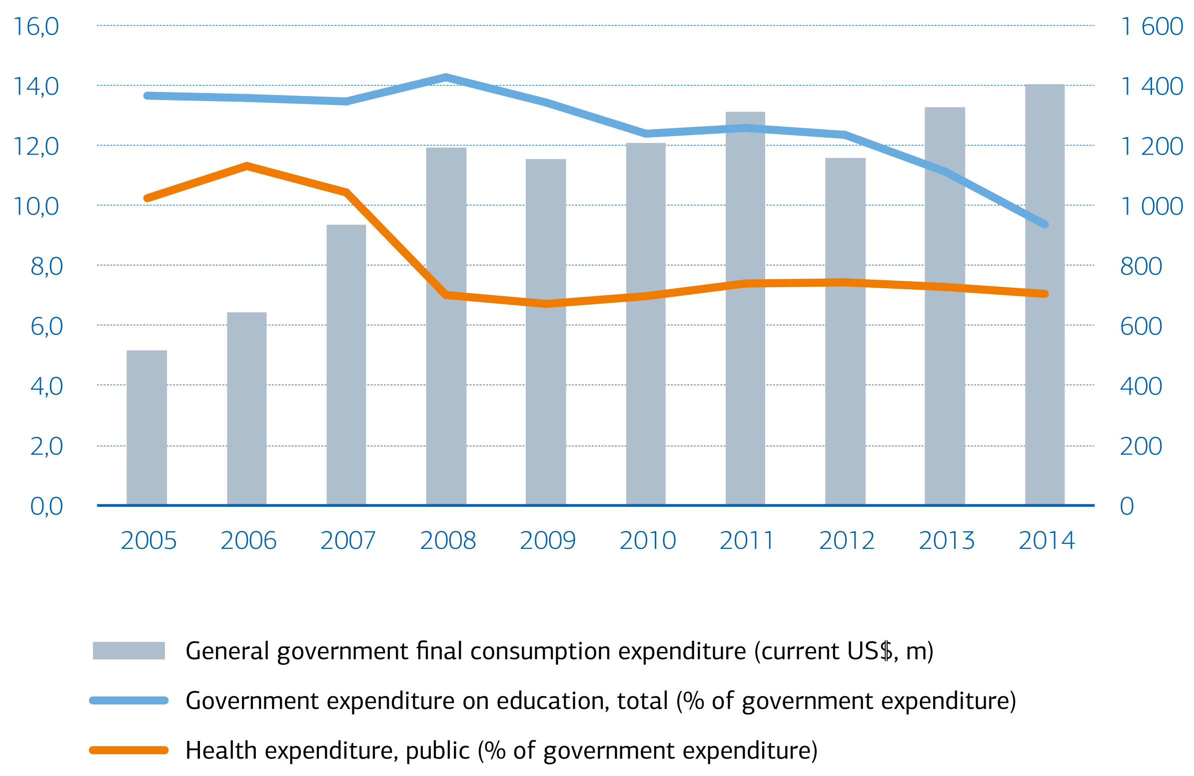
* Such as US$500m loan from the Russian Federation received in 2009.

past, as they claimed that certain construction contracts were awarded to companies which had delivered poor performance, and that were allegedly affiliated with government officials or their immediate circles.

The other key sovereign actor in this segment is the Armenian Territorial Development Fund (ATDF), formerly known as the Armenian Social Investment Fund (ASIF). Established in 1996, the ASIF was set up in order to provide immediate support for infrastructural renewal and to enhance the living conditions of most economically-vulnerable groups. In 2014 ASIF was reorganized and renamed, following a review of ASIF's strategy development carried out by the government of Armenia and the World Bank. Additionally, the fund became subjected to the requirements of the 2014-2025 Strategic Program on Prospective Development of the Republic of Armenia.

Subsequently, ATDF was entrusted with the implementation of a World Bank-funded social investment and local development program in Armenia. Since its inception as the ASIF in 1996, the organization has implemented over 900[99] community infrastructure

Figure 33. Historical Government Expenditure Patterns in Armenia (2005 – 2014)



Source: data.worldbank.org

rehabilitation projects in Armenia, including the construction and renovation of schools, community centers, irrigation and potable water systems, health centers, etc. ATDF has implemented projects funded by various multilateral and bilateral donors, such as the Swiss Agency for Development and Cooperation, the International Bank for Reconstruction and Development, USAID, and the Asian Development Bank. Consistent with the donors' co-funding requirements, the government of Armenia made a financial contribution to ATDF projects. For example, it provided US$13.75m of counterparty funding to the US$68m Local Economic and Infrastructure Development Project, with an IBRD credit amounting to US$55m. The total project budget was estimated at US$68m.

Implementing Development Interventions. Demand Side of Armenia's Development Market

The substantial economic and social progress achieved in Armenia has been made possible not only thanks to development funding injections, but also and perhaps mainly due to the effective and well-designed measures which have been implemented on the demand side of the development market. While the supply side is represented by development capital holders and project funders, the demand side is represented by actors implementing development interventions (see Figure 1). In the governance structure of the demand side different types of development intervention implementers can be identified at the national level: (1) State (sovereign and quasi-sovereign entities), (2) IGOs, (3) charities (foundations and NGOs), (4) start-ups and social enterprises, and (5) 'hybrids'. In comparison to the supply side where cumulative volumes for each segment can be either reported or derived as a sum of standalone deal amounts, such level of data is not available for different segments on the demand side where reported project budgets can be used as the most valid proxy for a bottom-up analysis.

Although it has not been possible to outline the taxonomy of the demand side and include the respective segment volumes, it has been decided to describe the entire spectrum of development interventions present in Armenia through the case studies method. The appendix section of this report includes a casebook consisting of case studies describing six unique development interventions implemented by all five aforementioned types of project implementers. Because charities are the most active development actors on the demand side, and their operational models are highly diverse, it has been decided to include two case studies on charity-led development. With regard to the selection procedure, all six presented cases have been filtered through the following criteria: (1) the case describes either the standard-for-that-type-of-development-actor intervention or a pioneering, novel approach, (2) the case has either been completed or, if still ongoing, certain measurable results have already been delivered, and (3) the case has either contributed to the development of a particular territory, or has had a nationwide impact.

With regard to the analysis of studied development interventions, certain trends have been observed which make possible some assertions about the Armenian development market as a whole. First of all, it is worth mentioning that the pioneering, innovative development models started being implemented in Armenia in the late 2000s. Agriculture has been identified as an essential component of most people's livelihoods in Armenia. The country's economy has historically been based substantially on agriculture, so solutions in this field have been identified as having most impact on broad-based poverty reduction. In line with the goal of poverty reduction, most development interventions are designed to target rural beneficiaries, primarily farmers or SMEs operating in the agriculture or food & beverage industries. Out of six development models 2.5 have revolved around the agriculture-led development.

Table 4. Overview of 6 Development Models						
Name of the Development Model	**One-Village One-Product (OVOP)**	**Integrated Area-Based Development**	**'Housing Revolving Loan Fund for Development'**	**'Pay-It-Forward' ('Passing on the Gift/POG')**	**Technology for Development**	**Private Agency for Social and Economic Development (PASED)**
Year of Launch	2013	2015	2007	2011	2009	2008
Type of social problem to be addressed in Armenia	Lack of market access by rural SMEs	Rural poverty in borderline communities	Substandard housing	Low endowment in cash-generating assets among rural farmers	Educational inequality and technological divide	Underdeveloped tourism infrastructure in rural areas
Industry	Agriculture + Tourism	Agriculture + Infrastructure	Housing	Agriculture	Education	Tourism
Type of Donor	Bilateral	Bilateral	Corporate	Own funds + IFI	Own funds + multilateral and bilateral	Private (founders and individual donors)
Type of Implementing Agency	State	IGO	Charity	Charity	Start-up	'Hybrid' platform
Engine for development	Specialization in value-added tangible PRODUCT	Provision of 'HARD' INFRASTRUCTURE and CASH-GENERATING ASSETS in the participatory community-based manner	Access to housing FINANCE	Multiplier effect from passing on of CASH-GENERATING ASSETS	Universal and equal access to EDTECH tangible product	Mobilization of public and private sector actors around INCOME-GENERATING anchor intervention
Project Cycle Management	Donor-driven	Implementer-driven	NA	Donor-driven	NA	NA
Financial multiplier effect	No	No	Yes (multiplied cycles)	Yes (multiplied cycles)	No	Yes (financially-sustainable 'anchor' project)
Other comparables in Armenia	Unique	Oxfam, Hayastan All-Armenian Fund (for the greenhouse-based development component)	Habitat for Humanity Armenia	Unique	Unique	Unique
Impact	248 participants attended OVOP trainings and seminars + over 200 suppliers of newly-established businesses	400 beneficiaries (needs assessment)	677 beneficiaries	3,650 households (POG Strategy)	1,501 teachers (generated employment), 38,000 teachers attended IT trainings	US$3.4m (taxes), 77 permanent positions and 250 temporary positions (generated employment)

Source: IEMS

Another common trend related to the sampled interventions design concerns their focus on sustainable engines for development. None of the development models is based on 'soft' capacity-building. Instead they enhance beneficiaries' financial sustainability through investment in physical assets, whether a technological platform, agricultural cash-generating equipment or housing. While traditionally the design of development interventions included training beneficiaries by foreign experts, round tables and study seminars, the current paradigm focuses on the long-term sustainability of anticipated results, and that involves 'hard' capacity-building which is often coupled with a financial multiplier effect. For example, the 'revolving loan fund' and 'passing on the gift' development models are designed to maximize outreach to a larger number of beneficiaries, as the funding is reused in multiple cycles. It is worth mentioning that four out of six development models have been classified as 'unique' in the Armenian setting, as well as of high impact on Armenia's economy and society at the national and regional levels. The overview outlined in Table 4 illustrates the diversity of the development models present in the Armenian development market, many of which have become so-called 'innovative pioneers' in the entire CIS region.

Transitioning from MDGs to SDGs: Armenia's Snapshot Position

Overall, it can be concluded that all material and non-material indicators suggest that Armenia's prosperity has been enhanced during the MDG era. The poverty incidence rate declined from 53.5% in 2004 to 29.8% in 2015[53]. However, it is alarming that one-third of the country's population are still classified as poor today. Certain other problems remain, as the Armenian economy remains highly fragile, and the previously achieved economic growth rates cannot be considered sustainable. One of the most pressing problems concerns regional disparities in development, income and access to decent employment opportunities. The level of informal employment is still high, but it is alarming that employment does not seem to protect many families from poverty, as the working poor constitute two-thirds of the total classified as poor[55].

The 2015 National Progress Report noted that nearly 40% of all labor resources in Armenia are economically inactive, and more than one-third of young men and women are neither employed nor enrolled in any form of education[59]. According to some researchers[100], in Armenia regional development disparities have been increasing in parallel to the country's accelerated economic growth since the beginning of the 2000s. Determined by underdeveloped physical and financial infrastructure, rural poverty is especially critical in Armenia. In 2015, poverty reported in rural communities was above the national average, i.e. 30.4% against 29.8%[53]. Rural households often have limited access to irrigation, agricultural machinery, production capacities, housing and agricultural finance. Their livelihoods are affected by poor roads and other transport facilities, especially in remote locations. For these reasons, people migrate from rural areas to the capital, as well as from Armenia to other countries.

The magnitude of social problems in Armenia illustrates the need for action, and suggests priority themes for all public and private development actors operating in the country during the SDG period.

Figure 34. Armenia: Poverty Rate by Consumption Aggregate, by Regions and Yerevan, 2015

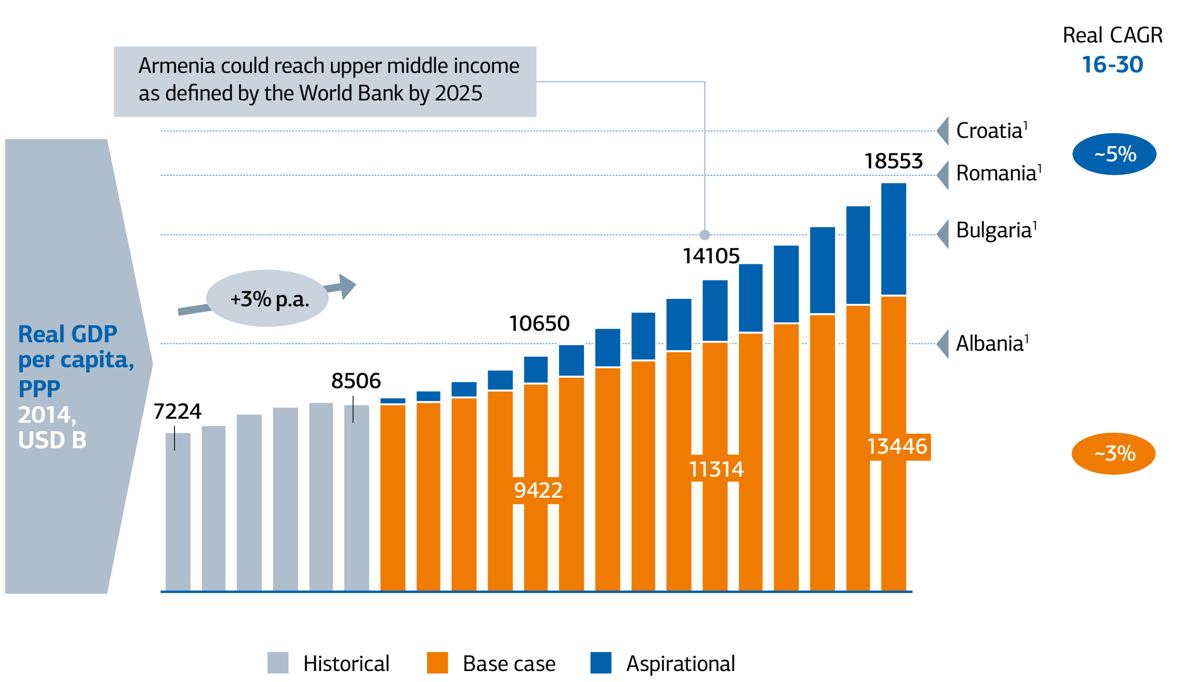
Source: National Statistical Service of the Republic of Armenia (2016) [53]

Chapter 3.
5 Basic Principles of Post-2015 Development Agenda in Armenia

In 2002 a group of prominent diaspora business leaders from the U.S.A., Europe and Russia, Ruben Vardanyan, Noubar Afeyan and others, launched a scenario-building initiative called Armenia 2020. This private sector-led exercise was implemented with the analytical support of the McKinsey & Company consulting firm, and with the objective of generating cluster-based alternative development models for Armenia by 2020. The results were instrumental for the emergence of the IDeA Foundation and the follow-up Armenia 2030 initiative.

2030 has been set as an important milestone in the Armenia 2030 vision, as it marks the end of the Sustainable Development Goals era, in which the country has to assess its progress in achieving national targets as defined by 17 goals. The Armenia 2030 exercise has generated a far-sighted prosperity vector, based on McKinsey Global Growth Model results, which described the means of doubling Armenia's GDP per capita level by 2030. First of all, it should be noted that the McKinsey experts tested the feasibility of reaching a US$18,500 GDP per capita level, which would put Armenia on a par with other higher-middle-income Eastern European countries. On the model's assumptions, a growth rate of 5% could be achievable and sustainable for the Armenian economy over a 15 years period, as a result of additional cumulative public and private investment amounting to US$8bn in six identified priority sectors. The highest economic growth potential was in IT, agro-processing, tourism, healthcare, finance, and mining.

Figure 35. Output of McKinsey Global Growth Model



Source: IDeA Foundation

The vision behind the Armenia 2020 initiative has subsequently been affirmed by newly-emerging global trends. For example, the World Economic Forum has launched an annual publication of two cluster-based reports: the Global Information Technology Report and the Travel and Tourism Competitiveness Report, both of which are consistent with the priority sectors identified by the Armenia 2020 exercise. As illustrated by the case studies presented in Chapter 2, the Armenia 2020 approach has been consistent with the vision adopted by many development actors which, already from late 2000s, have been implementing the most innovative development interventions across the identified priority sectors such as agriculture, tourism, IT and finance.

Irrespective of the findings' application in the development context, the Armenia 2020 initiative, which served as the navigator for business action in Armenia during the MDG era, focused primarily on the economic levers for growth, namely labor productivity, innovation (R&D) and the trade deficit, with less 'navigation' being directed to the 'beyond-GDP' metrics and inclusive growth objectives. Although notable economic growth and societal progress had been achieved in Armenia by 2015, which can be partially credited to the capacity-building efforts of multiple international donors, including the diaspora, the country pursued a growth-oriented trajectory at that time. Taking into account Armenia's factor endowment and global processes, IEMS would like to speculate that that the traditional GDP-fueled growth model is outdated and might not be applicable in Armenia over the next fifteen-years, and that a **development-oriented trajectory** might be the most optimal one for establishing sustainable growth.

2015 marked the transition from the MDG to the SDG agenda all over the world as well as in Armenia. The combination of concurrent global and national processes indicates existing momentum for the Development 2.0 movement in Armenia. Global experience illustrates the inherent opportunities offered by sustainable development which Armenia can tap along the country's far-sighted prosperity vector envisaged for the 2015-2030 horizon. The country can build upon the impressive record of economic and social progress achieved within the MDG framework. During the previous decade Armenia has accumulated a wealth of technical expertise in implementing different types of development interventions, as illustrated by the six development models. While development assistance and external aid successfully catalyzed Armenia's economic growth during the MDG era without much facilitation and strategic planning on the part of the government, today a self-reinforcing mechanism of development inflows does not seem to be feasible. There is evidence of a need for a comprehensive government-led development policy which focuses not only on investment promotion but also on development promotion in Armenia.

In order to conceptualize the basic principles of the post-2015 development agenda, the global context and global game-changers, Armenia's factor endowment, its strengths and weaknesses, Armenia's development enablers and a case-based bottom-up analysis have been aggregated into this summary table.

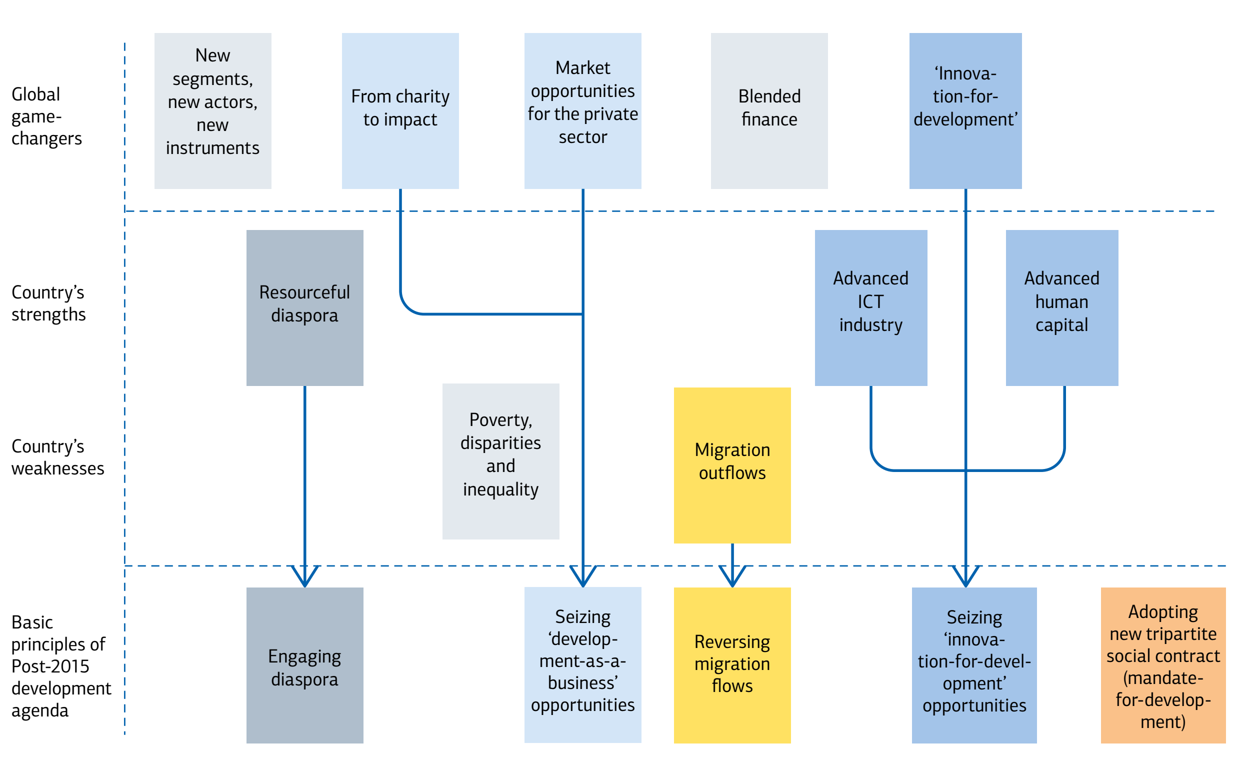
The aggregate analysis has generated five basic principles for a post-2015 development agenda which relies on a combination of selected global game-changers and country-specific factors. The findings of the IEMS research, based on top-down and bottom-up analyses, suggest that these five principles are the most relevant for the Development 2.0 movement in Armenia, and that they can be used as the building blocks of state policy on sustainable development.

The government has already started taking gradual steps to incorporate a development vision into its key strategic documents. A fully-fledged Poverty Reduction Strategy Paper was adopted in 2003, and a "Sustainable

Development Program" in 2008. Certain key strategic resolutions for defining a post-2015 agenda focused on sustainable development objectives to an even greater extent have also been adopted. For example, national authorities have already formed a Post-2015 Task Force, drafted the Post Rio+20 Strategy Plan produced by the National Council on Sustainable Development, and incorporated the SDG focus into the government's Prospective Development Strategy for 2014-2025. The "Promotion of Corporate Social Responsibility" has been included as a separate point in the government's 2008-2012 program. During the SDG era the government will have to face the challenge of strengthening internal resources, making the economy more resilient to external shocks (especially, in the light of the resulting negative impact on the Armenian economy from the economic sanctions imposed on Russia), and creating innovative opportunities for development. The following key development priorities for the SDG era are listed in the strategic documents:

- Growth economy,
- Development of human capital,
- Improved governance (institutional modernization of the government system),
- Gender equality,
- Health,
- Sustainable development (improved environmental protection)[59].

Figure 36. Modelling 5 Basic Principles of Post-2015 Development Agenda



Source: IEMS

BOX 1

SOCIAL ENTREPRENEUR PERSPECTIVE:

How can Armenia realize its innovation potential and become the first of its kind national SDG lab which experience can be transferrable to other countries?

"Armenia, always a hub of technical excellence even during the Soviet period, has remarkable potential to become the first to realize the full potential of the SDGs, not only in their word, but in their broadest practice. The new generation of Armenian citizens are highly motivated to take part in an exploding IT innovation movement in the country, and this from the capital and out to the smallest regional village. Awareness around the SDGs has only recently started, but they are being enthusiastically embraced.

My own Homeland Development Initiative Foundation is growing robustly, with an over 40% increase in sales in 2016. The skill set of female artisans whom we employ is robust, so all it takes is a good design and high quality to make a product widely sought after in the handmade gift markets, both within and outside of Armenia. Our customer base includes orders from the U.S.A., Canada, Norway, Sweden, Germany and other countries. Thus, it is not only the IT industry that has a huge potential in Armenia, but several others, like hand-knitted or hand-crocheted products, but also wine, jewelry and others. Much needed are the financial tools to make trade easier. Full integration of Armenia into the international market is dependent upon such technical solutions like full integration into payment platforms and more. For example, PayPal in Armenia would be a huge boost".

Timothy D. Straight
Founder and Executive Director, Homeland Development Initiative Foundation*

* HDIF, the producer and seller of Armenian traditional handicrafts, became the first organization in the region that has been certified as fair trade by the World Fair Trade Organization.

BOX 2

SOCIAL INCUBATOR PERSPECTIVE:

How can Armenia realize its innovation potential and become the first of its kind national SDG lab which experience can be transferrable to other countries?

"The narrative of our nation has been itching to shift from “it cannot be done” to “yes, it can be done”. Now, 26 years after independence, a new generation who never knew the Soviet Union, is dusting off the cobwebs of their parents' generation and taking responsibility for their own fate. They are bold, globally connected, and locally invested. They refuse to accept the “that's just the way it is here” excuse. Here is where Armenia is beginning to realize its innovation potential and where the increasing embrace of SDGs is coming in. The time is right to bring together Armenia's change makers and connect them to the global conversation on SDGs.

Impact Hub Yerevan Social Innovation Development Foundation (also known as Impact Hub Yerevan) is a professional membership organization dedicated to individuals, enterprises, start-ups, and organizations making a positive impact in Armenia and around the world. There are currently 203 Impact Hub Yerevan members representing every sector in Armenia - from the NGO/Civil Society sector, the tech sector, professional services sector, freelancers, artists, etc. We see Impact Hub Yerevan's main responsibility to pull existing innovators together (both within Armenia and the diaspora), activate their potential, and provide an inspiring space, a supportive ecosystem and educational programs that propels their ideas toward impact. Also, it is important to note that Impact Hub Yerevan serves not only the best and brightest innovators inside the country but acts as a bridge with change makers within the Armenian Diaspora and across the global Impact Hub network. In short, Impact Hub Yerevan is an inspirational home offering a plethora of resources for both our budding innovators inside Armenia and those who would like to invest in and support them outside Armenia".

Sara Anjargolian
Co-founder and CEO, Impact Hub Yerevan

* As of the Spring 2017, Impact Hub Yerevan network included 190 paying members, including individual entrepreneurs, social enterprises, NGOs, tech start-ups, and other organizations working towards making a positive impact in Armenia.

The five basic principles suggested by IEMS can complement the list of development priorities identified by the government of Armenia in its strategic documents.

1. Reversing Migration Flows

High levels of outward migration have been identified as one of Armenia's most critical weaknesses. Although none of the respondents interviewed for the case studies has identified migration as the key social problem which the development intervention was designed to address, some of them highlighted the impact opportunities created by interventions connected with emigration. Human capital flight is destructive for the countries of origin. In Armenia, the problem of unrealized earnings made by those who have left the country is especially pressing, despite the remittances received, due to the country's small size and high quality of human capital. Past experiences of such migration corridors as Italy-U.S.A. or Turkey-Germany have demonstrated that mass migration is usually reversed as a result of rising economic prospects in the originating country, and that the strongest incentives for emigration are high levels of unemployment, poorly functioning labor markets and entrepreneurship barriers.

Although the 'reversing migration flows' principle has been recognized as a country-specific factor, the inclusion of migration, which did not feature prominently in the Millennium Declaration, in the 2030 Agenda for Sustainable Development confirms and reinforces the important relationship between development and migration at the global level:

"We recognize the positive contribution of migrants for inclusive growth and sustainable development. We also recognize that international migration is a multi-dimensional reality of major relevance for the development of countries of origin, transit and destination, which requires coherent and comprehensive responses. We will cooperate internationally to ensure safe, orderly and regular migration involving full respect for human rights and the humane treatment of migrants regardless of migration status, of refugees and of displaced persons. Such cooperation should also strengthen the resilience of communities hosting refugees, particularly in developing countries. We underline the right of migrants to return to their country of citizenship, and recall that States must ensure that their returning nationals are duly received"[101].

Irrespective of the negative effect of emigration, it should be noted that received remittances are usually instrumental for building financial and human capital in originating countries. Nevertheless, it is not apparent that these benefits outweigh the ones generated by return migration, as return migrants have accumulated three types of capital in their destination countries, namely **financial, human and social capital**.

In general, emigration is a more problematic area than reintegration of return migrants. It can be addressed only by comprehensive public policies aimed at strengthening market mechanisms. Armenian policy makers have been more successful at taking certain steps in the field of reintegration assistance to repatriates. For example, Armenia has established an interagency committee to monitor the execution of the 2012-2016 Action Plan for the Concept for the Policy of State Regulation of Migration in the Republic of Armenia, with a particular focus on employment and skills. Also, the modalities of repatriation processes have been included in the "Priority Tasks for 2011 of Government of Armenia" document. A special program oriented towards Armenians residing in Switzerland was launched in 2004, the "Return Assistance Program for RA Nationals from Switzerland", which was later followed by the adoption of the dual citizenship regime in 2007, that allowed the granting citizenship to members of the Armenian diaspora.

For the reintegration of returnees, a special assistance package has been introduced by the

Figure 37. The Impact of Migration on Five Key Policy Sectors

	Labor Market	Agriculture	Education	Investment and Financial Services	Social Protection and Health
Emigration	Emigration can generate labor shortages in certain sectors and skills groups, but also alleviate pressure in the labor market. Emigration tends to reduce household labor supply.	Emigration revitalizes the agricultural labor market, as emigrants are replaced by workers from outside the emigrant's household.	Emigration of highly educated people can negatively affect human capital, at least in the short term. Low-skilled emigration can in some cases encourage young people to drop out of school.		
Remittances	Remittances can contribute to reducing household labor supply, but also help stimulate self-employment.	Remittances increase investment in agricultural activities.	Remittance-receiving households often invest more in education and increase the demand for quality education.	Remittances support business ownership in urban areas and stimulate investment in real estate.	Remittances are not often used for social expenditures generally, but are used for specific expenditures on and use of health facilities.
Return migration	Return migration can help encourage self-employment. Return migration helps enrich the skills sets in the home country.	Return migration increases investment in agricultural activities, but also in other types of activities in agricultural households, creating opportunities for diversification.	Even though only a limited proportion of the highly skilled return, they help raise the stock of human capital in originating countries.	Households with return migrants are more likely to run businesses than non-migrant households.	Return migrants are less likely to benefit from government transfers than non-migrants.
Immigration	Immigration provides an ample supply of labor for the economy and can fill labor shortages in certain sectors.	Agricultural households with immigrants are more likely than other agricultural households to hire-in labor and sell their produce.	Immigrant children are less likely to attend school than native-born children.	Households with immigrants are more likely to own a non-agricultural business than households without immigrants.	Immigrants are less likely to receive government transfers, but also to pay taxes because of their concentration in the informal sector.

Source: OECD (2017) "Interrelations Between Public Policies, Migration and Development".

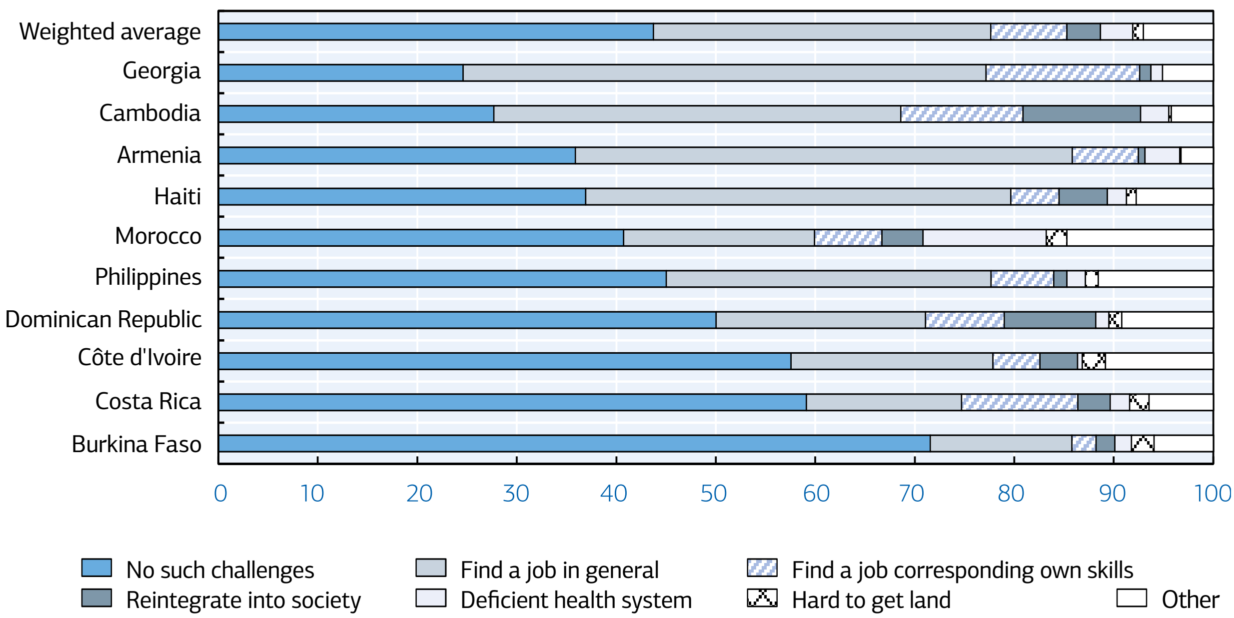
Figure 38. The Impact of Migration on Five Key Policy Sectors				
	Emigration	**Remittances**	**Return Migration**	**Immigration**
Labor Market	By providing better information on job opportunities at home, government employment agencies tend to curb emigration flows. When vocational training programs do not meet the needs of the domestic labor markets, they foster emigration. The coverage of most public employment programs is too small to have a significant impact on emigration.		Return migrants' lack of access to government employment agencies may mean that self-employment is the only option.	Immigrants who have formal labor contracts are more likely to invest in the host country than native-born individuals.
Agriculture	While agricultural subsidies tend to lower emigration in middle-income countries, they increase it in low-income countries. Agricultural training and risk-reducing programs have little influence on migration outcomes.	Agricultural subsidies are positively correlated with the level of remittances in certain countries.	The share of return migrants is higher in countries where a large proportion of households benefit from agricultural subsidies.	
Education	Cash-based educational programs help deter emigration when conditions are binding.	Conditional cash transfer programs are linked to the probability of receiving remittances, but not to the amount of remittances received.		Broadening access to education contributes to immigrants' integration and human capital gains.
Investment and Financial Services		A poor investment climate negatively affects households' abilities to invest remittances and accumulate savings. Financial inclusion translates into more formally sent remittances. Lack of financial training represents a missed opportunity to channel remittances towards more productive investment.		
Social Protection and Health	Public investment in social protection tends to curb emigration.	Increased social protection coverage reduces the probability of receiving remittances.	Social protection increases the likelihood of migrants returning home permanently.	Having better access to social protection reduces the likelihood of immigrants returning to their home countries. Access to social protection and health services fosters the integration of immigrants.

Source: OECD (2017) "Interrelations Between Public Policies, Migration and Development".

Migration Agency of Ministry of Territorial Administration. This includes assistance with job placement, education attainment and access to education. Private initiatives addressing the migration problem have been introduced, often in the PPP format. For example, the "Return to Origins" program of the French-Armenian Development Foundation in Armenia and the National Agency for Receiving of Foreigners and Migration of the Government of France, and the Armenian Association of Social Aid in France was launched in 2005. It has assisted 400 returnees since its inception. Another program is the "Stable Reintegration after Voluntary Return", supported by CARITAS-Armenia organization. The government of Belgium and CARITAS-Belgium funds around thirty returnees annually. The "People in Need" NGO has launched an assistance project that provides funding for new start-up businesses by returnees, which has funded the establishment of twenty new businesses for returnees since 2009. With the use of government funding and with the support of the Armenian State Employment Service Agency, the "People in Need" organization has established three resource centers where it delivers training to a hundred returnees. Irrespective of certain incentivizing measures already in place, underemployment of return migrants' skills and their limited participation in the labor market still remain as challenges in Armenia.

Although the Armenian government has introduced certain public policies addressing emigration and return migration, it has not raised these issues in public call or campaign forms, urging the return of Armenians residing abroad. The exception is the dedicated

Figure 39. Challenges Faced by Return Migrants



Source: OECD (2017) "Interrelations Between Public Policies, Migration and Development".

'Back to Armenia' web-page[102]. The experience of the Irish government, which launched the #hometowork ad campaign* urging emigrants to bring their skills back home, might be of some interest and relevance for Armenian policy makers.

2. Engaging Diaspora

It is ironic that while migration represents one side of the coin with the minus sign, diaspora is the other side, but with the plus sign. The engagement of diasporas is another important component in the link between development and migration. It has a strong policy dimension.

According to all experts, Armenia's unique trajectory is the one incorporating the pan-diaspora movement for Prosperous Armenia, as the indisputably resourceful Armenian diaspora provides the country with a competitive advantage. As it has been discussed throughout the report, up to now Armenian diaspora has participated in the country's development in the two main ways: (1) advocacy and lobbying to secure humanitarian assistance and development aid, and (2) funding through private transfers and donations. All sources cite 'mobilization of diaspora' as one of the enablers of the country's economic growth, development and prosperity, however it is not straightforward how the diaspora is perceived in the context of migration, as the former is perceived as the opportunity, while the latter as a threat to Armenia's welfare. It is for the Armenian government to decide how to address the problems of reversing migration and engaging the diaspora. The importance of engaging the Armenian diaspora in the country's development resonates with other researchers studying this topic: "a special policy aimed at engagement of the diaspora in Armenia's sustainable developments should be elaborated and implemented".

Global experience has illustrated that countries can benefit from utilizing diasporan resources in multiple ways. For example, governments such as Israel and India have successfully tapped expatriates' savings pool with a sovereign 'diaspora bond' financial instrument. Their experience could be replicated in Armenia. The announced Indian Diaspora Investment Initiative[103] illustrates an innovative way of leveraging the U.S.-based Indian diaspora which has been identified as the highest-earning ethnic group per capita in the United States[104] to fund sustainable development across India through a partnership between the Calvert Foundation, USAID and social enterprise investors in India.

Another example is the Georgian diaspora, which was mobilized not only as an economic actor, but also as a political one in 2000s, as high-profile repatriates became more active in participating in the political life of their home country and undertook political appointments. Turkey recently started utilizing its EU-based diaspora for political purposes. In 2016 the Alliance of German Democrats, which is led by President Erdoğan's most prominent advocate in the national media, Remzi Aru, was founded in Germany, which is home to up to three million people with Turkish origins.

The diaspora contribution to Armenia's development has been historically tremendous, and its vital role has always been recognized by the State. Yerevan hosted the first Pan-Armenian conference in 1999 and the first Armenia-Diaspora Economic Forum in 2003. In 2008 the government of Armenia established a specialized Ministry of Diaspora to trigger and support Pan-Armenian relations and affairs. Furthermore, the Armenian Minister of Diaspora, Hranush Hakobyan, has made a public appeal asking Armenians abroad to spend their vacation in Armenia once in four years and deposit US$1,000 in an account opened in

* Including the displays at the airports which were installed there during the Christmas festive season in 2015

an Armenian bank[105]. Among other measures the government, through its Ministry of Diaspora, has launched include a special program, "Ari Tun", in 2009, which will allow young members of the Armenian diaspora to stay with a local host family for a few weeks and learn about Armenian culture and history. In 2009 and 2010, over 900 young visitors from 26 countries visited the country through this program. Private initiatives launched by the IDeA Foundation, such as the 100 LIVES and its extension, the Aurora Prize, have primary objectives focused on enhancing identity and diasporan engagement within the Armenian community by increasing the number of Armenians with informed awareness by about 1.3 million people.

Despite some success the full potential of the Armenian diaspora is still far from being realized. Prominent diasporants who could contribute not only funding, but also their skills, knowledge and access to international professional networks still remain on the edge of political, business and territorial development in Armenia. At the moment, the diaspora-Armenia dialogue is found exclusively in education, arts, language and culture. However, there are many effective ways in which non-financial intellectual resources of the Armenian diaspora could be integrated in a more action-oriented way.

3. Seizing 'Innovation-For-Development' Opportunities

At a global level, 'innovation-for-development' has been identified as one of the most important current game-changers. It has the potential to transform the entire development landscape in the SDG era. There is empirical evidence that Armenia might be among the leading countries in the 'technology-for-development' movement, given its engineering and technological capabilities. The country has already been labelled as the "new Silicon Valley of the former Soviet Union". It is successfully building on its Soviet legacy, having a workforce base consisting of highly-skilled engineers and mathematicians. In Soviet times, Armenia was recognized as the country's IT innovation center, where one-third[106] of all military electronics was designed and manufactured.

Some of the statistics on the Armenian Information and Communications Technology (ICT) sector has been outlined in the START-UP LED TECHNOLOGY-FOR-ARMENIAN-DEVELOPMENT MODEL case study. During 2010-2015, the IT industry became the fastest growing sector of the Armenian economy, with the CAGR of 33.98%[107]. Annual tech revenues from 400 ICT companies alone are currently estimated in the order of US$475 million[108], which is sizable for a small economy. In comparison to some other global ICT clusters, Armenia is successfully transitioning from being an outsourcing industry to becoming an R&D generating one. Today 50%[107] of all ICT corporate revenues are generated from internal R&D activities. Armenia's IT sector has been going through a double-digit phase of growth, and has become a 'pocket of growth' which has a strong potential to catalyze other segments within the development space. The sustainable development 'miracle' of Armenia will most likely be technologically intensive, and not only fueled by advances in agriculture or SME segments which have traditionally been the focus of the donor community.

In line with the SDG 9: Industry, Innovation and Infrastructure, UNDP-Armenia has already established itself as a player in the innovation space, taking one step further than its traditionally-mandated activities focused on supporting public sector e-governance. Under the UNDP Innovation Facility which funds projects all over the world, the Kolba Innovation Lab[109] has been launched in Armenia, as a platform for incubating citizen-led micro-projects in local governance, human rights, and the green economy. Since the project was launched in 2013, it has received 580 ideas and incubated 40 social start-ups. Some of the resident start-ups included "Smart City", an e-management system on local governance in

Yerevan, "Matcheli", an online mapping platform which provides user-generated information on Armenia's disabled access spaces, and "Yamaka", an application which supports the learning process of children with Autism Spectrum Disorder[110].

Armenia has been taking gradual steps to blend 'innovation' and 'development', but the processes so far have been primarily positioned within the space of public sector innovation, and private sector actors have joined the 'innovation-for-development' movement only recently. In 2011 the first Tumo Center for Creative Technologies was opened in Yerevan, and then expanded to Dilijan, Gyumri and Stepanakert. The free-of-charge learning centers deliver trainings in animation, digital media, video game development, and web development to the Armenian youth. With the focus on technological innovation, the IDeA Foundation launched the Foundation for Armenian Science and Technology (FAST) initiative in 2016, which aims to serve as a multi-stakeholder platform for promoting technological breakthroughs in Armenia in the areas of IT and computer science, artificial intelligence, robotics, biotechnology, advanced engineering and manufacturing technologies. IEMS is convinced that technology-driven development has the highest potential to make the Armenian economy more resilient to external economic shocks in the long run.

4. Seizing 'Development-as-a-Business' Opportunities

This basic principle is based on the evidence of the global momentum for private sector-led development, rather than relying on country-level processes. As it has been mentioned in the previous sections of this report, SDGs do not only create additional investment needs, but they also unlock market opportunities for the private sector. Development offers vast opportunities to Armenian development players who can tap these market-based opportunities through products, services and other income-generating interventions.

The experience of a private telecommunications operator, VivaCell-MTS, and a 'hybrid' organization, IDeA Foundation, illustrate that this global game-changer is being gradually localized in the Armenian development market, although it has not become a common trend yet. Both organizations explicitly communicate a nation-building vision as the determinant of their development interventions, and both organizations operate the same vocabulary as their peers in more advanced markets. Being the first company in the CIS region that has implemented the ISO 26000 social responsibility guidelines, VivaCell-MTS has stated that between 2005 and 2017 the company made social investments of over 28 billion AMD* aimed at the development of Armenia, using the term 'social investment' and not CSR in its press-release[111]. Bringing sustainable impact to the society and economy of Armenia penetrates every single project which has been implemented by the IDeA Foundation, as a vision for a better Armenia led to the emergence of the Armenia 2020 and Armenia 2030 initiatives even before the foundation's inception. The Foundation became a pioneer in the social investment field in Armenia, as the financially-sustainable "Wings of Tatev" aerial tramway and UWC-Dilijan became the first known social investments ever implemented in the country.

The challenges of the SDG era necessitate the replication of the development models which are built around the pillars of financial sustainability and measurable social impact. The creation of an enabling environment for corporate and private social investors should become an integral part of the Development 2.0 strategy for the time period of 2015-2030.

* In accordance with the original information source

5. Adopting New Tripartite Social Contract (Mandate-For-Development)

From the viewpoint of IEMS, the success in unlocking latent market opportunities offered by the SDGs is conditional on the adoption of a new tripartite social contract between government, business and society. The traditional partnership paradigm which was extensively applied during the MDG era is not consistent with current reality. Today the level of public trust in governments and large corporations is at a low point. IGOs and NGOs are perceived as being inefficient in fund management. At the moment the vectors of three sectors – public, private and civil society – are diverging, although all three are pursuing a universal SDG vision. There is a need for the renewal of a social contract for sustainable development between these three stakeholder groups.

In the context of IEMS research, a mandate is defined as the 'power to act', and it describes one of the forms of this social contract in question. In the traditional paradigm the exclusive mandate for territorial development rests with the state or quasi-sovereign entities, such as territorial or regional development agencies. Until now, all development actors have accepted and saluted such a state of affairs. Even in PPP arrangements, such as the one of National Competitiveness Foundation of Armenia (NCFA) which was structured as a public-private entity, backed by the private investors and chaired by the Prime Minister of Armenia, the mandate for the implementation of the development interventions was vested with the state, with businesses acting solely in a donor and partner capacity. The paradigm in relation to the mandate for development seems to be the same all over the world. It is a top-down vesting process, under which the state awards the mandate for territorial development exclusively to IGOs, sovereign and quasi-sovereign entities.

The new operational reality which implies the emergence of 'hybrid' development models, such as PASED* or the one implemented by the Aga Khan Development Network, demands alternative forms of mandate. Even though the state has always had the exclusive mandate for territorial development, the quest for alternative and innovative development solutions might denote an unprecedented decision to formalize the procedures for assigning the mandate for development to Armenian business and other private actors. An implicit mandate awarded in the bottom-up manner by a collective body representing the local communities, such as the beneficiary committees, can also be one of the alternatives forms of mandate vesting.

Almost all development models described in this report's case studies and examples rest on an underlying partnership mechanism structured in various forms, such as multilateral aid agency - charity, bilateral aid agency - state, multilateral aid agency – business, charity – business or others. That suggests that various forms of collaborations and partnerships will become the key enabler for the evolution of sustainable development in Armenia, as anywhere else in the world. The state should leverage relationships, establish partnerships and engage stakeholders in the Development 2.0 movement from planning and strategizing to the results assessment stage.

IEMS research has demonstrated to prospective policy makers that 'development' is the vision for Armenia's prosperity, and 'partnership' is the means to the end. In the light of the larger scope for development action under the SDG vision, there is a greater need to 'blend' approaches and entrust the private sector with a wider mandate which goes beyond the capacity of a contractor or investor.

* Introduced by the IDeA Foundation and described in the case study in the appendix section of this report

Conclusion

Between 2000 and 2015, the Armenian development market went through a 'bullish' phase, helped by external development assistance. During that period, the country received largest private transfers, amounting almost to US$20bn, in comparison to its immediate neighbors in the South Caucasus region. With regard to the supply and demand side dynamics, the research findings indicate that the Armenian development market has featured a highly diverse landscape of actors, both on the capital provision and project implementation sides. During those fifteen years, many development interventions, some of which have been outlined in this report's case studies, were launched in Armenia. They were successful in attracting funds from traditional development actors and some private impact investors. The country already has a strong record of implementing multiple innovative development interventions, such as Dasaran and IDeA Foundation's projects, which are unique within the entire South Caucasus region.

After the adoption of the Sustainable Development Goals, the development industry has changed. A new reality poses complex challenges for all actors, both globally and in Armenia. Today more than ever, there is a growing need for private social capital in Armenia as the best alternative option. Development aid funds have been drying up, following the withdrawal of 'jumbo-sized' Millennium Challenge Corporation in 2011, the shutdown of the diaspora-led Lincy Foundation and the UAF in 2011 and 2015 respectively, all of which has had a massive impact on Armenia's economy. Because of certain inherent limitations on traditional funding sources, such as a lack of 'patient' capital for projects with longer payout periods, there is a manifested need for private sector capital in Armenia. At the moment, traditional donors worldwide as well as in Armenia tend to extend financial support to social ventures predominantly at their seed level and in a grant format. Such grant funding often runs out before the maturity of an enterprise, when it can become eligible for debt or equity financing. Very often, foreign stabilization aid and concessionary loans are extended by donors with attached policy conditionality. For this reason, the traditional development architecture is often described as either highly restrictive or financially-unsustainable, and more efficient private actors are expected to correct such systemic deficiencies. As the class of development capital holders expands beyond traditional IFIs, the newly-emerging class of private impact investors imposes 'non-conventional' requirements on investees. They seek bankable and investment-ready development interventions which are based on income-generation models that have solid impact measurement metrics in place. While Armenia could offer social investment opportunities to the previous generation of development capital holders, it still has to adapt to the new game-changers and tap the pipeline of investment-ready development interventions which blend financial return and social impact.

The new demands created by the more ambitious SDG agenda do not only require more financially- sustainable solutions, but they also require all types of public and private development actors to evolve and innovate in the areas of impact maximization, design and technology. Because of this, traditional charities, like Heifer International and the Fuller Center for Housing Armenia, have to be ahead of their competitors and build development models in which funding is used in multiple cycles to maximize the outreach to a larger number of beneficiaries through multiplier effects. As it has been illustrated throughout the report, the 'innovation-for-development' approach has infiltrated the activities of different types of public and private development actors, including the most complex bureaucracies, such as UN agencies, both globally and in Armenia. Today, the most innovative development interventions, as demonstrated by the Armenian experience, are the ones revolving around the investments in technology and physical assets with income-generation potential for beneficiaries.

With regard to the potential for scaling up and the replicability of the Armenian experience in sustainable development more generally, Armenia's unique factor endowment allows for the incubation of innovative technology-driven social solutions which could later be transferred to other comparable countries. Among the enablers for social innovation several factors make the "Armenia-as-a-fitting-Sustainability-Lab" reality more feasible: (1) compact territory as testing grounds, (2) past track record in technological innovation, and (3) advanced level of human capital*. The United Nations in Armenia and the government's 'reform accelerator', the Center for Strategic Initiatives (CSI), have recently begun development a National SDG Innovation Lab, positioned within the CSI structure. The Lab is supposed to be a hub for data, analytics and policy recommendations, which aims to ensure that government reforms contribute to a sustainable development trajectory, have systems-thinking at their core, and create an ecosystem for innovation and impact investment. Once Armenia incubates the most innovative sustainable solutions in 'lab' conditions, development, together with ICT, have the potential to become viable export items in the country's economy.

* Armenia's literacy rate stood at 99.8% in 2015, according to the UNESCO Institute for Statistics (UIS).

Appendix: Casebook

One-Village One-Product (OVOP): Development with Technical Cooperation in 9 Regions of Armenia

Small and Medium Entrepreneurship Development National Center of Armenia (SME DNC)

1 NO POVERTY

http://www.smednc.am/en/home/

Slogan/Mission: entrepreneurial opportunities for all
Sector: entrepreneurship accelerator
Country of origin: Armenia
Date of establishment: 2002
Entry into the Armenian market: Established by a decree of the government of the Republic of Armenia in 2002, SME DNC became the country's first national structure to implement state support to small and medium enterprises and facilitate their dialogue with the government and other structures. SME DNC offers both technical and financial assistance to the Armenian SMEs. Between 2011 and 2015 over 55,000 Armenian SMEs have received financial and technical assistance from SME DNC[112]. SME DNC operates 11 regional branches.
National leadership: Levon Mnatsakanyan, Executive Director, Karen Gevorgyan, Deputy Executive Director, Lilit Apujanyan, Head of International Cooperation Programmes Division
Project timeline: 2013 – 2016 (Phase I)
Budget: JPY 225.4m*[113]
Partners: Japan International Cooperation Agency (JICA) – sole donor, government of Armenia, USAID, UNDP, business support local organizations

Quotes

"During the implementation of JICA project in Armenia it was proved that regardless of the economic situation, and the culture and geography of the country, the OVOP experience can reveal new resources for local economic growth and market diversification based on local resources, nature, traditions and culture. Thanks to the Project, tens of local small-scale companies found their way to market and received comprehensive support for becoming growing businesses which can contribute to prosperity of local communities."

Mr. Karen Gevorgyan
Deputy Executive Director, SME DNC

"There is a secret to a successful development project. Projects succeed when the execution agencies desire to achieve some goals but require external assistance on know-how, and development partners can fulfil that need. We see this secret of success here in our project. SME DNC has been a driver of the project from the beginning, and based on their will. JICA has cooperated with their initiative."

Mr. Katsutoshi Fushimi
Chief Representative, JICA Uzbekistan Office

* In accordance with the original information source

Situation Analysis

For people living in Armenia's rural communities, agriculture remains the principle source of formal and informal employment. Thus, developing farmers' productivity, including through micro-entrepreneurship, and strengthening the links between agricultural producers and the food processing industry, are critical. Today, small and medium-sized enterprises are recognized as the backbone of Armenia's economy. A total of over 74,000 SMEs represented approximately 99.7% of all registered legal entities in Armenia in 2015.[114] While 80% of the labor force is employed in SMEs, it contributes just over 27% to Armenia's GDP due to relatively low productivity.[114] Nonetheless, it should be noted that in 2002 SMEs contributed less than 15% to Armenia's GDP.[115] Significant progress was made during the 2000s. The lack of market access in some rural areas does not only hinder economic activity, but also prevents new entrepreneurs from entering the market. Poverty remains a serious problem and it is estimated that approximately 35% of the rural population lives at or below the national poverty line. Social hardships and insufficient employment opportunities, particularly outside the capital, Yerevan, trigger urbanization and migration. Thirty to forty thousand Armenians emigrate each year, which has a negative impact on the rural population.[116] Several donor organizations have implemented development aid projects focused on creating markets for smallholders and building the capacity of rural micro-enterprises. They include USAID, the Swiss Agency for Development and Cooperation, GIZ, IFAD, the World Bank and UNDP. The government of Armenia has also been making considerable efforts to support the SME sector, and has adopted a number of key strategic documents and initiatives, focused on reducing the administrative burden on small and medium-sized businesses and increasing their competitiveness. For example, in 2000 two key legislative documents which outlined the basic directions for state support of SMEs were adopted: "Concept for SME Development Policy and Strategy in Armenia", and the Law of the RoA: "On State Support to Small and Medium-Sized Enterprises". Since 2001, structured programs for state support of SMEs have been implemented on an annual basis.

Vision and Solution

The One Village One Product (OVOP) concept originated as a regional development program in Japan in the late 1970s.[117] OVOP can be defined as a set of regional (local) economic and social development activities through the development of products and services based on territorial identities and resources.[118] The concept is that one village identifies a single value-added product or service which can be competitive in domestic and external markets, and that leads to higher sales revenues and, as a result, to higher incomes. Eventually OVOP became a general movement in Japan and outside, under the slogan "Let's work together on what we can do in the present condition!". The OVOP movement rests on three principles, all focused on local ownership.[119] They are:

(1) Creation of globally-acceptable products/services based on local resources and local legacy,

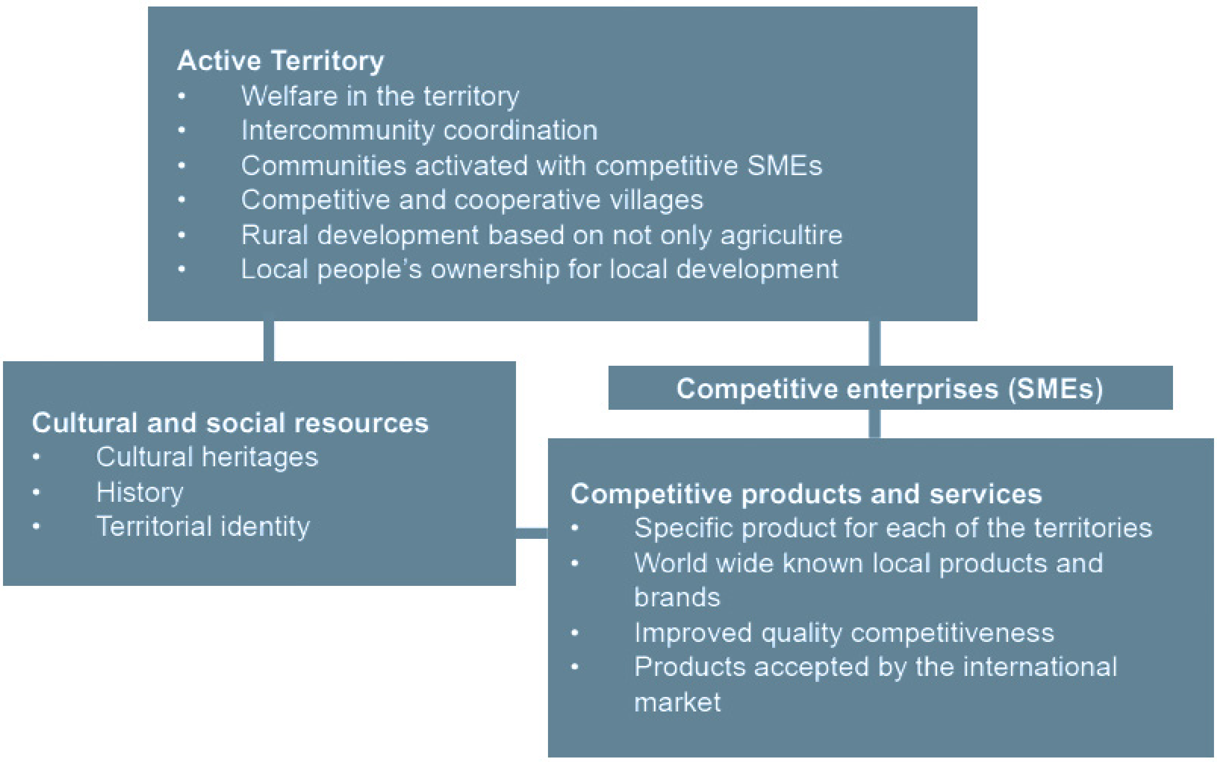
(2) Self-reliance and creativity, and

(3) Human resource development

Since the early 2000s, the government of Japan has been promoting the universal applicability of the OVOP approach for the development of local economies via technical cooperation. The Japan International Cooperation Agency (JICA) has been assisting developing and transition countries with product improvement and market access through technical cooperation. Today different countries apply the OVOP concept to local economic development. Thailand and Malawi have been the first non-Japanese countries to adopt it. The OVOP approach is often localized in line with the local factor endowment and inherent preferences towards either the 'product development' or 'community development' aspects.

In Armenia, after an official request for Japanese technical cooperation, both governments agreed on the implementation of "Development of Local Production and Promotion of Local Brands Project" which was to be executed by Armenia's Small and Medium Entrepreneurship Development National Center (SME DNC) with technical cooperation by JICA from 2013 until 2016. At its launch in 2013, the OVOP concept in Armenia was defined as "the integrated efforts to promote local economy, small enterprises, products and services in a coordinated manner, by utilizing local resources and culture".[118] In Armenia the OVOP approach has been applied to the development of marketing methods to support market-oriented local producers of cheese,

Figure 40. Overview of Armenian OVOP Concept



Source: JICA (2015) [118]

wine, dried fruits, and olive products, and providers of hospitality services. The "Development of Local Production and Promotion of Local Brands in Armenia" project was intended to improve the economic situation in communities, particularly in rural areas by supporting the development of local production, and small and medium-sized entrepreneurship. In 2016 the OVOP concept became an integral part of Armenia's business environment when it was included in the country's Strategy of Small and Medium Entrepreneurship Development.

Implementation

As the main implementing agency of the Armenian OVOP movement, SME DNC has supported start-up businesses and existing SMEs in 9 regions of Armenia, through training, publishing information manuals and guidebooks, coordinating loan provisions, etc.

Project activities could be divided into the two main components: (1) capacity development and (2) marketing platform.

• COMPONENT 1: CAPACITY DEVELOPMENT

The component 1 of the project was based on the "Training of Trainers" (ToT) model, and it represented the fundamental core for all other project activities. Under component 1 49 SME DNC staff members and Business Development Service providers have been trained on Kaizen-OVOP methods by Japanese experts in Armenia, enabling them to provide technical assistance to Armenian SMEs.* Three ToT sessions were organized during the project lifecycle. 24 participants from SME DNC, local NGOs and local business consultants were taken on study tours to Japan between 2013 and 2015. In its turn, SME DNC delivered start-up training programs to entrepreneurs, covering business management, motivation for business owners, individual business plan elaboration, quality management, and marketing. Additionally, Japanese experts have delivered complementary training courses to local enterprises in branding, merchandising, food production methods, and Kaizen. In addition to 'soft' capacity-building, JICA provided office equipment, such as computers and printers, which were essential for the implementation of Project activities, as well as agricultural and vacuum packaging training equipment to SME DNC. SME DNC acted as a coordinator of technical training for local SMEs on the utilization of the equipment. The project has strengthened three local SMEs as local training centers which provide technical/technological training and consultancy services to other local companies utilizing specialist knowledge to diffuse the impact of Project activities in the region. These three entities operate as training/consultancy centers for the dried food, cheese and olive production industries of the Tavush, Syunik and Ararat regions, respectively.

• COMPONENT 2: MARKETING PLATFORM

The program's 'marketing platform' has been defined as a system where local enterprises obtain information on their clients' needs and apply it to improving and/or developing their products and services. Component 2 was focused on creating three marketing platforms, namely monitor-type, event-type, and shop-type. Using them, local businesses and consumers could exchange information, products and services could be displayed, sales transactions could take place, and feedback from consumers could be collected. With regard to establishing event-type of platforms, four flagship events which incorporated the OVOP concept have taken place during the three-year project lifecycle, namely Ijevan Art Festival in 2013, Rural Product Festival "Sustainable Agriculture: the Key to a Green Future"

* Kaizen, or continuous improvement principle, has been applied in the Armenian OVOP movement in a way which entailed incorporation of consumers' opinions, and continuous improvement of products and services.

in 2014, Goris Vodka Festival and Areni Wine Festival in 2015. Each project complemented the others. For example, enterprises participating in the Armenian OVOP movement have been able to present and sell their products at those three events. Under component 2 the Armenian OVOP Facebook page has been launched as a monitor-type of platform.[120] The marketing platform has also been used for surveying, analyzing and reporting market demand for 200 sampled consumers for dried fruits, meat products, olives, cheese, wine, tourism services, and spices and herbs. Under the shop-type marketing platform showcase-type refrigerators were installed at the 18 target OVOP-based B&Bs.

Operational Results and Achievements

With regard to the project outputs, almost 300 start-ups and operating businesses have received consulting and training assistance during the project lifecycle.[121] In total, 47 start-ups and operating enterprises have participated in marketing platforms.[121] Although the project did not entail grant or credit funding to target enterprises, it has complemented other initiatives implemented by SME DNC, which were not funded by JICA. For example, SME DNC has provided loan guarantees to those hospitality enterprises which prepared the best business plans during the OVOP training sessions. In total, AMD46.5m of credit guarantees have been disbursed to 11 guesthouse owners, in addition to AMD74m of financing extended to 21 other start-ups[121]. The project has supported six enterprises with their logo designs.

All the 'hard' and 'soft' capacity-building activities as well as the establishment of the supportive infrastructure in the form of a marketing platform have resulted in the emergence of businesses which apply the OVOP approach. During the project lifecycle activities based on the OVOP concept have been implemented in 12 towns and villages. They have targeted six products and services, including cheese, dried fruits, wine, dried herbs, processed olives, and tourism service represented by B&Bs, all of which have successfully been introduced to the Armenian market. These 12 sites can be classified in three types: (i) clusters promoted by the local leading company, (ii) tourism development sites by collaborations among local businesses, and (iii) important bases for promoting the Armenian OVOP movement.

Generally speaking, training on Kaizen-OVOP best practice has equipped course participants with methods of improving product quality and increasing yields. After the courses, target enterprises start applying 5S workspace organization practices, such as using special detergents for cleaning, and wearing uniforms. That had an impact on the enterprises' profitability. For example, in Khndzoresk village, Syunik region, 12 out of 16 course participants have reported an increase in sales.[122] The quality improvement of the local producers has resulted in recognition of "Cheese made in Khndzoresk village" as a competitive territorial brand at the national level.

At Bagratashen village, in the Tavush region, and Vedi town in the Ararat region, a leading local company has promoted cluster development and the 'territorial brand' through specialization in processing olives and dried fruits (the former), and in processing dried herbs and fruits (the latter). Bagratashen-based dried fruits producer, "Bagfruits", has increased its production tenfold and has started exporting products to Russia and Spain, while Bagratashen-based bottled olive producer, "Viva Fruit", has also started selling its products in the Russian market.[118] Start-up businesses have collaborated with each other, and they are currently working towards local economic development in Garni and Bjni villages in the Kotayk region. Market research has identified the tourism potential of Tatev village, Syunik region, Jermuk town in the Vayots Dzor region, and Garni village, Kotayk

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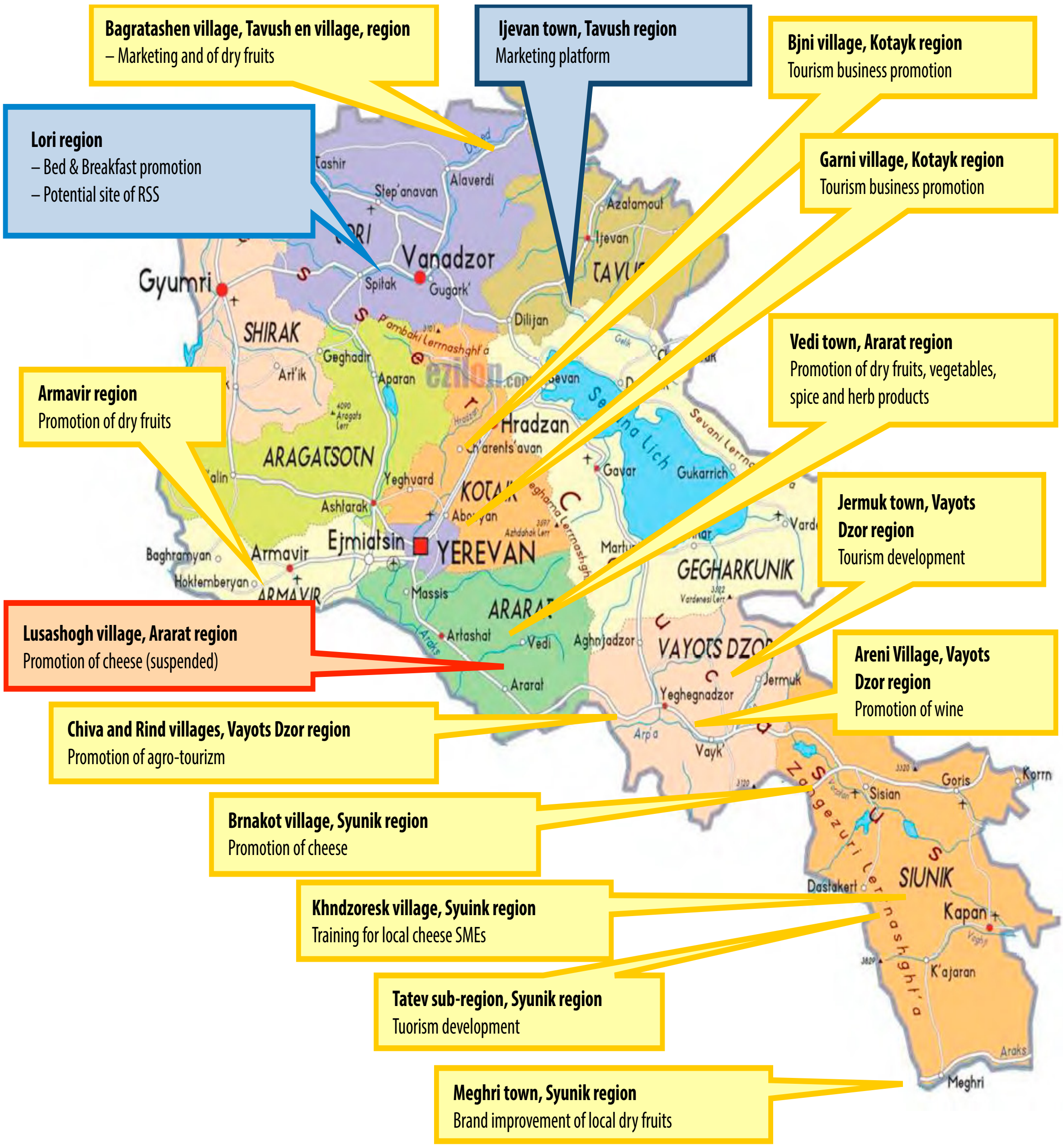
Moscow School of Management

Figure 41. Pilot Areas Participating in the Armenian OVOP Movement



Source: JICA (2016) [122]

region. The OVOP concept has been applied to the development of the tourism potential by supporting hospitality services at those project sites.

In the course of the project, lessons have been learnt. One has been related to SME DNC's financial assistance to a cheese factory, "Len-Hov", in Lusashogh village, Ararat Region. It had to suspend its operations after a year due to a shortage of working capital. Nevertheless, the project is regarded by the donor as "one of the best in its kind implemented in different countries".[123] Its results have been satisfactory for all the stakeholders, so that the second three-year phase of the "Development of Local Production and Promotion of Local Brands" project was launched in 2016. While the first phase of the project was focused on setting up operational businesses and establishing the brands, the second phase will focus on improving the export potential of local products and hospitality services with foreign tourists domestically, and in foreign markets.

Impact

Through entrepreneurship development, the project has had an impact on two levels: local and regional. Within the OVOP framework, branding entails not only the brand improvement of individual companies and their products, but also 'territorial branding' through the cluster approach.

The project has set measurable indicators only at the output level. Impact and outcome-level quantitative indicators, such as the percentage change in farmers' incomes, have not been monitored during the project lifecycle. With regard to its impact, the intervention has indisputably had a positive effect on the target enterprises' supply chains. Bagratashen-based dried fruits producer, "Bagfruit", has connected with farmers in Georgia, as the community is located near the border between the two countries. For example, OVOP pilot activities related to cheese promotion have benefitted a total of 160 local farmers supplying milk in Khndzoresk village, Syunik region, and Lusashogh village, Ararat region.

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Moscow School of Management

DONOR-LED INTEGRATED AREA-BASED DEVELOPMENT IN TAVUSH REGION

http://www.smednc.am/en/home/

Slogan/Mission: "Empowered lives, resilient nations"
Sector: multilateral development assistance agency
Country of origin: Global
Date of establishment: 1965
Entry into the Armenian market: UNDP office in Armenia was established in 1993. Starting from 2000, UNDP has positioned itself as the main responsible UN agency for supporting the government of Armenia in reaching national development priorities first under the MDG framework, and then under the SDG framework. Throughout the years UNDP has implemented community development projects across 150 urban and rural communities, including the design of more than 50 community development plans.
National leadership: Bradley Busetto, UNDP Resident Representative, Armen Tiraturyan, Project Coordinator
Project timeline: 2015 – 2020
Budget: US$5m
Partners: Ministry of Territorial Administration and Emergency Situations (Implementing Partner), Russian Federation (sole donor), Eurasian Center for Food Security (Russia)

Quotes

"The importance of this UNDP program is its focus on complex development of the vulnerable borderline communities in the Tavush region and the positive experience of its realization could be transferred to other communities of the country. It should be noted that UNDP is a reliable partner of the Russian Federation which has an excellent reputation and huge experience accumulated within years of work globally.[124]"

Ivan Volynkin
Ambassador of the Russian Federation to Armenia

"Borderline communities are always in the focus of the government of Armenia, which carries out various measures aimed at their support and development. We are confident that this project will be an invaluable investment to mitigate the burden felt in borderline communities.[124]"

Armen Yeritsyan
Minister of Territorial Administration and Emergency Situations, Armenia

Situation Analysis

The poverty level in the rural communities is as high as 36%, according to the UNDP statistics. The agricultural sector employs the majority of rural population in Armenia and 38.9% of the entire population. At the same time, the average monthly income generated by Armenian smallholders is estimated at US$110. Even within the rural population, inter-regional disparities in living standards are detected, with borderline communities being more economically vulnerable.

The Tavush region, which borders Georgia to the north and Azerbaijan to the east, is considered to be one of the most vulnerable areas due to having the largest number of borderline communities in Armenia and the resulting high security concerns. These have an impact on the potential for generating employment and attracting investment from the international community. UNDP reports that in the Tavush region only 55% of the total arable and perennial land is cultivated, partially because of the factors related to the obsolete irrigation infrastructure and the border

Table 5. Poverty Incidence by Regions and Yerevan

	2008			2009			2010			2011			2012		
	Poor	Extremely Poor	Not Poor	Poor	Extremely Poor	Not Poor	Poor	Extremely Poor	Not Poor	Poor	Extremely Poor	Not Poor	Poor	Extremely Poor	Not Poor
RA	27.6	1.6	72.4	34.1	3.6	65.9	35.8	3.0	64.2	35.0	3.7	65.0	32.4	2.8	67.6
Yerevan	20.1	1.1	79.9	26.7	2.1	73.3	27.1	2.2	72.9	27.5	2.7	72.5	25.6	2.2	74.4
Tavush	23.2	1.7	76.8	31.3	1.8	68.7	26.1	1.2	73.9	26.7	2.0	73.3	27.5	1.9	72.5

Source: Avenue Consulting Group (2014) "Poverty and Regional Disparities in Armenia"

Table 6. Per capita GDP ratio of Yerevan and Regions to Republican Average, 2009-2011, %

	2009	2010	2011	2012
Total, RA	100.0	100.0	100.0	100.0
Yerevan	172.3	162.3	148.7	151.7
Aragatsotn	65.0	85.4	78.6	82.6
Ararat	68.2	74.2	73.8	71.1
Armavir	67.4	62.1	70.6	67.0
Gegharkunik	63.9	68.2	74.6	69.7
Lori	42.4	47.5	59.3	52.7
Kotayk	66.9	65.3	70.5	78.4
Shirak	57.6	54.4	65.0	59.7
Syunik	97.1	133.9	140.2	133.5
Vayots Dzor	52.1	55.1	59.5	57.7
Tavush	39.5	46.4	54.8	62.6

Source: Avenue Consulting Group (2014) "Poverty and Regional Disparities in Armenia" conflict with Azerbaijan. 61% of the population in the Tavush region rely on agriculture as their main income source. According to the 2012 National Statistical Service figures, the province of Tavush had higher unemployment rates than the national average. In 2016 the World Food Program reported that Tavush, together with three other regions of Armenia, have a percentage of food insecurity above the national average, i.e. 16%.[125]

Vision And Solution

UNDP has pioneered an **integrated area-based development model** as one of its universal socio-economic approaches, and the organization has been implementing this development intervention across a large number of global operations, including the CIS region. The model is based on the simultaneous implementation of inter-linked comprehensive measures aimed at a significant reduction of poverty, the improvement of target communities' welfare and the establishment of more favorable conditions for the sustainable development of human capital. An integrated approach creates multiple opportunities for the beneficiaries to minimize their vulnerability through economic activities, improved access to natural resources, environmental security, employment generation and the rehabilitation of socio-economic infrastructure.

The project **"Integrated Support to Rural Development: Building Resilient Communities"** has drawn on the best practices, lessons learnt and past experiences gained in integrated, area-based development from the past UNDP initiatives and similar projects funded by the government of Russia and implemented in Naryn region of Kyrgyzstan. The Naryn Integrated Area-Based Development Program has succeeded in reducing poverty there, and some of its modalities have been replicated in Armenia where intervention has been adapted to the specific regional context.

Additionally, the project design has integrated certain elements of another universal development model which UNDP implemented in Armenia during the past decade. UNDP Community Development Projects also provide assistance to local communities through activities focused on the rehabilitation of social and economic infrastructure, and the establishment of sustainable income-generating mechanisms. But they rely more on the participatory community-based approach, which ensures local ownership of results.

The Russian government currently acts as the sole donor of the two assistance projects in Armenia. It has prioritized the support of agricultural development in Armenia because of the potential to boost exports of agricultural products to Russia and other states of the Eurasian Economic Union. The activities planned under the Community Sustainability Activities on Agriculture and Agro-Processing are expected to support Armenia's integration into the Eurasian Economic Union in the long run.

In order to address the problem of economic vulnerability experienced by the local population of 45 borderline areas of the Tavush region, a Russia-funded project with the objective of "ensuring balanced development of RoA regions through an integrated socio-economic approach, as well as raising the quality of life and income level" was launched in the summer of 2015.*

Project Design And Implementation

The project is currently in its second year of operation, following an annual cycle of planning, monitoring and reporting. All activities have been implemented across all three main project components: (1) development planning, (2) community sustainability activities on agriculture and agro-processing, and (3) community sustainability activities on energy efficiency, sustainable water management, and

* There are 62 communities in Tavush region, with 45 of them being classified as 'borderline' ones.

infrastructure rehabilitation, with the results of component 1 determining the type of activities which are to be implemented under components 2 and 3.

- **COMPONENT 1: DEVELOPMENT PLANNING**

Within the framework of component 1, all 45 borderline communities of the Tavush region are expected to gradually develop integrated community development plans and get them approved by the Community Councils during the project lifecycle.

According to the project's methodology, a detailed assessment of local community needs and institutional capacities is the starting point of the development planning process. This follows a sequence of stages, including (1) an initial, community-level meeting where all strengths, weaknesses, gaps and needs are outlined, (2) parallel focus group discussions with the various target groups, such as farmers, youth, women, etc., where different needs have been identified, (3) pairwise prioritization and pairwise ranking in which all identified needs are ranked, and a community vision is formulated, (4) a draft of the five-year community development plan, (5) approval of the community development plan by the community council as a guiding document for local self-governance bodies.

- **COMPONENT 2: COMMUNITY SUSTAINABILITY ACTIVITIES ON AGRICULTURE AND AGRO-PROCESSING**

Depending on the results of the community needs identified under component 1, UNDP will provide different types of agricultural and agro-processing equipment or greenhouses for each community under this component. Under component 2 UNDP has also communicated its plan to establish at least three collection centers for community clusters. By providing the services of cold storage, packaging, labelling and sales of primary and processed agricultural products, collection centers would contribute to the establishment of market-based mechanisms facilitating trade and income generation. While the project is more focused on the 'hard' capacity building of Tavush communities, component 2 also includes training activities and study tours to Russia, neither of which have been implemented yet. The delivery of full-time and distance-learning courses to project beneficiaries will be administered by the Moscow-based Eurasian Center for Food Security.

While the project has set the quantitative output indicators related to the support of horticulture and viticulture (via the establishment of orchards and vineyards), smallholder greenhouses have become a rural growth catalyst and the most feasible source of increased income in the Tavush region. Apart from UNDP, the greenhouse-based development model is applied by other donors in the Tavush region, such as Oxfam and the Hayastan All-Armenian Fund. By the end of the project, UNDP aims to establish at least 90 energy and water-efficient greenhouses in selected communities.

With regard to the delivery of greenhouses, UNDP follows certain procedures. The beneficiaries are selected via the open-call process, with the selection criteria being designed in such a manner that multi-child families, families with a disabled member, young families, single mothers and other vulnerable groups are given greater priority. The beneficiaries are also required to demonstrate the ability to contribute financially or in kind at least 20% of the total cost of constructing greenhouses in order to enhance the local ownership and long-term sustainability of an intervention. The community members themselves are in charge of screening all applications and compiling a short list which is then presented to the UNDP project staff. Together with the community representatives, UNDP conducts a household audit of all shortlisted applicants, and the decision on the final beneficiaries is made jointly by UNDP and community representatives. Once the project beneficiaries are identified, UNDP procures all products and services related to the greenhouse construction itself, and then transfers the ownership either to a group or an individual.

- **COMPONENT 3: COMMUNITY SUSTAINABILITY ACTIVITIES ON INFRASTRUCTURE REHABILITATION AND OPTIMIZATION**

As part of the community planning exercise, public infrastructure requiring immediate targeted rehabilitation is identified, such as kindergartens, school cafeterias and kitchen blocks, health points and community centers.* The project has a built-in focus on incorporating water-saving and energy-efficient technologies wherever possible. The 20% co-funding requirement for all 'hard' investments is also applicable under component 3, but in this case, the local self-government body has to make that financial contribution, as all the newly-constructed infrastructure would be then added to the municipal balance sheet after UNDP completes the procurement stage and installs the physical asset. Not all needs for community-level infrastructure which have been prioritized during the community planning phase have been addressed by UNDP in the past. The organization also conducts a review of municipal public budgets and accounts in order to assess the authorities' ability to ensure the long-term sustainability of an intervention (at least during the 5-year time period) in terms of the coverage of administration and maintenance costs.

OPERATIONAL RESULTS

In order to avoid the duplication of development interventions, UNDP has ensured continuous donor coordination with other players in the Tavush region, having established formal partnerships with some of them, e.g. Armenian Relief Society's funding of drip irrigation systems for all UNDP-built greenhouses.

By the end of 2016, different project activities had already been launched in 20 out of 45 border communities, with a different degree of progress being achieved in each one. Under component 1, 20 community development plans with the use of integrated participatory planning methodology had been approved by the end of 2016. Under component 2, 36 energy-efficient greenhouses in 12 communities have been installed. With regard to the delivery of other agricultural equipment, several statements of intent have been signed with the target communities for the establishment of agricultural produce- collection centers in the Voskepar and Sarigyugh-Tsaghkavan clusters, agricultural machinery parks in the Tavush and Sarighyugh-Tsaghkavan clusters, the provision of small-scale agro-production units, and the establishment of at least 5ha of new orchards in the Ditavan community. Under component 3, the results have been more diverse. In the Koghb community, UNDP has installed a total of 2 kms of street lights with the use of energy-efficient LED light technology.** In the Voskevan community, the Culture House has been renovated, resulting in a 45% increase in the energy efficiency of the building, which has led to lower heating and cooling costs. A statement of intent for the construction of an irrigation system has been signed with the Chinari community.

IMPACT

UNDP has formulated the following objective for the scope of its outreach: "By 2020, the residents of all 45 border communities of the Tavush region, with an overall population of 62,000, will benefit from the project through

* In collaboration with the World Food Program's intervention for development of sustainable school feeding

** Local self-government body has covered approximately 25% of the total project costs. The tender contracts have been awarded to "Khachmishshin", Armenia and DST Trade, Russia.

increased access to quality infrastructure, such as potable water and irrigation networks, community centers, collection centers for agricultural products and agricultural machinery parks, as well as employment in the agricultural and agro-processing sectors."

In addition to the enhanced social cohesion which results from community-wide, bottom-up participatory involvement, the project has had a more tangible and measurable impact on the local communities of the Tavush region. During the first 18 months of the project lifecycle, the intervention engaged more than 400 beneficiaries in a needs-assessment exercise. In terms of 'hard' capacity-building, over 2600 beneficiaries have been impacted, from receiving income-generating assets to enjoying rehabilitated public infrastructure.

The project framework monitors indicators at the output and outcome levels. At the impact level, UNDP does not track quantitative indicators related to changes in individual beneficiaries' income, their participation in agricultural value chains or entrepreneurship activities. Neither does it assess the impact of interventions on trends in the public budgets of local self-government bodies. Two target indicators have been set at the regional level: (1) 5% as a proportion of the employed population living in poverty and (2) a 1.3% ratio of the unemployment rate of women to the unemployment rate of men. Baseline data has been collected for both of these economic indicators at the Tavush regional level.

CHARITY-LED 'HOUSING REVOLVING FUND FOR DEVELOPMENT' MODEL IN 10 REGIONS

The Fuller Center for Housing Armenia

1 NO POVERTY

11 SUSTAINABLE CITIES & COMMMUNITIES

http://fullercenterarmenia.org/

Slogan/Mission: building homes, communities and a homeland
Sector: nonprofit
Country of origin: USA
Date of establishment: 2005
Entry into the Armenian market: The Fuller Center for Housing Armenia (FCHA) was registered as a legal entity in 2008. The organization supports the community development in Armenia and Nagorno-Karabakh (Artsakh) by helping build and renovate affordable houses and advocating for the human right to decent shelter. Between 2008 and 2016 FCHA has assisted directly 565 families through house building.[126] FCHA has a diverse funding base: foundations and corporations together have contributed 48% and individuals - 20% of all received donations in 2016.[127]
National leadership: Ashot Yeghizaryan, President
Project timeline*: project cycle management is not applicable. 2007-2008, and 2014 - present
Budget:** over AMD333m/US$690,000[128]
Partners:** VivaCell-MTS – sole donor

Quotes

"Supporting the development of rural communities, taking into account high rates of urbanization, is in the focus of our Company. For the Republic of Armenia the development of rural infrastructure is much more important from the viewpoint of reducing rural migration. To be firmly rooted to the homeland, to stand firmly on the soil and look to the future with optimism and hope, the farmer should have no shelter problem."[129]

Ralph Yirikian
General Manager, VivaCell-MTS

"Since the inception of our organization in 2008, we have assisted 565 Armenian families in need of decent housing. And the housing program has become of strategic importance towards family preservation, community development, poverty alleviation, emigration reduction... One of the main reasons for emigration is the inability to create a better standard of living and our experience of many years and the evaluation of our projects has shown that almost none of the families assisted through our projects emigrated from Armenia."

Ashot Yeghiazaryan
President, Fuller Center for Housing Armenia

* A Christian organization based on "the Economics of Jesus" and "the Theology of the Hammer".
** Applicable to the partnership with VivaCell-MTS

Situation Analysis

The situation with regard to the residential buildings in Armenia is comparable to other Former Soviet Union countries, in that a significant part of the housing stock is obsolete and is deteriorating. It has been estimated that in 2016 the number of unsheltered households*, and households in need of improvement, stood at 66,023 which represents 8.4% of Armenia's permanent population, of which 30,0000 were unsheltered or lived in some form of a temporary shelter.[130]

The Habitat for Humanity organization has identified the following immediate problems faced by the Armenian households:

- Insufficient energy insulation (roofs, windows, walls);
- Poor condition of the gas, water and sewerage systems;
- Unhygienic conditions of bathrooms and kitchens;
- Limited access to drinking water;
- Absence of gas-based heating systems, and the traditional practice of heating houses with wood.[131]

State-led housing development implemented in Armenia over the past years has solved

Figure 42. Breakdown of Unsheltered Households and Households in Need of Improved Housing Conditions in Armenia

Total	66,023
Unsheltered households	30,000
Households in need of improved housing conditions	36,023

1.	**Total number of households selected within the framework of state programs**	16,000
	Including:	
	Unsheltered households	15,000
	Households in need of improved housing conditions	1,000
2.	**Unsheltered households included in the system of poverty family subsidy outside the state programs**	15,000
3.	**Households living in overpopulated apartments**	33,110
4.	**Households living in dormitories**	1,913

Source: Habitat for Humanity, Stepanyan, H. and Varosyan, A. (2009) [130]

* Residing in temporary shelters which are not designed to be used as sleeping accommodation.

the problem of inadequate housing provision only to a limited extent. The current situation is aggravated by the earthquake-induced housing crisis, which effects are still visible in such places as the cities of Gyumri and Vanadzor, and by the regional conflicts which result in forced displacement from Azerbaijan and Syria to Armenia. Finally, there is the problem of internally displaced persons. In 2013 the State Migration Service Director, Gagik Yeganian, estimated that approximately US$25m is needed to provide housing for all refugees affected by regional instability.[132]

Today the situation is as critical as ever, in the light of an influx of over 20,000 Syrians into the country since 2011, many of whom are of the Armenian ethnicity.[133] Various international donor and diaspora organizations have been supporting housing development in Armenia, with UNHCR and the Norwegian Refugee Council being the most active players in delivering housing assistance to refugees. For example, the government of Armenia has been replicating the model of housing vouchers known as housing purchase certificates which was first tested and introduced by USAID's Armenia Earthquake Zone Recovery Program in the early 2000s. The Swiss Agency of Development and Cooperation, in partnership with local municipalities, has piloted a new model of social housing for refugees and other vulnerable groups in Goris and Yerevan.

Because of the lack of access to housing finance on affordable terms, and the small size of the mortgage market in Armenia, many vulnerable groups are not able to improve their housing conditions. The international donor community has been also supporting the development of a sustainable housing finance market in Armenia. For example, the "Development of Sustainable Housing Market" loan program was launched by the German-Armenian Fund in 2005.[134] In 2010 a consortium of three Armenian organizations, the Social Housing Foundation, Habitat for Humanity Armenia, and the Community Association Armenia, with the support of the Social Transformation Program (Matra) of the Netherlands Ministry of Foreign Affairs, launched an initiative entitled "Social Housing Program in Armenia".[135]

Vision And Solution

In order to address the problem of housing poverty in Armenia, the Fuller Center for Housing Armenia (FCHA) localized a development model revolving around the concepts of shelter and housing, which has been successfully applied by the organization globally since 2005. The 'housing for development' approach was introduced by Millard Fuller, the Founder of Fuller Center for Housing, who had previously founded the globally-renowned Habitat for Humanity organization, which also operates the shelter-oriented mandate. The revolving fund model was successfully tested by Millard Fuller during his tenure at Habitat for Humanity and later transferred to the Fuller Center for Housing. From the inception of the organization the revolving fund model has been integrated as a central theme throughout the entire FCHA portfolio of operations.

Even before official registration under the current legal organizational name, the FCHA went into partnership with Armenia's leading telecommunications operator, VivaCell-MTS, with the shared vision of addressing the problem of substandard housing in the country. In 2007, VivaCell-MTS positively appraised the partnership proposal submitted by the FCHA's team. For the company, social investment in 'hard' infrastructure is an extension of its traditional corporate social responsibility activities and is better aligned with the more ambitious goal of poverty alleviation in the Republic of Armenia. After two years of fruitful collaboration in 2007 and 2008, the partnership was dissolved at the initiative of the corporate donor and resumed only in 2014.

Implementation

FCHA's 'housing revolving fund for development' model is based on the provision of long-term inflation- and interest-free housing loans to low-income households which are selected as beneficiaries for housing-based intervention. The revolving fund operates at the organization level, rather than at the village or partnership levels, and future homeowners are expected to make monthly loan repayments to a revolving fund. The loan repayments are then used for assisting more families, triggering a multiplier effect in terms of the number of built houses. Interested families are able to apply for funding using different mechanisms such as unsolicited calls and letters, nomination from village self-governance bodies and many other ways. In alignment with the available budgets, the FCHA selects target households based on their willingness to partner with the FCHA, their housing needs and their ability to repay their loans.

The FCHA contributes to the intervention with the following inputs: supervision of construction, provision of materials and mobilization of volunteers. Target families are also required to contribute manual labor working on the construction of their own homes and those of their neighbors who are also FCHA participants. The model does not entail contracting professional construction companies, but relies on the resources of future homeowners, with additional support from mobilized international and national unskilled volunteers. FCHA is rigorous in enforcing the 'do-not-pay-for-labor' principle throughout the construction work phase, as that reduces total construction costs. Instead, homeowners are encouraged to mobilize the community partnership mechanism, engaging family members, relatives, friends and volunteers in the construction process. In addition to finance, VivaCell-MTS has contributed employee volunteer hours to the construction works, as the company encourages the values of corporate volunteerism.

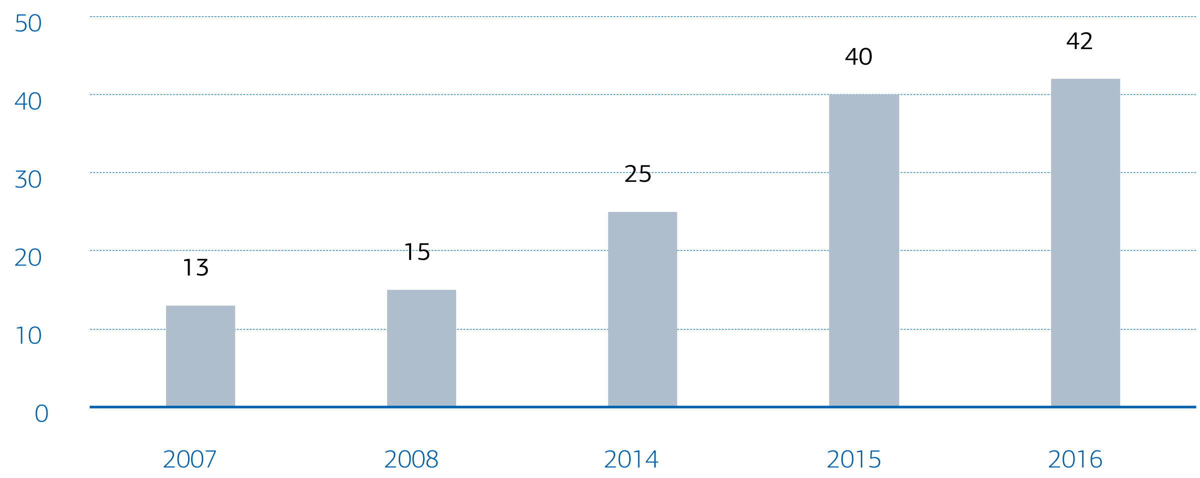
Within the scope of the VivaCell-MTS and FCHA partnership three types of activities have been implemented for the beneficiaries: construction of half-built houses, renovation of older houses and purchase of affordable houses, all of which are also included in the portfolio of FCHA activities. Based on the results of ex-ante appraisal of the applicant's existing housing stock, the FCHA might choose the purchase option, should the family not own a half-built house, and if it is possible to find housing within a comparable budget range. The FCHA estimates that the average cost of constructing one half-built house in Armenia is US$10,500.[127] One of the organizational requirements precludes the FCHA from building houses from the foundation due to the outreach maximization rationale.

Operational Results and Achievements

Because the 'housing revolving fund for development' model is integrated in other FCHA 'master' partnerships, for example one with the International Committee of Red Cross, it has been difficult to attribute certain inputs and outputs strictly to the VivaCell-MTS partnership. For example, there have been cases when the construction of one house was funded by more than one donor. Also, the indicator on the involvement of international and national volunteers in housing projects is monitored solely at the organizational level, and not at the partnership or territorial level. Overall, the FCHA hosted a total of 330 volunteers in 2016 alone.

VivaCell-MTS has historically been the FCHA's largest corporate donor and partner for projects implemented in Armenia. In 2016

Figure 43. Breakdown of the Number of Constructed Houses by Year Within the Framework of FCHA Partnership



Source: FCHA (n.d.) [127]

the partnership with VivaCell-MTS marked its 5th anniversary. In terms of the main reported achievements, 135 households were provided with housing between 2007 and 2016 thanks to the FCHA and VivaCell-MTS partnership.[128] In total, the FCHA has assisted 565 Armenian households with house building since the organization's inception.[126]

Impact

Housing as an instrument has a wide outreach in terms of its impact. Better housing conditions and homeownership affect everyone. In Armenia, the average household size was estimated at 3.6 people in 2010.[136] Within the framework of the partnership with VivaCell-MTS, the FCHA reports the total number of impacted lives being 677 by the end of 2016.[127] The organization has also monitored various aspects of the lives of supported beneficiaries in an unstructured manner, and has been able to report that none of the assisted families emigrated from Armenia after the intervention.

CHARITY-LED ‘PAY-IT-FORWARD’ DEVELOPMENT MODEL IN 6 REGIONS

Heifer International

https://www.heifer.org

Slogan/Mission: to work with communities to end hunger and poverty and care for the Earth
Sector*: nonprofit
Country of origin: USA
Date of establishment: 1944
Entry into the Armenian market: Since its establishment in 1999, Heifer Armenia has helped more than 10,000 rural households in 62 projects improve their livelihoods by developing rural communities, finding solutions to economic and ecological problems, spiritual revival, as well as strengthening the prospects of peace in the region.[137] The organization works on supporting poor families around the globe in their pursuit of economic self-reliance by providing them with livestock, trees, training and other resources. Heifer International is currently in the phasing out stage in Armenia, passing on the legacy to the Armenian NGO, “Development Principles”, as its successor. “Development Principles” organization has already assumed the responsibility of managing all the new projects, while Heifer is responsible for facilitating the commitments with regard to the past and ongoing projects that have to be completed. Heifer Armenia branch office plans to exit the country in 2018.
National leadership: Anahit Ghazanchyan, Country Director and Project Manager
Project timeline: 2011 - 2016
Budget: US$3.7m**
Partners: World Bank, Armenia’s Ministry of Agriculture, national and regional civil society organizations and public agencies

Quotes

“What we’re trying to do is to create pro-poor, wealth-creating value chains, so that the asymmetry in power that normally exists between the markets or large processors and the farmers is reduced in some way.[138]”

“Our belief is that the best thing to happen to Heifer is for it to be extinguished. We do not want to exist. Our strategy is always to exit as rapidly as possible, so they can be self-reliant. If a project goes on, it is the beginning of failure for us. We want to go on to the next village[138].”

Pierre Ferrari
CEO, Heifer International

“I think that similar projects will not only encourage Armenian men to return to the villages, but such projects are the only way out of the problem.[139]”

Gagik Khachatryan
Former Director of the Project Implementation Union, Ministry of Agriculture

“The Heifer approach applied in CARMAC project has resulted in a systemic change which is sustainable rather than one-time assistance. This is a fundamental change that addresses the root causes of barriers for just and sustainable human development.”

Anahit Ghazanchyan
Country Director, Heifer

* With origins in the Church of the Brethren, of non-denominational nature at present
** Heifer’s contribution to the CARMAC project with the total budget of US$21.3m.

Situation Analysis

Agriculture has historically been one of the key sectors of Armenia's economy, contributing almost 20% to national GDP and employing approximately 40% of the country's labor force.[140] Since independence in 1991, pasture areas which constitute almost 36% of the total area have not been managed efficiently.[141] Large privatization and decentralization programs in the agricultural sector led to the creation of individual agricultural households, most of which were characterized by predominantly subsistence farming practices, small and fragmented plots of land, low access to markets, limited resources and weak growth potential. As livestock has a greater potential for generating cash than horticulture, animal husbandry has been the only income-generating activity for around 186,000 households.[142] However, the cattle stock almost halved, and the sheep stock decreased almost threefold, in comparison to the levels recorded during the USSR era.[141]

The growth potential of smallholder farming in Armenia is reduced by the following factors:

- The small size of household economies;
- Non-unified functioning of individual farmers, which hinders efficiency gains;
- Lack of modern agricultural knowledge;
- Lack of agricultural equipment and/or the obsolete condition of existing equipment;
- Under- or over-exploitation of pasture resources due to bad pasture management;
- Under-exploitation of cropland;
- Unsatisfactory level of veterinary and breed improvement services;
- Limited possibilities for processing and marketing of production

Vision And Solution

In order to systematically address the technical problems which resource-poor smallholders face in Armenia, in 2011 the government launched the Community Agricultural Management and Competitiveness (CARMAC) project, funded with a World Bank loan of US$16m. Because of its successful track record employing the unique 'Passing on the Gift' (POG) concept in Armenia, the Heifer organization has been engaged in the implementation of component 1 of the CARMAC project: a Community Pasture/Livestock Management System which was mainly focused on social capital development and provision of agricultural equipment to the established cooperatives. The intervention aimed to provide assistance to cooperatives rather than individual smallholder farmers, in line with the donors' view that pooled resources in a cooperative structure can generate more efficient and cost-effective results than individual efforts.

The Heifer organization has been utilizing the approach adopted by the organization at the global level. It is focused on establishing economically viable, efficient, and sustainable linkages among different actors in a value chain. For past 70 years Heifer International has based all its development interventions on the vision of livestock being a catalyst in rural communities because of the idea of the **7 Ms,** namely, milk, manure, meat, muscle, money, materials, and motivation. In line with these principles, Heifer International has pioneered the 'Passing on the Gift' (POG) concept which includes the handing on of livestock as a mandatory component incorporated in all Heifer's farmer assistance projects. This requires all who receive assets such as livestock, poultry, seeds, farming equipment, etc. as a 'gift' from Heifer to pass on the same type of resources to another farming family in need within their community in the **'pay-it-forward'** format.* With regard to the cattle, the POG practice requires that the first female offspring of each animal received is to be passed-on. With beekeeping, 50% of harvested yield is to be used for family nutrition and income, while the rest is to be sold, and the proceeds are to be used to construct new hives for other members of the group who have not yet received hives. Pierre Ferrari, CEO, Heifer International, refers to POG as "living loan, the repayment (of which) is to the community, not to us". According to the Heifer's philosophy, 'living loans' are considered to be a gateway to food security and poverty alleviation.

The delivery of the original 'gift' tends to be complemented with additional project inputs, such as 'soft' capacity-building: training, veterinary drugs and equipment. Heifer apples an integrative approach to development interventions as the organization promotes the vision that a combination of natural resources and an appreciable amount of human capacity (knowledge, skills, and the right attitudes – development software) is needed for groups and communities to realize their full potential. As a result of a social multiplier effect which at least doubles the impact of the limited resources, lasting income generation opportunities contribute to sustainable development of the entire community.

In Armenia, the POG strategy has been employed in all community development work since 1999. Heifer's Country Director, Anahit Ghazanchyan, aimed to transfer the POG model to Armenia after attending professional development training held at the Heifer International global headquarters in the U.S.A. earlier that year.

Implementation

As a co-funder, contributing US$3.7m, Heifer Armenia has implemented a POG approach within the agricultural component of the **"Community Agricultural Resource Management and Competitiveness" (CARMAC)** project in 55 communities from six regions in Armenia. Cooperatives' matching contribution was the World Bank's requirement for the project, and Heifer Armenia covered 30% of the overall 50% share attributed to the local cooperatives, with the government of Armenia financing the remaining 50% with a World Bank loan. Heifer has invested a total of US$2m in agricultural equipment, such as tractors and baling machines, which became subject to the Passing on the Gift approach, and that required cooperatives to use part of their newly-generated revenue for purchasing similar equipment for other co-ops. Cooperative members were able to rent this agricultural equipment at a discount: under 50% for tractors, 25% for baling machines and 15% for cutting machines.[143] Following its objective of fostering the farmer cooperatives with their development of viable commercial livestock farms, Heifer supported the target communities with equipment, training on efficient pasture management, and livestock breeding and financial buy-in.

One of the requirements imposed by Heifer Armenia on beneficiary groups before the delivery of gifts was that they should be responsible for the construction of barns and coops for received cattle or poultry. Such a participatory approach, which requires beneficiaries to make a partial financial contribution to the venture, stimulates a sense of local ownership.

In Armenia, as well as globally, all POG-sponsored project participants are nominated for

* 'Pay it forward' is a concept for describing the beneficiary of a good deed repaying it to others instead of to the original lender. This contract may include the provision that the debtor may repay the debt in kind, lending the same amount to a similarly disadvantaged party once they have the means, and under the same conditions. Debt and payments can be monetary or by good deeds.

‘hard’ and ‘soft’ capacity building by the communities themselves. Throughout the entire intervention, the process is completely transparent, as the chain of ‘fair’ passing on is continuously monitored via the community oversight mechanism. Group pressure and social cohesion have been key in using the group-factor to enforce compliance with the call for passing on gifts within the community. All project beneficiaries are obliged to attend meetings, workshops and training sessions at the community level.

In comparison to many other donor-driven development projects, POG-sponsored interventions include a clear built-in exit strategy in their design. In order to ensure the long-term sustainability of social investments, participatory approach in project ownership and gradual capacity-building are included as essential components of the POG model.

Operational Results and Achievements

The CARMAC project (i.e. all four components) has served in total 83 communities in Shirak, Aragatsotn, Lori, Tavush, Gegharkunik and Syunik provinces, which represent a greater outreach than the initially-planned 55 target communities.[141] Under component 1 of the CARMAC project Community Pasture Management and Livestock Development Plans have been developed in 83 communities, and Community Pasture Management and Livestock Development Committees and Pasture User Consumer Cooperatives have been established in 90 communities.* By the end of the CARMAC project in 2016, approximately 545 pieces of agricultural equipment (such as tractors, plows, cultivators, rakes, balers, grass cutters, etc.) have been placed within 70 rural communities in Armenia through the POG strategy[141]. During the CARMAC project term, 17 cooperatives collected 30% of the overall cost of received agricultural machinery and equipment to purchase the new equipment and tools needed to provide more households with access to agricultural services. Since the beginning of the project, 47 cooperatives have collected ‘revolving’ POG to a total of around US$400,000. That money has been utilized by the co-ops for further capacity building and asset acquisition.

The project results have been satisfactory for all the stakeholders, so that the CARMAC II project was launched in 2016. The second phase of the project expanded its scope to include environmental objectives in addition to the livelihood ones, and it was designed to target a larger number of communities in Armenia.

Impact

It should be noted that without Heifer’s coverage of the communities’ co-funding contribution, the target communities would not have been able to participate in the CARMAC project at all. According to the initial project design, the CARMAC project was supposed to assist nearly 24,000 families.[143] After the project’s completion, it was reported that CARMAC’s intervention had reached nearly 37,000 families involved in livestock farming and covered 18% of Armenia’s pasture areas.[141] Through the POG strategy alone, almost 3,650 families have been reached.

The impact of POG interventions can be measured by nutrition and income-related metrics, as the POG principle generates a multiplier effect due to:

- Increase of livestock numbers,
- Increase in milk and meat productivity,
- Increase of the savings made by the members of the cooperatives

* That activity has been implemented in 7 additional communities besides 83 beneficiary communities.

Already in its second year of operation, CARMAC project beneficiaries have reported more than a 25% increase in the productivity of their animals, which indicates an income increase. Upon the project's completion, the following results were reported:

- 118% increase in the milk productivity of the cattle, and 106% increase in the milk productivity of the sheep,[141]
- 132% weight gain of the cattle, and 108% weight gain of the sheep.[141]

With regard to the changes in household income, in comparison to the interim baseline data collected in 2013, average household monthly income in target communities increased by 23% by the end of the project in 2016.

START-UP LED TECHNOLOGY-FOR-ARMENIAN-DEVELOPMENT MODEL

Dasaran

http://www.dasaran.am/

Slogan/Mission: "New Horizons in Education"
Sector: EdTech
Country of origin: Armenia
Date of establishment: 2009
Entry into the Armenian market: The legal entity behind the "Dasaran" platform is the nonprofit organization - "New Generation School" NGO. It was set up in 2009 with the purpose of making education equally accessible to all children in Armenia.
National leadership: Suren Aloyan, Founding President/CEO
Project timeline: project cycle management is not applicable
Partners:

State Partnerships as follows: Republic of Armenia (RoA or RA) President's Apparatus, RoA government (headed by the Prime Minister), RA Ministry of Education and Science, RA Ministry of Territorial Administration, RA Ministry of Culture, RA Ministry of Diaspora, RA Ministry of Defense, RA Ministry of Emergency Situations, Municipality of Yerevan and Regional Governors' Offices.

International Organizations as follows: EU Delegation to Armenia, UNDP, UNICEF, USAID, US Embassy to Armenia, Save the Children, Counterpart International, British Council, Publicis Hepta, Pyunik Human Resources Development Foundation.

Other entities/institutions as follows: Armenian State Pedagogical University, Agribusiness Teaching Center (International Center for Agribusiness Research and Education), Teach for Armenia etc.

Quotes

"Through our activities we aim to increase Armenia's profile abroad and promote it as a modern education-exporting country."

Suren Aloyan
Co-Founder and CEO

"This is a very important project for the European Union. Armenia abounds in talent in the younger generation. It is imperative to make use of these talents here in Armenia, and they can be developed only through investing in education.[144]"

Ambassador Piotr Switalski
Head of the EU Delegation to Armenia

Situation Analysis

Armenia has been successful in realizing its potential as one of the most innovative hubs for technology development in the entire CIS region, primarily thanks to the highly competitive technical workforce and world-class R&D capabilities in engineering, computer science, physics and mathematics. According to the Enterprise Incubator Foundation, in 2015 approximately 450 ICT companies operated in Armenia, with nearly 82% of them being founded during the period from 2000 to 2015.[145] Armenia's authorities have actively supported the development of a stimulating 'ecosystem'. From 2010 to 2015, the Enterprise Incubator Foundation, the RA Ministry of Economy, with the support of World Bank, initiated a number of grant programs targeting information and other advanced technologies to promote idea-generation and innovation. These included Innovation Matching Grants, Gyumri Matching Grants and Vanadzor Matching Grants.

To facilitate the establishment of digital infrastructure in Armenia, the government of Armenia, the EIF, and Hewlett Packard piloted the Computers for All Program in 2010. This aims at increasing the population's computer usage and at legalizing software by offering modern and reliable computers with software at affordable prices. Armenia's ICT landscape also features a number of cooperative initiatives between the IT and education industries, such as Gyumri IT Center, Academic Initiative (launched jointly by IBM and IBM Innovative Solutions and Technologies), and Samsung Learning Center. Within the framework of the Armat project, which was launched in 2014, almost 120 robotics-dedicated groups and engineering laboratories, attended by 2,000 children, now exist in the country. By 2019, Armat laboratories are expected to operate in every school of the country. Also, there are currently four tuition-free TUMO Centers for Creative Technologies in Armenia, where approximately 10,000 children between the ages of 12 and 18 learn animation, game development, web design and film-making. The Armenian IT/High-Tech Representative Office was officially launched at the Plug & Play Tech Center in California's Silicon Valley in December 2012. The office was set up as a hub to foster the development of sales and investment opportunities for Armenian IT and high-tech companies in the USA.

Vision and Solution

Historically, all professional and educational opportunities in Armenia have been Yerevan-centric. By launching the “Dasaran” platform, its founder, Suren Aloyan, wished to address the problems of educational inequality and technological divide within Armenia. Upon his return to Armenia after postgraduate studies in the USA, Suren was convinced that education is vital for the future prosperity of Armenia and that the advancement of its human capital is the road to this prosperity. His vision also focused on the unification of the Armenian diaspora and the preservation of Armenian identity. In order for quality education to reach the most remote locations within and beyond Armenia, an electronic network of distribution channels had to be established.

Dasaran, which means 'classroom' in Armenian, has become the pioneer technology globally and nationally. It has been designed as a comprehensive e-Learning portal integrating technology and gamification with educational modules to provide equal access to education for all children in Armenia.

Products and Services

From the start, Suren knew that he had to build his own proprietary technological platform as he could not rely on external providers. The exceptional quality of the technological expertise available in Armenia enabled him to contract coders and developers domestically. It took 18 months to complete the pioneering eLearning environment. Since then, the program has been upgraded on a daily basis as a result of users' feedback.

Today, Dasaran offers a range of solutions to three main beneficiary groups: (1) school management and information system solutions to principals and teachers, (2) free educational and social networking products to students (including diaspora), and (3) centralized statistical analytics to educational policy makers. Parents or guardians, especially expatriate parents, who work outside Armenia are identified as a fourth beneficiary group, as they use the "Dasaran" platform for tracking the academic performance of their children. E-Gradebook and E-Diary became Dasaran's flagship solutions which were introduced in all schools in Armenia. Later the product range has expanded to interschool social network, and other tools and games. Today the platform offers more than 50 educational games to its users.

In addition to the technological products and solutions, the "New Generation School" NGO also delivers free training for IT teachers who administer the "Dasaran" platform in schools. The organization utilizes the Training of Trainers ("ToT") approach and brings all teachers to Yerevan two or three times a year.

Funding And Partnerships

During the first three years of its operations, the organization was financed out of the founder's own capital. As time passed and Dasaran received more recognition, the funding structure became more diversified. In 2010, the "New Generation School" NGO signed an agreement with the Ministry of Education under which the government agreed to contribute to the project in two ways: (1) by employing and paying the salary of one IT teacher in all state schools where the platform has been installed, and (2) by bearing the cost of connecting each school to the platform on a monthly basis.

Once the unique infrastructure which connected all Armenian schools was established, different international development organizations came on board. For them, Dasaran became a cost-effective way of disseminating content relevant to their mandates. For example, because of the alignment of UNICEF's education-oriented objectives with those of the "New Generation School", cooperation between two organizations has been beneficial for both, as well as for the final beneficiaries. In 2015 "I Know: My Rights in the Army" awareness-raising online game for high school students was developed in partnership with the Armenian Defense Ministry and the U.S. Embassy in Armenia.* Another educational game which was launched in 2015 was the EU-funded "Explore Europe" project. This delivered interactive content concerning the European Union member states, and European culture and history. In 2016 the E-stat Diagnostic Tool on Public Education, which aggregates data on public schools and national educational indicators at school level, was launched with the support of the Delegation of European Union to Armenia.** Experts from Harvard University have provided *pro bono* support to the Dasaran team with big data analysis within the framework of the E-stat Diagnostic Tool project. For the purpose of educational content development, the "New Generation School" organization has partnered not only with the public authorities and international donor organizations, but also with corporations (e.g. Samsung), the Chess Federation of Armenia and the Holy See of Etchmiadzin. The latter resulted in the launch of interactive lessons related to spiritual education.

* The educational game teaches its users to better understand legal and human rights related to military and criminal legislation of Armenia.
** The E-Stat provides real-time statistical data and comparative analysis on school management using various indicators, including student, parent and teacher distribution by region (territorial-administrative units), age and gender distribution, student performance data by average grades and absence rates, student emigration and transfer rates (from regions to Yerevan or from Armenia to foreign countries), comparative analysis of teachers' workload and teacher/student ratios in class, etc.

Over the years, Dasaran has become Armenia's flagship project in EdTech and an example of a successful PPP. Today Suren is invited to join official delegation visits abroad, where the highest-ranking officials 'pitch' Dasaran alongside other potential investment opportunities which Armenia has to offer to foreign public and private investors.

Operational Results and Achievements

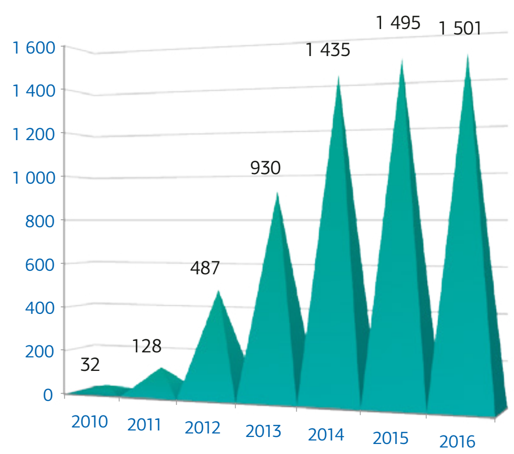
With regard to public school coverage, Dasaran achieved the 100% threshold in 2016. Today all 1,501 schools in Armenia and one international school (St. Stephen's Armenian Elementary School in Massachusetts, U.S.A.) are integrated into the common online platform. The number of unique users, including all beneficiary groups, has been reported at around 1,000,000, which includes teachers, students, parents/guardians and policy makers.

The model has proved immensely successful within Armenia and beyond. In 2016 Dasaran was recognized as one of the world's top 5 most innovative enterprises in the final round of Accelerate 2030, a joint international initiative by the UNDP and Impact Hub. Being an Accelerate 2030 finalist, Dasaran was invited to represent Armenia at the inaugural Social Good Summit in Switzerland in late 2016, and received pro bono consulting services from Dalberg Global Development Advisors and the Boston Consulting Group after the event.

Impact

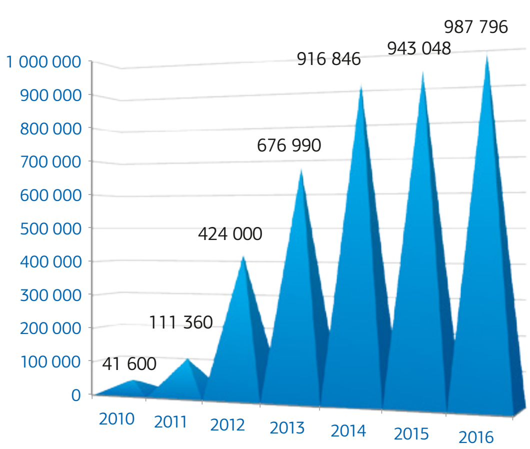
Thanks to the government's contribution to the project, Dasaran has generated employment for 1,501 IT teachers who are salaried public sector employees. Through the ToT model, 38,000 Armenian teachers have been trained in information technology and

Figure 44. Number of Armenian Schools Integrated into the Dasaran Platform



Source: "Dasaran" presentation materials

Figure 45. Number of Dasaran Users



Source: "Dasaran" presentation materials general computer knowledge, and as a result their computer literacy has increased from 5% to 81%, according to the test results. Dasaran also monitors and reports certain indicators on student academic performance. For example, between 2014 and 2016 the student absenteeism rate fell from 0.74% to 0.12%, and the A-performance rate rose from 5.8% to 8.1%.

Going Forward

As the "New Generation School" NGO has succeeded in its primary objective of establishing country-wide electronic infrastructure and an online school environment in the country, Suren and his team are currently in the process of conceptualizing the future vision for the next 5 years and developing a 2017-2022 strategic plan. In Armenia, Dasaran will focus its main efforts on equipping younger users with the most progressive and useful professional and life skills.

Most of Suren's future plans have an outward focus. He feels that the business model is already mature enough for it to evolve and be transferred abroad. Suren envisages it evolving from a nonprofit to a hybrid format. Revenue would be generated primarily by integrating foreign public education systems to the "Dasaran" platform, with these being administered and supported centrally by the Armenian team. The "New Generation School" NGO has already entered into preliminary negotiations about business expansion to six countries whose public authorities have expressed an interest in adopting the "Dasaran" platform. Such negotiations are taking place at intergovernmental level with the public authorities of Zambia, Senegal, Qatar, Turkmenistan, and Ukraine. Suren is also very much interested in having a presence in the U.S. market, and he has already started exploring the possibility of registering intellectual property rights in the U.S.A.*

However, there are some obstacles. International expansion plans require software upgrades needing a capital investment estimated at around US$4m. In order for Suren to fund this venture with a commercial loan, a for-profit entity eligible for raising debt capital has to be established. By 2022 Dasaran plans to achieve: (1) presence in 3 different countries, (2) integration of 30,000 schools, and (3) 15,000,000 unique users.

* Full intellectual property rights for the "Dasaran" products are registered in Armenia.

PRIVATE AGENCY FOR SOCIAL AND ECONOMIC DEVELOPMENT (PASED): BUSINESS-LED DEVELOPMENT IN TATEV

Initiatives for Development of Armenia (IDeA) Foundation

https://www.idea.am/

Slogan/Mission: "Transitioning Armenians from Survival to Prosperity"
Sector: hybrid
Country of origin: Armenia
Date of establishment: 2014 (as a legal entity under the current name)
Entry into the Armenian market: The legal entity behind the Tatev Revival Project is the Initiatives for Development of Armenia (IDeA) Foundation which was established to advance the prosperity and strengthen the identity of the global Armenian nation. IDeA is a private, non-profit foundation which work is based on 10 development models: tourism, urban development, cultural heritage preservation, identity engagement, agri-agro, education, healthcare, technology, mining, and financial infrastructure.
National leadership: Ruben Vardanyan, Founder, Veronika Zonabend, Founder, Rafi Baghdjian, Chief Executive Officer
Project timeline: 2008 - present
Budget: US$34.6m*
Partners: Government of Armenia, Ministry of Culture, World Wide Fund for Nature, Armenia, Armenian Social Investment Fund, Small and Medium Entrepreneurship Development National Center, Union of Information Technology Enterprises, National Competitiveness Foundation of Armenia, Armenian Apostolic Church, individual donors

Quotes

"We need 'anchor' projects that will attract (other initiatives). We choose projects which evoke changes in the region or in a separate field. Besides my family and myself, a large number of people are involved in these projects – all the projects are jointly carried out. But the most important aspect of our projects is that they are multi-effective, for example, the revival of the monastery or the construction of the school lead to the implementation of other important projects".[146]

Ruben Vardanyan
Founder

* Including co-funding from other partners

Situation Analysis

The development of rural tourism has been identified as an alternative income-generating activity with the potential of reducing rural poverty in Armenia, and that has been reflected in the Republic of Armenia (RoA) Strategy for Agricultural and Rural Sustainable Development for 2010-2020. In addition, the RoA has developed a 2014-2025 National Development Strategy in which tourism has been identified as one of five priority sectors for job creation and as the second main export sector, generating 20% of Armenia's total exports. The strategy assumes that tourism-related jobs will account for 3.3% of non-agricultural jobs by 2025.[147] In 2016, the travel industry supported 38,500 jobs (i.e. 3.3% of total employment) directly and 143,500 (i.e. 12.5% of total employment).[148]

Thanks to Armenia's rich religious, cultural and natural heritage, the country tends to attract those foreign tourists who are more interested in ecotourism, and cultural and spiritual tourism, rather than short city breaks. According to the 2006-7 international visitor survey, 69% of visitors to Armenia were attracted by the natural environment, 60% by the historical and cultural features, and 9% by the opportunity to go on pilgrimage.[149] These survey results indicate an existing demand for the rural tourism products and services in Armenia.

Although the tourism sector has evolved significantly during the past decade, having increased its direct contribution from 2-2.2% of GDP recorded in 2008 to 3.8% of total GDP in 2016,[148] Armenia's rural tourism still falls far short of its potential. Historically, Armenia's tourism market has been centered on Yerevan, which is the primary tourism hub for the entire country. Due to its international airport, Yerevan is the country's main entry point, as well as the host area for the majority of tourist overnight stays. Because of that, virtually all spending on accommodation, food and beverages, sightseeing and transportation is concentrated in Yerevan, with no 'ripple' effect in rural areas. Current research confirms this trend. The 2013 USAID Armenian International Visitor Survey noted that 62% of all leisure tourist overnight stays take place in Yerevan, and that 8 of Armenia's 12 regions hosted less than 10% of total overnight stays.[150]

Realizing the hidden potential of rural tourism in Armenia is difficult due to the poor quality of community infrastructure, and a lack of capacity and knowledge in service development, management and marketing. The Yerevan-centric tourism model means that tourists appear in rural areas only in tour buses and as day travelers. This does not contribute to the local economy by providing jobs and bringing money in.

Vision And Solution

In order to address the limitations of the dominant tourism model which has resulted in the chronic underdevelopment of infrastructure, accommodation and tourism products in rural areas outside Yerevan, Ruben Vardanyan, the founder of the IDeA Foundation, and his team have identified the remote area of Tatev as a potential hub and an 'anchor' base for those visiting the entire southern Armenian region.

In comparison to traditional donor-led projects on rural tourism development in Armenia, IDeA's Tatev Revival Project was different in its vision and design. In terms of reverse engineering, Tatev Revival Project is positioned in the 'prosperity' dimension of the Private Agency for Socio-Economic Development (PASED)* model. PASED is an example of the territorial development model, and the project was launched with the initial

* A complex development intervention blending charity and investment which leads to the nation development through two unique pillars: prosperity and humanity.

intention of enhancing the livelihoods of local communities in Tatev. Ruben has introduced an integrative and entrepreneurial solution to the social problem based on blending charity, social investment projects and commercial activities, and revolving around an income-generating entity, namely an aerial cableway. As an example of the PASED model, the Tatev Revival Project was designed as a blend of interconnected complementary components which successful integration unlocked new opportunities and maximized social impact.

Implementation

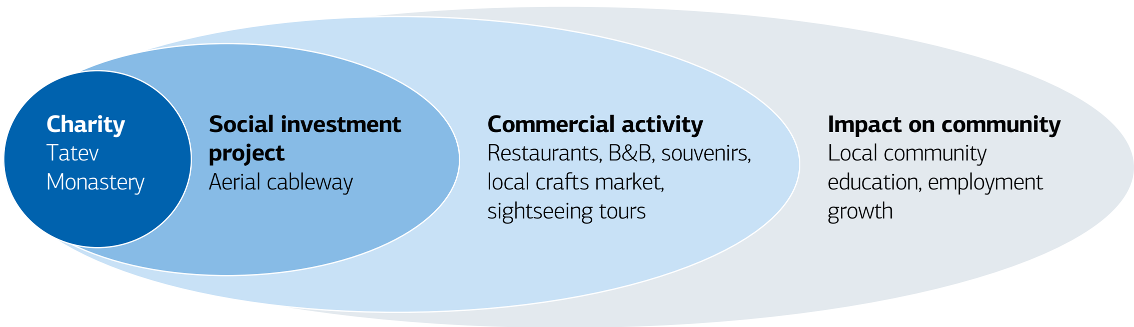
The project has three main pillar components: (1) monastery restoration, (2) Tatev Gateway, and (3) Larger Tatev. From the very beginning, the visionary behind the Tatev Revival Project, Ruben Vardanyan, defined the restoration of the Tatev monastery (component 1) and the development of regional tourism infrastructure (component 2) as the organization's key objectives. Unlike the commercial and cultural preservation ventures, the IDeA Foundation got involved in traditional capacity-building of local communities (component 3) only in 2012.

• COMPONENT 1: MONASTERY RESTORATION

The fundraising and planning activities related to restoration of the Tatev monastic complex started in 2008. Component 1 has been primarily financed by the individual donors, consisting of high-net-worth individuals (HNWIs), members of the Armenian diaspora, and friends and colleagues of the founders. Once the "Wings of Tatev" aerial cableway (under component 2) reached its operational break-even point, all profits were used to subsidize the restoration of the Tatev monastery.

All cultural heritage restoration works became subject to a lengthy approval process by the Armenian Apostolic Church and the

Figure 46. Tatev Revival Project as a PASED model



Source: IEMS

government of Armenia. A formal Memorandum of Understanding with the Armenian Apostolic Church and the Ministry of Culture was signed in 2012. The appointment of Artyom Grigoryan as principal architect was jointly proposed by the Armenian Apostolic Church and the Ministry of Culture. The total scope of work on monastery restoration is estimated at US$5.2m. So far, a total of US$1.5m has been invested in component 1 activities which included ongoing engineering works on the Surb Astvatsatsin (Holy Mother of God) Church, the Church of Surb Poghos-Petros (St. Paul and Peter), monk and communal quarters, the drainage system of the monastic complex, and other architectural structures. By the end of 2016, restoration works on the Northern entrance and Dzithan (oil mill) had been completed. The restoration of the Tatev monastic complex complies with international standards, which was ensured through participation of Italian experts from the Polytechnic University of Milan in the restoration works. This work is still in progress. In 2015 a gift-shop was opened on the premises of the oil mill (Dzithan) which was restored in 2010. It also mounted a permanent photo exhibition entitled "Memory of the Abandoned Canyon". In parallel with the restoration works, experts from the Institute of Archaeology and Ethnography of the National Academy of Sciences of Armenia are studying all artifacts found on site and making recommendations for their preservation.

Additionally, component 1 also includes activities related to the revival of monastic life. Starting from 2013, the IDeA Foundation has been financing the Tatev church choir. Formed in 2014, a Tatev community children's choir has brought together children from the local communities of Halidzor, Tatev, Shinuhayr, and Svarants. It has given performances all around the Syunik region and beyond. In 2016 the Tatev monastery hosted the first "Sharakan" festival of Armenian sacred music, which was organized jointly with the "Music of Armenia" NGO.

• COMPONENT 2: TATEV GATEWAY

Component 2 includes two sub-components: (1) construction and operation of the aerial cableway "Wings of Tatev" and (2) establishment of tourism infrastructure. Most of the physical assets constructed within the framework of component 2 are of a commercial nature and have revenue-generating potential. As of the end of 2016, a total of US$21.1m had been invested in the construction, maintenance and infrastructural upgrade of the "Wings of Tatev" aerial cableway, and construction of tourism infrastructure in Tatev and Halidzor villages.

In contrast to component 1, the construction of the aerial cableway, called "Wings of Tatev", was funded by the founders personally, with some reliance on short-term bridge lines extended under the IFC-funded program for infrastructure development in Armenia, and channeled through Armenia's Ameriabank. The engineering and construction works started in 2009, and the design and construction phase took 18 months. The Austrian-Swiss engineering company, Doppelmayr/Garaventa Group, undertook all the installation works, including construction of the world's longest non-stop double-track cableway which has a total length of 5,752 meters (according to the Guinness Book of Records). The official opening ceremony and launch of the "Wings of Tatev" aerial cableway took place on 16 October 2010, and was attended by more than 700 guests, including Armenia's President and Prime Minister. This has reduced the travel time from Halidzor station to the Tatev monastery from a 40-minute ride along a steep and twisty road through the Vorotan gorge to a 12-minutes cabin ride. In the fourth year of cableway's operations, a custom-made electronic ticketing system with different pricing for high and low seasons was introduced. This enables customers to make reservations for their preferred date and time on the website. With regard to regular maintenance and upgrades, the Wings of Tatev equipment is inspected annually by the Wings of Tatev team and experts from Doppelmayr/Garaventa.

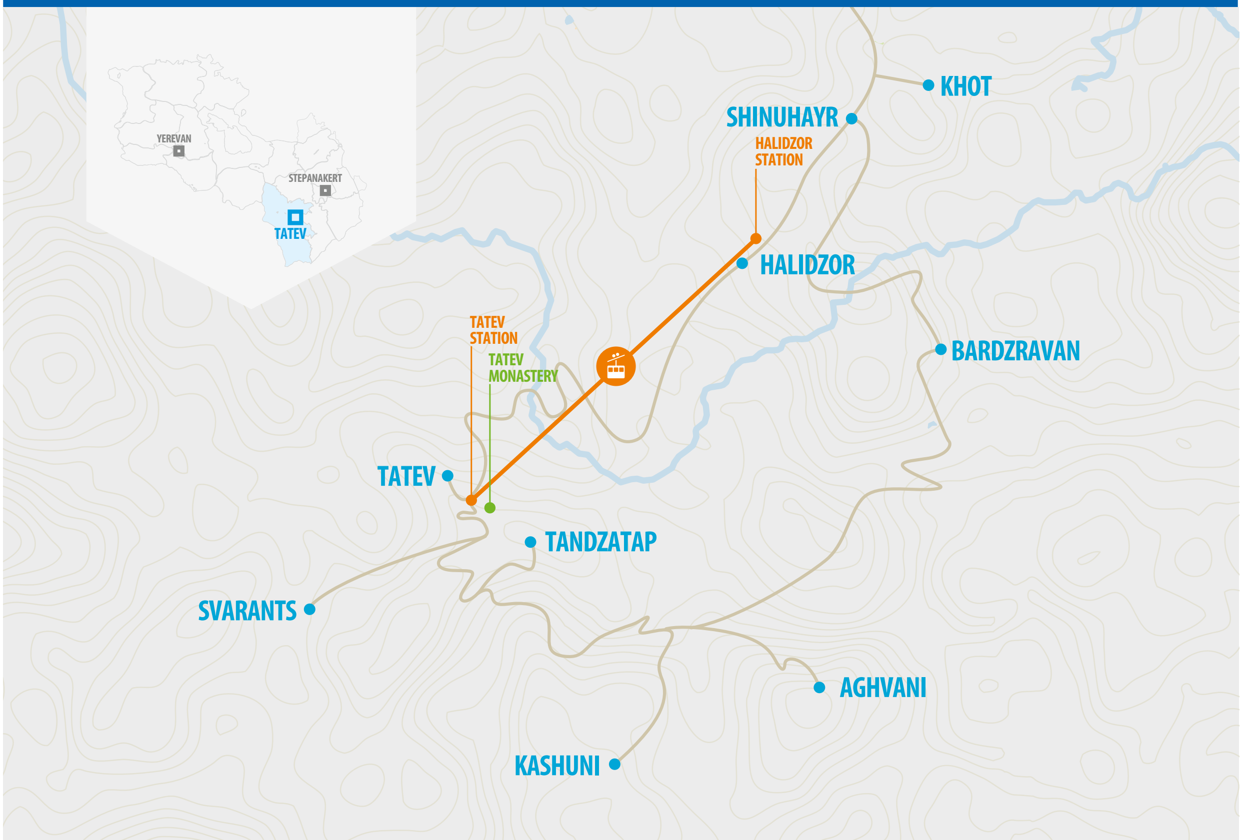
Under the sub-component related to the establishment of tourism infrastructure, a number of facilities have been constructed and installed, such as the Tatevatun restaurant at Halidzor station of the tramway, public toilets, map stands and information boards.

• COMPONENT 3: LARGER TATEV

Systematic capacity-building of local communities in 9 adjacent villages did not commence until 2012, although the IDeA Foundation had continuously engaged them in consultative processes during the construction of the cableway. Component 3 of the Project includes two sub-components: (1) development of hospitality enterprises and (2) infrastructure rehabilitation and 'hard' capacity-building. All activities focused on the economic empowerment of the local communities have been financed primarily by the IDeA Foundation's parent company. The foundation's investment in the Tatev community development amounted to just over US$2m, excluding partners' financial contribution.

The "Wings of Tatev" cableway has motivated the private-sector tourism industry, but in addition to that the IDeA Foundation has also

Figure 47. Map of Communities Engaged in the Tatev Revival Programme



Source: IDeA (2016) [151]

financed several entrepreneurship and business planning training schemes and study visits in order to help local residents start new businesses in the hospitality sector. In total, owners of 23 B&Bs and homestays operating in the Tatev area received training in marketing and office management in 2015. These entrepreneurs were assisted by the business consulting firm contracted by the IDeA Foundation to support the locals in drafting business plans, registering their businesses and marketing hospitality services. This qualified them to receive preferential financing from the Small and Medium Entrepreneurship Development National Center. As part of the project, the website tatevbnb.am marketing Tatev hospitality enterprises has been launched.

With regard to the infrastructure rehabilitation and hard capacity-building sub-component, several initiatives have been implemented so far. Within the PPP agreement, the government fulfilled its commitment to contribute just under US$9m to the rehabilitation of 12 kilometers of the Sisian-Tatev road, and covered through a quasi-sovereign Armenian Social Investment Fund approximately 42% of all expenditure related to the reconstruction of Halidzor school, which had a total renovation cost of US$0.33m. Additionally, the government financed the relocation of a high-voltage line in the Tatev area. In 2015, with the active involvement of the Union of Information Technology Enterprises (UITE), engineering labs were opened in schools in Goris, Tatev, Halidzor and Shinuhayr. To date, more than 86 students have acquired beginner-level skills in three-dimensional modeling, 3D-printing and computer-programming languages C/C++, HTML, CSS and JavaScript at the Armat engineering laboratories. In addition, the IDeA Foundation has also donated a playground to the community kindergarten of Halidzor.

All project components are of interconnected and complementary nature to each other. For example, the grounds adjacent to the Tatev and Halidzor stations of the "Wings of Tatev" are often used as community-based fairs where folk dance and music performances, traditional crafts and organic local produce are displayed for international and national visitors. Sheep-sheering festival held in Halidzor villages has become the annual summer tradition and one of the top regional attractions. Local vendors are also able to get access and sell their goods at the local market constructed near the Tatev station of the "Wings of Tatev". In addition, the souvenir shop located at the Halidzor station of the "Wings of Tatev" tramway displayed crafts sourced from local artisans. In 2014 the foundation facilitated* the opening of the "Wool to Carpet" handicraft studio in the Shinuhayr village. The studio run by the Goris Women's Resource Center has created employment for local women and become the venue where the entire cycle of authentic carpet-making is displayed to tourists.

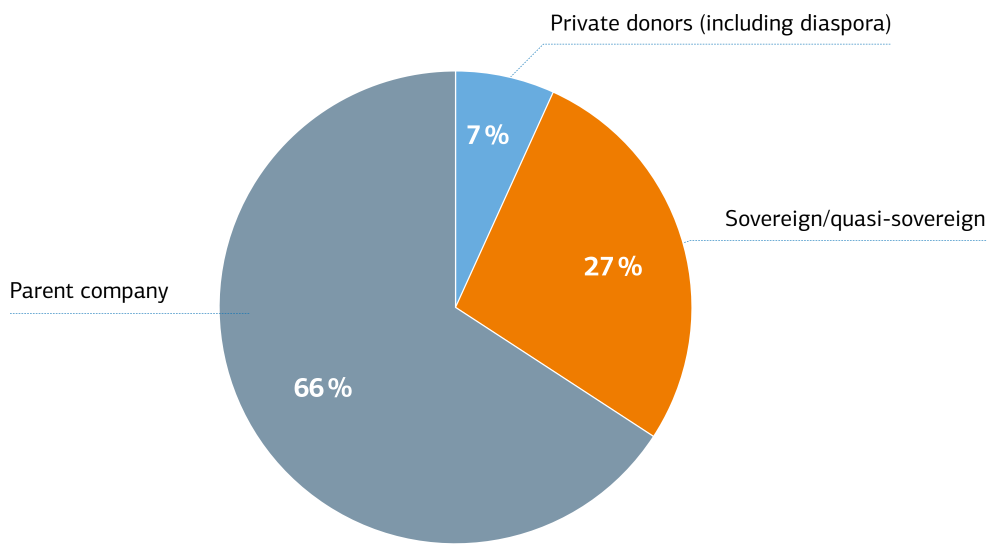
Operational Results and Achievements

First of all, the "Tatev Revival Project" is a flagship example of a successful multi-stakeholder partnership between the government of Armenia, the sovereign National Competitiveness Foundation of Armenia**, the Armenian Apostolic Church and various businesses and individuals. Since 2008 over 140 individual donors from 18 countries have generously contributed to the Tatev Revival Project's heritage preservation and philanthropic activities.

Second, the project has achieved its initial objective of attracting more tourists to the Tatev region, as the cumulative number of tourists has exceeded 505,000 by the end of 2016.

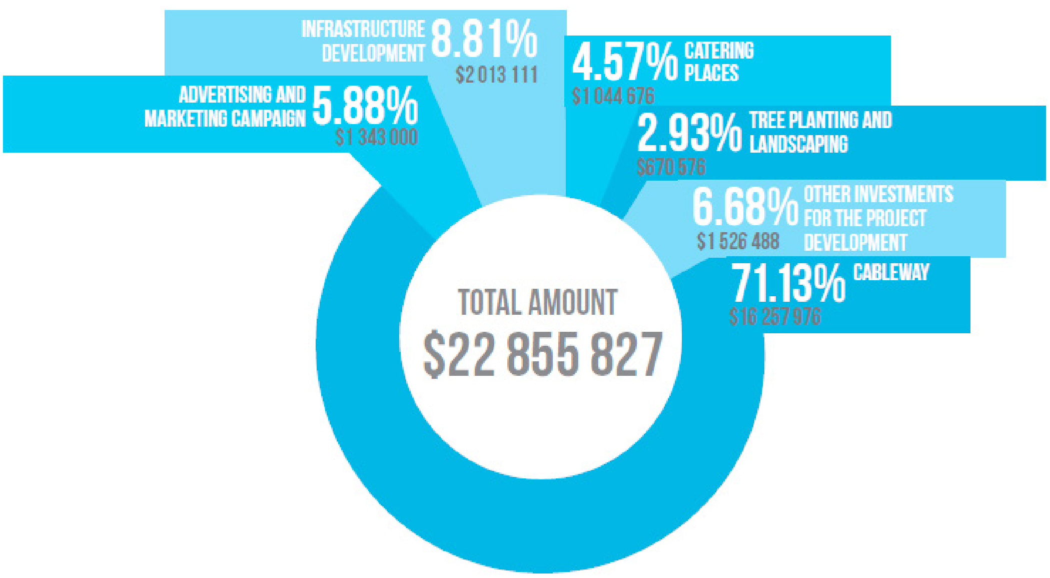
* The initiative was not funded by the IDeA Foundation, but by an external private donor.
** Founded in 2008, the National Competitiveness Foundation of Armenia (NCFA) was a public-private partnership aimed at enhancing competitiveness capacity of Armenian economy, which initially oversaw the implementation of the Tatev Revival Project.

Figure 48. Funding Structure of the Tatev Revival Project



Source: IDeA Foundation

Figure 49. General Structure of the Investments of the Tatev Revival Project



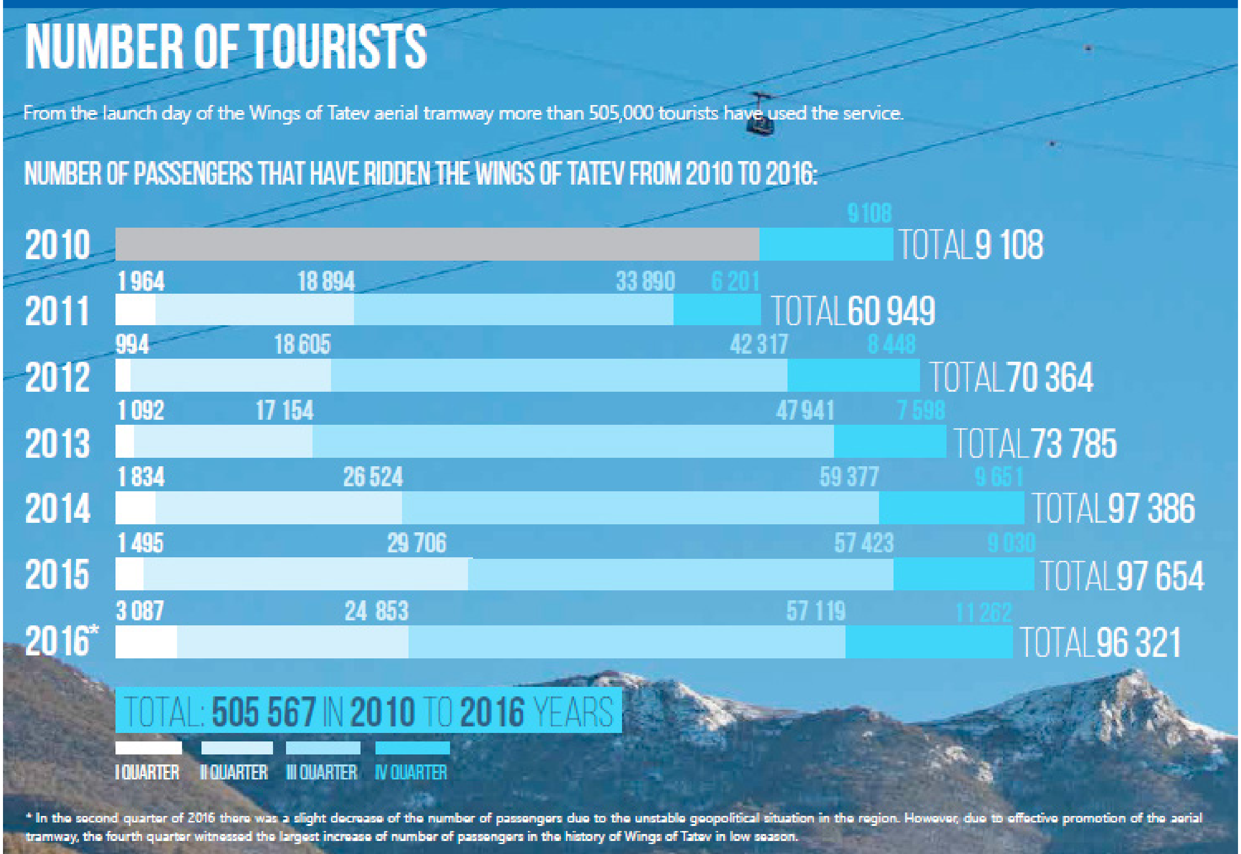
Note: excluding sovereign and quasi-sovereign contributions. Source: IDeA (2016) [151]

Between 2010 and 2016 the number of Tatev cableway passengers has increased tenfold, and now represents 20% of the entire Armenian tourism flow, which exceeds the most ambitious forecasts. A small decrease in the tourist flow to Tatev recorded in 2016 can be attributed to the unstable geopolitical situation in the region and heightened security concerns. Unexpectedly, Armenian visitors currently constitute almost 33% of the total tourism flow to Tatev. Nevertheless, as of the end of 2016, the Tatev aerial cableway still operated under the 50% of its annual capacity.*

Third, the "Wings of Tatev" cableway reached breakeven point in 2014. During six years of its operation the cableway has generated the cumulative revenues of nearly US$4.5m, with US$4m coming from ticket sales.[151]

In the 2014 survey of tour operators conducted by the World Bank tourism team, Tatev was reported as being the most popular attraction. Also, World Bank experts recognized that "Tatev investments stimulated regional hotel investment".[147]

Figure 50. Breakdown of Tramway Passenger Flow by Year



Source: IDeA (2016) [151]

* During the recent years the cableway has operated at the 100% utilization rate at high season.

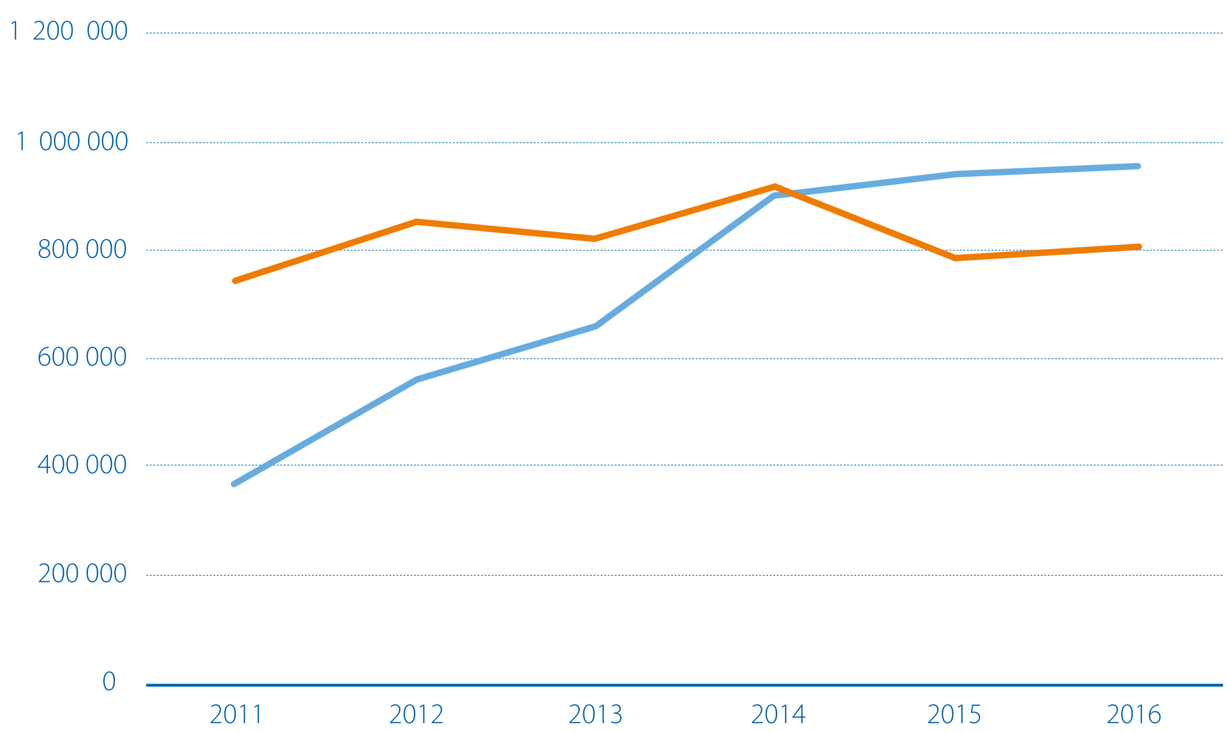
The "Wings of Tatev" aerial cableway received the Armenia Tourism Magazine's "Best Tourism Project" award three years in a row—in 2014, 2015 and 2016. In 2016, the school engineering laboratories project was granted a merit award by the World Information Technology and Services Alliance (WITSA) as an exemplary project in the IT implementation field.

Impact

The project has become a sizable tax-payer at the regional level. During the past six years around US$3.4m has been paid in taxes, with US$2.3m being paid as VAT.[151]

In terms of the social impact on the regional development, the Tatev Revival Project has created over 77 permanent jobs. At the end of 2016, 49 residents of adjacent villages and the town of Goris were employed in the cableway operations. This is in addition to more than 250 temporary jobs created during the construction phase. The project's outreach through generation of income for local residents is much wider than this, as the Tatevatun restaurant and all established B&Bs and restaurants procure food products locally, and local vendors constitute 80% of the project's total procurement. Indisputably the Tatev Revival Project has had an enormously positive

Figure 51. Tatev Revival Project. Historical Revenues vs. Expenditures



Source: IDeA Foundation

impact on the lives of the 5,778 residents of the nine local villages, although not all of this is measurable. These distant and isolated communities have hosted more than 500,000 visitors over the years, including the likes of the World Chess champion Magnus Carlsen, Baron Eric de Rothschild and many others. Various cultural events and festivals have taken place in the areas surrounding the Tatev monastery. In general, the Tatev site has indisputably contributed to the promotion of southern Armenia as an attractive tourist destination, and has enhanced the overall tourist inflow into the country.

Going Forward

At the moment, the Tatev Revival Project portfolio is being expanded in several directions. There are immediate plans to construct multiple hospitality and entertainment facilities on the territory adjacent to the Halidzor station. Also, the IDeA Foundation is currently in the process of adding an ecotourism component to its project portfolio. The IDeA Foundation has partnered with the World Wide Fund for Nature, Armenia (WWF) to create the Tatev National Park in the Syunik region. The WWF acts as the implementing partner of this initiative, while the IDeA Foundation acts in a donor capacity, having already funded the total of US$0.18m on surveying, zoning, planning and design activities in 2015-16. The anticipated creation of the Tatev National Park, with a total area of 9,516 hectares, would complement the other components of the Tatev Revival Project, as it would serve as an additional attraction for tourists, especially in the eco-tourist segment. As of the end of 2016, the Tatev National Park is at the stage of receiving official National Park status. This is a necessary procedure, as the state authorities will be the operator of the park, once all social investments have been made by the IDeA Foundation and WWF-Armenia.

SKOLKOVO
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THERE IS ALWAYS AN EMERGING MARKET

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