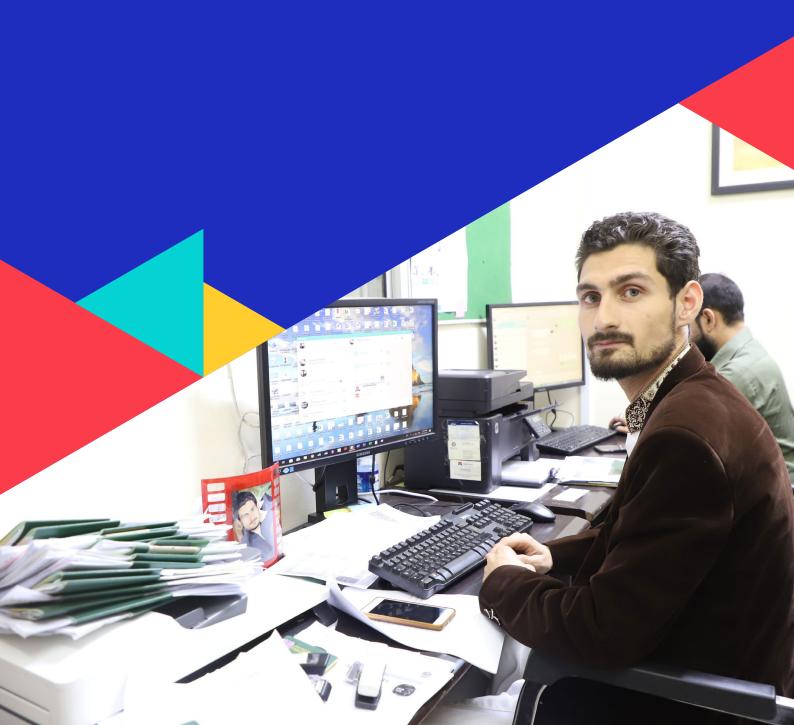




Study on the design of business incubation centres

For the Government of Pakistan's Kamyab Jawan Programme





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Acronyms and abbreviations

BIC business incubation centre

FBR Federal Board of Revenue

ICT information and communications technology

ILO International Labour Organization

IPO Intellectual Property Office

IT information technology

KPI Key performance indicator

NAVTTC National Vocational and Technical Training Commission

NGO non-governmental organization

NIC National Incubation Centre

ORIC Office of Research, Innovation and Commercialization

SECP Securities and Exchange Commission of Pakistan

SIYB Start and Improve Your Business Programme

SME small and medium-sized enterprise

SMEDA Small and Medium Enterprise Development Authority

TVET technical and vocational education and training

TEVTA Technical Education & Vocational Training Authority

US\$ United States Dollar



Executive summary

Executive summary

Entrepreneurship's role in promoting inclusive, sustainable socio-economic development is well-established by research and empirical literature. Both in developed and developing countries, the public sector has played a key role in defining policies, programmes and instruments to support the development of small and medium-sized enterprises, while creating a conducive environment and structures for entrepreneurship.

Business incubation centres have been instrumental in this regard. These incubators provide multifaceted support that facilitates the creation of start-ups and assists them until they have the capacity to survive in a competitive market. The success of incubators depends on several factors, including the sustainability of public financial flows, the dynamism of the macro-environment and the private sector's role as a supportive actor in the broader ecosystem. To achieve an optimal scale and impact, business incubation centres need to be made sustainable as institutions with market-responsive structures and self-led revenue generation capacities.



This study provides a composite analysis of the need to establish business incubation centres in Pakistan. in order to support a vibrant entrepreneurial landscape.

analysis of the need to establish business incubation centres in Pakistan, in order to support a vibrant entrepreneurial landscape.

This study provides a composite

It offers an overview of key challenges and arrangements in the incubator sector. It suggests locally viable, though non-exhaustive, models for business incubation centres that can be established within educational and training institutions. It also offers evidencebased, actionable recommendations to make these centres effective and sustainable.

This study's analysis and recommendations are informed by in-depth social dialogue in the business incubation centre and entrepreneurship support domain across Pakistan. The valuable insights shared during this dialogue process, and their adaptation at the institutional level, can contribute to locally-responsive solutions for developing effective, sustainable and impact-oriented business incubation centres in Pakistan.



Chapter 1

Chapter 1 Purpose and methodology

This study provides a composite analysis of the need to establish business incubation centres to support a vibrant entrepreneurial landscape in Pakistan. It offers an overview of Pakistan's local entrepreneurship ecosystem, focusing on challenges and learning from several major ecosystem players, such as university-based incubators, government and corporate sector programmes.



It also examines technical and vocational education and training (TVET) centres nationwide, which provide essential

skills to youth at the grassroots level. Building the capacity of these centres to include innovation and entrepreneurship trainings can go a long way towards empowering youth. As a result, more start-up companies are emerging from the TVET sector.

This study adapts the Entrepreneurship Measurement Framework, developed by the Organisation for Economic Co-operation and Development (OECD), to guide its research and analysis. The framework identifies three broad lenses for assessing an entrepreneurial ecosystem, measuring its performance and its impact on socio-economic conditions. While this framework is especially useful for mapping an entrepreneurial ecosystem, some of its elements also proved useful for conducting focus group discussions for this study. These elements are 'determinants', 'entrepreneurial performance' and 'impact', as shown in figure 1.

This study is informed by desk research and consultations with key players in the Pakistani entrepreneurship ecosystem. They shared their insights, experiences of challenges and ways to overcome them. Their recommendations for an ideal model of incubation include a menu of services, the model's scope of work, effectiveness and financial sustainability (business model).



These key players also identified sectors and geographic locations that are best suited to benefitting from the establishment of business incubation centres. A broad range of locations were taken into consideration when planning the consultations, in order to ensure that lessons learned from all parts of Pakistan are incorporated in this study (see table 1).

▶ Figure 1. Entrepreneurship Measurement Framework

| Determinants | | | | | | | | |
|-----------------------------|---|--------------------------|-----------------------|-----------------|------|--------------------------|--------------------------|----------------------------|
| Finance | Business support | Policy | Markets | Hum capi | | nfrastructure | Research and development | Culture |
| Debt access | Industry networks | Tax rates | Domestic sales | Gradua rate | | Access to telecoms | Patents | Entrepreneurial motivation |
| VC access | Incubators/ accelerators | Tax incentives | International sales | Qualit educa | | Access to electricity | | |
| Access to grants | Legal/ accounting services | Cost to start a business | Target market size | | i | Access to infrastructure | | |
| Access to angels | | | | | | | | |
| Stock markets | | | | | | | | |
| Impact | | | | | | | | |
| | Economic Job Poverty growth creation reduction | | | | | | | |
| Entrepreneurial performance | | | | | | | | |
| | | Fir | ms Emplo | yment | Weal | th | | |

Source: Adapted from OECD Eurostat.

▶ Table 1. Interviews conducted

| Province/ region | Incubator/accelerator | Person interviewed |
|-----------------------------------|---|--|
| Punjab | Plan9, Tech Incubator of the Punjab Information Technology Board | Mr Hammad Khalique, Project Manager, Plan9 |
| | National Incubation Centre Lahore | Mr Saleem Ahmad, Director, National Incubation Centre Lahore |
| | Takhleeq Business Incubator, University of Central Punjab | Mr Fouad Riaz Bajwa, Director, Office of Research, Innovation and Commercialization (ORIC) |
| | Technical Education and Vocational Training Authority, Punjab | Mr Javed Hassan, Head of Innovation, Technical Education and Vocational Training Authority, Punjab |
| Sindh | National Incubation Centre Karachi | Mr Azfar Hussain, Project Manager, National Incubation Centre Karachi |
| | NEST I/O | Ms Jehan Ara, NEST I/O |
| | Institute of Business Administration Karachi | Dr Shahid Hassan, Institute of Business Administration |
| | Employers' Federation of Pakistan (EFP) | Mr Fasihul Karim Siddiqui |
| Khyber Pakhtunkhwa | National Incubation Centre Peshawar | Mr Farhad Shafqat Qayyum, Project Manager, National Incubation Centre Peshawar |
| | Technical Education and Vocational Training Authority, Khyber Pakhtunkhwa | |
| Balochistan | National Incubation Centre Quetta | |
| | Technical Education and Vocational Training Authority, Balochistan | |
| Islamabad Capital Territory | National Vocational and Technical Training Commission | Mr Nasir Khan, Executive Director, National Vocational and Technical Training Commission |
| | National Incubation Centre Islamabad IGNITE | Mr Jawad Azfar, General Manager Projects, IGNITE and former Head of the NIC Programme, IGNITE |
| | International Islamic University | Mr Ahsan Mirza, Director, Business Incubation Centre, International Islamic University |
| | Pakistan Workers' Federation (PWF) | Mr Zahoor Awan, Pakistan Workers' Federation |

Chapter 2

Chapter 2 Context

The International Labour Organization (ILO) is the only tripartite agency of the United Nations. Since 1919, it has brought together governments, employers and workers across 187 Member States to set labour standards, develop policies and devise programmes that promote decent work for all women and men.¹ Decent work sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for workers and their families. It involves better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives, and equality of opportunity and treatment for all women and men.²

The ILO's Entrepreneurship and Enterprise Development Programme supports efforts to link job quality and productivity with real benefits for employers and workers. The programme promotes a culture of entrepreneurship, of enhancing the coverage and quality of business services, and of building enterprise development institutions.³



Enterprise development, entrepreneurship and job creation targeting both women and men are important elements of decent work.

Through a range of services – including support for cooperatives, small and medium-sized enterprises (SMEs), multinational enterprises, green jobs, a social finance programme and global employment injury programmes – the ILO's Enterprise Department supports governments, employers' and workers' organizations across the globe to advance a culture of entrepreneurship.

The correlation and causal relationship between entrepreneurship, job creation and economic growth is acknowledged by existing research.⁴ It has also been validated by the experiences of several developing economies in the past two decades.⁵

ILO, "About the ILO".

² ILO, "Decent work".

³ILO, "Areas of work".

⁴ See for example: Ronald W. McQuaid, "Entrepreneurship and regional development policies", European Regional Science Association (ERSA) conference paper, 2002; Per Davidsson, Frédéric Delmar, and Johan Wiklund, "Entrepreneurship as growth: growth as entrepreneurship", in *Entrepreneurship and the Growth of Firms*, ed. Per Davidsson, Frédéric Delmar, and Johan Wiklund, 21–38 (Cheltenham: Elgar Publishing, 2006).

⁵See for example: Norman Walzer and Adee Athiyaman, "Introduction and Overview", in Entrepreneurship and Local Economic Development, ed. Normal Walzer, 1–20 (New York: Lexington Books, 2007); Liaqat Ali, Jianing Mi, Mussawar Shah, Sayed Jamal Shah, Salim Khan, and Kausar BiBi, "The potential socio-economic impact of the China Pakistan Economic Corridor", Asian Development Policy Review 5, No. 4 (2017), 191–198; Zoltan J. Acs and Catherine Armington, "Employment Growth and Entrepreneurial Activity in Cities", Regional Studies 38, No. 8 (2004), 911–927; David B. Audretsch and Michael Fritsch, "Growth regimes over time and space", Regional Studies 36, No. 3 (2002), 113–124.

Entrepreneurship has assumed a renewed role in the discourse on employment-led growth, "undermining the logic of the old industrial corporation and putting the focus of innovation and growth on the start-ups, science-parks, incubators, accelerators, and other institutions supporting enterprise development." Enterprise development, including of SMEs, entrepreneurship, and job creation targeting both women and men are important elements of decent work.

According to Pakistan's most recent Population Census, the country was home to 207.8 million people in 2017. By 2025, its population is expected to grow to more than 227 million, 63 per cent of whom will be under the age of 30.7 This burgeoning young population offers the opportunity for significant shifts in socio-economic development. However, Pakistan will only be able to turn its 'youth bulge' into a demographic dividend if it meets this young population's health, education, training and decent work-related needs.

Ensuring better livelihood prospects for Pakistan's youth will depend on national policies to mobilize sufficient capital and enable 'employment-rich' growth, among other measures. The country faces progressive pressure from its labour supply, as more and more people join the labour force each year, but are met with inadequate decent work and livelihood opportunities. There are several reasons for this. These range from moderate growth and associated macro-economic forecasts, to mismatches between skills and market demands, market informality, underemployment and vulnerable employment. Pakistan faces the triple challenge of creating more jobs, improving access to decent work and economic opportunities for women, and improving the quality and productivity of decent work overall.

▶ 2.1. The state of entrepreneurship in Pakistan

Alongside other positive developments, supporting youth entrepreneurship and self-employment is one of the most potent strategies to overcome the challenges that Pakistan is facing. In 2017, the World Bank conducted a comprehensive analysis of Pakistan's entrepreneurial ecosystem and the broader trends of entrepreneurship in the country. Its findings still hold true. Based on data from the Pakistan Social and Living Stands Measurement (PSLM) Survey, own-account and self-employed workers represent approximately one-third of labour force participation in the country. Moreover, every second household owns a small, usually informal, business.

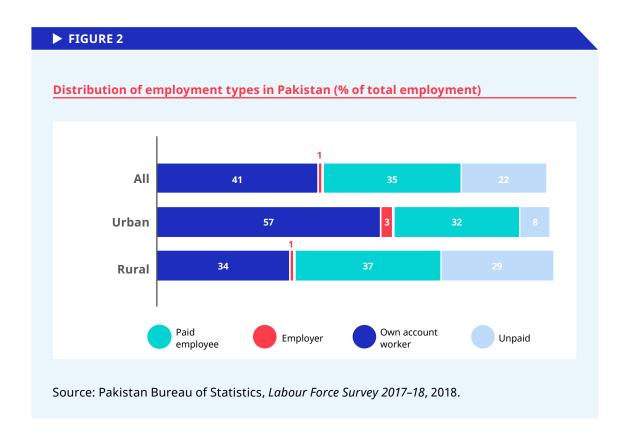
The World Bank's report concludes that most entrepreneurial activity in Pakistan is driven by necessity, rather than ambitions for growth. Growth-oriented entrepreneurship, defined as businesses with the potential to grow and generate decent work, contrasts with 'necessity' entrepreneurship. This provides livelihoods to those who opt for self-employment because they lack other opportunities. They do not necessarily have the skills or aspirations to grow their businesses.⁹

⁶ ILO, "Entrepreneurship development".

⁷ Government of Pakistan, Planning Commission, *Pakistan Vision 2025: One Nation, One Vision*, 2015.

⁸ World Bank, Pakistan Development Update, November 2017: Managing Risks for Sustained Growth, 2017.

⁹ Colin Mason and Ross Brown Entrepreneurial Ecosystems and Growth-oriented Entrepreneurship (OECD, ²⁰¹⁴).



Further analysis of entrepreneurship patterns reveals that only 1 per cent of persons employed in these enterprises are also employers – that is, they are entrepreneurs who employ others. These entrepreneurs are known as 'opportunity entrepreneurs'. While urban areas have a higher share of opportunity entrepreneurs (3 per cent), women's underrepresentation among them is a common feature across rural and urban areas. According to the World Bank, "women represent just 2 per cent of all employers – a negligible share – and only 14 per cent of own-account workers." 10

Opportunity entrepreneurs tend to be more educated and more likely to operate in the formal economy, principally in manufacturing and services. The limited share of opportunity entrepreneurs in the total pool tallies with statistics on the rate of entry of new enterprises into the formal private sector.

While the number of registered private companies has been steadily increasing in Pakistan, it remains low. As of the end of 2020, the Securities and Exchange Commission of Pakistan (SECP) reported the registration of 20,324 companies. Although this represents a 24 per cent increase compared to the previous year, it corresponds to just 0.2 companies for every 100,000 people. This statistic underestimates entry by only considering formal companies. Nevertheless, it points to significant barriers to growth-oriented entrepreneurship – the kind that can provide more decent work opportunities to a growing work force.

¹⁰ World Bank estimations based on data from the *Labour Force Survey 2015*.

This ties into Pakistan's low ranking on the Global Entrepreneurship Index (GEI).¹¹ In 2019, Pakistan ranked 120th of 137 countries on the index, with an overall score of 15.6. Its performance highlights the weak capacity of entrepreneurs in the country. Their capacities can be improved by strengthening their technical know-how, investing in entrepreneurial skills development and advancing technology absorption.

2.2. Course correction: Key imperatives for Pakistan

Incentivizing digitalization and technology-oriented entrepreneurship

Digital development holds great promise as a driver of structural transformation. Increasing digitalization, and particularly expanding internet access, supports structural transformation through two channels. First, the internet creates new types of jobs, work arrangements and opportunities for entrepreneurship. It does so by reducing search costs and market entry barriers, while making it easier for workers, employers and customers to find each other, irrespective of their locations. Digitally-enabled work can be inclusive because services – including delivery, ride-sharing or housework – tend to employ workers in the informal economy in both urban and suburban areas, and flexible work arrangements can encourage women's labour force participation.

Second, modern technology can enhance productivity in traditional sectors, thus trigger structural transformation. In agriculture, for instance, digital technologies can overcome information barriers and open up market access for many smallholder farmers. Modern technology can also increase technical capacity through new ways of providing extension services, as well as improving agricultural supply chain management.

Pakistan has already reaped some of the benefits of digitalization, but there remains room for further progress. Software exports in the 2019–20 fiscal year (FY19–20) were valued at US\$1.23 billion. When this is coupled with informal employment in the gig economy, its valuation grows further. With more than 5,000 information and technology companies providing services to entities in around 100 countries, Pakistan's information and communications technology (ICT) sector is booming. Every year, more than 10,000 application developers and freelancers enter the work force. Pakistan is also an increasingly attractive destination for 'knowledge process outsourcing' or 'business process outsourcing'. The Federal Government, and the Provincial Governments of Punjab and Khyber Pakhtunkhwa, are actively supporting entrepreneurship through incubation programmes.

[&]quot;The Global Entrepreneurship Index is an annual index that measures the health of the entrepreneurship ecosystems in 137 countries and ranks these countries based on their performance. This provides a picture of how each country performs in both the domestic and international context. The index collects data on the local population's entrepreneurial attitudes, abilities and aspirations. It then weights these against existing social and economic infrastructure, including broadband connectivity, transport links to external markets and other factors. This process creates 14 pillars which the index uses to measure the health of the regional entrepreneurship ecosystem.

¹² Government of Pakistan, Ministry of Information Technology and Telecommunication, "Software Exports Edge Up".

Nevertheless, relative to its neighbours, Pakistan performs poorly on most of the key enablers of a digital economy: infrastructure, affordability, consumer readiness and content.13 Crucially, there remains scope for improvement in terms of the inclusiveness of digitallydriven growth. Improvements in decent work have been concentrated among Pakistan's relatively few higherskilled workers and there remains a huge digital divide between women and men.

Rural entrepreneurship

In rural parts of Pakistan, rural entrepreneurship already contributes immensely to economic opportunities, workforce development, income generation and food security. However, there is a critical need for training and assistance to enhance the skills of small-scale entrepreneurs, as well as to improve their connections to market opportunities nationwide, particularly in rural Sindh, Khyber Pakhtunkhwa and Balochistan. This applies to both agricultural and non-agricultural enterprises.

Targeted skills development through technical and vocational educational and training programmes by the

federal and provincial governments, as well as by non-governmental organizations (NGOs), would help to nurture and incubate an entrepreneurship ecosystem in rural Pakistan. The positive impact of such efforts would be twofold. Skills development would enhance incomes, livelihood diversification and poverty alleviation. It would also ensure productive and progressive livelihood opportunities in rural areas, which could curb growing rates of rural-urban migration.

Creating space for urban microenterprises

By 2030, Pakistan's urban population is projected to account for 50 per cent of its total population. This will make Pakistan among the most urbanized countries in the world.14 Urban development is likely to pose new challenges for governance, the development of microenterprises and urban service delivery. These challenges must be addressed in order to enable urbanization to fuel sustainable growth.

While urbanization poses challenges, it will also create new opportunities for growth and prosperity. The emergence of a larger middle class will expand the domestic market for goods and services. It will also increase the size of Pakistan's skilled work force, which can become an engine of growth.

¹³ McKinsey & Company, Starting up: Unlocking Entrepreneurship in Pakistan, 2019.

¹⁴ Philip Auerswald, Elmira Bayrasli, and Sara Shroff, "Creating a Place for the Future: Strategies for Entrepreneurship-Led Development in Pakistan", Innovations: Technology, Governance, Globalization 7, No. 2 (2012), 107–134; World Bank, "Press Release: Proper Urbanization Can Yield Economic Benefits for Pakistan", 5 December 2015. Also see: Peter Ellis and Mark Roberts, Leveraging Urbanization in South Asia: Managing Spatial Transformation for Prosperity and Livability (World Bank, 2016).

Pakistan can only leverage this dividend if the Government creates a 'formal' and 'affordable' space for urban microenterprises to prosper. Support for micro and small enterprises is most effective where the legal and regulatory environment provides both security and opportunity, while creating an effective balance of incentives and disincentives. A policy and legal environment that lowers the costs of establishing and operating businesses will help new entrepreneurs to start formal enterprises and existing informal businesses to enter the formal economy. This kind of environment involves simplified registration and licensing procedures, appropriate rules and regulations, and reasonable and fair taxation. Furthermore, the security that formality provides will facilitate access to favourable credit terms, legal protection, contract enforcement, foreign exchange, and local and international markets.

▶ 2.3. Key areas that support entrepreneurship

Establishing robust quality standards for incubators and accelerators

Pakistan's entrepreneurial ecosystem, and enterprises at the pre- and post-start-up stage, are fast gaining momentum. Over the last decade, a number of business incubators and accelerators have emerged. These provide shared office spaces, business support, mentorship, start-up competitions, networking forums for budding entrepreneurs and, potentially, funding for start-ups. These incubators are the result of both public and private initiatives, as well as public-private partnerships.

Growing participation in incubators and accelerators offers distinct advantages. However, quality does not always match quantity in terms of creating value for entrepreneurs. Standardized monitoring and evaluation guidelines, alongside impact measurement, are critical as the ecosystem continues to grow. For example, while incubation centres measure success by their number of graduates, this merely focuses on an 'output' and does not necessarily imply that a business is more equipped to survive once an incubation programme ends. Incubators and accelerators need to measure impact and success by using 'outcome' indicators, such as the average percentage revenue growth of an incubated start-up, the amount of funding raised and the number of start-ups that continue to operate after they leave a support programme.¹⁵ Incubation programmes must continue strengthening their curricula and offerings to improve outcomes and provide value to start-ups.

Developing entrepreneurial enclaves

Most entrepreneurial activity in Pakistan is concentrated in major cities. While the entrepreneurial ecosystem has grown considerably, major efforts and support initiatives are concentrated in Islamabad, Karachi, Lahore and Peshawar. This has agglomeration advantages¹⁶ and can be more suitable for higher order entrepreneurship.

¹⁵ Kathy Qian, Victor Mulas, and Matt Lerner, Supporting Entrepreneurs at the Local Level: The Effect of Accelerators and Mentors on Early-Stage Firms. Finance, Competitiveness and Innovation in Focus (World Bank, 2018).

¹⁶ Edward L. Glaeser (ed.), Agglomeration Economics (Chicago: University of Chicago Press, 2010).

Yet in skills and value, the exclusive concentration of support systems in major urban centres, higher education institutions and universities has implications for equity. The strength of an entrepreneurial ecosystem is also measured by how inclusive its programmes and support are. There is, therefore, a need to expand support, launch initiatives and build the capacity of young entrepreneurs in other urban areas in Pakistan with a large number of universities, polytechnics and TVET institutions.

Regulatory and legal barriers

Pakistan's policy and regulatory environment is challenging for start-ups and small growing businesses. Pakistan performs well in the 'support domain', as indicated by the frequency of start-up activity. However, it needs to improve the 'policy domain'. While entrepreneurs may find the process of setting up a business relatively easy, it is widely accepted that maintaining and shutting down a business in Pakistan is significantly more difficult. This is due to a multitude of procedures and tax-related issues.



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Taxation for businesses is applied across the board, regardless of whether a business is a start-up or an established enterprise. These costs are an issue for businesses overall, but are most debilitating for start-ups. As a result, many start-ups are reluctant to register officially. As they grow, many fall into the practice of 'double books' to avoid paying levies. The issue of double, or even triple, books increases risks for investors, affecting their interest in the start-up space.

Cumbersome business regulations mean that firms spend valuable resources on navigating the regulatory environment instead of putting these resources to productive use. This reduces their overall productivity. Regulatory reform should level the playing field for all firms by reducing red tape and limiting the scope for excessive discretion and arbitrary enforcement. Pakistan has already embarked on these reforms as part of the **Doing Business Reform Sprint**. The initiative is driven by a high-level committee, established by the Prime Minister's Office. Potential interventions should aim to reduce the procedures, costs and time associated with investing and doing business in Pakistan. They should align national investment policy with sectoral policies, streamline the foreign direct investment (FDI) approval process, and consolidate the plethora of incentive schemes by establishing a one-window operation. This would not only assist businesses that are starting up, but also enable them to access finance – more of which will be available due to these favourable conditions.

Since 2016, almost 300 reforms have been implemented to improve the investment climate in Pakistan. These have helped it rise 39 places on the World Bank's Ease of Doing Business Index (EODB), rising to a ranking 108th of 190 economies in 2020. Pakistan was recognized as the top reformer in South Asia and sixth reformer in the world, alongside Saudi Arabia, Jordan, Togo, Bahrain, Tajikistan, Kuwait, China, India and Nigeria. The **Doing Business Reform Strategy 2018–2021** is Pakistan's national roadmap for improving the investment climate. It is designed to create an enabling environment for attracting greater investment (both foreign and domestic) to boost the country's prospects for growth. In order to achieve this objective, the strategy involves a set of comprehensive reform actions at the federal and provincial government levels.

The reforms focus on regulatory changes, improving technology and simplifying procedures. As a result of their implementation, Pakistan's global ranking has improved.

Access to finance

Regulatory barriers exacerbate issues of access to capital for early-stage businesses. Pakistan's complex regulatory environment not only hampers entrepreneurship, it is also a barrier to commerce and investment. As a result, Pakistan does not fare very well in terms the 'finance domain' of start-up ecosystems. In a 2014 survey by Invest2Innovate, 84 per cent of respondents said it was either 'difficult' or 'somewhat difficult' to raise investment for start-ups.

Key reasons why investors and funds prefer to invest in more established businesses, rather than start-ups, include issues like double or triple books, as well as high due diligence costs due to the lack of industry level data. Regulatory challenges and risk perception of Pakistan also dissuade international investors from entering the market. For example, all foreign investors and shareholders must obtain approval from Pakistan's Ministry of the Interior before investing. This is an arduous process that can take upward of six months. They must also apply for a Proceeds Realization Certificate to remit funds from Pakistan. Investors who fail to apply for a certificate before investing are not able to move their money out of the country. These barriers and associated risks have exacerbated the early-stage capital gap in Pakistan. Many start-ups are struggling to secure the investments they need to grow their businesses.

Other cross-cutting support areas

Innovation is increasingly moving away from closed iterative innovation models to more open and disruptive innovation by business creators within ecosystems. Therefore, there is a significant growing need for entrepreneurial education and training for new talent, as well as support services for more open innovation and business creation.



The most important issues to consider when providing support to start-ups in Pakistan

- ▶ Awareness of legal structures and company formation guidelines
- ▶ Financial structures, and model knowledge and application
- ► Identifying a problem and determining its solution, which creates a business opportunity
- ► Access to capital, primarily at the early-stage in the form of angel investors or institutional investments
- ▶ Business modelling and marketing knowledge
- ► Capital for creating a first prototype by hardware-related start-ups
- ▶ Relevant documentation

Chapter 3

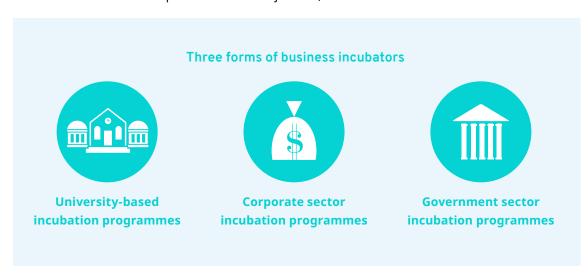
Chapter 3 Critical enablers: Effective business incubation centres

In addition to creating a more conducive macro-environment for entrepreneurship, operationalizing plans to promote entrepreneurship requires increasing young people's inclination to become entrepreneurs. This is necessary both in post-secondary and tertiary education institutions, as well as in TVET institutions.

Embedding entrepreneurial learning components in study programmes, and creating structures within institutions to guide and support students' entrepreneurial ideas, can encourage young people to launch new business activities in the future. This is where establishing business incubation centres comes to the fore as a critical enabler.

▶ 3.1. Different models of business incubation centres in Pakistan

Business incubation is a business support process that accelerates the successful development of start-ups and fledging companies. It does so by providing entrepreneurs with an array of targeted resources and services. In pursuit of these objectives, business incubators can take three forms:



All of these incubators serve their particular sectors, with different goals and objectives that suit their needs and intended outcomes. This study undertakes an in-depth analysis of all of these types of programmes in order to understand potential models, challenges and outcomes of designing a sustainable model of business incubation centres for the Kamyab Jawan Programme and the ILO.

▶ 3.2. The need for business incubation centres in Pakistan

According to the United Nations Development Programme's (UNDP) National Human Development Report 2017 (NHDR), Pakistan needs to create 1.3 million additional jobs on average every year, as the number of people of working age will grow from 4 million to 5 million by 2035.17 The report notes that, "Expanding the formal sector, supporting entrepreneurship, building the human capital of youth and active labour market policies are key instruments to ensure that the required growth is inclusive and sustainable."

As start-up activity grows, it is increasingly important to improve the ecosystem and provide an enabling environment for young

businesses.

This recommendation ties into the current state of Pakistan's entrepreneurial ecosystem, which is already young and technology-enabled, and will continue to be so as more young tech-savvy people

launch their own businesses. As start-up activity grows, it is increasingly important to improve the ecosystem and provide an enabling environment for young businesses.

Since 2012, increased entrepreneurial activity in Pakistan has encouraged the entry of a growing number of public and private stakeholders into the entrepreneurship ecosystem. The Government of Pakistan has signalled its support for entrepreneurship through intermediaries, such as the Federal Government's Ignite initiative, formerly known as the National Information and Communications Technology Research and Development (R&D) Fund. Ignite is housed under the Ministry of Information Technology and Telecommunication. Since 2017, it has launched National Incubation Centres (NICs) in Islamabad, Karachi, Lahore, Quetta and Peshawar. The Provincial Government of Punjab was an even earlier supporter of technology-related entrepreneurship through the Punjab Information Technology Board. It launched Pakistan's largest technology incubator, Plan9, in 2012.

In addition to government-backed intermediaries, privately-led incubators and accelerators – such as The Nest i/o and i2i - are running programmes across the country, graduating entrepreneurs and supporting the ecosystem. There are also a growing number of start-up competitions and conferences, such as Momentum, 021 Disrupt and Startup Cup. There are a growing number of coworking spaces, like Daftarkhwan, CoLabs and the Hive. Other supporting players and associations are also emerging, such as Pakistan Software Houses Association for IT and ITES (P@SHA), Circle, The Indus Entrepreneurs (TiE) and the Organization of Pakistani Entrepreneurs (OPEN).

¹⁷ UNDP, Pakistan National Human Development Report 2017: Unleashing the potential of a young Pakistan, 2018.

One of the most interesting and providential recent developments in business incubation in Pakistan is the steady growth and consolidation of business incubation initiatives by higher learning institutions. Noteworthy university-level incubators include the Technology Innovation Centre (TIC) at the National University of Science and Technology (NUST) in Islamabad, the Aman Centre for Entrepreneurial Development at the Institute of Business Administration (IBA) in Karachi, and the Takhleeq Incubator at the University of Central Punjab (UCP) in Lahore.

▶ 3.3. Offices of Research, Innovation and Commercialization

The evolution of university-based business incubators has its roots in the initiatives of the Higher Education Commission (HEC) to motivate and facilitate higher education institutions (HEIs) to make research a top priority for sustainable economic growth and a future knowledge economy. For this purpose, universities establish a centre to serve as a pivotal point, encompassing all research activities under a single umbrella – from the development of research proposals to the commercialization of research products. These centres are called Offices of Research, Innovation and Commercialization (ORICs). Their objective is to develop, expand, enhance and manage the university's research programmes, as well as to link research activities directly to the educational, social and economic priorities of the university and its broader community. They are also responsible for ensuring that the quality of research upholds the highest international standards and advances the university's stature globally. These offices are meant to guarantee that all research programmes and policies reflect the core values of academic freedom, professional integrity, ethical conduct and full compliance with all of the university's policies, legal requirements and operational standards.



ORICs strengthen the environment for research and scholarship by:

- ▶ Supporting their university's strategic research direction and policies
- ► Improving the integration of research and education at all levels of the institution
- ▶ Increasing and diversifying external research funding
- ▶ Improving the recruitment and retention of high-level faculty members
- ▶ Translating research for the public's benefit
- Strengthening university-industry relationships
- ► Promoting entrepreneurship, technology-transfer and commercialization activities which benefit the economy
- ▶ Promoting and improving multidisciplinary research initiatives

The overall administrative model of Offices of Research, Innovation and Commercialization, as prescribed by the Higher Education Commission, is as follows:

- ▶ the Director of the ORIC, who is in charge of the entire department, usually with an academic background, and has sole responsibility for commercializing the university's research;
- ▶ a Manager of Research Operations and Development;
- a Manager of University Industrial Linkages and Technology Transfer;
- a Manager of Intellectual Property and Legal Services;
- ▶ a Publications and Communication Specialist;
- ▶ an accountant;
- ▶ a research associate; and
- administrative assistants.

Two important centres under Offices of Research, Innovation and Commercialization support innovation and fast track the process of commercializing research:

- ▶ business incubations centres (BICs), which support product development, marketing knowledge and 'ideation' (the formation of ideas); and
- ▶ technology and innovation support centres, which provide support for intellectual property, patents and trademarks.

Business incubation centres nurture and 'grow' research projects that can be converted into products with sustainable business models.

Service menu of business incubation centres

Since Offices of Research, Innovation and Commercialization are established in universities, they are very close to academic infrastructure and academic culture. Some experts suggest that business incubation centres should be created in the industrial sector instead, as real-world problems are sourced from the industrial sector, while maintaining close collaboration with academia to ease knowledge transfer and access.

The standard services offered by business incubation centres, established under Offices of Research, Innovation and Commercialization, are:



1. Product development: Business incubation centres offer workshops and training on all stages of product development – from an initial concept or idea, through to market release and beyond. These sessions cover the complete process of delivering a new product or improving an existing one for customers.



Business incubation centres nurture and 'grow' research projects that can be converted into products with sustainable business models.



▶ 2. Training on legal and intellectual property issues: Sessions by business incubation centres strengthen participants' understanding of all the legal structures and obligations related to intellectual property. They provide an overview of trademarks and patents, explaining how to obtain these to protect a company's intellectual property. They also focus on data protection and guidelines on the responsible use of data.



▶ 3. Basic marketing: Business incubation centres provide orientation on how to develop, implement and measure a 'winning' marketing strategy using the latest tools and platforms. This includes, but is not limited to, everything from branding and public relations to search engine optimization (SEO), web analytics and social media marketing.



▶ **4. Financial knowledge:** Business incubation centres enhance participants' financial knowledge, including on how to build a financial model, value a start-up, find investors and raise the right type of capital.



➤ 5. Investment essentials: Business incubation centres cover the basic 'essentials' of investment, including the documentation that companies require and how they can restructure to prepare for institutional and/or other types of investment by drafting 'terms sheets' and shareholder agreements. Most importantly, they train participants on negotiating with investors.



▶ 6. Support for accessing markets: Business incubation centres provide access to potential markets that start-ups and other projects require. They organize regular networking events, introducing market leaders to start-ups so that they can explore synergies, avenues for collaboration and the potential for joint growth.

Every business incubation centre offers some version of these services. Some centres go into great depth and make it mandatory for incubated start-ups to attend sessions. Others operate on a 'needs basis', providing specific support that start-ups or projects require.

Sustainability factor

Identifying how many successful companies that have gone through incubation centres are operating in an industry demonstrates the performance output of business incubation centres. At the macro level, start-ups that have benefitted from university-based business incubation centres usually feel the need to be 'incubated' again in an incubator outside the university, in order to grow and enter the market.

Start-ups like Bookme.pk, Cricflex, Markhor Shoes, Mauqa Online have gone through an incubation programme and become successful. The overall average success ratio is around 20 per cent per cohort. While this may seem low, it is impressive for the start-up ecosystem, where the average investor success ratio is roughly 11 per cent.



The overall average success ratio is around

per cent per cohort.

This ratio can be improved further by learning and adapting to market conditions. Mentoring start-ups is essential to ease their path towards success in their chosen industry.

The common challenge that all entrepreneur support organizations face is a lack of innovation, primarily due to Pakistan's limited focus on research and development compared to neighbouring countries. Academia needs to step up if Pakistan is to produce more innovations.

A second major challenge is a lack of awareness of procedures and processes required to establish companies. Processes need to be streamlined further to make them 'hassle free'. While government efforts to improve the ease of doing business are promising, there remains room for improvement.

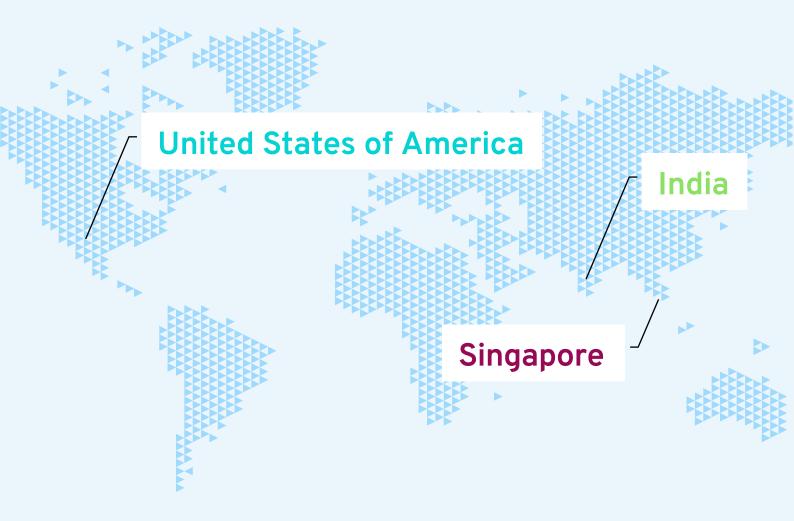


The common challenge that all entrepreneur support organizations face is a lack of innovation, primarily due to Pakistan's limited focus on research and development.



Business incubation centres are working hard to meet market needs by helping start-ups across Pakistan. Successful strategies include:

- ➤ Sourcing problems from industries, by directly approaching industries and identifying problems that can be solved by spin-off companies and start-ups.
- ► Corporate entrepreneurship, which involves establishing incubators within corporate organizations, devising innovative solutions to their problems and creating new companies as a result.
- ▶ Building close liaisons with investment firms to understand their needs, requirements and expectations in terms of quality and standards, which can catalyse investment by ensuring that companies are up to investors' standards.
- ► Educating the public by regularly organizing promotional events and awareness raising sessions in smaller cities, in order to encourage people, especially youths, to consider starting their own businesses.



Some international experiences

Most leading universities in **India** have well-established incubators and accelerators that are closely linked with relevant industries. For example, the Indian Institute of Technology has incubators in each of its campuses that work closely with students, supporting them to quickly transform their projects into products. India also has a strong corporate incubator network, with major private companies setting up innovation centres to encourage creativity within their business units and solve real world problems. This model works well, aided by India's large market and industrial economy.

Singapore established Startup SG, a government body to showcase the country's vibrant start-up ecosystem, both locally and globally. It represents the shared interests of the start-up community and unifies efforts to support the ecosystem through its initiatives and programmes. It makes it easier for start-ups and ecosystem partners to discover and access available avenues of support. In 2018, the Startup SG Network was launched to bring Singapore's tech start-up ecosystem even closer together and encourage innovative, collaborative partnerships. As a virtual ecosystem of entities in Singapore's tech start-up community, the network allows local tech start-ups to put their profiles on the radar of stakeholders in the local and global ecosystem. This expands their opportunities for growth.

The **United States of America** has very different market dynamics, a far more mature education system and a more conducive investment ecosystem than Pakistan. While drawing parallels is difficult, it is possible to learn from good practices, including close collaboration between organizations with similar goals and strong legislation on the ease of doing business. These factors make it easier for entrepreneurs to thrive. All major universities in the United States have mature innovation centres that are aided by corporate incubators and accelerators. These act as an industry liaison to source problems, find solutions and guide start-ups to become sustainable companies.

Chapter 4

Chapter 4 Analysis and design of business incubation centres

Based on insights from the consultations held for this study and subsequent analysis, this chapter outlines the main elements required to develop effective, sustainable business incubation centres.

▶ 4.1. Core functions of business incubation centres

Since start-up companies lack resources, experience and networks, incubators provide services that help them overcome initial hurdles to starting a business. These hurdles include space, funding, legal issues, accounting, computer services and others. The most common incubator services are:

| Helping with 'business basics' | Organizing networking activities | | |
|---|---|--|--|
| Providing marketing assistance | Assisting market research | | |
| Providing high-speed internet access | Supporting accounting and financial management | | |
| Assisting efforts to access capital (e.g. bank loans, loan funds, etc.) | Strengthening presentation skills | | |
| Providing links to higher education resources | Providing links to strategic partners | | |
| Securing access to angel investors and venture capital | Organizing comprehensive business training programmes | | |
| Acting as an advisory board and/or mentor | Helping to identify management teams | | |
| Strengthening understandings of business etiquette | Providing assistance on the commercialization of technology | | |
| Helping with regulatory compliance | Assisting intellectual property management | | |
| Providing an orientation on decent work (e.g. awareness of rights at work, labour laws and social dialogue institutions, etc.) | | | |

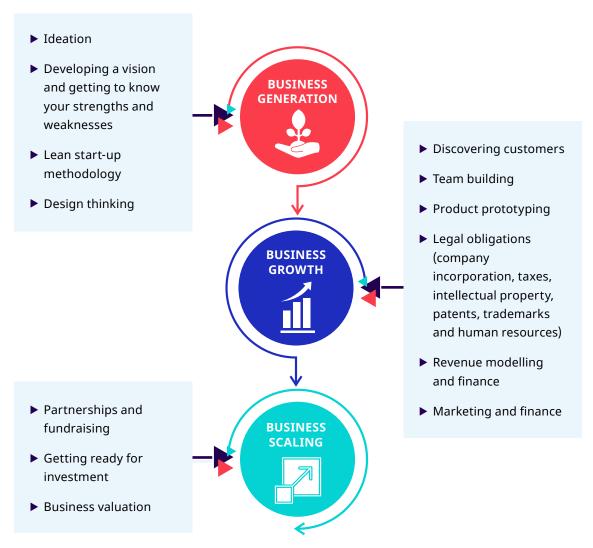
This study's findings suggest that all of the incubators in Pakistan either offer all, or some, of these services for the start-ups they incubate. Above all, incubators and innovation support centres in Pakistan provide services that help companies grow. Sectors, geographic locations and neighbouring industrial activities all play an important role in the types of start-ups that exist in an area, as well as the types of services that incubators provide. For example, as Faisalabad has a vibrant textile industry, most start-ups are connected to textile manufacturing or related services in some way.

Incubators and innovation support centres in Pakistan provide services that help companies grow.

Figure 3 presents the curriculum proposed by this study's respondents, considering the local realities of entrepreneurs and the best ways forward for spurring innovation. The curriculum is

divided into three subsections for the sake of clarity. This curriculum, alongside the menu of services listed above, would effectively nurture early stage start-ups and support them to grow.

▶ Figure 3. Curriculum proposed for incubators by this study's respondents



In addition to core incubation programmes, several other short initiatives can be launched to increase overall impact. These include initiatives related to co-working spaces, women's entrepreneurship and design thinking, among others, as discussed below.

Co-working spaces for freelancers

Pakistan is among the top four destinations for outsourcing work from developed states. Freelancing is one the most popular models for accessing work, delivering services and earning revenue remotely. The challenge is that freelancers need infrastructural support to do so – such as high-speed internet connections, as well as office space for themselves and their teams.

Establishing co-working spaces provides all of these services at a very low cost due to economies of scale. These spaces offer multiple benefits. First, they earn revenue for the incubator. Second, they promote freelancing. Third, they offer youth across Pakistan the opportunity to earn without having to travel long distances to major cities in search of work.

Women's entrepreneurship programmes

Dedicated programmes are essential for promoting women's entrepreneurship, and equipping them with the skills and knowledge needed to thrive in the labour marker.

Vocational centres in Pakistan provide a range of skills to a substantial number of girls and young women. Enhancing women's knowledge of how to start businesses, and how to grow them by accessing new markets beyond their localities, will have a major positive financial impact.

Design thinking and 'ideation' workshops

Design thinking focuses on empathy. It addresses one of the most common mistakes that start-ups make: not understanding the needs of their potential customers. Design thinking and 'ideation' workshops streamline thinking and planning processes, encouraging the formation of ideas, reflection and a focus on customer needs. In this way, they support the emergence of innovative and impact-driven start-ups. These workshops can be conducted virtually or face-to-face. In both cases, they have a major impact.





Enhancing women's knowledge of how to start businesses, and how to grow them [...] will have a major positive financial impact.

Other factors to consider

The financial sustainability of start-ups or entrepreneurs depends on far more than being part of an incubation programme. Other important factors to consider include:

| The dynamics of the business idea | The sector | Domain knowledge | |
|---|---|---|--|
| Identifying the right market | Effective marketing techniques | Financial literacy | |
| The entrepreneur's passion and interest | Perseverance and the ability to bounce back | Adaptability to changing market trends and requirements | |

While business incubation centres can provide essential knowledge in these areas, soft skills are also extremely important for ensuring successful, financially sustainable ventures. Networking events and opportunities provided by business incubation centres are specifically designed for this purpose. For instance, they expose start-ups to successful entrepreneurs, in order to inspire them to learn from the experiences and mistakes of others.

▶ 4.2. Upgrading the service centres of the Technical Education & Vocational Training Authority

The Technical Education & Vocational Training Authority (TEVTA) has established 18 service centres that impart skills relevant for six vertical markets – that is, business niches where vendors serve a specific audience. These vertical markets, with an established presence in specific locations, are:

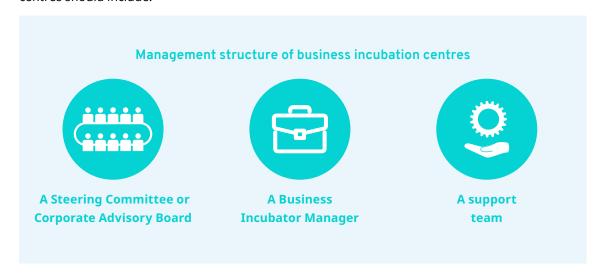
- ceramics and pottery;
- ▶ wood working;
- agriculture;
- ▶ leather;
- ▶ light engineering; and
- ▶ textiles.

Delivering an incubation curriculum during or after the TVET curriculum would build the capacity of these service centres to foster entrepreneurship, as discussed below. Once this skilled work force of entrepreneurs exists, they will require an incubation platform to help them start their own businesses.

These entrepreneurs could also access the loan facility offered by the *Kamyab Jawan* Programme to scale up their businesses. These loans would have a greater impact, greater prospects for returns and lower risk for investors if entrepreneurs are equipped with the essential skills they need to scale up their businesses. The fact that these service centres already exist will minimize the costs of establishing new business incubation centres. Making use of existing TVET centres would enable Pakistan to get a 'head start' on developing a skilled labour force with strong entrepreneurial skills.

► 4.3. Management structure of business incubation centres

To oversee daily operations and support start-ups, the management structure of business incubation centres should include:



Steering Committee or Corporate Advisory Board

This committee's members should be drawn from the public and private sector, including the business community, employers' and workers' organizations and the management team of the business incubation centre. Where Institute Management Committees (IMCs) or District Boards of Management (DBoMs) already exist, these could be used instead of forming a new Steering Committee.

The following key performance indicators (KPIs) or terms of reference (ToRs) should be added to the responsibilities of each Steering Committee:

- ▶ Provide strategic leadership and governance oversight as a core function including evaluations, and advice on decisions and planned actions, in line with the objectives, approach and scope of the business incubation centre.
- ► Continuously review the performance of the business incubation centre based on established key performance indicators and the centre's strategic plan.

- ▶ Guide the business incubation centre's leadership by providing effective oversight and evaluations.
- ▶ Oversee the strategic plan and ensure proper compliance with it.
- ▶ Review and approve recommendations on the implementation of initiatives to better achieve the business incubation centre's objectives.
- ▶ Review periodic monitoring reports based on key performance indicators and advise the business incubation centre's leadership accordingly.
- ▶ Provide policy guidelines to the leadership team of the business incubation centre.
- ► Ensure that the business incubation centre's activities are coordinated with other relevant stakeholders.
- ▶ Bridge the gap between academia and industry, especially by offering advice on promoting industry linkages and commercialization.
- ▶ Provide advice on any other matter relevant to the business incubation centre's efficient functioning.
- ▶ Ensure that the Steering Committee's members have expertise in the roles and responsibilities relevant for the business incubation centre's performance, and that they clearly state any conflict of interest that could harm its proper functioning.
- ▶ Promote social dialogue between the Government, employers and workers to regularly review the business incubation centre's performance and find sustainable solutions that are acceptable to all parties.

Business Incubator Manager

The manager should be responsible for the oversight of daily operations, including: marketing the business incubation centre, recruiting new start-ups, providing support to existing start-ups, facilitating training for start-ups and aspiring entrepreneurs, and developing infrastructure to support economic development. Ideally, each manager should possess an engineering or business degree from a recognized institution or university. They should have a minimum of 7–10 years of relevant work experience, including 4–6 years of experience of working with entrepreneurs, start-ups, incubators, accelerators or incubation consultancies. Other requirements for this position include strong research skills and proven abilities to cultivate, build and maintain strong working relationships with a range of stakeholders. These include start-ups, entrepreneurs, mentors, universities, research institutions, industry experts, associations, chambers of commerce and industry, national and sub-national governments, and angel investors.

To ensure that a business incubation centre functions effectively, each Business Incubator Manager's responsibilities should also include:

- ▶ Developing and executing a strategy for outreach, head hunting, attracting and bringing onboard deserving, qualified and innovative entrepreneurs and start-ups.
- ▶ Evaluating applicants in terms of creativity, innovation, acceleration and the investment stage.

- ▶ Displaying a strong understanding of the social entrepreneurship ecosystem.
- ▶ Designing and managing incubation and/or acceleration programmes.
- ▶ Managing day-to-day interactions with incubated start-ups and entrepreneurs.
- ▶ Supporting entrepreneurs from the 'ideation' stage through to acceleration, investment and scaling up.
- ▶ Providing high-quality coaching and advisory support to entrepreneurs.
- ▶ Providing continuous strategic guidance to entrepreneurs in different areas, including business.
- ▶ Guiding and supporting start-ups in terms of fundraising activities.
- ▶ Acting as a 'switchboard' for entrepreneurs to help them access relevant resources and connections.
- ▶ Ensuring the proper management of milestones and progress among entrepreneurs and start-ups.
- ▶ Developing, executing and 'owning' an operational and engagement strategy for the entire community, including donors, start-ups, investors, corporations, mentors, advisors and domain experts.
- ▶ Overseeing modelling, sales, marketing, financing, fundraising, overall strategies and the operations of entrepreneurs and enterprises.

Support team

The support team should include a Start-up Support Executive, a Business Development Executive, a Marketing Executive, an Administration and Finance Executive, and office assistants.

▶ 4.4. Performance monitoring at business incubation centres

The following key performance indicators should be reported on to the management of each business incubation centre on a quarterly, biannual or annual basis. These should be validated through annual on-site visits and become the basis of performance monitoring for business incubation centres. They include a mix of input indicators, processes, output indicators and outcome measures.

The list should be updated at least every three years to accommodate the business incubation centre's new emerging needs. If necessary, centres can review these key performance indicators and may make minor adjustments between metrics.



Key performance indicators for performance monitoring

► 1. Input indicators:

- ▶ (a) Number of entrepreneurs registered and supported (disaggregated by gender, location, age and citizenship, among other characteristics)
- ▶ (b) Type of services requested and used by entrepreneurs
- ▶ (c) Awareness raising seminars or 'open houses' held to promote entrepreneurship among the public
- ▶ (d) Facilities and human resources available at the business incubation centre

► 2. Output indicators:

- ▶ (a) Number of start-ups created
- ▶ (b) Number of jobs created by these start-ups and retained two years after each start-up's foundation
- ▶ (c) Revenue earned by graduating start-ups
- ▶ (d) Funding secured for start-ups
- ▶ (e) Number of license agreements, non-disclosure agreements (NDAs), consultancy agreements, and intellectual property rights agreements signed by start-ups
- (f) Venture capitalist, angel investment or seed funding secured by start-ups

▶ 4.5. Start-up selection procedure

Start-up selection is a critical activity. Evaluating the strengths and weaknesses of potential start-ups is key for determining fields which require special assistance by the incubator. It is also vital for start-ups' success. Business incubation centres must exercise extreme caution in incubating the right start-ups based on their established criteria, available resources and services needed for the efficient, successful completion of projects. Two possible criteria that could be applied include:

- ▶ a completed business plan; and
- ▶ a routine start-up selection procedure (advertising through a call for proposals, holding a 'pitching' event, organizing a Selection Committee meeting, finalizing the selection and starting the incubation process).

Major parameters that should be considered when selecting start-ups include:

| The strength of their idea | The existence of a business plan |
|--|---|
| The ability to create jobs | High growth potential and social impact |
| Technological readiness and innovative potential | Relevant professional experience and education |
| Team strength | Whether the business is a new start-up or is complementary to existing firms |

The business incubation centre's management should define the selection procedure with the approval of the centre's Steering Committee. The Selection Committee for picking start-ups should include the managers of the business incubation centre, an industry expert from a relevant field, and other relevant officials.

▶ 4.6. Selecting geographic locations

There is a need for business incubation centres geared towards specific vertical markets in locations where industrial activity is concentrated. This would reduce the gap in supply and demand between start-ups and the industries where they will be absorbed. Table 2 highlights some of the industrial hotspots identified by this study. Sector-specific business incubation centres can be set up in these hotspots to support the creation of rapid 'go to market' start-ups. In these areas, it will be relatively easy for start-ups to access domain experts, industry veterans and other infrastructural support. Existing TVET centres in these locations would be a good place to house business incubation centres, as they are already developing skills required by industries in the area. If these TVET centres also foster entrepreneurship, this would have a positive impact on the local and national economy.

▶ Table 2. Industrial hotspots

| Location | Sectors |
|---|---|
| Faisalabad, Punjab | Textiles |
| Gujrat, Gujranwala and Sialkot (Golden Triangle), Punjab | Sports goods, surgical equipment, cutlery and light engineering equipment |
| Kallar Kahar, Punjab | Salt reserve (one of the world's largest) |
| Multan, Punjab | Blue pottery and handicrafts |
| The plains of Punjab | Agricultural value chain |
| Karachi, Sindh | Manufacturing and the automotive sector |
| Khyber Pakhtunkhwa | Marble |
| Balochistan | Oil and gas, gold, copper, the wool value chain and horticulture (apples, pomegranates, etc.) |
| Northern areas | Precious stones and the agricultural value chain |

Chapter 5 Business model for business incubation centres: Financial sustainability

Although business incubation centres help start-ups to generate strong business plans and revenue models, these centres often struggle to develop strong business models of their own. There are several reasons for this. The very nature of business incubation centres is to provide a nurturing environment for entrepreneurs. However, not every business is a success. This study finds that roughly one in 10 incubated companies in Pakistan succeeds. As such, it is difficult for business incubation centres to monetize their support. As start-ups lack financial muscle, they cannot be charged for incubation. If they pay rent for incubation, their chances of success plummet. That is why in economies like Pakistan's, the primary funding sources for incubators are the Government, donors or corporate sponsorships, making it hard to ensure incubators' long-term financial sustainability.

This chapter explores services or functions that business incubation centres could monetize to generate revenue for their core incubation programmes.

Renting out facilities

Publicly-funded incubators with physical infrastructure – such as a conference room, meeting hall or auditorium – can rent out these facilities to the public. This has the potential to meet almost 50 per cent of business incubation centres' operating expenses.

Co-working spaces for freelancers

Business incubation centres can provide co-working spaces for freelancers, as discussed above. Since freelancers are already earning, they can be charged on a 'per seat' basis. In addition to generating revenue, co-working spaces can have positive impacts that should be explored further.

Commissions on deals

Business incubation centres actively work to attract investors for incubated start-ups. For every successful deal, a percentage agreed in advanced could be charged to the investor. This would reduce the burden on start-ups, while generating revenue for the incubator. The bigger the deal, the greater the revenue. This creates a win-win situation for the start-up, the incubator and the investor.

Training-cum-production units

Options to set up incubators in TVET centres should also be explored. As discussed above, TVET centres already produce a skilled work force for allied industries, in line with industries' needs. If their graduates are also equipped with entrepreneurial skills, they will go on to create start-ups that improve their own prospects, as well as those of the local economy. A consortium of the industry that benefits from this skilled work force with entrepreneurial skills could give back to the community by financially supporting their local TVET centre. This funding would be a good source of revenue for TVET centres and their incubation facilities. While this may not support incubators fully, securing close to 50 per cent of required funds would help to make centres financially sustainable after initial government support ends. The table below offers an example of a business incubation centre's skeletal financial planning sheet, based on the assumptions and imperatives explored in this chapter.

▶ Table 3. Example of a business incubation centre's financial planning sheet

| Rent from co-working Rent from spaces (conference room/meeting hall, etc.) Share of investment deals Total (A) Third party revenue Government funding Industry support Corporate sponsorship Conor agency funding Miscellaneous Total (B) Total generated Revenue (C-A+B) Operating costs Rent Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials Other operating costs (X) Other costs (Y) Year 1 Year 2 Year 3 Year 3 Year 1 Year 2 Year 3 | | | | |
|---|---|--------|--------|--------|
| Rent from spaces (conference room/meeting hall, etc.) Share of investment deals Total (A) Third party revenue Government funding Industry support Corporate sponsorship Conor agency funding Miscellaneous Total (B) Total generated Revenue (C=A+B) Operating costs Staff Utilities Rent Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials Other operating costs (X) Total operating costs (Y) Year 1 Year 2 Year 3 Total operating and other costs (Z=X+Y) | Incubator generated revenue | Year 1 | Year 2 | Year 3 |
| Share of investment deals Total (A) Third party revenue Government funding Industry support Corporate sponsorship Conor agency funding Miscellaneous Total (B) Total generated Revenue (C=A+B) Operating costs Staff Utilities Rent Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials Other operating costs (X) Other costs (Y) Year 1 Year 2 Year 3 Total operating and other costs (Z=X+Y) | Rent from co-working | | | |
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| Miscellaneous Total (B) Total generated Revenue (C=A+B) Departing costs Year 1 Year 2 Year 3 Staff Utilities Rent Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials Other operating costs Total operating costs (X) Other costs (Y) Year 1 Year 2 Year 3 | Corporate sponsorship | | | |
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| Total generated Revenue (C=A+B) Operating costs Year 1 Year 2 Year 3 Staff Utilities Rent Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials Other operating costs Total operating costs (X) Other costs (Y) Year 1 Year 2 Year 3 | Miscellaneous | | | |
| Operating costs Staff Utilities Rent Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials Other operating costs Total operating costs (X) Other costs (Y) Total operating and other costs (Z=X+Y) | Total (B) | | | |
| Staff Utilities Rent Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials Other operating costs Total operating costs (X) Other costs (Y) Year 1 Year 2 Year 3 | Total generated Revenue (C=A+B) | | | |
| Utilities Rent Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials Other operating costs Total operating costs (X) Other costs (Y) Total operating and other costs (Z=X+Y) | Operating costs | Year 1 | Year 2 | Year 3 |
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| Repairs and maintenance Business materials Other operating costs Fotal operating costs (X) Other costs (Y) Year 1 Year 2 Year 3 | Rent | | | |
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| Total operating costs (X) Other costs (Y) Total operating and other costs (Z=X+Y) | Information and communications technology (ICT) | | | |
| Other costs (Y) Year 1 Year 2 Year 3 Total operating and other costs (Z=X+Y) | Information and communications technology (ICT) Publicity and marketing | | | |
| Total operating and other costs (Z=X+Y) | Information and communications technology (ICT) Publicity and marketing Repairs and maintenance | | | |
| | Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials | | | |
| Net profit (cash flow) = C-Z | Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials Other operating costs | Year 1 | Year 2 | Year 3 |
| | Information and communications technology (ICT) Publicity and marketing Repairs and maintenance Business materials Other operating costs Total operating costs (X) | Year 1 | Year 2 | Year 3 |

Chapter 6 Success factors

Several factors play a role in the success of business incubation centres. As this sector is still emerging, new initiatives are being tried and tested to see how they perform in terms of fostering strong, sustainable start-ups.



Success factors highlighted by the consultations held for this study

- ▶ 1. Tech-oriented start-ups: Technology-focused and technology-oriented start-ups have a relatively shorter route to the market, as they usually do not require a great deal of capital for initial product development and market adaptation. This puts tech start-ups in a strong position. Incubation further facilitates their entry into the market.
- ▶ 2. Market integration in training: When designing training programmes for start-ups, market knowledge and learning are extremely important. Augmenting theoretical content with practical market practices gives aspiring start-ups the first-hand knowledge they require to enter the market successfully.
- ➤ 3. Industry information sessions or visits: Conducting regular industry visits and information sessions on real life market dynamics is essential. These sessions are almost always conducted by experienced market professionals and entrepreneurs.
- ▶ 4. Industrial visits: Organizing regular industrial visit for start-ups exposes them to the reality of doing business. Visiting business places gives start-ups exposure to practical knowledge beyond the environment of an incubation facility.
- ➤ 5. Regular investor road shows or 'demo days': Regular investor road shows or 'demo days' help to link start-ups with the investor community. These networking events enable start-ups to understand the mindset of investors by meeting them in person.
- ▶ 6. Linkages with academia: For start-ups working on complex concepts where academic backing and validation plays a pivotal role, strong linkages with academia help them acquire knowledge of the domain from experts.

Chapter 7 Partnerships and collaboration

Partnerships and collaboration are essential for business incubation centres to successfully support incubated start-ups. These partnerships help incubators to 'match-make' start-ups with the right regulatory institutions and other public and private stakeholders, in order to achieve more of an impact. Table 4 outlines important entities and forms of local collaboration.

▶ Table 4. Local collaboration

| Entity | Description of collaboration |
|--|--|
| Chambers of Commerce and Industry | Local chambers of commerce and industry can help to connect start-ups with like-minded business owners to forge new partnerships and gain knowledge. |
| Intellectual Property Office (IPO) | The office manages intellectual property issues linked to innovative products and research, as well as trademarks and other intellectual property protection services. |
| Securities and Exchange Commission of Pakistan (SECP) | Companies must register with the commission in order to become formally recognized enterprises. This involves meeting all company incorporation guidelines. |
| Department of Labour | This department is responsible for regulating labour-related issues and protecting labour rights. |
| Federal Board of Revenue (FBR) | This federal body governs the implementation of corporate tax, income tax and the filing of annual tax returns. |
| Provincial Revenue Authority | This provincial body governs the implementation of provincial sales, income tax and other taxes. |
| Department of Industry | This department provides No Objection Certificates (NOCs) required to establish certain kinds of industries. |
| Technical and Vocational Training Authority (TEVTA) | The authority's training centres deliver technical and vocational education and training for young people, in line with industry demands. |
| National Vocational and Technical Training Commission (NAVTTC) | This central body governs technical and vocational education and training across Pakistan. |

| Entity | Description of collaboration |
|--|---|
| Small and Medium Enterprise Development Authority (SMEDA) | This body provides SMEs and start-ups with opportunities to grow and connect with other stakeholders. |
| Commercial banks | Links with commercial banks are important for start-ups in order to open corporate bank accounts and access SME financing. |
| Start and Improve Your Business Programme (SIYB), ILO-Higher Education Commission | This holistic entrepreneur development programme, supported by the ILO and the Higher Education Commission, focuses on starting and improving small businesses as a strategy for creating decent work opportunities for all. |
| E-Rozgar Programme/ National Freelance Training Programme, Punjab Information Technology Board | This initiative creates and manages co-working spaces in the province of Punjab. By offering co-working spaces for IT freelancers, it promotes collaboration between them. |
| Prime Minister's <i>Kamyab</i> <i>Jawan</i> Programme | This national programme aims to provide opportunities for youth by developing skills, fostering internships, providing business loans and launching the Start-up Pakistan Programme – one of the six initiatives rolled out under the Prime Minister's <i>Kamyab Jawan</i> Programme. |

For partnerships and collaboration with financial institutions, a number of programmes can be designed in close coordination with these institutions. One example is to create a platform that provides fast, easy access to digital payments, so that entrepreneurs can easily sign up and digitize their payment model.

Linkages with financial institutions are especially beneficial when a start-up's product has been validated and is close to being launched on the market. Incubators and accelerators in Pakistan have collaborated with several financial institutions whose services suit the needs and aid the growth of start-ups. For instance, under the *Kamyab Jawan* Programme, loans are offered on easy terms to emerging start-ups through banks and other financial institutions.

Chapter 8 Conclusion

Pakistan has made considerable progress in supporting the growth of entrepreneurship. As a result of this support, the number of people who engage in entrepreneurial activities has grown, particularly young tech-savvy Pakistanis. There has also been a proliferation of players in the country's funding and support space for entrepreneurship.

To sustain this momentum, **business incubation centres are essential**. These centres are especially necessary in smaller cities to tap into Pakistan's human capital at the grassroots level. Such spaces for innovation can bridge knowledge gaps, provide much-needed support and link more developed centres with less developed areas by expanding access to new markets and products.



The business incubation centre model discussed at length in this study has been carefully constructed based on realities on the ground, especially the many challenges that Pakistan's young entrepreneurs face.

Placing business incubation centres within existing TEVTA centres is a promising way forward. This offers a relatively Business incubation centres can bridge knowledge gaps, provide much-needed support and link more developed centres with less developed areas by expanding access to new markets and products.

easy road to success for business incubation centres, as technical and vocational education and training centres are already well-versed in imparting skills in demand by the labour market. Pairing technical skills development with entrepreneurial skills and knowledge bodes well for the emergence of innovative start-ups.

The growth of Pakistan's start-up ecosystem over the past seven years has been exciting. If the Government of Pakistan and key stakeholders work to address overarching challenges, start-ups will thrive, job creation and economic growth will gain pace, and the country will gain positive visibility on the global stage.

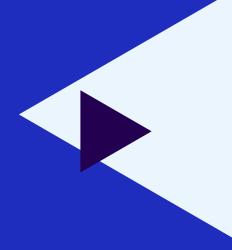




Study on the design of business incubation centres for the Government of Pakistan's Kamyab Jawan Programme

This study provides a composite analysis of the need to establish business incubation centres in Pakistan, in order to support a vibrant entrepreneurial landscape. It undertakes an in-depth analysis of different types of existing incubation programmes in Pakistan to understand potential models, challenges and outcomes for designing a sustainable model of business incubation centres for the Government of Pakistan's Kamyab Jawan Programme and the International Labour Organization (ILO). It suggests locally viable, though non-exhaustive, models for business incubation centres that can be established within educational and training institutions. It also offers evidence-based, actionable recommendations to make these centres effective and sustainable.





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