



PMIC Insight - VII

In this Issue

- PMIC Renewable Energy Project
- Focusing Inward
- Focusing Outward
- Learning Hub
- Sustainable Development Goal 7
- The Economics
- Works Cited

Contacts:

Sobia Maqbool
Chief Risk and Compliance Officer
sobia.maqbool@pmic.pk

Syed Ahsan Abbas Naqvi
Assistant Manager, Risk Management Department
ahsan.abbas@pmic.pk



PMIC Renewable Energy Project

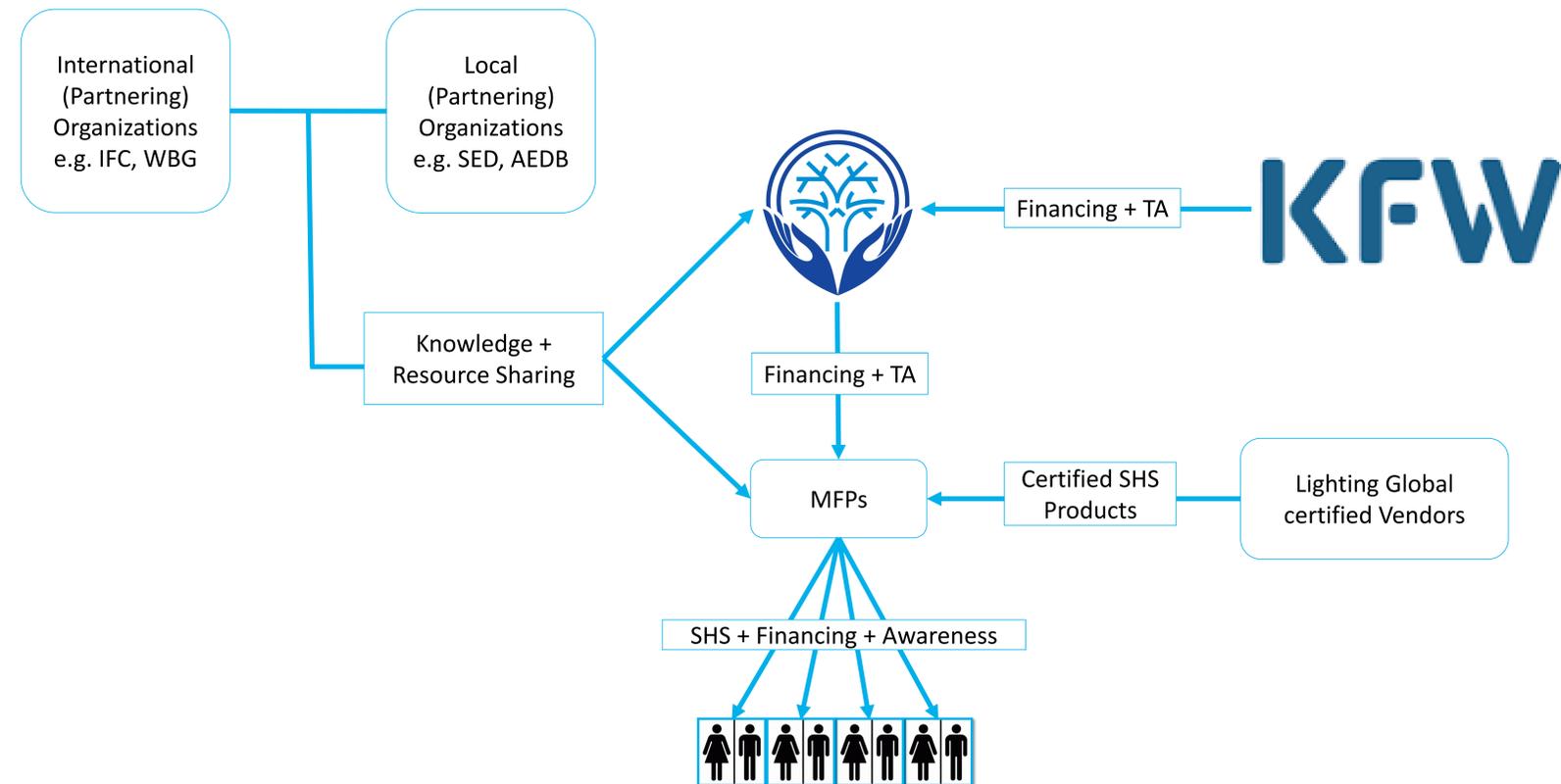
Energy Landscape of Pakistan

- According to International Energy Agency nearly 25% of Pakistani households were not connected to the national grid in 2017.
- Grid extension is costly and impractical in low population density areas.
- Pakistan ranked 7th most vulnerable country to Long Term Climate Risk; energy is the dominant contributor to climate change, accounting for around 60% of total global GG emissions.
- Renewable Energy Country attractiveness Index (RECAI) - Pakistan ranked 26th.

Challenges in Pakistan's Solar Energy Market

In January 2018, Pakistan Microfinance Investment Company (PMIC) and the German Government Development Bank (KfW) conducted a market feasibility study for introducing and upscaling the provision of Solar Home Solutions (SHS) to households via microfinance. The feasibility report highlights the following barriers/recommendations in this regard:

- Price difference between local and certified product creates difficulty in uptake
- There is a limited number of SHS vendors/suppliers with certified products
- MFP and SHS vendors need to have their links bridged to create an off-grid market
- The supply chain direly needs to be strengthened especially in establishing footprint of MFPs and vendors
- The uptake of the product requires awareness on using quality products that last longer and are provided by vendors who can deliver after-sales services; technical assistance (TA) is needed to stimulate market uptake



PRIME

Cognizant of findings and recommendations put forth by the study, PMIC set out to kickstart its solar energy program which is an initiative targeting poor-and off-grid areas, to provide over 200,000 households with high quality Solar Home Solutions (SHS); the program is supported by KfW, implemented by PMIC and has been branded as PMIC-KfW Renewable Energy Initiative through Microfinance (PRIME).

The KfW financing will be used to provide SHS to off-and poor-grid population in Punjab and Sindh initially, build capacity of microfinance providers, and catalyze quality production and distribution of solar products. The accompanying grant measures will be used to strengthen PMIC's capacity, train MFI staff and develop a robust marketing and awareness campaign around usage of SHS.

After a year of close cooperation with international organizations, such as World Bank Group, International Finance Corporation, CLASP and KfW, and local organizations including Sindh Energy Department and Alternative Energy Development Board etc., PMIC has devised a strategy based on three cooperation models for PRIME's implementation. Each model differs in terms of the stakeholder(s) leading marketing efforts and loan origination.

Each cooperation model will be used in different regions based on feasibility and PMIC's priority areas. As of yet, the project is being initiated with one of the models whereby MFIs will be providing financing to end clients and collaborating with SHS vendors for marketing efforts. Priority areas in Sindh are Thatta, Badin, Tharparkar, Umerkot, Mirpur Khas, Sanghar, and Matiari; in Punjab, priority will be given to Bahawalnagar, Rahim Yar Khan, Bahawalpur, Rajanpur, Dera Ghazi Khan, Vehari, Khanawal, Multan, Lodhran and Muzaffargarh. The cooperation models will be closely monitored and tracked to measure impact and efficiency for subsequent phases of the program.

Success Indicators

- Increased access to clean energy
- Improved quality of life of poor
- Reduced CO2 emissions



Focusing Inward

Electronic money (e-money) is defined as an electronic store of monetary value on a technical device that may be widely used for making payments to entities other than the e-money issuer. State Bank of Pakistan (SBP) launched its new Electronic Money Institutions Regulations (EMIR) on April 1, 2019 under the powers conferred on the central bank by Payment Systems and Electronic Fund Transfers Act (PS&EFT), 2007. The regulatory document defines EMIs as non-bank entities that will be licensed by the State Bank of Pakistan (SBP) allowing them to operate as issuers of e-money.

EMIR – Scope

The basic objective of the EMI regulations is to put forth a framework for EMIs to operate as service providers of e-money to the general public; EMIR prescribes minimum service standards in order to ensure safe and cost-effective service delivery by restricting the use of EMIs' services to only:

- i. payments of goods, services and bills;
- ii. fund transfers;
- iii. cash deposits; and
- iv. withdrawals from e-money accounts.

Furthermore, EMIR clearly disallows EMIs to conduct banking business including accepting funds from public for lending, doing investments or any speculative activity. Lastly, EMIR is envisaged to serve SBP's objective of digital payments and financial inclusion.

Some of the key features of the regulations are as follows:

- i. **Capital Requirements** – An initial paid up capital of PKR 200 million is required to become an EMI. The regulations also specify slabs of ongoing capital requirement for different levels of average daily outstanding balances.
- ii. **Funds Safeguarding Arrangements** – EMIs shall not co-mingle their own funds with those received by customers in exchange of e-money, which will be placed in a bank rated 'A' by a credit rating agency.
- iii. **Use of Agents** – EMIs can use the existing branchless banking agent network.
- iv. **Interoperability** – As of yet, EMIs are only encouraged to enter into interoperability arrangements with other EMIs, banks and payment system operators. However, at an "appropriate time" SBP will mandate interoperability of applicant EMIs with others.

Commentary

About a decade has passed since SBP issued the Branchless Banking Regulations. This initiative enabled the entry of telecommunication companies into the banking and payments space. Telenor Microfinance Bank, U Bank, Easypaisa, Upaisa and JazzCash are prominent examples in this regard. However, the payment eco-system requires significant development. The issuance of EMI regulations is likely to remove entry barriers and provide level playing field to EMIs in payments arena which will eventually lead to the development of payments ecosystem in Pakistan.

EMIs may acquire payment instruments of other banks or MFBs under the regulations. Thus, banks and MFPs which do not possess separate EMI wings will be incentivized to partner with new EMIs in extending financial services to the underserved markets at lower costs – and attain scale. Also, although the regulations currently only allow interoperability amongst EMIs, interoperability in the future across the board will give further stimulus to financial inclusion goals under the NFIS.

Greater proliferation of EMIs will also strengthen the MSME sector as cashless payment instruments are deeply associated with a stronger e-commerce and trading sector. The positive externalities for MSMEs, FIs and MFPs abound – provided EMIs enter, grow, mature and thrive.



Focusing Outward

Five Emerging Areas of Innovation in Fintechs

CGAP launched a program in 2016 to understand fintech innovations and draw clear links to financial inclusion, whereby 18 fintech pilots were supported in South Asia and Africa. These fintechs target financial services for the underserved and low-income customers. In May 2019, based on careful study of these institutions, CGAP published the paper, *Fintechs and Financial Inclusion: Looking Past the Hype and Exploring Potential*, wherein it identifies five types of innovations in the fintech space that support financial inclusion.

i. Interactive Customer Engagement – Fintechs combine communication technologies such as SMS, audio recordings, and video with digital analytics and automation to interact with customers. This improves customers' experience with offered products or services and can lead to the collection of more information, increased engagement, and fast resolution of customer complaints.

Fintech	Service
Juntos	Mobile messaging and customer service
Arifu	Mobile advice and information
People's Pension Trust	Mobile nudges and incentives to encourage long-term savings

ii. Smartphone-Based Payments – Fintechs deliver intuitive, engaging smartphone-based payment systems with low data costs and low storage requirements with their innovative user interface and experience applications. These solutions result in account dormancy reduction and expansion of use cases for payments.

Fintech	Service
Wave Money	Payments app
NALA and Hover	Payments app with no data requirements
Fundu	Person-to-person ATM app

iii. Connections-Based Finance – Social connections are being created or harnessed to build customer creditworthiness and offer connections-based finance. These fintechs connect customers to their savings groups and keep an electronic record of their payment behavior. Customers may also connect with others in their network or beyond when cash is needed amidst emergencies. Data generated from these connections and transactions are also used to help clients to access small and timely amounts of credit; small amounts of credit imply lower risks.

Fintech	Service
M-Changa	Digital crowd-funding site
MaTontine	Digital savings groups and credit advance
Pezesha	Digital P2P lending
Patasente	Digital lending marketplace for MSMEs
Social Lender	Social-score-based lending

iv. Location-Based Finance – Digital technologies and alternative data sources are being used to reduce cost and expand financial services access to smallholder farmers. Specific digital technologies and data sources vary from using machine learning on large quantities of payment data, to using remote sensing and geospatial technologies – primarily satellite images and GPS coordinates – to improve credit-risk analysis, monitor yields to inform insurance payoffs, and provide agronomic advice to build farmers' creditworthiness.

Fintech	Service
Farmdrive	Digital loans for farmers
Apollo	Digital loans for farmers
Pula	Satellite data-based digital insurance

v. De-Risked Non-Productive Finance – Fintechs are assisting low-income people pay sizable or unexpected expenses while using unique features to reduce risk for the financier. For instance, some fintechs ensure that the customer never receives the actual loan in cash by enabling direct access to the desired service or products such as farm inputs, education, healthcare, or energy. In other cases, the product allows funds to be used only at qualified locations, such as health clinics, or at a specific time, such as at the start of the school year. Still, in other cases, bundling finance with insurance, savings and other products reduces risks for the fintech while improving the business model of the clients.

Fintech	Service
Microensure	Digital health insurance bundled with microcredit
Tulaa	Digital credit for farm inputs
Biolite	Energy products on credit

Catalysts for Fintechs' Success in Emerging Markets

In addition to identifying the five areas of innovation, CGAP also tracks, in this paper, five features/trends in emerging markets that may serve as stimulants of fintechs' success. These catalysts are:

i. Widespread Digital Payment Schemes

Since around 2008, many emerging markets introduced and implemented regulations that were conducive to new players' entrance into the financial sector, especially in payments. These players are typically mobile network operators (MNOs) and e-money issuers that offer store-of-value accounts and payment services accessible from mobile phones. MNOs attract vast numbers of agents that conduct cash-in and-out functions on behalf of mobile money providers and aggregators. Fintechs have used this infrastructure to target customers (offering B2C services) or to conduct operations on behalf of large financial institutions (offering B2B services).

ii. Third Party Integration Mechanisms

Banks and MNOs wish to expand their customer base, deepen customer loyalty, and increase digital transaction frequencies. This has instigated interest in integrating with fintechs offering a variety of services. The increasing prevalence of open application programming interfaces (APIs) in developing countries is expected to further bolster partnerships between financial services companies and fintechs because APIs substantially decrease the cost and time of integrating disparate systems. APIs enable interconnection of these systems, which is integral to offering products or services that rely on capabilities of different firms.

iii. Rising Smartphone Penetration

Smartphone penetration has shown a steady, and increasing, trend in these markets. Reasons cited are primarily, prevalence of low-cost devices and low-cost data plans, and the availability of tools to compress the size of apps and allow for more data use. Such features allow for more innovative – and therefore – engaging interfaces. Increasing data handling capacities in increasingly common mobile devices also allow for reaching customers more directly involving more enriched interactions. Pew Research Centre reports that a median of 37% in emerging markets reported owning a smartphone in 2015, up from 21% in 2013.

iv. New Data Sources

Growing digital footprint represents fintechs' increasing abilities to leverage alternative data sources in a more targeted fashion vis-à-vis market segments, and to build customized financial services models. These alternative data sources include digital payment records, satellite data and social media behavior – just to name a few. This increasingly data-intensive environment is giving way to cost efficient and innovative financial access to greater numbers of people.

v. Regulatory Sandboxes

In the context of fintech space, these sandboxes encourage fintechs to test out their unique solutions in a safe and controlled environment. This affords service providers an understanding of their customer base; these service providers in turn adjust their business models before the regulators may chalk out a realistic – and context-specific – licensing scheme, if need be. Prominent examples of countries allowing such sandboxes are Sierra Leone, Kenya, Jordan, Mexico and Thailand.

While the emerging markets still lack widespread internet access, greater tech savvy population and mainstreaming of digital money, the aforementioned characteristics portend a conducive environment for financial inclusion via fintechs. Nevertheless, the paper also acknowledges the dearth of investment in seed and early-stage startups in these markets. In an absence of such investments, startups may struggle to survive during critical periods of prototype testing and establishing their value propositions.



Topic of the Quarter

Alternative Data for Financial Inclusion

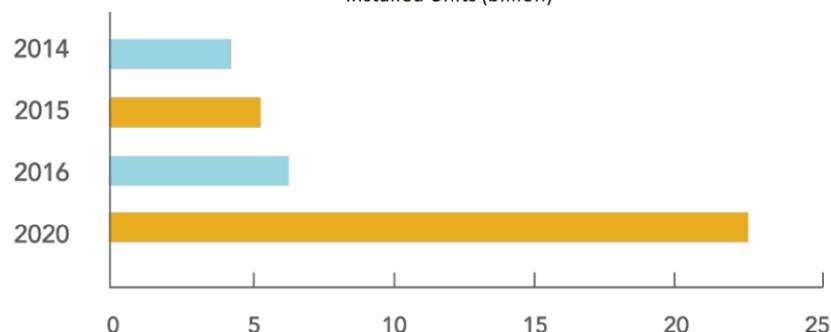
Definition

Emergent technologies and related developments e.g. increased computing power, mobile connectivity and greater capacities to manage data have led to a steady influx of new types of information that either did not exist or was inaccessible before. These “alternative” data types have allowed financial services providers (FSPs) to derive deeper insights, reduce cost of delivery and thus scale services.

New Types of Data

The 2018 joint report by Centre for Financial Inclusion at Accion, and the Institute of International Finance, Accelerating Financial Inclusion with New Data, reports the number of internet-connected devices over 2014 through 2016 along with a forecast by Gartner for 2020.

Installed Units (billion)



With such rapid proliferation of digital technologies, FSPs (or Fintechs) face a wide variety of data sources employable apropos their unique service delivery models. A few of these sources, as discussed in the Accion report are mobile phones, smartphones, social media, e-mail, utility payments, e-commerce and psychometric data.

In May 2019, Consultative Group to Assist the Poor (CGAP) published a set of case studies – 18 in total – on fintech pilots in Africa and South Asia, Fintechs and Financial Inclusion: Lessons Learned. Some pilots were successful while others were not. One successful pilot that took advantage from alternative data sources via satellite imaging, remote sensing and mobile phones was Apollo.

Case Study

Location-Based Smallholder Finance by Apollo Agriculture

About Apollo

Apollo Agriculture is a fintech that delivers customized advice and input finance to smallholder farmers. It offers a package of seed and fertilizer, farming advice, and credit to maize farmers in Kenya in a customized manner. Mobile phones, agronomic machine learning, and remote sensing are used to de-risk Apollo’s loans and deliver its product cost effectively.

Pilot

Apollo captures the Global Positioning System (GPS) boundaries of all clients’ farms and satellite data are used as an input to its credit model. After a loan is approved, the client receives a mobile voucher via SMS, which he/she brings to the local dealer in the value chain to redeem for inputs. These inputs are customized to the size of the client’s farm. Afterwards, the client receives voice-based training via his/her feature phone.

Under its pilot studied by CGAP, Apollo tested:

- The predictive power of satellite imaging in farmers’ credit assessment
- Effects of customized nudges delivered via SMS and interactive voice response (IVR) technologies on repayment behavior

Out of 6,000 applicants, 1,016 farmers received loans; these farmers were selected to generate an unbiased sample upon which different modelling approaches could be tested.

Insights

The predicted power of satellite data for credit risk analysis could not be conclusively demonstrated owing to the inconsistency in events subsequent to loan offerings to two sets of farmers; one faced no major hazards while the other suffered from drought and an “armyworm” pest outbreak. Nevertheless, elements of the pilot effectively tested revealed the following insights:

Timing

Most of the loans were cleared at the repayment deadline.

Communication

Clients’ ability to engage with Apollo via SMS and IVR technologies was tested. Experiments showed that engagement was notably higher with IVR communications relative to SMS messaging only. This prompted Apollo to focus on IVR for communication.

Messaging and Nudging

Treatment and control groups showed very similar results as to testing behavioral nudges for incentivizing early repayments. Nevertheless, lottery incentives whereby farmers made a partial payment for participation proved to incentivize small prepayments.

Remote Assessment Model

The model to gather farmer location and data proved cost effective and thus, scalable. This is promising as having a cost-effective way to gather information is integral to scaling financial services and expanding access.

Input Distribution

Farmers’ bringing of mobile voucher to agro-dealers for their inputs to redeem was cost-effective and logistically simple to manage in comparison with direct delivery by Apollo.

Insurance

Bundling weather insurance with the loan product helped improve recoveries from the farmer segment hit by the drought. However, many did not fully understand the complexity of the bundled product, highlighting the importance of effective communication when introducing more complex financial products.

Gender

Although Apollo’s portfolio comprised roughly equal number of male and female clients, repayment rates were observed to be materially different across gender; women showed better repayment than men.

Microfinance in the Digital World: Seven Questions for the Future

Elisabeth Rhyne, Managing Director of the Center for Financial Inclusion at Accion offers her take on the seven questions faced by MFIs when it comes to conducting business in a digital world.¹

i. Are fintechs going to take over the microfinance market?

Fintechs are prone to partnering with MFIs for their need to acquire customers. Partnering with fintechs can allow MFIs to go digital. In doing so, what MFIs need are an experimentation culture, recognition that fintechs with limited resources need quick market access, and IT infrastructure that allows seamless connection to technology brought by the partnering fintech.

ii. Will MFIs join the shift to digital lending?

Traditional high-touch underwriting methodologies (e.g. group guarantees) employed by MFIs are key to increasing motivation to pay – thus, leading to high repayment rates. In contrast, algorithm-based credit lacks most of these motivational aspects but are so cheap that their rise is inevitable. Thus, MFIs may want to explore hybrid models that combine both “tech and touch”.

iii. Can MFIs participate in the innovation happening in SME credit?

The shift to greater formality of SMEs is driven by three economic structural changes: electronic invoicing, supply chain finance, and e-commerce. Amidst the high access of MFIs to SME markets, lending methods using electronic data trails can be developed. Additionally, partnering with big distributors and e-commerce firms can be taken advantage of as lending is not their core business, and thus, they welcome such partnerships.

iv. Will insurance ever matter for MFI customers?

Digital innovations in insurance are disrupting traditional insurance provision by reducing sign-up costs, claim payment costs (via automation) and building an insurance culture by covering common problems. This is facilitated by electronic distribution and MFIs can participate in this innovation. Insurance matters because mitigating risks is a good business strategy for MFIs.

v. Will consumers be adequately protected in a digital world?

Digital financial services are easily scalable but come with new risks e.g. high default risk, loan diversion to other activities and data security breach. Digital MFIs will be more exposed to cybersecurity risks. Thus, they can be pivotal in ensuring they meet high consumer protection standards and in shaping high market conduct standards for other players.

vi. How will payments and credit connect in 2020?

Tech-based payment platforms generate swathes of data, which if properly analyzed, yield insights integral to offer credit. Rhyne postulates that major tech platforms could very well dominate lending while smaller platforms could remain small or become dependent on such platforms. In short, the power and efficiency of payments data that could inform credit decision implies MFIs should look for ways to connect to or harness such data.

vii. Is digital transformation feasible for traditional MFIs?

An end-to-end (fundamental) digital transformation requires rethinking business models. Difficult choices about retraining staff and employment will have to be made and need to be openly discussed. Additionally, investment in data analytic capabilities and expertise to guide the transformation at a broader level are required to make it feasible for MFIs.



SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Sustainable Development Goal 7



Targets by 2030

- **7.1** – Ensure universal access to affordable, reliable and modern energy services.
- **7.2** – Increase substantially the share of renewable energy in the global energy mix.
- **7.3** – Double the global rate of improvement in energy efficiency.
- **7.A** – Promote access, technology and investments in clean energy.
- **7.B** – Expand and upgrade energy services for developing countries.

Global Progress – The Sustainable Development Goals Report 2018

- From 2000 to 2016, the proportion of the global population with access to electricity increased from 78% to 87%.
- Proportion of people with access to electricity more than doubled between 2000 and 2016 in the least developed countries.
- In 2016, 3 billion people (41% of global population) were still cooking with polluting fuel and stove combinations.

Pakistan's Status

- World Bank, Sustainable Energy for All (SE4ALL) database reports that approximately 29% of the population was deprived of access to electricity in 2017.
- Share of population with access to clean fuels and technologies for cooking i.e. technologies which reduce exposure to indoor air pollutants was 43% in 2016.
- An indicator of energy consumed to produce one unit of economic output is the ratio between energy supply and GDP measured at purchasing power parity and is called Energy Intensity Level (EIL) of primary energy. Globally, there has been a declining trend in EIL. From 1990 to 2015, global EIL and those of lower-middle income and low-income countries declined by 32%, 45% and 27%. For Pakistan the decline was a mere 20% implying the improvements in energy efficiency brought about over this period are not commensurate with those of comparable countries. However, Pakistan's 2015 EIL was 1.23kWh/\$ which was somewhat better in comparison to EIL of lower-middle income countries (1.27kWh/\$), low income countries (2.46kWh/\$) and global EIL (1.43kWh/\$).

Pakistan Renewable Energy Potential

Pakistan has immense renewable energy potential under four forms of alternate energy: solar, wind, hydro and biogas:

i. Solar Energy

As per the National Renewable Energy Laboratory (NREL), USA data, direct Normal Irradiance received by most of the landmass of Pakistan ranges from 3.1 to 6.5 kWh/m²/day. Baluchistan and Sindh get exposed to 4.2-6.5 kWh/m²/day of irradiance indicating higher potential in these areas. With more than 300 sunshine days, the potential is estimated at 2.9 million MW.

ii. Wind Energy

Although the range of average wind speeds across the country is quite wide – 4.0 m/s to 10.0 m/s – vast areas in Baluchistan and Sindh experience faster winds on average as per NREL. Coastline belts of the two provinces have wind speed up to 9 m/s; certain parts peak at 10 m/s during the year. Wind energy potential is estimated at 346,000 MW.

iii. Hydropower

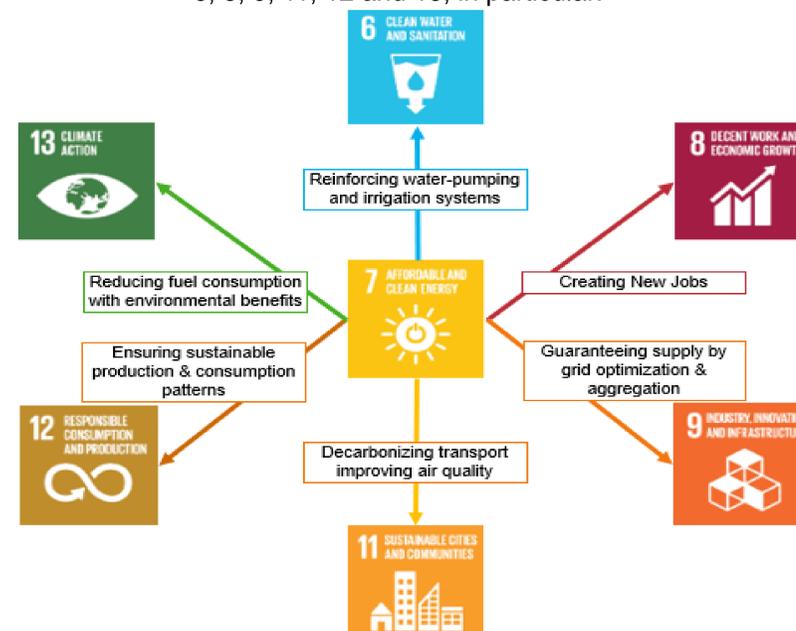
The total resource potential is estimated at 50,000 MW by World Energy Council. Sites for large scale (100-7000 MW) are mostly located in Northern Pakistan while smaller scale sites are spread-out throughout the country. Furthermore, Pakistan's canal system stretching over 58,000 km, and farm channels and field ditchers running 160,000 km in length characterize huge potential with numerous sites where plants with capacities ranging from 1 to 100 MW of energy can be installed.

iv. Biogas

Pakistan has a vast rural economy which characterizes livestock-based income generation. According to an estimate, only cattle and buffalo stock in Pakistan are sufficient to produce 16.3 million m³ of biogas per day.² Biogas energy generation systems have the potential to be a viable substitute of energy for more than half of the country's rural population.

Access to Energy – Achieving other SDGs

SDG 7 can be considered an “enabling factor” for the implementation of SDG 6, 8, 9, 11, 12 and 13, in particular:³



Pakistan Landscape

Pakistan Vision 2025 aims at ensuring uninterrupted access to affordable and clean energy for all sections of the population. It identifies the following goals in this respect:

- Cater to growing future demand by adding 25,000 MW by 2025
- Optimize energy generation mix between oil, gas, hydro, coal, nuclear, solar, wind and biomass – with reference to its indigenoussness, economic feasibility, scalability, risk assessment and environmental impact
- Complete two major hydel projects: Diamer-Bhasha and Dasu dams
- Operationalize the potential of Thar coal and complete Gaddani Energy Park with 6600 MW capacity.
- Tap Pakistan's potential for alternative energy
- Complete new Nuclear power generation plants
- Maximize distribution efficiency and cut wasteful losses through investment in transmission and distribution infrastructure and effective enforcement of controls
- Address institutional fragmentation and decay of the sector due to poor capacity
- Focus on demand management and conservation to ensure prioritization in allocation, elimination of wasteful use, incentives to use more energy efficient equipment and appliances, and achieve better balance between peak and off-peak hours

While these goals are commendable, they have been criticized in terms of lack of clarity. A few of them put forth clear goals and others need to be more comprehensively formulated, and thenceforth, reflected in policy.

Microfinance and Energy

- In March 2016, the Participatory Microfinance Group for Africa (PAMIGA) conducted an impact assessment study⁴ using the difference-in-difference approach, with 215 Solar Loan clients and 61 control clients in Ethiopia. The study demonstrated that the Solar Loans were integral in:
 - Facilitating in the provision of solar lamps for 92% of concerned households;
 - Totally stopping the use of kerosene lamps for 40% of households;
 - Extending daily 4 to 5 hours of lighting on average; and
 - Reducing energy expenditure by 64% on average;
- Waldron reports that a diverse set of companies, including solar manufacturers, local distributors and financial intermediaries, is disaggregating the [solar energy] value chain by forming synergistic partnerships. MFIs are well-positioned to roll out pay-as-you-go solar products given their existing customer base and loan distribution networks.⁵
- Literature review⁶ by Martinot et al. in their 2002 paper, Renewable Energy Markets in Developing Countries, acknowledges four cases of emergence of consumer credit for SHS in Bangladesh, Vietnam, Sri Lanka and Zimbabwe. The four programs reviewed involved loan terms ranging from 2 to 5 years and had rolled out nearly 25,000 systems in total. However, while assessing the efficacy of these programs, the authors note, “the prospects for consumer credit [for renewable energy systems] are very specific to cultural, legal, and financial factors in each country”.



The Economics

The Economy

Asian Development Bank's report, published in April, Asian Development Outlook 2019 calls for more export competitiveness if Pakistan is to curb recurrent balance of payments (BOP) crises in the future. This was also the backdrop against which an agreement was reached with the IMF in May-2019 for \$6 bn spanning over three years. The bailout package is tied with reforms aiming at slashing government expenditure, devaluing PKR-USD exchange rate, cutting heavy subsidies for certain sectors, improving tax administration, creating conducive business environment, and greater financial discipline.

PKR devaluation has resulted in rising cost of imports – both capital goods and raw materials. Although PKR devaluation theoretically makes our exports cheaper in international markets, translating into higher export volume, export values remained subdued owing to fall in unit prices:



Nevertheless, current account deficit improved by 29% over Jul-May FY19 mainly due to import compression and increase in remittance flows. Remittances for FY19 were greater by 10% than those for FY18. However, pertinent to mention is that over 80% of our exports are low value-added goods. Thus, measures beyond

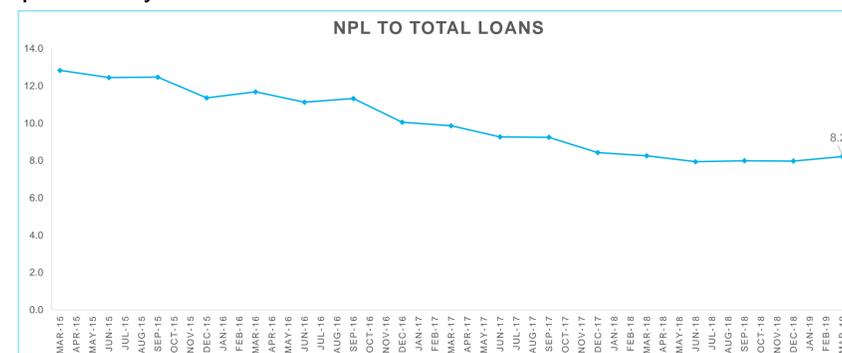
Item	Amount
GDP per capita (current US\$) - FY18	\$1,472.9
GDP (at current market prices) – FY'18	\$319b
Trade Balance (Cumulative) – July'18-Apr'19	(\$23.9b)
Public External Debt % GDP – Mar'19	26.4%
Liquid FX Reserves – June'19	\$14.5b
CPI – June'19 (YoY)	8.9%
6-month KIBOR – June'19	13.1%

exchange-rate adjustment are needed to stimulate exports – particularly those of high value-added nature.

The first tranche of IMF's Extended Fund Facility has given some relief to the external account. Additional future inflows via international creditors and remittances in FY20 should improve BOP position. Another significant contributor to BOP is FDI. Cumulative net FDI for FY19 was lower than that of the corresponding period by 44%. This was mainly due to uncertainty around exchange rate adjustment and finalization of IMF program. The finalization of IMF program is expected to renew investor confidence as well, however.

Commercial Banking Sector

Private sector lending stood at Rs. 5.3 trillion at June-end 2019 which was 65% of scheduled banks' advances; this proportion has remained consistent over the years with steady increase in lending. However, private sector lending growth has started to decelerate; it grew by 11.4% over FY19 as compared to 14.8% growth over FY18. This deceleration is expected to prolong amidst rising inflation and policy rate hikes. High inflation, raising cost of doing business along with high interest rates is expected to eat into the profitability of private sector businesses. Other than increased cost of business, inflation will truncate consumption which will in turn, further impact private sector's profitability.



Item	Amount
Advances (Rs. in tr) – Jun'19	8.1
Deposits (Rs. in tr) – Jun'19	14.5
ADR – Jun'19	0.56
Net Infection Ratio – Mar'19	1.4%
Risk Weighted CAR – Mar'19	15.9%
Credit to Private Sector % Total Scheduled Banks' Credit – Jun'18	65%
Credit to SMEs % Loans to Private Sector Business – Mar'19	8%
Agriculture Credit % Loans to Private Sector Business – Mar'19	5.8%

Furthermore, a small uptick occurred in Scheduled banks' gross infection ratio by 1Q2019 after a long spell of the ratio's steady decline. Banks are also aware of expected impact on private sector's profitability and in turn ability to service loans. Curtailment of lending may be an outcome of a risk aversion strategy, which may not bode well for the economy.

Microfinance Sector

Sector growth remained positive in 1Q2019; active borrowers grew to more than 7 million, GLP increased by another 5%. Subsequent to periods of aggressive growth (as evidenced by GLP trends over the past years), weakening in credit markets is often witnessed – this may be particularly relevant for the microfinance sector in Pakistan given the current and foreseeable economic situation. This is reflected in QoQ increase of 14% and a staggering YoY 3016% increase in PAR-30. Also, YoY value of savings increased by 25% only. This is a much lower rate of increase as compared to previous periods. While theoretically, high interest rate environment would suggest higher savings; it may be hypothesized that the simultaneous high inflation is resulting in deliberate dilution of savings – especially by the very poor – to sustain i.e. absorb inflationary shocks. In fact, QoQ value of savings fell by 1% in 1Q2019; micro-savings have fell only twice since 1Q2015.

Lastly, noteworthy is that GLP's growth rates (QoQ, 5%; and YoY, 30%) are significantly lower in relation to previous periods. QoQ growth rate was lower than those of previous 14 quarters while YoY growth rate was lower than at least those of previous 3 periods. Growth rates of active borrowers follow a similar pattern which indicates the sector's growth rate tapering off – in the near term at least.

It is important to reiterate that growth continues in existing markets while financial access continues to remain restricted in hitherto excluded markets.

	%Δ QoQ	%Δ YoY	Q1-2019	2018	2017	2016	2015
Penetration Rate (%)	-	-	34.7	33.8	28.3	22.3	13.7
Active Borrowers (In m)	3	15	7.12	6.94	5.8	4.6	3.8
Gross Loan Portfolio (Rs. in b)	5	30	288	275	203	137	93.0
PAR-30 (Rs. in b)	14	3016	7	6	0.2	1.9	1.3
Value of Savings (Rs. in b)	-1	25	237	240	187	121	65
Number of Policy Holders (In m)	3	10	8.71	8.46	7.3	5.9	4.6



Works Cited

1. Rhyne, Elisabeth. "Microfinance in the Digital World: Seven Questions for the Future." *Findevgateway.org*, May 2019, www.findevgateway.org/blog/2019/may/microfinance-digital-world-seven-questions-future
2. Saleh, Absar. *Biogas Potential in Pakistan*. Biomass Conversion Research Center, 2012, *Biogas Potential in Pakistan*.
3. Alloisio, Isabella. "SDG 7 as an Enabling Factor for Sustainable Development." United Nations Headquarters, New York, 25 Jan. 2018, https://sustainabledevelopment.un.org/content/documents/26618Alloisio_Session_5_SDG_7_EGM_01_2018.pdf
4. Allet, M. 2016a. *Facilitating Access to Clean Energy: Microfinance Impact in Rural Africa*. Microfinance Barometer 2016. Paris: Convergences
5. Waldron, Daniel. "Solar Energy: A New Frontier for Microfinance." *Cgap.org*, Consultative Group to Assist the Poor, 17 Apr. 2017, www.cgap.org/blog/solar-energy-new-frontier-microfinance
6. Martinot, Eric, et al. "Renewable Energy Markets in Developing Countries." *Martinot.info*, www.martinot.info/Martinot_et_al_AR27.pdf