

Self-Reliance Accelerator Package



Government of the Islamic Republic of Afghanistan

April 2019

Report for Spring meetings with IMF and the World Bank

1. Overview

The Government of the Islamic Republic of Afghanistan (GoIRA) is proposing an \$8.7 billion USD investment package to help accelerate the process of achieving economic self-reliance. These projects are designed to spur economic development, raise living standards and provide new jobs for Afghanistan's growing labor force. The long-term aim is to promote self-sufficiency so that Afghanistan can move away from its dependence on donor support, enabling the Afghan people to take the lead in improving their lives.

The Self-Reliance Accelerator Package (the Package) includes a concrete set of projects across three sectors that are fully costed and ready to be commissioned. The sectors are: (i) agriculture, horticulture, and irrigation, (ii) electricity transmission, and (iii) urban housing and commercial properties. These sectors have been chosen because they are commercially feasible and provide short-term economic impacts, while facilitating longer-term benefits.

There will be wide-ranging fiscal and economic benefits to Afghanistan from implementing the Package. The total package is forecast to generate \$10.8 billion in government revenue by 2030. The successful implementation of the Package will also create 1.48 million full-time equivalent jobs. This is expected to lead to a 4.55% increase in GDP each year over the first five years of implementation. Importantly, the projects within the Package are designed to enable long-term economic growth opportunities.

In order to finance these projects, the government is seeking an increase in its imposed debt ceiling from 0% to 30% of Afghanistan's GDP. Afghanistan cannot develop in the long term with international assistance alone. Afghanistan must be able to access non-concessional loans and other forms of private sector financing. GoIRA is therefore seeking to negotiate with the IMF and the World Bank to lift restrictions on non-concessional borrowing. Beyond the projects identified in the package, private sector finance will be required at a much greater scale to support future sectors that are fundamental to sustainable economic development, such as mining, regional connectivity, manufacturing and digital infrastructure.

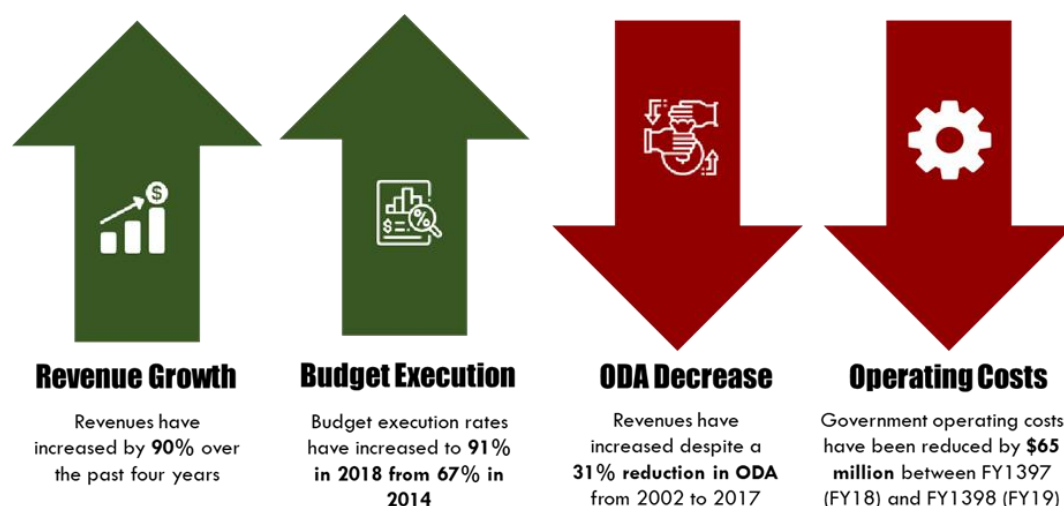
Creating economic growth opportunities to promote peace

The direct and indirect job opportunities that will be created through the Package will be key to promoting peace in Afghanistan. Almost a million young people enter the job market every year in Afghanistan.¹ The Package has been designed to create job opportunities for the unemployed and to improve overall living standards. It specifically targets projects that absorb large quantities of low-skilled labor. These economic and employment opportunities are fundamental to enhancing confidence in Afghanistan's future and promoting stability. With improved levels of prosperity, Afghanistan's citizens will feel less marginalized and more socially integrated.

¹ Wasti, Abdulla. "Event Recap: What's Next for Afghanistan's Economy?" Wilson Center. December 13, 2019. Accessed March 25, 2019. <https://www.wilsoncenter.org/blog-post/event-recap-whats-next-for-afghanistans-economy>

Progress so far

Afghanistan's Fiscal Accomplishments



GoIRA has made vast improvements in the ability to collect revenue and manage public finances. Revenue has grown rapidly with revenue increasing by 90% over the past four years. This has taken place amidst ongoing reductions in official development assistance (ODA) as a percentage of Afghanistan's Gross National Income (from 50% in 2002 to 19% in 2017). Development budget execution rates have increased from 67% in 2014 to 91% in 2018.² Moreover, government operating costs were reduced by \$65 million between FY 1397 (FY 18) and FY 1398 (FY 19).

What the Economic Accelerator is not

The Package is not a substitute to GoIRA's existing strategy for achieving self-reliance. Rather, it is a tactical approach to infrastructure development that aims to fast-track the process towards self-reliance. The Package conforms with GoIRA's *Realising Self-Reliance* strategy developed in 2014, which highlights the Government's commitments towards "peace, recovery, productivity and growth" for Afghanistan.³ The accelerator is aligned with the principles and objectives of the Afghan National Peace and Development Framework (ANPDF), Afghanistan's National Infrastructure Plan and the 2030 Agenda and Sustainable Development Goals (SDGs).

The projects for the Package were selected based on their ability to meet key criteria for non-concessional borrowing, including:

² Islamic Republic of Afghanistan, (2019), Budget Execution Rate. Ministry of Finance, Directorate General Budget. Accessed March 29, 2019. <https://www.budgetmof.gov.af/index.php/en/85-news/291-budget-execution-rate1>

³ Islamic Republic of Afghanistan, (2014), "Self -Reliance Commitments to Reform and Renewed Partnerships." Embassy of Afghanistan. Accessed March 25, 2019. <http://staging.afghanembassy.us/contents/2016/04/documents/Realizing-Self-Reliance.pdf>

- Is the project financially and commercially feasible / does it have great revenue generation potential?
- Is there a strong likelihood of funding available for the project (including alternative sources of finance)?
- Will the project generate employment opportunities?
- Will the project help to balance trade?
- Are value chain opportunities tied to the project?

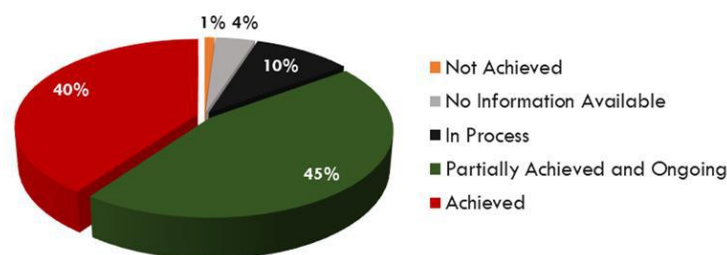
2. State of Play

GoIRA's Commitment

In the lead up to the 2014 elections, President Ashraf Ghani's campaign platform involved investigating ways of building a self-reliant economy with decreasing dependence on aid and development assistance. In order to fully capitalize on Afghanistan's vast assets, open and accountable government was upheld as a necessary pre-condition.

Since 2014, GoIRA has implemented critical reforms that have led to improvements in managing fiscal resources transparently and accountably. As evidence of this, in just two years GoIRA has fully-achieved 39% and partially-achieved 45% of total commitments laid out in key strategic documents and donor agreements. These include: the [Afghanistan National Peace and Development Framework](#) (ANPDF), [National Priority Programs](#), the [National Strategy for Combatting Corruption](#), the [EU State-Building Contract](#), the [Self-Reliance Through Mutual Accountability Framework](#) and the [Geneva Mutual Accountability Framework](#). All commitments are on track to being fulfilled by 2021. To demonstrate GoIRA's commitment to transparency and corruption eradication, www.reforms.gov.af was set up to track and publicize progress against these commitments.

Progress Against GoIRA Commitments



The Self-Reliance Accelerator Package should be understood in the context of these strategies and donor agreements. The projects involved in the Package either build off the various policy aims in these documents (e.g. anti-corruption and national accountability), or help achieve them (e.g. economic self-sufficiency, higher living standards and peace).

Revenue Growth and Budget Execution

Afghanistan's Revenue Performance



Revenue Growth

Revenues have increased by **90%** over the past four years



Domestic Revenues

In FY18, GoIRA's revenue was \$2.5 billion with aggregate domestic revenues up 9.3% from the previous year



Revenue Performance

In August 2018, Afghanistan's revenue performance was at a record high, reaching 12.3% of GDP in 2017



Budget Execution

Budget execution is currently at 91%

As evidence of GoIRA's improving fiscal performance, Afghanistan's revenue gains have been strong in recent years. In August 2018, Afghanistan's revenue performance was at a record high, reaching 12.3% of GDP in 2017 (with a previous peak of 11.7% in 2011).⁴ According to the World Bank, revenue gains were attributable to improved customs enforcement and administration as well as new charges and fees.⁵

GoIRA's revenue performance has remained strong in FY 1397 (FY 18). During this period, the government's revenue was approximately \$2.5 billion, with aggregate domestic revenues up from 9.3% the previous year.⁶

Additionally, this fiscal year's budget execution was at 91%. In comparison, the budget execution in FY 1393 (FY14) was at 67%. The high budget execution rate is driven by an overall improvement in Afghanistan's budget process. This includes better systems for planning, formulation, authorization, disbursement, monitoring of implementation, performance measurement, and supervision.

Government's Expenditures

As further evidence of its fiscal discipline, GoIRA has been economizing on its operating expenses. Afghanistan's operating budget was reduced by \$65 million from FY 1397 (FY 18) to FY 1398 (FY 19). This was driven by a reduction in expenditure on government agencies and civil servants through consolidation of ministries.

While overall expenditures did grow in FY 1398 (FY 19), expenditure growth was only 3.1%. This was driven primarily by an increased cost for acquisition of government assets.

⁴ SIGAR, *Quarterly Report to the United States Congress*, 1/30/2019, p. 149.

⁵ World Bank, *Afghanistan Development Update*, 8/2018, p. 9.

⁶ SIGAR, *Quarterly Report to the United States Congress*, 1/30/2019, p. 153.

The next section details GoIRA's aggressive goal of reducing security and civilian expenditures in order to become financially self-reliant.

Reduction in Civilian and Security Expenditures

GoIRA has achieved cost reductions through the consolidation of ministries and streamlining of the civil service. In 2018, a revision of the Government's organizational structure was undertaken, which found that several efficiencies could be gained by reducing duplicative government functions. This resulted in the consolidation of six ministries and departments including the Ministries of Transport and Public Works, with the Ministries of Civil Aviation, Railway and Traffic Police.

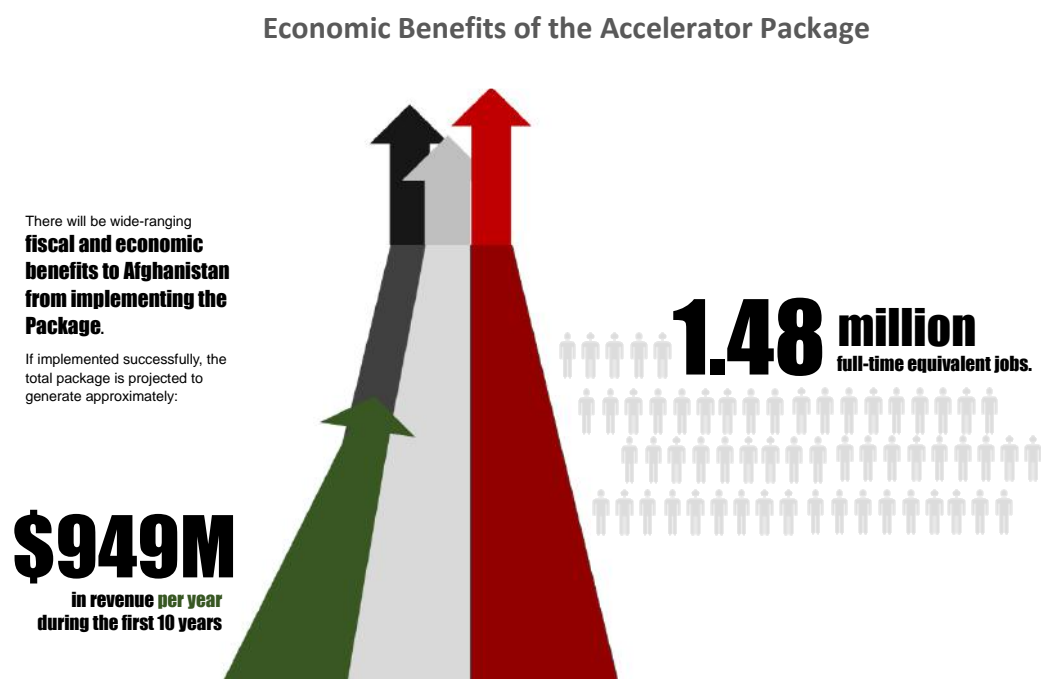
New reviews have been commissioned to examine ways of making Afghanistan's security sector more efficient without adversely impacting Afghanistan's security environment. Presidential decree no. 2669, issued in February 2019, tasked GoIRA with decreasing security expenditures without affecting the Afghan soldiers on the frontline. The reduction in security expenditures will occur in three phases. The first phase will reduce waste in consumption items (e.g. weapons, equipment, food, and care and maintenance). The second phase will revise the organizational structure by simplifying and automating processes to improve efficiencies within particular areas of the security forces (e.g. human resources, administrative, financial, procurement, logistics, communications, and IT). The third phase will review the overall military strategy of the country. The first and second phases, which are already underway, are expected to reduce security expenditures by approximately 10%. A commission, chaired by the Minister of Finance, with representatives from the National Security Council, the Ministry of Defense, the Ministry of Interior, and the National Directorate of the Security will prepare a plan to present to the Cabinet in mid-2019.

In summary, GoIRA is making significant efforts to improve the fiscal performance of Afghanistan. This is being driven by ongoing efforts to enhance the efficiency of public expenditure. The processes GoIRA has put in place to increase fiscal space, improve efficiencies and enhance transparency should boost lenders' confidence in GoIRA's ability to manage the budget and repay its loans.

3. Sectors Involved in the Self-Reliance Accelerator Package

Overview

GoIRA's Self-reliance Accelerator Package selects projects in key sectors that will improve economic growth, raise living standards and create jobs. The Package is designed to accelerate Afghanistan's progress towards fiscal self-reliance. The projects in the Package are spread across three sectors: (i) agriculture, horticulture, and irrigation (ii) electricity transmission and distribution, and (iii) urban housing and developing commercial properties. These sectors have been chosen because they are financially feasible and provide a short-term economic stimulus, while facilitating longer-term economic growth.



There will be significant fiscal and economic benefits to Afghanistan from implementing the Package. The total package is projected to generate approximately \$949 million in revenue per year during the first 10 years. The successful implementation of the Package will also create 1.48 million full-time equivalent jobs.

GoIRA is seeking an increase in Afghanistan's non-concessional debt ceiling from 0% to 30% of Afghanistan's GDP to finance the Package. Afghanistan needs to move away from its dependence on aid and development assistance if it wants to develop well into the future. To do so, Afghanistan must be able to access non-concessional loans and other forms of private sector financing. GoIRA is therefore seeking to negotiate with the IMF and the World Bank to lift restrictions on non-concessional borrowing.

The IMF and the World Bank both have the capacity under their policies to allow non-concessional borrowing on a case-by-case basis and in exceptional circumstances. Criteria for exceptional circumstances include:

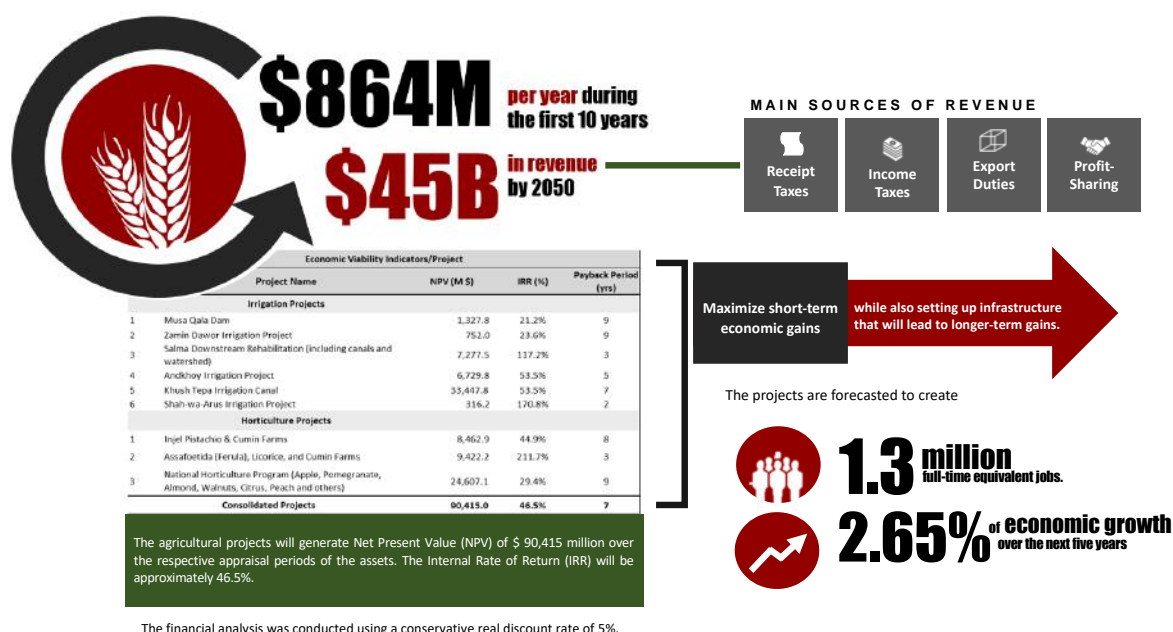
- a. The economic impact intended of the project;

- b. Adequacy of debt management systems;
- c. Implications for overall debt sustainability and risks; and
- d. Availability of financing from alternative sources.

The below sub-sections outline why the three sectors have been prioritized, how much funding is required, and why these are fiscally responsible sectors to fund.

1. Agriculture, horticulture and irrigation

Opportunities from Agriculture, Irrigation and Horticulture Projects

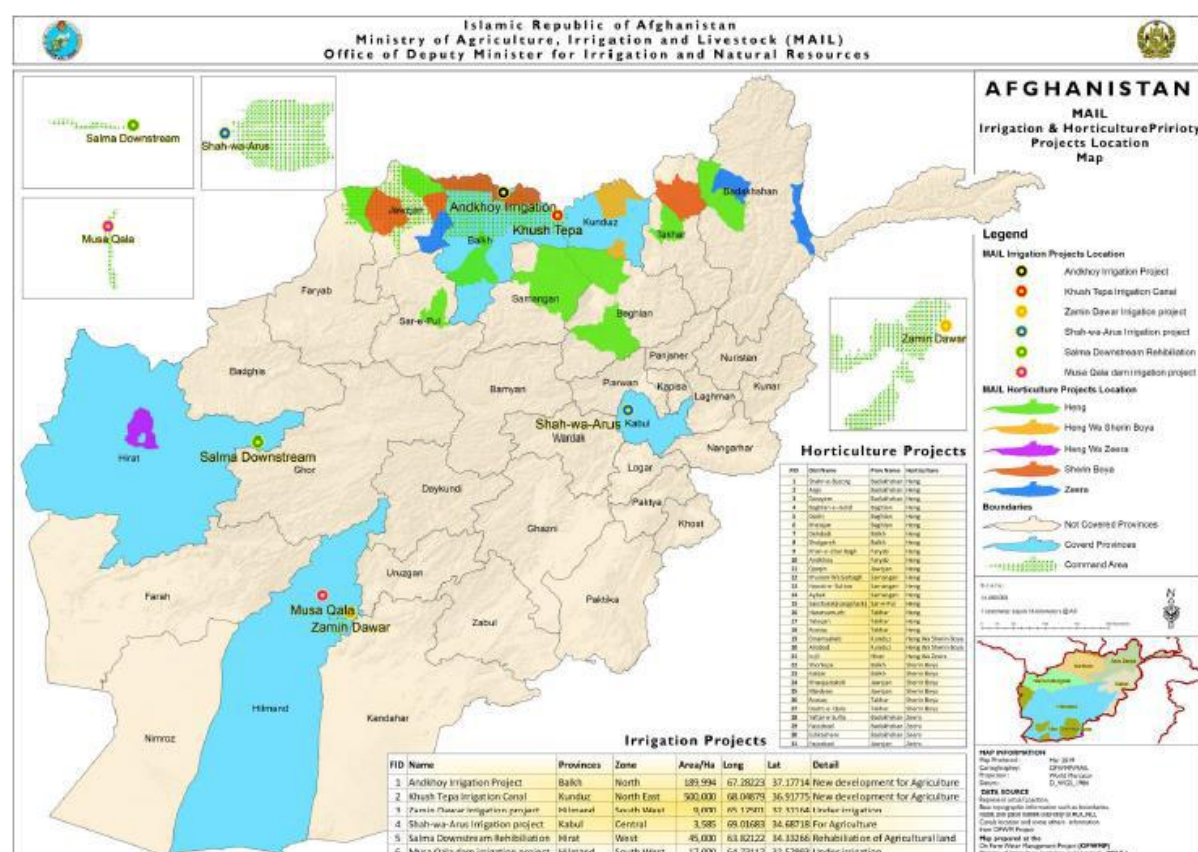


Agriculture and agribusiness present substantial opportunities for growth, job creation, and developing Afghanistan's export market. Agriculture currently employs approximately 44% of the total workforce.⁷ The potential of Afghan agriculture is tremendous and has been the subject of many [reports](#) and [strategies](#), and it was selected as one of the main growth sectors presented at the Geneva Conference on Afghanistan in 2018.

The selected agriculture, horticulture and irrigation projects in the Package are designed to benefit Afghanistan's economic and financial situation in two ways. The first is to expand the variety of cash-crops that are tailored to Afghanistan's arid climate. Crops include pistachio, cumin, ferula and liquorice. These crops will be both consumed domestically and contribute to Afghanistan's export market. The second is to improve irrigation systems. Agricultural export development in Afghanistan requires increased production capacity, which can be most efficiently realized through irrigation improvements.

⁷ The World Bank, (2016), *Afghanistan to 2030 Priorities for Economic Development Under Fragility*. The World Bank.

Locations of Horticulture and Irrigation Projects



The Ministry of Agriculture, Irrigation and Livestock (MAIL), is seeking loans to invest **\$3.46 billion** over a nine-year period from 2020 to 2028. This investment will be directed towards six irrigation projects and three horticulture projects. Afghanistan's private sector (i.e. firms and entrepreneurs) is expected to finance an additional \$2.3 billion. These projects are outlined as follows:

Govt Investment Distribution/Project					
No	Project Name	Govt Investment Million USD	Relative %	Land Covered (in Hectares)	Implementation Period (Years)
Irrigation Projects					
1	Musa Qala Dam Irrigation Project	254.6	7%	17,000	4
2	Zamin Dawar Irrigation Project	110.5	3%	9,000	4
3	Salma Downstream Rehabilitation (including canals and watershed)	78.8	2%	45,000	5
4	Andkhoy Irrigation Project	548.0	16%	189,994	8
5	Khush Tapa Irrigation Canal	1,503.6	44%	500,000	8
6	Shah-wa-Arus Irrigation Project	12.9	0%	3,585	3
Horticulture Projects					
7	Injel Pistachio & Cumin Farms	57.8	2%	30,000	5
8	Assafoetida (Ferula), Licorice, and Cumin Farms	39.0	1%	280,000	5
9	National Horticulture Program (Apple, Pomegranate, Almond, Walnuts, Citrus, Peach and others)	850.0	25%	163,300	5
Total		3,455.2	100%	1,237,879	9

These projects have been evaluated to ensure they are fiscally sustainable and therefore suitable for loans. Revenue generated by the MAIL projects is predicted to be \$864 million per year during the first 10 years. The package is forecast to generate over \$45 billion in revenue by 2050. The main sources of revenue are receipts taxes, income taxes, profit-sharing arrangements and export duties.

The table below displays the project-level revenue until 2030:

Economic Viability Indicators/Project				
No	Project Name	NPV (M \$)	IRR (%)	Payback Period (yrs)
Irrigation Projects				
1	Musa Qala Dam	1,327.8	21.2%	9
2	Zamin Dawor Irrigation Project	752.0	23.6%	9
3	Salma Downstream Rehabilitation (including canals and watershed)	7,277.5	117.2%	3
4	Andkhoy Irrigation Project	6,729.8	53.5%	5
5	Khush Tapa Irrigation Canal	33,447.8	53.5%	7
6	Shah-wa-Arus Irrigation Project	316.2	170.8%	2
Horticulture Projects				
7	Injel Pistachio & Cumin Farms	8,462.9	44.9%	8
8	Assafoetida (Ferula), Licorice, and Cumin Farms	9,422.2	211.7%	3
9	National Horticulture Program (Apple, Pomegranate, Almond, Walnuts, Citrus, Peach and others)	24,607.1	29.4%	9
Consolidated Projects		90,415.0	46.5%	7

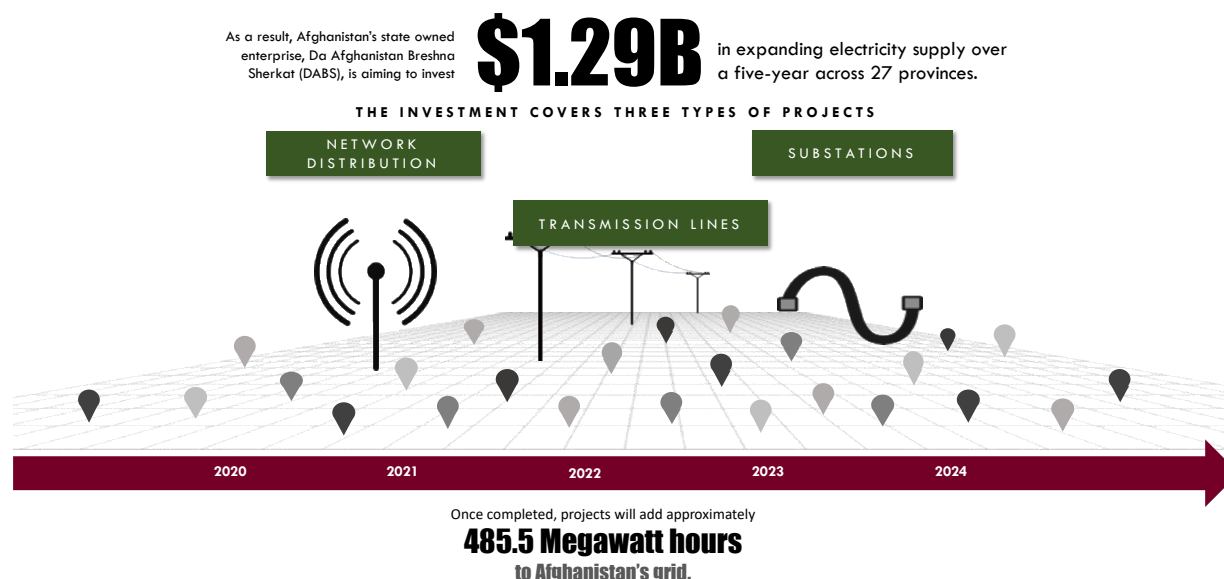
Upon successful implementation, the agricultural projects will generate a Net Present Value (NPV) of \$90.4 billion over the respective appraisal periods of the assets. The projected Internal Rate of Return (IRR) is 46.5%.⁸

These projects have been selected to maximize short-term economic gains, while also establishing infrastructure that will lead to longer-term growth. The projects are forecast to create 1.3 million full-time equivalent jobs. As such, the projects will improve economic growth by approximately 2.65% over the next five years, and will involve irrigating 1,237,879 hectares of agricultural land, which can be utilized to improve agriculture yields well into the future.

⁸ The financial analysis was conducted using a conservative real discount rate of 5%.

2. Electricity transmission and distribution

Opportunities from Electrification Projects



Improving access to electricity throughout Afghanistan is central to economic development. According to the Asian Development Bank's Power Sector Masterplan, only 28% of Afghan households are connected to a power supply.⁹ The connection rate within the provinces ranges from zero in rural areas to near 100% in urban regions.

The absence of a power connection means households experience lower standards of living, while businesses face higher costs of doing business. Afghanistan's fragmented electricity supply poses a challenge to the economy for three reasons:

1. Households that choose to use diesel generators are faced with high costs of living, while households that eschew generators are left without power altogether.
2. It prevents businesses in less-electrified areas from entering the market.
3. Businesses that are forced to run their operations using diesel generators have higher costs of doing business. This means that their products and services are more expensive, and therefore are less competitive.

Building electricity transmission and distribution systems will lower the costs of doing business, remove barriers to private sector development and promote better living standards for Afghan citizens. Moreover, the World Bank states that positioning Afghanistan as a 'bridge' linking the energy reserves of Central Asia with the growing demand of South Asia, could ultimately add 3.1% to export growth annually and contribute substantially to revenue growth through to 2030.¹⁰

⁹ Asian Development Bank (2010). *Afghanistan Power Sector Masterplan*. ADB.

¹⁰ Afghanistan to 2030 report.

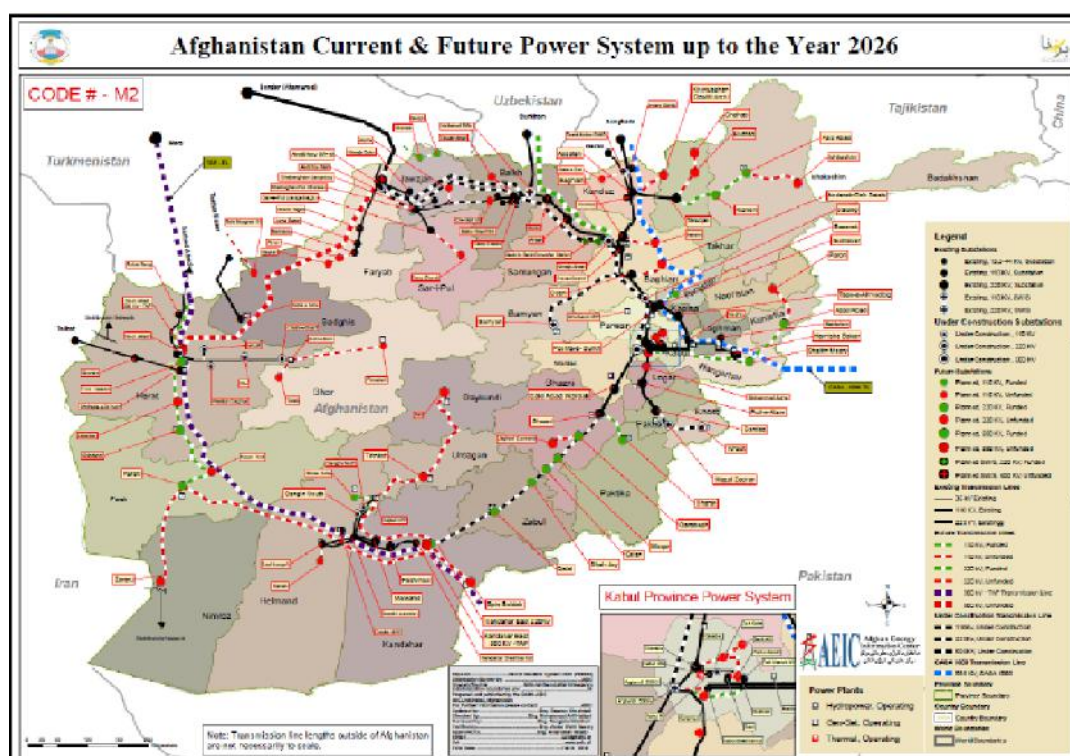


Figure 1 Locations of Electrification Projects

As a result, Afghanistan's state-owned corporation, Da Afghanistan Breshna Sherkat (DABS), is aiming to invest \$1.29 billion in expanding electricity supply over a five-year period from 2020 to 2024 across 27 provinces. The investment covers three types of projects: transmission lines, substations and network distribution. Once completed, these projects will add approximately 485.5 Megawatt hours to Afghanistan's grid.

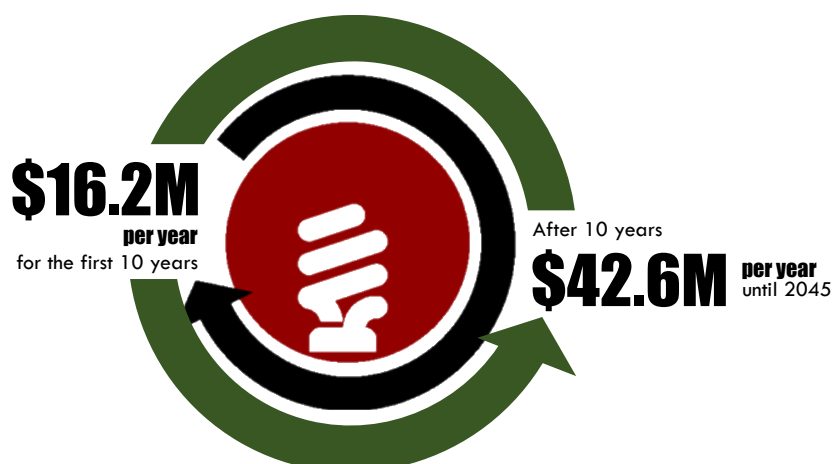
These projects will result in 85,500 new residential connections, 23,940 commercial connections and 211 industrial connections. Overall, this will lead to a 37% increase in energy availability in Afghanistan.

DABS is seeking loans to fully finance these projects, with a cost breakdown as follows:

Investment Distribution/Projects		
Projects	Million USD	Relative %
Transmission Lines	845.4	66%
Substations	262.4	20%
Network Distribution	181.8	14%
Total	1,289.5	100%

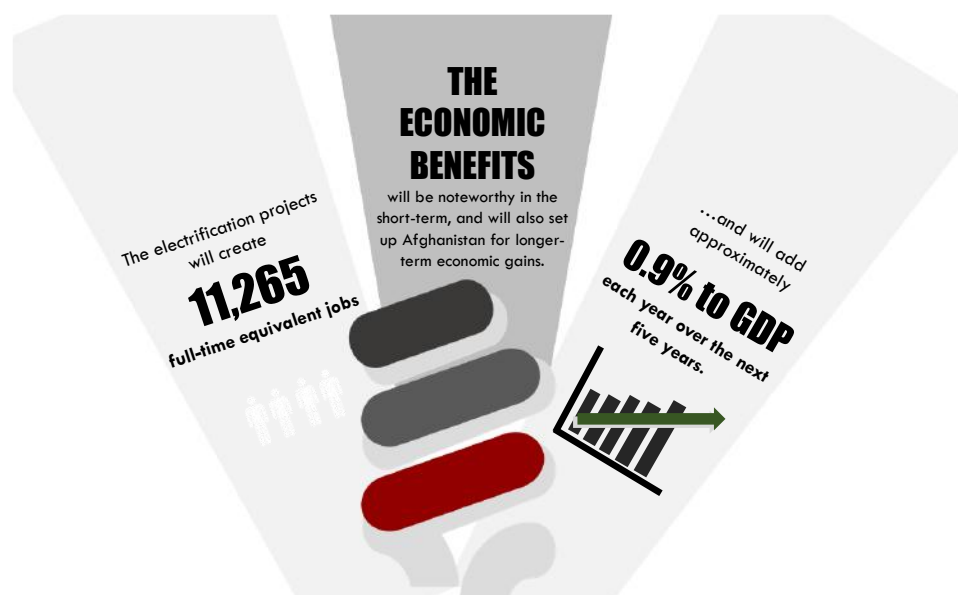
DABS requires a front-loaded investment with 76% of loans taking place within the first three years of the project. A five-year moratorium is sought, after which DABS will repay principal and loan interest for the following ten years.

Fiscal Impact of the Electrification Projects



The fiscal impact of the selected projects demonstrates the viability of the investment. Total revenue to government generated by this set of projects is projected to be \$16.2 million per year for the first 10 years. After 10 years, revenue generated by the package could reach on average \$42.6 million per year until 2045. Upon successful implementation, the financial NPV is set to be \$203 million, and the modified financial IRR will be 6.4%.¹¹ The average debt service coverage ratio is projected to be low at 0.73. Such rates indicate that this set of projects is a sound and fiscally responsible investment for Afghanistan's journey towards self-reliance.

Economic Benefits of the Electrification Projects

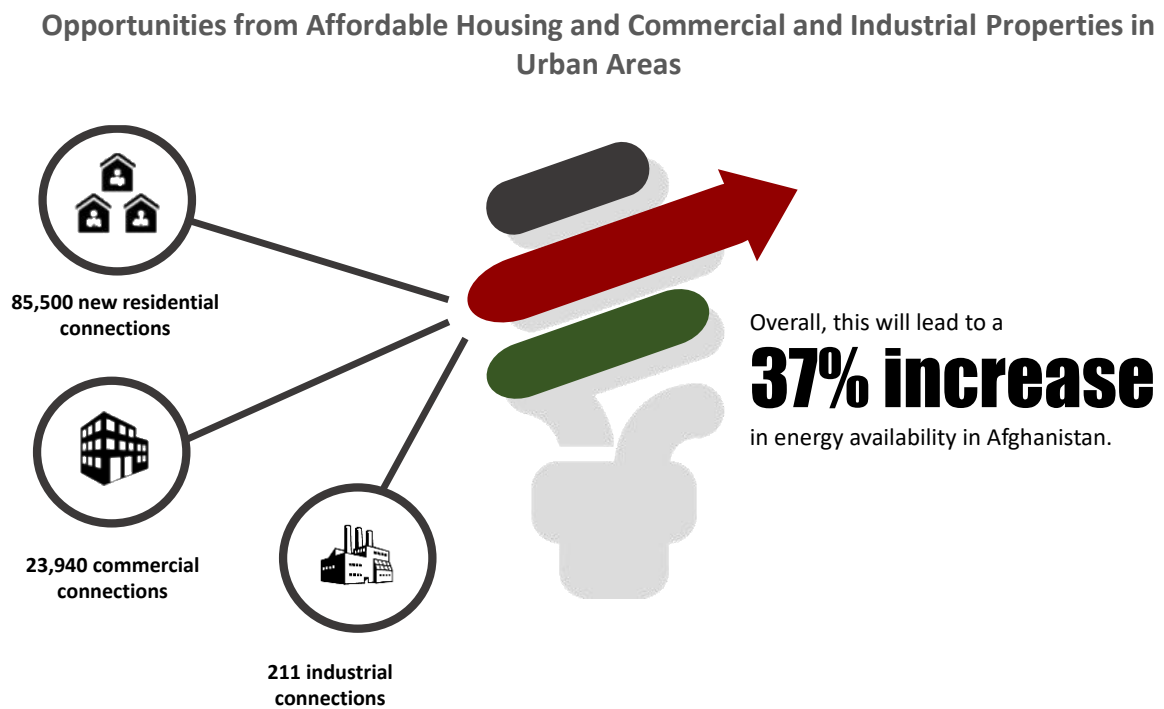


Moreover, the economic benefits for the projects will be noteworthy in the short-term and will also set up Afghanistan for longer-term economic gains. The electrification projects will create 11,265 full-time equivalent jobs and will add approximately 0.9% to GDP each year over the next five years. In

¹¹ These forecasts are based on a conservative 5% discount rate and a 25-year appraisal period.

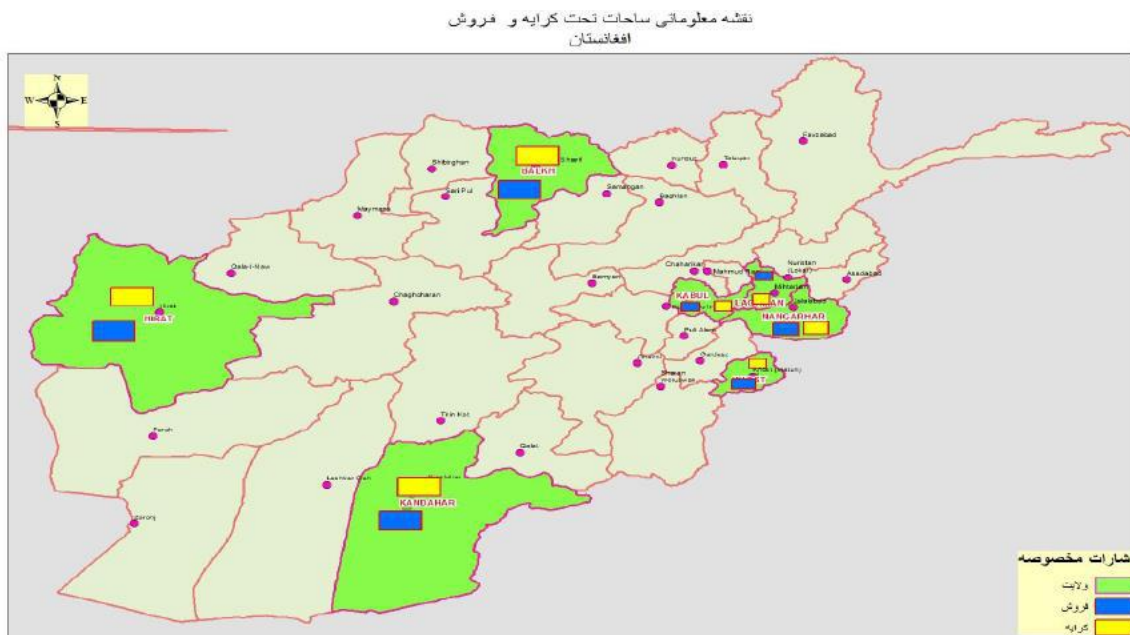
addition, it will reduce the barriers to doing business and encourage new entrants into Afghanistan's market.

3. Building affordable housing and commercial and industrial properties in urban areas



Afghanistan is experiencing rapid urbanization, which necessitates the expansion of urban housing stock and investment in urban business infrastructure. As more internal migration from rural areas to urban areas takes place, GoIRA needs to ensure that adequate services are provided to individuals, while businesses are provided with business centers and industrial parks that can leverage the benefits of agglomeration economies.

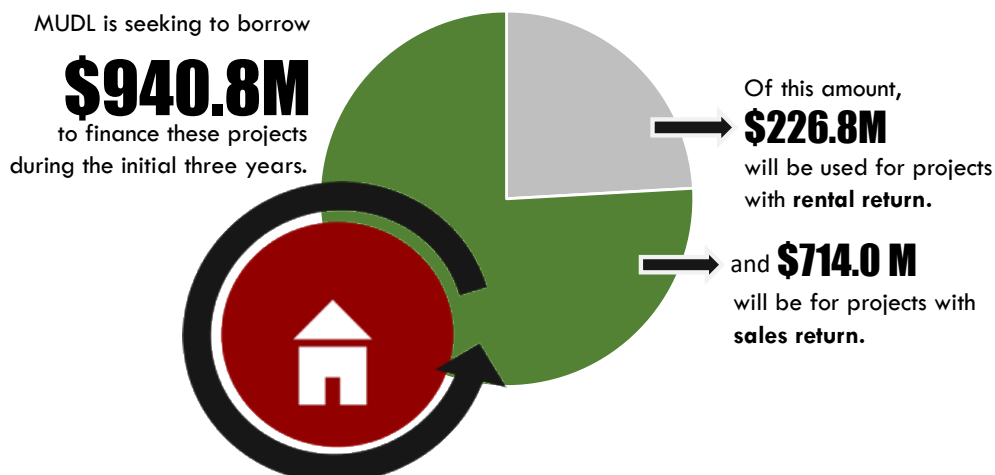
Locations of the Urban Housing and Commercial Properties Projects



To address these issues, the Ministry of Urban Development and Land (MUDL) is embarking on a range of projects to build affordable housing and to develop commercial and industrial properties. MUDL is aiming to invest \$1.67 billion for 17 projects over five years from 2020-2024. The investment package covers two types of projects: (i) projects with rental return and (ii) projects with sales return. Projects with rental return include business centers built across seven provinces. While projects with sales return involve the construction of 10 residential areas in urban centers across Afghanistan.

MUDL is seeking to borrow \$940.8 million to finance these projects during the initial three years. Of this amount, \$226.8 million will be used for projects with rental return, and \$714.0 million will be for projects with sales return.

Investment Breakdown of Urban Housing and Commercial Properties Projects

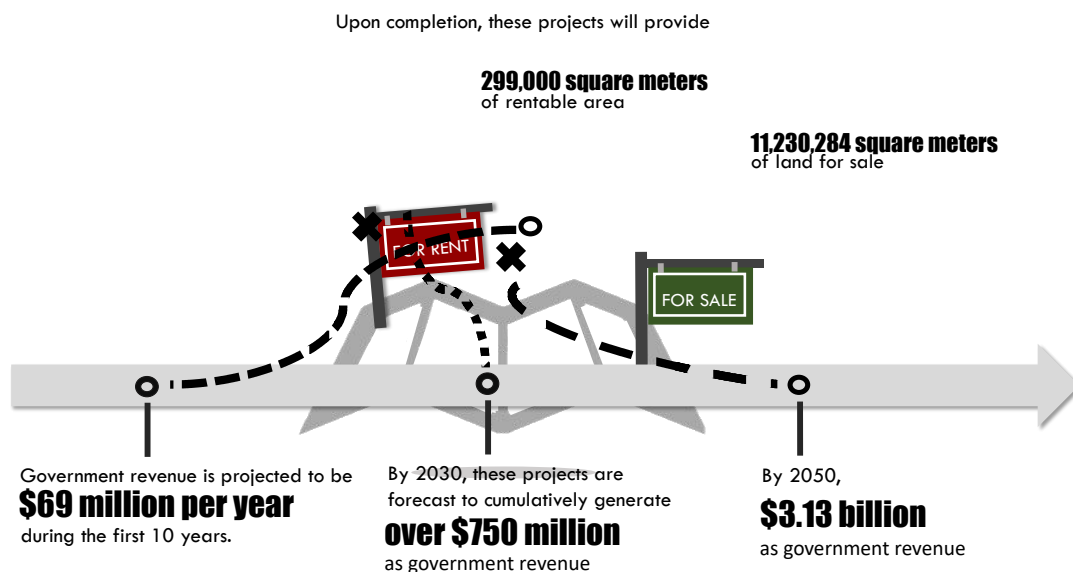


MUDL will be seeking a borrowing rate at 5% and a loan moratorium for two years. Loans for rental projects will be repaid in ten years, while loans for non-rental projects will be repaid in three years.

The land cost, which amounts to \$165.1 million, will be borne by MUDL. This will be included as an equity stake in the projects. The remaining investment will be sourced from investors as prepayments. This will amount to \$186.1 million annually during the last three years of the project.

Revenue projections demonstrate the fiscal sustainability of the projects with an IRR of 54%. Upon completion, these projects will provide 299,000 square meters of rentable area and 11,230,284 square meters of land for sale. Revenue to government is projected to be \$69 million per annum over the first 10 years. By 2030, these projects are forecast to cumulatively generate more than \$750 million as revenue for the government, and \$3.13 billion by 2050. Upon successful implementation, the projects will generate a Financial NPV of \$1.3 billion over the appraisal period.

Economic Returns of Urban Housing and Commercial Properties Projects



Finally, the economic returns of these projects are also considerable. The projects are estimated to create 179,895 full-time equivalent jobs, and it is forecast to add approximately 1% to GDP each year during the first five years.

Investment Criteria	Projects with Rental Return	Projects with Sales Return	All Projects
Financial NPV (\$)	1,198,676,105	109,937,835	1,308,613,940
Financial IRR (%)	40%	92%	54%
Payback Period (yrs)	5	2	3

Economic Benefits of Urban Housing and Commercial Properties Projects

The projects are estimated to add approximately

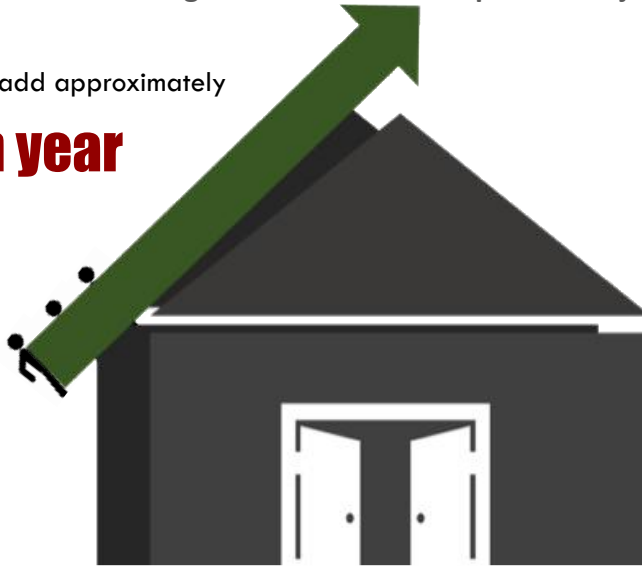
1% to GDP each year

during the first five years

and create

179,895

full-time equivalent jobs



4. Social, Political and Environmental Impact

In addition to their economic and fiscal benefits, the projects in the Package were selected for their wide-ranging social, political and environmental impacts.

Social Impact

The Package's agriculture and irrigation projects address food insecurity amidst increasingly severe weather conditions in Afghanistan. Agriculture projects have been selected to expand the variety of crops that can be grown in Afghanistan's arid climate. Increasing the quantity and variety of produce will have positive long-term impacts on food security. The development of sustainable agricultural and irrigation systems will similarly address food insecurity – particularly for communities that are affected by Afghanistan's ongoing drought.

The electricity transmission and distribution projects in the Package will target previously underserved areas and improve access to electricity for *all* segments of the population. The projects selected are closely aligned with the Government's national priority programs—including Citizens' Charter and the National Infrastructure NPP. Electrification leads to numerous social benefits – it can power equipment, provide lighting and can be used as a source for heating or air conditioning. This in turn, can lead to better quality education and improved access to health care. Currently, 88% of government schools have no electricity.¹² Access to electricity can facilitate students' ability to use computers, while enabling them to read and do homework at night.

Residential, commercial and industrial development projects will provide important social benefits to vulnerable segments of Afghanistan's population. Internally Displaced Persons (IDPs) and Afghan returnees are a significant proportion of the population and lack access to basic needs. As of 2016, there were approximately one million Afghan returnees and 1.2 million IDPs. 48% of returnees and IDPs have relocated to urban areas in order to obtain better security, social services and job opportunities.¹³ Many of these people live in informal urban settlements that experience low hygiene levels and poor access to water. Increased investment in urban housing and properties will therefore enable one of the most vulnerable segments of Afghanistan's population to access improved living conditions.

Political Impact

The projects will have several positive political impacts, including reducing opium production—which fuels insurgency in Afghanistan. The investment package identifies areas of agricultural production where alternative crops like pistachios, cumin, licorice or ferula can generate high returns to replace opium as the main cash crop. Opium production fuels insurgency in Afghanistan as it is mostly cultivated in areas under Taliban control. The most recent estimates of the Taliban's annual

¹² Human Rights Watch, (2017), *"I Won't Be A Doctor, and One Day You'll Be Sick"*. Accessed March 27, 2019. <https://www.hrw.org/report/2017/10/17/i-wont-be-doctor-and-one-day-youll-be-sick/girls-access-education-afghanistan>

¹³ IOM Afghanistan, (2018), *Displacement Survey Shows 3.5 Million Internally Displaced, Returnees from Abroad in 15 Afghan Provinces*. Afghanistan IOM Int. Accessed March 25, 2019. <https://afghanistan.iom.int/press-releases/displacement-survey-shows-35-million-internally-displaced-returnees-abroad-15-afghan>

share of the illicit drug economy range from \$100 - \$400 million.¹⁴ Therefore, moving agricultural production away from opium towards other cash crops will constrain a major source of revenue for insurgents.

The projects selected in the Package aim to increase domestic energy production and transmission so that Afghanistan can become more self-sufficient. GoIRA is seeking to increase domestic energy production and transmission so that it can rely less on imported energy from neighboring countries. The longer-term aim is to become a regional connectivity hub that facilitates energy transmission from energy rich countries to energy poor countries. These electrification projects will prompt changes in incentives for cooperation between Gulf, South and Central Asian countries as their economies grow and become interdependent.

Improvements in urban infrastructure will be critical to meeting the needs of a rapidly urbanizing population and will serve as an enabler for peace. With many Afghans now living in or migrating to urban areas, poverty and unemployment will increasingly be concentrated in cities. Inadequate living standards and unemployment can make individuals more susceptible to violent extremism. The projects will provide improvements to living standards through more affordable housing and will also help deliver jobs to those without work. As evidence of this, the construction of business centers is forecasted to create 179,895 full-time equivalent job opportunities.

The Package is designed to promote economic development throughout the entire country. The projects within all three sectors have been selected based on their geographical diversity. This is an important measure to counter spatial and regional inequalities within Afghanistan.

Environmental Impact

Many of the projects utilize climate change resilience technology to mitigate the effects of future natural disasters. The horticulture projects aim to plant drought-resilient crops using modern horticultural practice. Meanwhile, the irrigation projects utilize techniques like water harvesting, which enables supplemental irrigation during critical water deficit periods. Moreover, projects in the agriculture and irrigation sectors have the combined potential to plant approximately 200 million trees.¹⁵

The electrification projects in the investment package will be assessed in terms of their potential adverse environmental impacts, including possible emissions to air and noise, raw water use and possible water pollution, loss of fauna and flora habitats, and disturbance of the landscape. Project plans would be supported by an environmental impact evaluation for all phases of the project. The assessment would identify all potential environmental concerns that may arise during construction and operation and propose appropriate courses of action to reduce the environmental impact as much as possible.

¹⁴ Azami, Dawood, (2018), Afghanistan: How Does the Taliban Make Money?" BBC News. Accessed March 27, 2019. <https://www.bbc.com/news/world-46554097>

¹⁵ Ministry of Finance of Afghanistan, (2019), *Government Investment Package for Self-reliance Acceleration*. Government of the Islamic Republic of Afghanistan.

5. Financing

The overall funding required for the Self-Reliance Accelerator Package is \$8.7 billion. Of this amount, GoIRA is seeking to borrow \$5.85 billion while the private sector will contribute \$2.85 billion.

In order to seek funding from alternative (i.e. non-donor) sources, GoIRA is pursuing three avenues:

1. Access debt markets to facilitate government-led finance of projects;
2. Enhance investment attractiveness to crowd in private sector-led activity; and
3. Mitigate the country/political risk to enable 1 & 2.

GoIRA requires the debt ceiling to be raised to access alternative funding sources for the Package (e.g. the private sector and international debt markets). GoIRA is currently prevented from progressing financing options other than concessional borrowing due to the restrictions of the IMF's Extended Credit Facility Program and the World Bank's Non-Concessional Borrowing Policy. Under certain circumstances, the IMF and World Bank will consider permitting countries to seek out non-concessional loans.

The projects for the investment package were therefore selected for their ability to meet the criteria for non-concessional borrowing:

- projects are financially and commercially feasible, and have significant revenue generation potential,
- there are pools of funding available for the projects,
- projects will generate substantial employment opportunities,
- projects will help expand Afghanistan's export market, and
- the projects facilitate value chain opportunities.

GoIRA has explored a range of investment vehicles, scaling approaches, risk reduction tools, and investment partners across the spectrum of the traditional donor system to straight commercial lending. A full description of the financial instruments considered can be found at [Annex B](#).

In order to finance a package of this scale, multiple instruments will need to be used in parallel. For example, the securing of a concessional loan from an MDB/DFI may provide the leverage to secure an FDI partner or the public confidence to access public debts markets (such as *sukuk* issues). The most efficient financing vehicle will depend on the specific nature of the investment.

1. Government access to debt markets

While government investment is expected to be financed primarily through loans, GoIRA is exploring other options, including:

- an innovative loans structure similar to contract farming arrangements. Under this, national investors (such as sovereign wealth funds) would provide loans. They would be repaid through a barter-like system, whereby export produce is delivered to a state-owned enterprise or other nominated vehicle (either an agreed quantity or a total dollar value at market price);

- disaster mitigation loans or grants for irrigation projects that would significantly reduce the risk of drought and improve food security;
- green loans and/or bonds for projects that significantly reduce Afghanistan's carbon footprint such as for large-scale planting of trees for horticulture; and
- a *mudarabah sukuk* issue. While work needs to be done to establish the legal framework for these instruments in Afghanistan, they are particularly attractive as the capital risk is primarily borne by the investor. Our analysis shows that there is a significant latent domestic debt market in Afghanistan. This is evidenced by the ongoing capital flight to UAE, Turkey, and elsewhere.

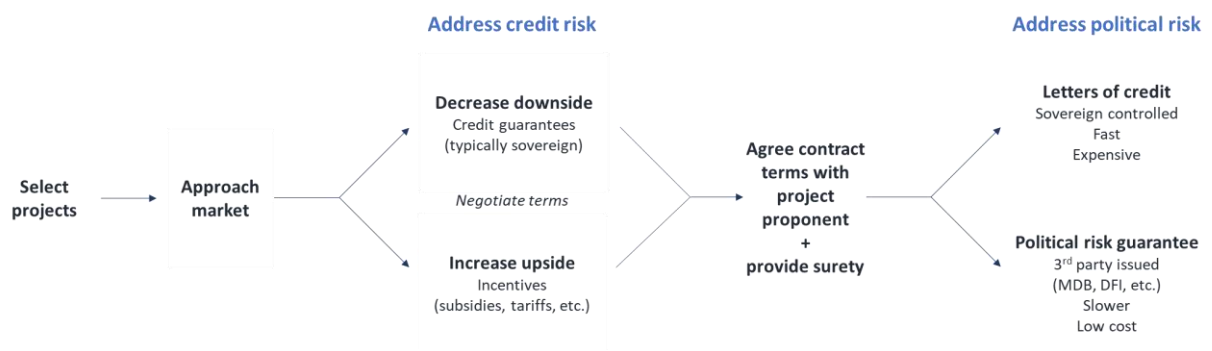
2. Enhancing investment attractiveness for the private sector

The current global economic environment presents opportunities for international investors. With interest rates continuing to hover around historic lows, institutional investors are looking to higher risk, higher yield frontier markets. The selection of projects with relatively short realization windows (5-10 years) is aimed at appealing to such investors.

GoIRA has explored a number of credit enhancement instruments that could be utilized to crowd-in private sector investment. Given the projects' strong revenue generation forecasts, limited sovereign credit guarantees offer an efficient way to leverage private investment with limited public capital. This strategy is in line with the World Bank's recently adopted cascade framework. GoIRA will consider the use of limited guarantees, such as liquidity or first-loss guarantees, to backstop the creditworthiness of projects. However, the use of revenue or return on capital guarantees will not be considered.

3. Mitigating country risk

Political risk guarantees issued by development finance institutions and export credit agencies could provide the necessary catalyst for private sector investment. Investors see significant credit and political risks in relation to investing in infrastructure in Afghanistan. The credit rating of investments will essentially be pegged to the country risk rating. Without directly addressing these risks, GoIRA will not be able to access capital pools. As such, political risk mitigation instruments should be used in tandem with the other instruments.



Identification of dormant and underutilized donor capital pools could facilitate their greater use. Disbursements from numerous sectoral grants and loans under facilities such as the AITF and ARTF have not met the relevant commitments made. These underutilized and dormant funding pools

represent a significant opportunity if they could be repurposed to provide limited political risk guarantees to private sector lenders and investors. GoIRA is currently engaging with stakeholders to identify and quantify these potential capital pools.

I. Debt servicing and management

GoIRA recognizes that debt servicing is a primary concern and has undertaken due diligence to this regard in the Package. The IMF and the World Bank have generally discouraged non-concessional borrowing for countries like Afghanistan. Afghanistan is currently rated at a high risk of debt distress under the World Bank/IMF Debt Sustainability Framework.

Given Afghanistan's low debt levels and improving fiscal performance, GoIRA will be able to service the debt incurred in financing the Package. However, existing debt sustainability analysis shows that Afghanistan would face challenges in servicing this debt under stricter terms of international assistance.

To account for underlying levels of risk, financial projections for each project are designed to be conservative. The projections incorporated a 5% real discount rate, a 5% operations and maintenance margin, and standard commercial lending terms with a 5% annual interest rate. Based on these projections, the Package is forecast to generate an annual average of \$944 million in revenues over the first 10 years. After this, projections show an average annual revenue increase of \$1.86 billion over the project life cycle to 2051. These projections are based on the narrow financial impacts of the projects. Given the broader economic impact that these projects will have, revenue is likely to be substantially higher. Additionally, the projections do not model the anticipated mix of concessional borrowing, non-concessional loans, and private sector investment. Had this mix been modelled, the rate of return projections would likely have been higher still.

The Ministry of Finance is introducing new governance structures and processes to monitor project implementation and manage incurred debt. Despite these projections indicating that the financial outlook of the projects is strong, effective implementation will require considerable oversight and management of debt.

6. Risk Mitigation

Lenders and investors see risks investing in infrastructure and GoIRA has taken steps to mitigate these. GoIRA recognizes that in order to access capital pools at scale, it must address these risks. To contextualize these risks, this report uses IHS Markit's political risk ratings. IHS Markit is a political risk firm that creates risk statistics for all countries. The current overall risk rating for Afghanistan is 4.3 out of 10 (with 10 being the highest risk level).

There are five key risks and mitigations considered in relation to funding and implementing the package: (1) operational capacity constraints, (2) security risks, (3) expropriation risks, (4) state contract alteration risks, and (5) currency risks.

Risk: Operational capacity constraints: Operational capacity constraints have been tied to problems in Afghanistan's budget transparency and bureaucratic efficiency (IHS risk rating: 4.6). **Mitigation:** **GoIRA has made significant improvements in budget transparency and delivery.** Last year's budget execution was at 92%, up from 67% in 2014.

Risk: Capacity to manage project implementation for infrastructure development. Strong management and risk controls will be required to ensure that projects are delivered to the standards agreed in the contracts. **Mitigation:** To address capacity constraints, **international firms which offer domestic capacity building and technical assistance will be prioritized in the procurement process.** GoIRA is committed to capacity building and technical training initiatives that complement the infrastructure development projects. Further mitigations for capacity constraint risks include:

- a. ensuring simple project design and validating through external experts;
- b. engaging external experts to conduct feasibility studies on planned projects;
- c. focusing on building capacity and resourcing MoF;
- d. securing technical assistance on public expenditure management; and
- e. providing dedicated implementation support via city/regional coordinators.

Risk: Security as a barrier for successful implementation and management of large-scale infrastructure projects (IHS risk rating: 4.4 – improving; terrorism: 6.7 - improving). The insurgency in Afghanistan continues to shape the country's development trajectory. The security situation is currently exacerbated by an influx of returnees in an economic climate where the unemployment rate has already reached 40%. **Mitigation:** At a project level, mitigation strategies include:

- a. working with the Ministry of the Interior to offer supervision and security services to project implementers;
- b. selecting projects that can provide job opportunities at scale; and
- c. securing war and civil disturbance guarantees/insurance from third parties.

Risk: Expropriation driven by corruption and fraud (IHS risk rating: 2.5; corruption: 7.0). These risks are exacerbated by a perceived weakness in financial sector oversight as a result of the 2009 Kabul Bank incident. **Mitigation:** **GoIRA has undertaken significant reforms to limit corruption, particularly in the high-risk areas of customs and the construction industry.** It has also sought to improve regulation of the financial sector. The reforms implemented under the [National Strategy for](#)

[Combatting Corruption](#), recently resulted in Afghanistan being removed from the Financial Action Task Force (FATF) grey list. At a project level, mitigation strategies include:

- a. continuous oversight of public expenditure through a dedicated delivery unit in MoF; and
- b. securing expropriation guarantees/insurance from third parties.

Risk: political uncertainty (*IHS risk rating: 4.9*). Political uncertainty in Afghanistan is being exacerbated due to delays in the upcoming elections and the ongoing peace talks. Uncertainty in the enforceability of contractual arrangements is driven by international perceptions about the lack of a robust judicial system (*IHS risk rating: 5.4*). **Mitigation: GoIRA has a strong continuing commitment to improving legal and regulatory institutions to increase private sector engagement in the country.** In 2019, Afghanistan was the top global improver in the World Bank Group's Doing Business rankings. At a project level, mitigation strategies include:

- a. submitting to relevant investor-state arbitration jurisdictions in financing contracts; and
- b. securing political risk insurance from third parties for non-honoring of sovereign financial obligations and breach of contract.

Risk: Devaluation of investments made in afghanis due to exchange rate fluctuations (*IHS risk rating: 6.3 – improving*). The afghani has fallen approximately 20% against the US dollar since 2014. However, this depreciation is driven by a strengthening of the USD as opposed to deteriorating economic conditions in Afghanistan. Low levels of exports are a persistent source of depreciation pressures. **Mitigation:** The agricultural sector projects in the Package should significantly improve the country's balance of trade. This would thereby reduce exposure to foreign currency fluctuations. At a project level, mitigation strategies include:

- a. denominating contracts and securities in afghanis where possible;
- b. utilizing hedging instruments;
- c. maintenance of foreign currency reserves to limit fluctuations; and
- d. securing currency risk guarantees/insurance from third parties.

7. Timelines

Agriculture, Horticulture and Irrigation Projects

MAIL Agriculture Package	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
AG1: Musa Qala Dam Irrigation Project															
Feasibility study undertaken and financing secured															
Constructions and development															
Revenue generation begins															
Payment period															
AG2: Zamin Dawar Irrigation Project															
Feasibility study undertaken and financing secured															
Constructions and development															
Revenue generation begins															
Payment period															
AG3: Salma Downstream Rehabilitation (canals and watershed)															
Feasibility study undertaken and financing secured															
Constructions and development															
Revenue generation begins															
Loan repayment period															
AG4: Andkhoy Irrigation Project															
Feasibility study undertaken and financing secured															
Constructions and development															
Revenue generation begins															
Loan repayment period															
AG5: Khush Tepa Irrigation Canal															
Feasibility study undertaken and financing secured															
Constructions and development															
Revenue generation begins															
Loan repayment period															
AG6: Shah-wa-Arus Irrigation Project															
Feasibility study undertaken and financing secured															
Constructions and development															
Revenue generation begins															
Loan repayment period															
HC1: Injel Pistachio and Cumin Farms															
Feasibility study undertaken and financing secured															
Constructions and development															
Revenue generation begins															
Loan repayment period															
HC2: Ferula (Asafoetida), Licorice, and Cumin Farms															
Feasibility study undertaken and financing secured															
Constructions and development															
Revenue generation begins															
Loan repayment period															
HC3: National Horticulture Development Program															
Feasibility study undertaken and financing secured															
Constructions and development															
Revenue generation begins															
Loan repayment period															

Commercial Property Development Projects

MUDL Urban Development Package	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
RR1: Mukhabirat Business Center															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Payment period															
RR2: Qazi Plaza Business Center															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Payment period															
RR3: Darul Aman Business Center															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
RR4: Jalalabad Business Center															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
RR5: Mazar Business Center															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
RR6: Herat Business Center															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
RR7: Khost Business Center															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															

Residential Property Development Projects

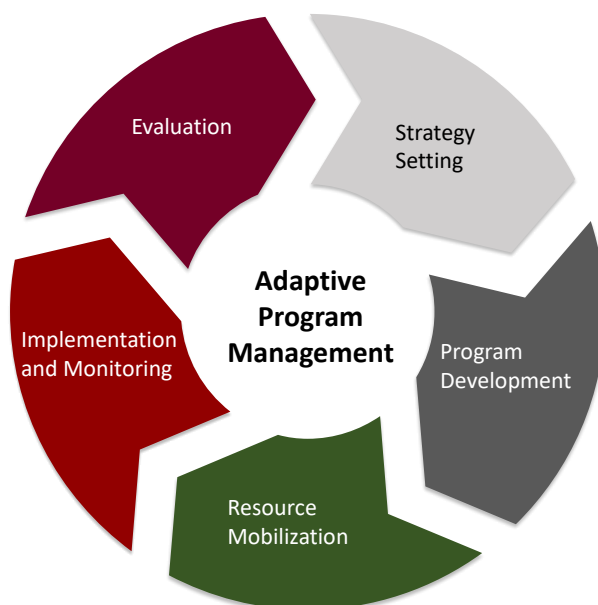
MUDL Urban Development Package	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
SR1: Banayee Residential and Commercial City															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
SR2: Diplomatic Area Township Kabul															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
SR3: Herat Residential Area															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
SR4: Khost, Balkh, Kabul, Herat and Kandahar Industrial Parks															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
SR5: Khost Residential Takhtabeg Area															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
SR5: Kamaz Residential Area															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
SR6: Laghman Residential Area															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
SR7: Qasaba Residential Area															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
SR8: Nangarhar Residential Area															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															
SR9: Kandahar Residential Area															
Feasibility study undertaken and financing secured															
Contructions and development															
Revenue generation begins															
Loan repayment period															

Electricity Transmission Projects

DABS Package	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
ETD1: Electrification package																					
Feasibility study undertaken and financing secured																					
Contructions and development																					
Revenue generation begins																					
Payment period																					

8. Project Monitoring and Evaluation

Adaptive program management lies at the heart of the Self-Reliance Accelerator Package's monitoring and evaluation (M&E) framework. Adaptive program management recognizes the importance of learning processes and feedback loops. It stands in contrast to linear planning models which do not emphasize learning and adaptation.



Every time a project is commissioned, M&E processes will be put in place so that results can be evaluated, and lessons can be learned. This will then feed into the subsequent development of future projects.

GoIRA's M&E framework will uphold the World Bank's [ARTF M&E approach](#):

Monitoring and Self-Evaluation	Project Results Framework
	Specific M&E approaches
Independent Evaluations	Impact evaluation
	Independent evaluation

This approach involves a combination of two mechanisms: (i) monitoring and self-evaluation, and (ii) independent evaluation.

GoIRA will use project results frameworks to define the objectives, indicators and units of measurement for M&E processes in each project. These frameworks can be used by ministries to conduct a self-evaluation of their projects. Project results frameworks consists of four elements: (i) identifying the project development objectives; (ii) specifying indicators which will be used to measure outcomes and track progress; (iii) prescribing clear units of measurement for each indicator; and (iv) identifying the roles and responsibilities for collecting, reporting, and analyzing these indicators.

GoIRA can also choose to use project-specific M&E approaches to supplement the project results framework. The most successful example of project-specific M&E in Afghanistan is community monitoring. This was used previously in the National Solidarity Program (NSP) and the Education Quality Improvement Project. For the NSP, community monitoring teams were comprised of two male and two female members elected by the community. They were responsible for monitoring the quality and progress of activities and reported results back to Government.

Self-evaluations will be accompanied by periodic independent evaluations. Independent evaluations are used to validate the accuracy of self-evaluation activities. These evaluations are typically conducted by a third party, such as a contractor, or the World Bank (through its Independent Evaluation Group). These evaluations can be multi-level, multi-project evaluations which rely on elaborate mixed methods designs. Mixed methods can include a combination of: portfolio analyses, structured literature reviews, surveys, interviews and case study analyses.

All lessons learned from the M&E will feedback into program design for future projects in the Self-Reliance Accelerator Package. GoIRA is taking M&E requirements seriously and views this as a fundamental component to designing and implementing successful infrastructure projects. As a result, GoIRA is in the process of releasing a Request for Proposals for firms to conduct feasibility studies and implement M&E procedures for all projects within the Package.

9. Conclusion

In summary, the Self-Reliance Accelerator Package is designed to accelerate Afghanistan's process towards economic self-reliance. The projects within the package have been carefully designed and selected to improve economic development, increase living standards, provide jobs and promote peace. These projects will, in turn, lay the seeds for future opportunities for growth.

The Package will have overwhelming benefits to Afghanistan's economy both in the short and long-term. The Package will generate approximately \$9.5 billion in revenue during the first ten years of implementation and will result in the generation of 1.48 million full-time equivalent jobs. As such, GDP growth is expected to grow by 4.55% per year over the first five years of the Package's implementation, while the infrastructure built will play a pivotal role in unlocking future growth.

These internal financial projections do not take into account the significant network effects that the projects will deliver. These mutually reinforcing projects will produce exponential economic returns and social development results. This Package is the first phase in a broader program of investment (see [Annex A](#)). Each stage will reinvest gains and leverage existing infrastructure assets in order to achieve the accelerating growth necessary for economic self-reliance.

In order to finance the Package and actualize these benefits, GoIRA is seeking to increase Afghanistan's non-concessional debt-ceiling to 30% of GDP. GoIRA recognizes that it cannot achieve economic self-reliance through dependence on development assistance and aid. GoIRA therefore requires the IMF and the World Bank to lift restrictions on non-concessional borrowing.

The window of opportunity is now. Afghanistan cannot afford to delay the implementation of the Package. There is the political will and the economic need for this Package. GoIRA has made improvements in fiscal management and has made progress in addressing corruption. Furthermore, in 2018, GoIRA carried out a record number of business reforms that has lowered the cost of doing business. It subsequently earned a place in the World Bank's Top 10 Global Improvers for the Ease of Doing Business.¹⁶ These successes demonstrate how serious GoIRA is about addressing the major barriers that have previously undermined Afghanistan's economic development programs. GoIRA is therefore laying the foundations for a successful Self-Reliance Accelerator program. It is appealing to development partners to help capitalize on these successes.

¹⁶ The World Bank, (2018), Doing Business Report: Afghanistan is a Top Improver with Record Reforms to Improve Business Climate. The World Bank Group. Accessed on March 219, 2019. <https://www.worldbank.org/en/news/press-release/2018/10/31/afghanistan-is-a-top-improver-with-record-reforms-to-improve-business-climate>

ANNEX A: Next Phases for Long-term Economic Growth

This economic accelerator does not stand in isolation and is the first step in the broader program of long-term economic growth, operationalizing the ANPDF and Afghanistan's international commitments. The second phase will target four additional sectors. The four sectors have been prioritized based on the returns they can deliver to the economy, their financial viability, the speed with which they can be established and their ability to accelerate Afghanistan's process towards reaching self-reliance. The four sectors are (i) extractives, including hydrocarbon development; (ii) large-scale regional connectivity projects; (iii) manufacturing to supply domestic markets; and (iv) digital infrastructure. These sectors are part of the second phase because they leverage the infrastructure constructed in the initial phase. More information is available on these upon request from the Ministry of Finance.

Extractives

Afghanistan has the potential to benefit from an estimated \$1 trillion in minerals and rare earth deposits.¹⁷ The extractives which have the greatest potential to promote economic growth are: metals, precious/semi-precious stones, lithium, cobalt, and copper.

Extractives are critical for Afghanistan to achieve self-reliance and is in line with Afghanistan's and international partners' priorities. The World Bank in its Afghanistan to 2030 report highlighted the enormous potential that the extractives sector will have in generating economic growth over the long-term.¹⁸ GoIRA, in accordance with the Geneva Mutual Accountability Framework (GMAF) principles established at the Geneva Conference, is currently implementing various reforms in the short-term to develop the mining sector. The reforms include achieving meaningful progress on meeting the Extractives Industries Transparency Initiative (EITI) 2016 standards and implementing regulations on bidding, technical and financial issues, as well as health and safety issues contained in the new Mining Law.

Hydrocarbon development

Harnessing energy from hydrocarbons will provide substantial benefits to communities in Afghanistan as they will have greater access to heat, fuel, and electricity. Afghanistan boasts tremendous gas resources which, unlike most extractives, are easier to develop without the potential for resource capture. They also have the fastest yield. Developing the gas supply will remove a significant bottleneck to energy generation and begin to produce substantial profits from the sale of gas to neighboring countries. Hydrocarbons will provide a significant portion of Afghanistan's energy needs, which totals 2,000 MW but is estimated to increase to 3,000 MW by 2020.¹⁹

¹⁷ UNAMA, (2018), Geneva Mutual Accountability Framework (GMAF). Geneva Conference on Afghanistan. Accessed March 28, 2019. https://unama.unmissions.org/sites/default/files/gmaf_final_26_nov_2018.pdf

¹⁸ The World Bank, (2016), *Afghanistan to 2030 Priorities for Economic Development Under Fragility*. The World Bank. Accessed March 27, 2019. <http://documents.worldbank.org/curated/en/156881533220723730/pdf/129161-WP-P157288-Afghanistan-to-2030-PUBLIC.pdf>

¹⁹ Agnieszka Flak, (2012), Electricity only reaches one in three Afghans. Reuters. Accessed March 28, 2019. <https://www.reuters.com/article/us-afghanistan-power/electricity-only-reaches-one-in-three-afghans-idUSTRE8080C920120109>

The investments that GoIRA has made in this sector are already forecast to generate promising returns. In 2018, the government successfully negotiated Independent Power Purchase agreements (IPPs) for two natural gas power plants. The IPPs, which will produce 50 MW of energy in the first phase (and which will ultimately scale to 250 MW), serve as a proof of concept for future contract negotiations. Future IPPs will collectively serve as a source of long-term revenue generation for Afghanistan and offer reliable sources of electricity to the people.

Regional Connectivity

Early investments in the development of transmission lines, substations and network distribution will unlock future regional connectivity projects. GoIRA recognizes that regional economic connectivity will be key to establishing peace and security in the region. The development of this sector also aligns with the GMAF commitments and principles, which maintain that regional economic cooperation and connectivity “are the key to ensuring growth, eliminating poverty and utilizing the immense trade and transit potential of Afghanistan and its neighbors”.²⁰ GoIRA aims to use its geography as an asset, connecting Central Asia to South Asia and the Gulf in order to move energy, goods and data and build north-south linkages. GoIRA estimates it will collect roughly \$3 billion per year of revenue in transit fees within the next five to seven years.

Balancing trade with Afghanistan’s strategic neighbors will incentivize neighboring countries to depend on and contribute to Afghanistan’s stability. GoIRA has been working to reduce energy dependence (Afghanistan currently imports 80% of its electricity) in order to change the incentives for cooperation between countries in the region. For example, through projects like CASA 1000, Afghanistan will provide 1,000 MW of energy to Pakistan.²¹ The TAPI Pipeline, along with various wind energy projects in western Afghanistan, will provide critical services domestically and across borders. Future investment in these existing initiatives, as well as new projects, may bolster efforts to promote peace and stability in the region, bringing many benefits to both the Afghan and regional population.

Manufacturing

Developing Afghanistan’s manufacturing sector is fundamental to creating sustainable growth and jobs. GoIRA’s peace and development framework vision is to change the structure of the economy so that a thriving private sector from small farmers and urban businesses to large manufacturers can successfully export Afghan products to regional and global markets.²² The key for this sector is therefore to replace imports with local goods by developing manufacturing facilities to create value chain opportunities from agricultural products.

The availability of electricity to operate manufacturing facilities is necessary in order to lower costs of doing business (as manufacturers would need to rely less on expensive sources of energy such as diesel). Afghanistan cannot otherwise compete with imported goods from around the region.

²⁰ UNAMA, (2018), Geneva Mutual Accountability Framework (GMAF). Geneva Conference on Afghanistan. Accessed March 28, 2019. https://unama.unmissions.org/sites/default/files/gmaf_final_26_nov_2018.pdf

²¹ The World Bank, (2018), The CASA-1000 Project Crosses Another Important Milestone. The World Bank. Accessed March 28, 2019. <http://www.worldbank.org/en/news/press-release/2018/09/24/the-casa1000-project-crosses-another-important-milestone>

²² Islamic Republic of Afghanistan, (2016), Afghanistan National Peace and Development Framework. Accessed March 28, 2019. <http://extwprlegs1.fao.org/docs/pdf/afg148215.pdf>

Digital Infrastructure

In order to unlock growth prospects, Afghanistan needs to improve its digital connectivity and update its digital infrastructure. Digital connectivity forms a key component of Afghanistan's National Infrastructure Plan (NIP). Afghanistan's ICT sector was an early success story. By late 2010 there were approximately 15 million mobile phone subscriptions and mobile telephone networks covered about 80% of the population.²³ Despite this, disparities in access to ICT infrastructure exists between rural and urban areas. Expanding digital connectivity will therefore help improve living standards in rural areas, facilitate improved public service delivery, and promote important productivity gains for businesses.

Many of the regional connectivity projects planned for the next phase of investments have the potential for combining digital infrastructure with cross-border trade and transit. For example, projects like the CASA 1000 provide an enabling environment for growth of the ICT sector through its digital component, Digital CASA. This project aims to position Afghanistan as a hub for routing Europe-to-Asia internet traffic, expanding and strengthening regional and national broadband connectivity based on optical fiber networks (OFNs), and improving digital society and economy through e-Governance initiatives.

²³ The World Bank, (2018), Implementation Completion and Results Report (Report No: ICR00004450). The World Bank Group. Accessed on March 29, 2019.
<http://documents.worldbank.org/curated/en/334521534181268872/pdf/P121755-FINAL-ICR-10-Aug-2018-08102018.pdf>

ANNEX B: Finance Instruments for Infrastructure Investment

	Asset	Class	Instrument	Market	
Direct Financing	Debt	Bond	Bonds		
			Sub-sovereign bonds		
			Sukuk		
		Loan	Direct lending		
			Securitized loans (ABS)		
			Syndicated loans (B, parallel, participation in A loans)		
		Hybrid		Subordinated loans/bonds	
				Mezzanine finance	
	Equity	Listed	YeildCos		
			Closed-end funds		
		Unlisted	Direct equity		
			Public-Private Partnership		
Credit Enhancement	Incentive	Contingent loan	Deferred drawdown option		
		Concessional loan	Concessional loan		
		Availability Payments	Performance based annuity		
		Tariffs	Tariffs		
	Guaran- tee	Credit (full/ partial)	Revenue	<ul style="list-style-type: none">• Sovereign indemnity• NB guarantee• MDB Guarantees (MIGA)	
			First-loss		
			Liquidity (cash flow, refinancing)		
			Return on capital		
			Currency (exchange rate)		
			Commodity		
		Political	NHSFO	<ul style="list-style-type: none">• Commercial bank• MDB• Foreign govt.	
			Expropriation		
			War & civil disturbance		
			Transfer restriction		
Risk Mitigation	Hybrid		Swap guarantee		
	Hedge	Swap	Currency		
			Interest rate		
			Commodity		
	Surety	Collateral	Safe Keeping Receipts		
			Letter of Credit		

I. Direct Financing

Government Bonds (*Balance-sheet*) - These are certificates of debt, generally long-term, where an issuer contracts to pay the investor a fixed principal amount on a specified future date and, often, a series of interest (fixed or variable) payments during the instrument's life. Compared to loans, bonds allow borrowers to lock-in long-term financing. Publicly listed bonds require regular financial reporting and may offer daily liquidity, pricing and higher levels of transparency.

Corporate Bonds (*Balance-sheet*) - These are standardized securities that finance the balance sheets of corporations. Publicly traded infrastructure companies and utilities are the primary issuers. Instead of bearing the risks of an individual project, corporate bonds bear the risk of the issuing corporate entity, so they are less risky than project bonds. Corporate bonds provide an alternative to lower-yielding government bonds.

Convertible Bonds (*Balance-sheet*) - A common corporate finance debt instrument, these are junior bond issues that include imbedded call options on the price of shares. They are a cheaper method of borrowing funds for an issuer because coupon payments are offset by the value of the conversion option – investors are willing to accept a lower coupon rate for the possible participation in share price appreciation. Their unique investment profile provides downside protection, like a bond, but also upside participation in the growth of the issuer through conversion to common shares. They are popular instruments amongst publicly listed green technology companies such as solar panel manufacturers due to the low cost and expected share price increases attributed to fast growing companies. Depending on market cycles, convertible arbitrage hedge funds can be major investors in convertible bonds.

Project Bonds (*Project*) - standardized securities that finance stand-alone infrastructure projects. They finance projects in operational phase requiring long-term investment, generally greater than \$100 million. The lack of diversified portfolio means they are riskier. It can be issued as a straight bond (creditworthiness depends on cash flow of the vehicle) or a secured bond assisted by credit enhancement mechanisms. Bond ratings are a prerequisite to reach a broader base of investors.

Municipal / sub-sovereign bonds (*Project*) – Instruments issued by federal/local governments, and sub-sovereign entities (i.e. government agencies, national development banks) that bear an implicit backing of the sovereign entity. Their performance is linked to the creditworthiness of the borrower instead of the infrastructure asset. These bonds are sold directly to investors through the fixed income markets, generally have long-term maturities, and are rated by the major rating agencies. Some issues can be illiquid due to small issue size and infrequent trading.

Sukuk - Investments structured to comply with Sharia law. Rather than generate interest, they channel rents, capital gains/losses, or income to investors in periodic payments. The IDB and ADB are major players in creating a market for sukuk through technical assistance and credit guarantees. The market is young - further regulatory and supervisory mechanisms are needed. There are different types of sukuk bonds, including:

- **Ijarah** is a contract where the asset owner, or lessor, leases the asset out to a lessee at an agreed lease rental for a predetermined period. The ownership of the asset is not transferred. How it works is the sukuk issuer purchases an asset and then leases it back under a contract. The rental payments are then paid back to the Sukuk holders at set intervals. If the lessee defaults, the lessor cannot charge compound interest. Further, the leased asset's use is specified in the contract. Unless the sukuk is asset-backed, the documentation will typically provide that the only recourse available to the sukuk holders in a default scenario is a contractual claim against the originator for non-payment of the purchase price for the assets in accordance with the purchase undertaking, which puts the sukuk holders in a position similar to that of bondholders under a conventional unsecured bond.
- **Mudharabah** is a profit-sharing contract between two parties (investor and issuer). Losses are borne by the investor unless the loss was due to negligence or mismanagement of the venture. How it works is the investor supplies the entrepreneur with funds and in return the investor gets a return of funds based on a pre-agreed profit-sharing ratio. The investors do not participate in the management of the underlying asset or project.
- **Musharakah** is a partnership between two or more parties to finance, either in cash or in kind, a joint business venture, and profits are distributed based on a pre-agreed profit-sharing ratio. Losses are shared based on the capital contribution. How it works is the issuer signs a Musharakah contract that can be between the issuer and sukuk holders, or among sukuk holders. With this sukuk, the investors are the owners of the joint venture or asset.
- **Murabahah** is a contract of sale and purchase of assets where the cost and the profit margin are made known to all parties. How it works is a sukuk holder buys an asset to sell it to an issuer for the cost-plus profit (which both parties have agreed to upfront) and the issuer then makes payments to the holder in instalments.
- **Al Wakalah** entails investing through an investment agent, or "wakeel". The Wakeel can be appointed to manage a wakalah portfolio in order to generate an agreed profit return. How it works is through a contract between the wakeel and the investor. The investor will only receive the profit return agreed at the outset, and excess profits are kept by the wakeel. The wakeel does not share the risk with the investor in case of any losses. Thus, the investor bears all of the risks.

Direct lending (Project) - An institutional investor invests in infrastructure loans originated by an internal investment team or other institutional investor. This allows large investors that have the requisite expertise in underwriting deals, project finance, and infrastructure to bypass capital markets.

Co-investment lending (Project) - the lead underwriter organizes a syndicate and retains a pre-agreed percentage of each loan in its loan portfolio, selling the remaining portion to other investors. An institutional investor can build a portfolio of infrastructure loans and can rely on the servicing of the loans in the portfolio provided by the originator.

Syndicated project loans (Project) - These are originated by commercial or development banks and are either directly sold to investors through syndicated loan markets, or large institutional investors may participate through co-investment arrangements. Loans are originated by a lead underwriting bank, or a consortium of banks, and syndicated amongst financial institutions and investors. With respect to repayment, debt restructuring can be cheaper and quicker. Access to these types of loans has increased in recent years.

Hybrid Instruments: Subordinated debt and mezzanine finance (*Project*) - Mezzanine loans are subordinate tranches of debt often used in project finance to provide credit enhancement for senior debt tranches. Mezzanine is higher risk and pays higher yields than senior issues and often includes equity participation. Public entities such as MDBs can step in to reduce the amount of equity to be raised by private investors by initiating subordinated debt or mezzanine tranches, providing internal credit support for the whole project structure.

Listed Infrastructure Utilities Stocks (*Balance-sheet*) - Public infrastructure companies raise capital through public equity markets by selling shares to investors through organized stock exchanges. Shares are perpetuities and confer ownership rights to shareholders (prospective capital gains and dividends) and are a form of long-term investment finance for infrastructure. A major problem with listed infrastructure indices is the rules with which infrastructure is defined and whether the listed index actually reflects the true infrastructure exposure that investors seek.

Preferred Stocks (*Balance-sheet*) - Preferred shares are debt-like instruments usually limited to companies with listed shares, although it is possible for private companies to issue preferred share classes. Issuing preferred stock is cheaper than issuing common stock and does not dilute ownership but is more expensive than issuing bonds. Preferred shares are perpetuities (no stated maturity date). This instrument would not be considered for project finance. Major index providers such as Merrill Lynch and Barclays have created specialized indexes that track the performance of convertible bond and preferred stock markets. Mutual funds and ETFs also provide channels to invest in these asset classes.

Closed-end Funds - REITs, IITs, and MLPs (*Balance-sheet*) - These are corporate-like entities that invest directly in infrastructure assets. They issue shares on the market like a corporation, and in the case of MLPs and REITs, can issue debt like a corporation to finance investment and growth. REITs are typically not a major part of infrastructure finance, however.

YieldCos (*Project*) - YieldCos are special power projects with multi-year power purchase agreements that are placed into a new subsidiary. Shares of the subsidiary are listed on exchanges through an IPO, while the parent maintains an equity stake. They offer attractive opportunities for utilities to spin-off power plants or projects and they provide stable attractive returns through long-term contracts. Much of the future growth of YieldCos will probably be closely linked to the trends in renewable energy projects, particularly in the wind and solar sectors. Investors can access YieldCos through fund investments and asset management products.

Unlisted direct investment in infrastructure project equity (*Project*) - Direct equity investment refers to investments made directly in unlisted stand-alone infrastructure assets (often project finance), bypassing fund managers. Direct investment has been utilized by institutional investors that have the in-house resources and capability to source assets, perform due diligence, finance the investments and manage/maintain them. There are only about twenty direct institutional investors in the market. A number of large pension funds and sovereign wealth funds have looked at pooling their financial and internal resources to invest jointly in infrastructure projects. Government support may be required to either help achieve coordination between the parties or provide access to attractive investment opportunities.

Collateralized Loan Obligations (Balance-sheet) - These are similar to securitization technologies and further expand potential liquidity for banks by tapping capital markets. Corporate entities may raise equity and debt financing through private market channels through direct or co-direct investment by large institutional investors.

Public-Private Partnerships (PPPs) (Project) - The use of Public Private Partnerships (PPP) contracts is common in project finance; however, PPPs have few standardized structures and are often project-specific. PPPs have emerged as a major legal structure to define project finance investment. PPPs offer considerable potential to reduce project risk but are costly to transact. If such transactions are off-budget, this may inhibit the scrutiny needed to ensure efficient investment.

PPP models are applicable depending on the nature of assets either existing (brownfield) or new (greenfield) infrastructure. In the case of existing infrastructure, the long-term lease agreement and the operation & maintenance (O&M) concession are the two common models. For new infrastructure, the following models are identified in the increasing order to complexity and responsibility to the private sector:

- Contract fee service.
- Design-build (DB).
- Design-build-operate-maintain (DBOM).
- Design-build-finance (DBF).
- Design-build-finance-operate-maintain (DBFOM) models.

Regulated Asset Base (RAB) Model (Project) - a regulatory commitment device that provides investors in privatized network utilities such as electricity, transport and water with assurance that their investments will not be treated unfairly. Its typical form is as a legally binding license with regular reviews. Key elements include required outputs and service quality, but in contrast to the PPP model, price limits or revenue caps include part of the model as well. RABs were initially developed in the early 1990s for UK infrastructure industries by Ofwat (the economic regulator of the water industry in England and Wales). Their success in these instances depends largely on the quality and predictability of the regulatory framework in which they operate.²⁴

²⁴ Oxera (2014). The Regulatory Asset Base and Regulatory Commitment. Accessed at: www.oxera.com/agenda/the-regulatory-asset-base-and-regulatory-commitment/

II. Credit Enhancement Instruments

Deferred Drawdown Option (DDO) (*either*) - is a contingent loan providing a committed credit line that allows the borrower to rapidly meet its financing requirements following a shortfall in resources due to adverse economic events.

Concessional Loans - flexible financing arrangements are offered by governments to project proponents at lower interest rates and/or longer terms than available in the market.

Availability Payments (a.k.a Performance Based Annuity Schemes) (*Project*) - are payments for making services available (irrespective of demand). Most typically used in connection with a PPP, they provide certainty and fiscal support to enhance infrastructure projects' attractiveness.

Sovereign Guarantees (*Project*) - are given by host governments to assure project lenders that the government will take certain actions or refrain from taking certain actions affecting the project. It is a guarantee by the government that all obligations will be satisfied when and if the primary obligor goes into default. It is therefore a "standard" financial guarantee, with the exception that it is issued by a government rather than a bank or corporation.

Safe Keeping Receipts - is a collateral based instrument where an asset owner (the government) places the asset in the care of an agent, usually a Bank or a Financial Institution. An acknowledgement is then sent to a third party. The collateral is transferred to the third party pursuant to contractual conditions. Typical collateral are gold, property or bonds.