

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Mikherjee, Arpita; Kapoor, Avantika; Parashar, Angana

# Working Paper High-skilled labour mobility in an era of protectionism: Foreign startups and India

Working Paper, No. 362

**Provided in Cooperation with:** Indian Council for Research on International Economic Relations (ICRIER)

*Suggested Citation:* Mikherjee, Arpita; Kapoor, Avantika; Parashar, Angana (2018) : High-skilled labour mobility in an era of protectionism: Foreign startups and India, Working Paper, No. 362, Indian Council for Research on International Economic Relations (ICRIER), New Delhi

This Version is available at: https://hdl.handle.net/10419/203696

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# WWW.ECONSTOR.EU

# **Working Paper 362**

# High-Skilled Labour Mobility in an Era of Protectionism: Foreign Startups and India

Arpita Mukherjee Avantika Kapoor Angana Parashar Sarma

**July 2018** 



INDIAN COUNCIL FOR RESEARCH ON INTERNATIONAL ECONOMIC RELATIONS

# **Table of Contents**

App	endix A	Α	33
Ref	erences		30
	7.4	~ Strengthen Invest India and Startup India Hub Portal	
	7.3	<i>Reduce Delays in Clearances for Starting a Business and Fast Track the Response to Queries</i>	28
	7.2	Have a Startup Visa and Use it to Push High-Skilled Labour Mobility	27
	7.1	Design Policies to Attract and Support Startups	26
7.	The W	Vay Forward	25
	6.11	Low Budget for R&D, Innovation and Marketing	25
	6.10	Protection of Innovation	24
	6.9	Difficulties in Establishing Global Value Chains	24
	6.8	Quality Standard	24
	6.7	Infrastructure Bottlenecks	24
	6.6	Issues Related to Company Incorporation and Transferring Working Capital	23
	6.5	Lack of Availability of Right Skills	23
	6.4	High-skilled Labour Mobility Related Issues	22
	6.3	Multiple Regulatory Bodies, Multiple Clearances and Difficulties in Interacting with the Government	21
	6.2	Lack of Clarity in Government Policies	21
	6.1	Lack of Market Entry Related Information	
6.	Issues	Faced by Foreign Startups in India	
	5.2	Socio-Economic Impact of Foreign Startups	
	5.1	Reasons for Entering and the Entry Process	
5.		nce of Foreign Startups in India	
	4.2	India vis-à-vis Select Countries in Different Indicators	
	4.1	Advantage India	
4.		as a Destination for the Foreign Startups	
	3.1	Visas for Foreign Startups and/or Entrepreneurs	
2. 3.		tives given to Startups	
1. 2.		ition of Startups and Foreign Startups	
A08		uction	
		lgement	
	Ũ	ires	
		les ıres	
		previations	
I int	of ALL	raviations	:

# List of Abbreviations

CEO	Chief Executive Officer		
DIPP	Department of Industrial Policy and Promotion		
EC	European Commission		
EU	European Union		
FDI	Foreign Direct Investment		
FRRO	Foreigner Regional Registration Office		
FTA	Free Trade Agreement		
GII	Global Innovation Index		
ICT	Information and Communications Technology		
IP	Intellectual Property		
KSI Keyless Signature Infrastructure			
MoU Memorandum of Understanding			
NRI Non-Resident Indian			
OPC One Person Company			
R&D	Research and Development		
SME	Small and Medium Enterprise		
UNCTAD	United Nations Conference on Trade and Development		
US	United States		
USISTEF	US India Science and Technology Endowment Fund		
WIPO	World Intellectual Property Organization		
WTO	World Trade Organization		
YEA Young Entrepreneur's Alliance			
KSIKeyless Signature InfrastructureMoUMemorandum of UnderstandingNRINon-Resident IndianOPCOne Person CompanyR&DResearch and DevelopmentSMESmall and Medium EnterpriseUNCTADUnited Nations Conference on Trade and DevelopmentUSUnited StatesUSISTEFUS India Science and Technology Endowment FundWIPOWorld Intellectual Property OrganizationWTOWorld Trade Organization			

# List of Tables

Table 1: Startup Specific Polices and Visas in Select Countries	5
Table 2: India's Overall Global Innovation Index Rankings (2013-2017)	11
Table 3: Ranking of Select Countries in the Global Entrepreneurship Index 2018	13
Table 4: Presence of Foreign Startups in Different Sectors in India	15
Table A1: Startup Visa Features and Policies of Select Countries	

# List of Figures

Figure 1: India's Global Innovation Index Ranking vis-à-vis Select Countries Across Sub-indicators	3
(2017)	. 12
Figure 2: Patent Applications Filed at the Top 10 Offices in 2016	
Figure 3: Reasons for Entering the Indian Market	.17

# List of Boxes

Box 1: DIPP's Definition of Startups	4
Box 2: Philippines Innovative Startup Act	5
Box 3: How PlenOptika Came to India	
Box 4: The Case of Harvesting - A California-based Startup	

#### Acknowledgement

This paper is part of our study on high-skilled labour mobility in the context of the discussions in the G20 and India's other international engagements including the World Trade Organization. We express our gratitude to Rajat Kathuria, Director and Chief Executive, ICRIER, for giving us the opportunity to work in this area and for his constant support. We would like to thank the survey participants including the foreign startups, embassies, business councils, trade bodies, industry associations, angel investors, incubators, accelerators, and Indian and foreign policymakers, who participated in the survey and shared their valuable inputs. We would especially like to thank, Ravi Srivastava, First Secretary for Environment, Science and Technology Affairs and D Jagannath Rao, Senior Macro Economist, Embassy of the United States of America; Louis Nouaille-Degorce, Deputy Regional Economic Counsellor, Regional Economic Department for India and South Asia and Patrick Pillon, Regional Financial Counsellor, Deputy Head of the Regional Economic Department for India and South Asia, Embassy of France; Tania Friederichs, Counsellor-Head of Research and Innovation, and Wojciech Dziworski, Counsellor for Health and Food Safety, Delegation of the European Union to India and Bhutan; Seeta Sharma, Technical Officer and Harpreet Bhullar, National Project Coordinator, EU-India Cooperation and Dialogue on Migration and Mobility, International Labour Organization; Ankit Bahl, Advisor-Trade and Investments, Embassy of Estonia in India; Poul V. Jensen, Director, European Business & Technology Centre and Sachin Gaur, Local Coordinator for EU-India Co-operation on ICT-related Standardization for their support and valuable inputs.

We are indebted to our reviewers Professor Anwarul Hoda, Chair of Trade Policies and WTO Research Programme, ICRIER, and Former Deputy Director General, World Trade Organization; Professor Rupa Chanda, Indian Institute of Management, Bangalore; Professor Parthapratim Pal, Indian Institute of Management, Calcutta; and Dr A. Didar Singh, Senior Fellow, Delhi Policy Group for their valuable comments, which enhanced the quality of the paper.

We are grateful to the ICRIER administrative team for formatting the paper.

#### Abstract

Realisation that foreign startups have the potential to add new and innovative products and services to the market, bring in investment and create more jobs compared to traditional firms, a number of countries are providing fiscal and non-fiscal incentives, including startup visas, to attract them. In spite of being a proponent of liberalisation of high-skilled labour mobility in its international engagements, India is yet to take a position on incentives to foreign startups and/or entrepreneurs and startups visas.

Given this background, this paper examines the policies of other countries with respect to incentives given to the foreign startups, including startups visas, and how India can learn from global best practices. It analyses India's advantages and comparative position vis- $\dot{a}$ -vis select developed and developing countries as a startup hub. It examines the contribution of foreign startups in India and the barriers that they face. It then makes policy recommendations on how to attract foreign startups to bring in investment, technology, create high quality jobs, mitigate and enhance their participation in India's growth and development towards an innovation economy. It also makes policy recommendations on how India can synergise its domestic policies with international negotiations to leverage its position in global platforms such as the G20 and the WTO.

Keywords: High-skilled Mobility, Protectionism, Startups, India, Survey, Policy

**JEL Classification**: C83, F20, F13, F66, L26

**Disclaimer**: Opinions and recommendations in the report are exclusively of the author(s) and not of any other individual or institution including ICRIER. This report has been prepared in good faith on the basis of information available at the date of publication. All interactions and transactions with industry sponsors and their representatives have been transparent and conducted in an open, honest and independent manner as enshrined in ICRIER Memorandum of Association. ICRIER does not accept any corporate funding that comes with a mandated research area which is not in line with ICRIER's research agenda. The corporate funding of an ICRIER activity does not, in any way, imply ICRIER's endorsement of the views of the sponsoring organization or its products or policies. ICRIER does not conduct research that is focused on any specific product or service provided by the corporate sponsor.

# High-Skilled Labour Mobility in an Era of Protectionism: Foreign Startups and India

Arpita Mukherjee, Avantika Kapoor and Angana Parashar Sarma

#### 1. Introduction

Immigration is a sensitive issue and labour mobility is at the centre of both international and domestic debate. With increase in technology adaptation and realisation that human intellectual capital is of fundamental importance for knowledge-based economies, there has been an increase in the cross-country mobility of high-skilled professionals and specialised workforce (Petersen and Puliga, 2017). With growth in innovation-driven industries and high-technology services sectors, countries and regional groups want to be globally competitive by attracting the best talent. This has led to regions such as the European Union (EU) adopting policies such as the Blue Card Directive (Council Directive 2009/50/EC)<sup>1</sup>, which aims to attract non-EU high-skilled workers into EU in line with the EU's Entrepreneurship 2020 Action Plan<sup>2</sup> (Cerna, 2010). Countries such as Canada, Australia and New Zealand have, in the past, come up with fairly liberal policies to grant permanent residence to foreign nationals (Facchini et al., 2014). In the United States (US), an H1 visa (which allows the US employers to employ foreign nationals in specialty occupations) can be converted into a Green Card (permanent resident card).

A number of studies have shown that the inflow of high-skilled labour has benefitted the host country in terms of driving innovation, technology development and job creation (Hunt, 2010; Bosetti et al., 2015 and Kerr et al., 2016). Studies also show that the migrant workforce is two times more entrepreneurial than the native workforce in every country that they enter (Salter, 2015). Specifically, in the US, high-skilled immigrants account for roughly a quarter of the US high-skilled workforce and constitute an important part of innovation and entrepreneurship in the country. High-skilled immigrants lead to productivity growth and studies show direct positive linkages between H1B visas and patent applications filed (Kerr, 2013). Other studies, covering a number of countries such as China (for example, see Aghion et al., 2012), have also shown that migrant entrepreneurs create a competitive situation forcing the domestic companies to innovate and raise productivity. They can help to ease the capital constraints for domestic firms and contribute to international trade by bringing in improved international knowledge and supply chains through their networks.<sup>3</sup>

In spite of these benefits, the global financial crisis and economic downturn since the year 2009 have led to concerns about the liberal immigration policies of countries such as the US. The crisis led to job losses, which were perceived to be a result of off-shoring and employment of foreign skilled workers. There were other issues such as lower wages due to competition from immigrant workers, abuse of immigration regulations by foreign and domestic firms and increased social costs resulting from immigrants (Davis and Hart, 2010 and Duncan and Waldorf, 2010). This led to a political debate on increased need for

<sup>&</sup>lt;sup>1</sup> Source: <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Al14573</u> (accessed on 2 July 2018)

<sup>&</sup>lt;sup>2</sup> It's an action plan designed to unleash the entrepreneurial potential of EU and aims to ease the creation of businesses and growth of an entrepreneurial culture.

<sup>&</sup>lt;sup>3</sup> For a review of literature, see Nathan et al., 2013

protection of domestic employment and wages, limits on immigration, and greater emphasis on immigration enforcement policies. Thus, the liberalised global order shifted its focus towards protectionism (Boeri et al., 2012). The debate regarding protectionism intensified with a number of countries taking strong positions on the issue. For instance, in the US, President Trump won the election by supporting the creation of local employment,<sup>4</sup> Britain passed a referendum initiating its exit from the EU,<sup>5</sup> and the Swiss Referendum limited the freedom of movement across its borders by imposing quotas on imported labour.<sup>6</sup> These developments are of concern since they do reflect national policy shifts in imposing barriers on the mobility of high-skilled workforce.

During this time, developing countries led by India, which is a key supplier of high-skilled workforce to the world, were pushing for liberalisation of temporary movement of high-skilled workforce in the World Trade Organization (WTO) and through bilateral and regional trade agreements (Mukherjee and Goyal, 2013). India, however, has been different from other developing countries such as China as it is defensive in trade negotiations with respect to giving market access into India in sectors of interest to its trading partners [such as allowing foreign direct investment (FDI) in retail, accountancy and legal services or reducing tariffs in automobile and dairy products], and at the same time is highly offensive in asking for easier mobility for its high-skilled workforce. A number of studies have argued in favour of India being a proponent of liberalisation of high-skilled labour mobility, given its competitive advantage of having a large educated workforce which can potentially establish and exploit relationships with their expatriates (Davis and Hart, 2010). However, hardly any of them have looked at India's own labour mobility regime and how India compares *vis-à-vis* other countries in terms of its policies on the entry of high-skilled professionals and specialised workforce.

As governments, academicians, interest groups and other stakeholders continue to debate on whether a country should open or restrict mobility of high and specialised skills, a number of countries came up with visas for entrepreneurs and/or startups. This is because countries realised that entrepreneurs are drivers of innovation; they create wealth by adding new products or services to the market and contribute to employment generation. Startups are technology-driven businesses, with targets of fast growth; high reliance on innovation of product, processes and financing; and extensive use of innovative business models. Developed countries were also quick to recognise that entrepreneurs, especially startups can help to create jobs [European Commission (EC), 2013] and foreign startups can bring in technology and investment and as they scale up, create employment (Watson, 2015).

Among the developed economies, the EU has looked towards entrepreneurship as a way to let Europe's young people create and take up the jobs of tomorrow (Novick, 2016). The European Agenda for the Integration of Third-Country Nationals stresses the important role of migrants as entrepreneurs and states that "*their creativity and innovation capacity should also be reinforced*" (EC, 2011). Many EU Member States such as Italy, Germany, and France are looking beyond their borders to increase the level of entrepreneurship at home through the introduction of startup visas. Several other non-EU countries including Australia, Singapore and Canada have also come up with startup visas. In the US, the startup visa was proposed as an amendment to the US immigration law to create a visa category for foreign entrepreneurs (Krueger and Kumar, 2012). The Startup Visa Act went through several changes and is still

<sup>&</sup>lt;sup>4</sup>Source: <u>http://time.com/4495507/donald-trump-economy-speech-transcript/</u> (accessed on 2 July 2018)

<sup>&</sup>lt;sup>5</sup> Source: https://www.gov.uk/government/topical-events/eu-referendum (accessed on 10 July 2018)

<sup>&</sup>lt;sup>6</sup> Source: <u>https://espresso.economist.com/1f50d0737a738a9ba3206543d1102cbc (accessed on 2 July 2018)</u>

being debated. India is yet to take a position on incentives to foreign startups and/or entrepreneurs, and startups or entrepreneurship visas.

In the above context, this paper examines the policies of other countries with respect to incentives given to the foreign startups, including startups visas, and how India can learn from the global best practices. It then analyses India's advantages and comparative position vis- $\dot{a}$ -vis select developed and developing countries as a startup hub. Based on a primary survey, it identifies the contribution of foreign startups in India and the barriers that they face. It then makes policy recommendations on how to attract foreign startups to bring in investment, technology, create high quality jobs and enhance their participation in India's growth and development towards an innovation economy. It also makes policy recommendations to leverage its position in global platforms such as the G20 and the WTO.

This paper is based on secondary information analysis and a primary survey. The primary survey covered 50 in-depth interviews with foreign startups, embassies, business councils, trade bodies, industry associations, angel investors, incubators, accelerators, and Indian and foreign policymakers and academicians. Both face-to-face and telephonic interviews were conducted.

The layout of the paper is as follows. Section 2 provides definition of startups and Section 3 discusses the incentives given to foreign startups by select developed and developing countries, including startup visas. Section 4 lists the advantages that India has in terms of developing as a startup hub and compares India *vis-a-vis* other startup destinations across some key indicators. Section 5 analyses the experiences of foreign startups in India, focusing on their areas of operation, reasons for selecting India and their contribution to the economy. Section 6 examines the barriers faced by foreign startups in India and Section 7 suggests the way forward.

### 2. Definition of Startups and Foreign Startups

There is no globally approved definition of startups. According to the EC,

Startups, often tech-enabled, in general combine fast growth, high reliance on innovation of product, processes and financing, utmost attention to new technological developments and extensive use of innovative business models, and, often, collaborative platforms. (EC, 2016; pp. 2)

Italy, which has a Startup Act (The Decree-Law 179/2012)<sup>7</sup>, has tried to provide a comprehensive definition of a startup under the Act. The immigration regulation of the Government of Canada defines startups as "...*innovative entrepreneurs who have the potential to build dynamic companies that can compete on a global scale.*"<sup>8</sup> The Government of Netherlands, through the Entrepreneurship Action Plan defines startups as new businesses that have only recently been launched and for whom fast access to networks and finance are quite vital.<sup>9</sup> Other countries, such as India, which give tax concessions/exemptions or other

<sup>&</sup>lt;sup>7</sup> Source: <u>http://www.mise.gov.it/images/stories/documenti/Exective\_summary\_ENG\_FINAL.pdf</u> (accessed on 4 July 2018)

<sup>&</sup>lt;sup>8</sup> Source: <u>https://www.canada.ca/en/immigration-refugees-citizenship/news/archives/backgrounders-2013/new-start-visa-program-innovative-approach-economic-immigration.html</u> (accessed on 21 June 2018)

<sup>&</sup>lt;sup>9</sup> Source: <u>https://www.government.nl/topics/enterprise-and-innovation/supporting-ambitious-entrepreneurs-and-startups</u> (accessed on 21 June 2018)

incentives to startups have come up with a definition for the purpose of granting those incentives. For example, in India the Department of Industrial Policy and Promotion (DIPP) under the Ministry of Commerce and Industry under its notification dated 11 April 2018, has provided a definition of startups, which is given in Box 1.

### **Box 1: DIPP's Definition of Startups**

An entity shall be considered as a Startup:

- i. Upto a period of seven years from the date of incorporation/registration, if it is incorporated as a private limited company (as defined in the Companies Act, 2013) or registered as a partnership firm (registered under section 59 of the Partnership Act, 1932) or a limited liability partnership (under the Limited Liability Partnership Act, 2008) in India. In the case of Startups in the biotechnology sector, the period shall be upto ten years from the date of its incorporation/registration.
- *ii.* Turnover of the entity for any of the financial years since incorporation/ registration has not exceeded Rs. 25 crore (EUR 3.1 million)
- *iii.* Entity is working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation.

Provided that an entity formed by splitting up or reconstruction of an existing business shall not be considered a 'Startup'.

Further the notification states that - An entity shall cease to be a Startup on completion of seven years from the date of its incorporation/registration or if its turnover for any previous year exceeds Rupees 25 crore (EUR 3.1 million). In respect of Startups in the biotechnology sector, an entity shall cease to be a Startup on completion of ten years from the date of its incorporation/registration or if its turnover for any previous year exceeds Rs. 25 crore (EUR 3.1 million).

Source: <u>https://www.startupindia.gov.in/</u> (accessed on 27 April 2018)

In case of Australia, the government, through different support programmes and schemes (for example, the Global Talent Scheme and the Early Stage Venture Capital Limited Partnerships (ESVCLP) programme) provides different definitions of a startup.

Overall, there is no uniformity among countries as to the definition of startups and there are hardly any definitions of foreign startups. Broadly, a startup is a young company that has just began to develop. Such companies are usually small and initially financed and operated by a handful of founders or one individual. These companies offer products or services that are innovative and may not currently be available in the market in the format offered by the startup. While startups are companies that tend to scale up at a fast pace, unless they gain certain scale, they cannot expand globally. Given this in the Indian context, a foreign startup is defined as a *startup that is headquartered or registered outside India, owned by a foreign national or an Indian national residing abroad.* The definition of foreign startups in India would not include foreign funding for an Indian startup, which is based out of India.

### 3. Incentives given to Startups

Only a few countries such as Italy, Philippines and Tunisia have specific Acts for startups. Others have guidelines or policies as is given in Table 1. These are mostly designed to give incentives to startups. The incentives given to startups can be both fiscal and non-fiscal. In May 2018, Philippines passed the Innovative Startup  $Act^{10}$  (Senate Bill 1532), the details of which are given in Box 2.

# **Box 2: Philippines Innovative Startup Act**

This Act aims to give entrepreneurs a better chance of succeeding by providing them with subsidies and assistance. The benefits include waived application fees, refund of fees for the permits and certificates, expedited processing of permits and certificates, research and development grants, exemption from fees and charges levied by national government agencies for the use of equipment, facilities, or services availed by the innovative startup, access to applicable benefits and incentives provided by the Intellectual Property Office of the Philippines, subsidy for visa application, renewal, or extension of foreign owners, employees, and/or investors of an innovative startup and support service providers and exemption from the alien employment permit.

Source: <u>http://www.senate.gov.ph/press\_release/2018/0516\_prib3.asp</u> (accessed on 4 July 2018)

The incentives can be given to startups through a single policy or guideline or through multiple policy initiatives. For example, in South Korea, the government assists the startup ecosystem through a number of programmes such as TIPS (Accelerator Investment-Driven Tech Incubator Program for Startups), K-Startup Challenge which promotes collaboration between domestic and foreign startups and Living Innovation Startup Acceleration Program which supports startup businesses that combine unique ideas with business items that draw from everyday experience.

Countries	Startup Specific Acts or Policies/Programmes/G uidelines/Initiatives for incentives to Startups	Startup Visa	Entrepreneur Visa
Australia	National Innovation and Science Agenda, Entrepreneur's Program	A new visa scheme to attract high-skilled global talent is proposed to be piloted from July 2018	Business Innovation and Investment Visa (Provisional), Business Innovation and Investment Visa (Residence), Business Talent (Migrant) Visa
Austria	Startup Package	Yes	No
Canada	Startup Canada	Yes	No
Chile	Startup Chile Program	Chilean Tech Visa	No
China	The Torch Program	No (It has a Visa Program for foreign graduates of Chinese Universities)	No
Denmark	Innovation Strategy, Startup Denmark Program	Yes	No

### Table 1: Startup Specific Polices and Visas in Select Countries

<sup>&</sup>lt;sup>10</sup> Source: <u>http://www.senate.gov.ph/press\_release/2018/0516\_prib3.asp</u> (accessed on 4 July 2018)

Countries	Startup Specific Acts or Policies/Programmes/G uidelines/Initiatives for incentives to Startups	Startup Visa	Entrepreneur Visa
Estonia	Startup Estonia	Yes	No
Finland	Startup Grant	Finnish Startup Permit	No
France	French Tech Ticket	French Tech Visa	No
Germany	New Age for Entrepreneurship Initiative	No	Self-Employed Visa
India	Startup India Initiative	No	No
Ireland	Startup Ireland, Startup Entrepreneur Program	Yes	No
Israel	Israel Innovation Authority	Proposed and is in process of implementation in July 2019 (Innovation Visa)	No
Italy	Italy's Startup Act	Yes	No
Japan	J-Startup Program, Shido Next Innovator Program and others	Currently available in Tokyo and Fukuoka City and is proposed to be extended to central level in 2018	No
New Zealand	Callaghan Innovation	No	Entrepreneur Work Visa
Singapore	Startup SG & other schemes	Singapore EntrePass	Singapore EntrePass
Republic of Korea	Living Innovation Startup Acceleration Program, Overall Assistance for Start-up Immigration System (OASIS) and other schemes	Technology-Based Startup Visa (D-8-4)	No
Spain	Rising Startup Spain Program	No	Through Entrepreneur's Law
Netherlands	Ambitious Entrepreneurship Action Plan	Start-up Residence Permit	No
Philippines	The Innovative Startup Act	Special Visa with five year validity under startup act	No
Tunisia	Tunisia Startup Act	No	No
UK	Global Entrepreneur Program	To be implemented from 2019	Tier 1 Visa
US	Proposed but yet to be implemented	No	O1 Visa

Source: Compiled from multiple government websites

Incentives to startups can be specifically for domestic startups or to attract foreign startups or both. For example, in India, incentives and tax exemptions under the Startup India Initiative are only for the domestic startups. In Austria, a Startup Package of EUR 185 million was introduced in April 2017 for both Austrian as well as foreign entrepreneurs. Under this package, startups can get a partial refund on wage costs for the first three years after the company is formed - wage costs are fully reimbursed in the first year, two-thirds are refunded in the second year and one-third in the third year. In order to promote equity stakes in innovative startups, a maximum of 20 per cent of the accumulated investments of up to EUR 250,000 per year is reimbursed by means of risk capital premium. France, in 2017, launched a startup campus, Station, F, in Paris. This is part of a larger push from France to foster entrepreneurship and build a technology culture like that of California's Silicon Valley. Station F is open to both domestic and foreign startups.<sup>11</sup> To attract foreign startups, China is offering foreign companies a break on provisional income tax on profits.<sup>12</sup> The Singapore government's Startup SG hub provides entrepreneurs (foreign and domestic) with a launch pad and a platform to connect them to the global stage and access to local support initiatives.

The incentives to the startups can be given by the country or by specific provinces. They can be at the national level, at local levels or even at city levels. For example, in the Quebec province of Canada, the Quebec Entrepreneur Program allows qualified business owners and managers to obtain permanent residency in Canada, provided they have net assets of at least Canadian Dollar (C\$) 300,000 and at least two years' experience in running a business. As per the requirement, the entrepreneurs should effectively create or acquire an agricultural, commercial or industrial business in the Province of Quebec, with capital equity control of 25 per cent.<sup>13</sup> In China, under the Shenzhen Municipal government's Peacock Initiative, a program started in 2011 for attracting high-level foreign talent in the field of entrepreneurship and innovation in Shenzhen, subsidies are made available for foreign startups in areas such as information technology (IT), robotics, and aerospace engineering. Under this initiative, a maximum of US\$15 million per award is available for startups, with an average award of US\$3 million.<sup>14</sup> In 2017, Japan's Fukuoka City was approved to implement the Startup Visa (Entrepreneurial Incentives for Foreigners) Initiative to incentivise foreigners to be business entrepreneurs in Fukuoka.<sup>15</sup> Japan is now planning to extend this to other cities and then across the country.

### 3.1 Visas for Foreign Startups and/or Entrepreneurs

As shown in Table 1, a number of countries have come up with visas specifically for foreign startups or for business innovators and entrepreneurs. Table 1 also shows that startup visas are due for implementation in 2018 in countries such as the UK and Australia. The concept of a startup visa is fairly new and was brought forward during the recent financial crisis. Since 2009, countries have created a number of barriers to high-skilled labour mobility in order to protect domestic employment. In the process, it became increasingly difficult to get a visa and grow new businesses in markets such as Europe. The restrictive visa regime indirectly dampened innovation. Realising that innovation is needed for growth and job creation, a number of countries came up with entrepreneur-focused visa polices, including "startup visas". Table A1 in Appendix A provides examples of select countries and their startup visa policies. Countries such as Canada amended their Immigration and Refugee Protection Regulations to have a new visa category specifically for startups.

<sup>&</sup>lt;sup>11</sup> Source: <u>https://www.theverge.com/2017/6/29/15896606/france-station-f-startup-campus-diversity-xavier-niel</u> (accessed on 26 March 2018)

<sup>&</sup>lt;sup>12</sup> Source: <u>https://www.reuters.com/article/us-china-economy-investment-tax/china-temporarily-exempts-foreign-firms-from-taxes-for-reinvested-profits-idUSKBN1EM0GI</u> (accessed on 23 May 2018)

<sup>&</sup>lt;sup>13</sup> Source: <u>https://www.immigration-quebec.gouv.qc.ca/</u> (accessed on 23 May 2018)

<sup>&</sup>lt;sup>14</sup> Source: <u>http://www.china-briefing.com/news/2017/08/01/incentives-shenzhen-attracting-foreign-talent.html</u> (accessed on 27 March 2018)

<sup>&</sup>lt;sup>15</sup> Source: <u>http://www.city.fukuoka.lg.jp/</u> (accessed on 27 Mar 2018)

Although the nature of such visas and specific conditions attached to them vary across countries, they have certain commonalities (See Table A1 in Appendix A). These include fast-track visa procedures, validity of one year or more with residency clause attached or option to convert to residency, option for dependents (such as spouses, common-law-partners or children) to live in the country too, on the same or a similar visa, the need to show a business plan that is in line with the country's idea of an innovative startup, and in some cases, the necessity to show sufficient funds, proof that the venture will create employment opportunities for the local population, etc. Visa benefits include longer duration of stay (France and Estonia), assistance in settling in for professionals that acquire the visa (Chile), etc. The US, which is one of the largest recipients and beneficiaries of high-skilled labour mobility, has been debating the issue of promoting and supporting startups, including foreign startups, for a long time. The Startup Act proposed to make changes in the American tax, immigration, and regulatory policies to encourage the growth and viability of startup companies in the US. However, this Bill is still under discussion. A number of other regulations both at the Federal and state level such as Jumpstart Our Business Startups Act, or JOBS Act, and the Small Business Technical Assistance and Expansion Act (2018) of California are also under discussion.

At the international level, the G20 Young Entrepreneurs Alliance (YEA)<sup>16</sup> has been arguing that if young entrepreneurs are allowed easier access to international markets, they can create significantly more jobs. Therefore, they mooted the idea of Entrepreneur Visa Program and recommended implementation of an up to two year visa during which young entrepreneurs and/or their key managers and their families can conduct their business in foreign countries. They also pointed out that the process of getting such a visa should be as simple as a Working Holiday Visa. To avoid abuses of such visas, the G20 YEA also suggested that some criteria could be put in place to select the relevant candidates.

Getting visas does not mean that entrepreneurs will succeed in a foreign country. They may need easier administrative clearances, mentorship programmes with support from the local government, access to incubators, accelerators, educational institutes, and private organisations to build their networks. This may require integrating the startup/entrepreneur visa policies with the governments' own startup/entrepreneurship/foreign investment promotion programmes. When the government takes a holistic approach, the country can benefit. For example, in Chile, the government launched the Start-up Chile programme in 2010 as a public accelerator to attract high-potential entrepreneurs (both Chilean and foreign) into Chile. According to a study in 2015, more than 1,200 startups from 72 countries have graduated from Start-up Chile's accelerator programme. The participants of the programme have raised funds of over US\$100 million and created more than 1,500 jobs (West and Karsten, 2015). Chile provides a one-year working visa for professionals, which can be obtained in 15 working days. Once a foreign professional comes to Chile, he/she is provided with support, including networking and community engagements and assistance in moving into a house.<sup>17</sup>

While visas for startups have overall been a good initiative to facilitate high-skilled labour mobility, studies have shown that foreign entrepreneurs may find it difficult to meet certain conditions imposed as part of the visa requirements, which includes minimum investment and residency requirements (Nathan et al., 2013). Since startup/entrepreneur visas are recent

<sup>&</sup>lt;sup>16</sup> Source: <u>https://www.g20yea.com/images/reports/G20-YEA-Entrepreneur-Visa-Program-discussion-paper.pdf</u> (accessed on 28 June 2018)

<sup>&</sup>lt;sup>17</sup> Source: <u>http://www.startupchile.org/programs/</u> (accessed on 27 June 2018)

initiatives, it is too early to draw conclusions on their impact on the host economy. However, studies have shown that the impact of a liberal visa regime and policies to attract foreign startups have largely been positive. For example, between April 2012 and March 2014, 20 foreign entrepreneurs were approved visas in Ireland which generated investments of over EUR 6 million and created 220 jobs (Salter, 2015).

Discussions with foreign embassies in India and Indian startups highlighted that Indian entrepreneurs have been one of the largest number of applicants of the startup benefits and visa facilities. For example, in Estonia, the Startup Visa programme has attracted over 1,000 applications from India, which is one of the top ten applicant countries for this programme. In 2017, 82 of the 782 applicants for the French Tech Ticket were from India, and out of these 82 companies, 11 Indian companies won the French Tech Ticket. Since Indians are trying to access the global markets through startups visas and the Indian government has an aggressive interest in negotiating for greater market access for its high-skilled workforce in its international trade negotiations, it is important to understand the country's strengths and how it can gain from a policy related to foreign startups and their mobility.

# 4. India as a Destination for the Foreign Startups

This section presents India's advantage as a startup hub based on secondary data and information. It also discusses the comparative position of India *vis-a-vis* select developed and developing countries in key innovation indicators.

# 4.1 Advantage India

India is one of the fastest growing economies in the world. According to the International Monetary Fund (IMF), India's growth rate in 2018 is estimated to be 7.4 per cent, and is expected to increase to 7.8 per cent in 2019, surpassing the growth rate of China (6 per cent in 2018 and 6.4 per cent in 2019).<sup>18</sup> The startup ecosystem in India has been evolving rapidly in the past decade. In 2015, India was ranked as the second best funded startup hub in the world, and witnessed a compound annual growth rate (CAGR) of 46.5 per cent in the number of startups, which is expected to cross the 10,000 mark by 2020 (Startup Genome, 2015). India has the third largest group of scientists and technicians in the world and is predicted to be the world's largest supplier of university graduates by 2020.<sup>19</sup> India's ranking in the Global Innovation Index (GII) of the World Intellectual Property Organization (WIPO) improved from 81 in 2015 to 60 in 2017 among 130 countries.<sup>20</sup> The country's rank in the World Bank's 'Ease of Doing Business Index' also improved from 130 in 2016 to 100 in the year 2017.<sup>21</sup> India is the third most favourable investment destination for foreign investment, after US and China [United Nations Conference on Trade and Development (UNCTAD), 2017]. The country has one of the largest pool of educated diaspora, many of them have established startups which have scaled up and globalised. As on December 2017, there were an estimated 31.2 million persons of Indian origin living overseas. Data has shown that 33% of all immigrant-founded companies in the US have Indian founders (Kauffman Foundation, 2017).

In the year 2016, the Government of India came up with the flagship initiative called Startup India, with the specific purpose to build a strong ecosystem for nurturing domestic startups

<sup>&</sup>lt;sup>18</sup> Source: <u>http://www.imf.org/external/pubs/ft/weo/2017/update/01/</u> (accessed on 16 May 2018)

<sup>&</sup>lt;sup>19</sup> Source: <u>https://www.investindia.gov.in/why-india</u> (accessed on 16 May 2018)

<sup>&</sup>lt;sup>20</sup> Source: <u>https://www.globalinnovationindex.org/analysis-indicator</u> (accessed on 16 May 2018)

<sup>&</sup>lt;sup>21</sup> Source: <u>http://www.doingbusiness.org/rankings</u> (accessed on 16 May 2018)

that will drive sustainable economic growth and generate employment opportunities. The government also came up with other initiatives such as the Make in India, Atal Innovation Mission, Skill India and Digital India, which have attracted foreign startups to invest in India. The government has entered into over 100 collaborations and Memoranda of Understanding (MoUs) with a number of countries to strengthen research and development (R&D), innovation and startup ecosystem and joint startup hubs have been set up. For example, in October 2017, Invest India signed a MoU with Founders Alliance, a network for Sweden's leading entrepreneurs, which led to the formation of the Sweden India Startup Sambandh, which provides information on the Indian market to the Swedish entrepreneurs.<sup>22</sup> Similarly, in June 2017, the India-Portugal International Startup Hub was launched which is expected to strengthen the startup ecosystems of the two countries.<sup>23</sup> Some of these MoUs have helped innovators from the two countries to commercialise their innovation through startups. For example, portable eye testing device has been developed by the US-based startup PlenOptika, in partnership with Aurolab (based in Tamil Nadu), under the India-US joint Government funded programme, United States India Science and Technology Endowment Fund (USISTEF), which is now being sold in India.

In recent years, a number of events and conclaves have been organised in India either jointly or funded by other countries/regions to showcase the country to foreign startups. These include the Startup EU India Summit (SEIS)<sup>24</sup> organised by Startup Europe India Network (SEU-IN) in Bengaluru in October 2016, the India Singapore/ASEAN Entrepreneurship Bridge 2018<sup>25</sup> conclave organised by the High Commission of India in Singapore in January 2018, India–Israel Innovation Bridge launched in July 2017<sup>26</sup> and the Global Entrepreneurship Summit (GES)<sup>27</sup> organised jointly by the US and India in Hyderabad in November 2017. All these initiatives have helped to promote the startup ecosystem in India and attracted foreign startups to this growing market.

In spite of the above mentioned advantages, it is surprising that India does not have any specific policies to attract foreign startups, especially when it wants to promote and attract foreign investment to the country. The focus of the Startup India initiative is only on promoting domestic startups and developing a robust startup ecosystem. In order to meet the objectives of the Startup India Initiative, the Government of India announced an Action Plan on 16 January 2016, which laid down certain fiscal and non-fiscal incentives for domestic startups. While this is a step in the right direction, India lags behind a number of countries in terms of global ranking as an innovation hub, entrepreneurial economy and startup hub. These are discussed in Section 4.2 below.

### 4.2 India *vis-à-vis* Select Countries in Different Indicators

In a globalised world, startups tend to invest in countries with good a startup ecosystem, which includes ability to secure innovation, incubators and accelerators, access to funds, access to the market, ICT readiness, infrastructure, institutions, etc. This section looks at India's position *vis-a-vis* select developed and developing countries in various indicators for innovation, ICT and entrepreneurship. While foreign startups will look at these indicators along with the advantages (for example, a large market) that India offers, Indian startups may

<sup>&</sup>lt;sup>22</sup> Source: <u>https://www.startupindiahub.org.in/content/sih/en/home-page.html</u> (accessed on 10 April 2018)

<sup>&</sup>lt;sup>23</sup> Source: <u>http://pib.nic.in/</u> (accessed on 10 April 2018)

<sup>&</sup>lt;sup>24</sup> Source: <u>https://startupeuindiasummit.com/</u> (accessed on 26 March 2018)

<sup>&</sup>lt;sup>25</sup> Source: <u>http://inspreneur.org/</u> (accessed 29 March 2018)

<sup>&</sup>lt;sup>26</sup> Source: <u>https://www.startupindiahub.org.in/</u> (accessed on 29 March 2018)

<sup>&</sup>lt;sup>27</sup> Source: <u>https://www.ges2017.org/</u> (accessed on 10 April 2018)

invest abroad and create employment in their host country rather than in India, if those countries have comparative advantages and also offer benefits to foreign startups.

# 4.2.1 The Ease of Doing Business Index

The World Bank's 'Ease of Doing Business' index measures 190 economies on how easy it is to conduct business.<sup>28</sup> In 2017, New Zealand, Singapore, and Denmark were ranked 1st, 2nd and 3rd respectively, while China was ranked 5th and the US was ranked 6th. While India's rank in the index improved from 130 in 2016 to 100 in 2017, it fell in sub-indicators such as 'Starting a Business' (from 155 in 2016 to 156 in 2017), 'Registering Property' (from 138 in 2016 to 154 in 2017) and 'Getting Electricity' (from 26 in 2016 to 29 in 2017),<sup>29</sup> indicating that businesses (including foreign firms) may face issues at the inception stage. However, it is important to note that, in 2017, India was ranked 4<sup>th</sup> in the 'Protecting Minority Investors' sub-indicator.

# 4.2.2 The Global Innovation Index

The WIPO's Global Innovation Index (GII) for 2017 compared innovation performance of 127 countries and economies around the world with its sub-indicators broadly exploring their participation in various aspects of innovation, including political environment, education, infrastructure, and business sophistication. India's overall ranking improved from 66 in 2013 to 60 in 2017 (see Table 2), but it was still lower than countries such as Israel (ranked 17), China (ranked 22) and Chile (ranked 46).<sup>30</sup> However, Figure 1 shows that India has ranked better than Chile in 'Knowledge and Technology Outputs', and 'Market Sophistication' sub-indicators.

Year	Rank on the Global Innovation Index
2017	60
2016	66
2015	81
2014	76
2013	66

# Table 2: India's Overall Global Innovation Index Rankings (2013-2017)

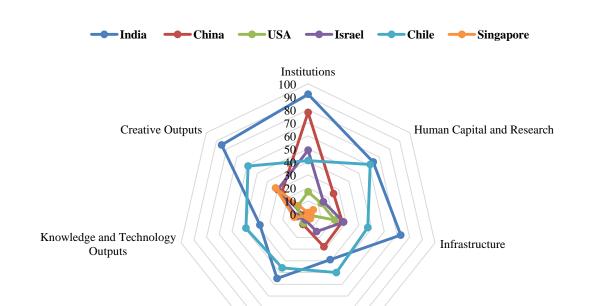
Source: <u>https://www.globalinnovationindex.org/analysis-indicator</u> (accessed on 18 May 2018)

<sup>&</sup>lt;sup>28</sup> For the methodology, please see

<sup>&</sup>lt;u>http://www.doingbusiness.org/~/media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB18-Chapters/DB18-DTF-and-DBRankings.pdf</u> (accessed on 2 July 2018)

<sup>&</sup>lt;sup>29</sup> Source: <u>http://www.doingbusiness.org/</u> (accessed on 22 May 2018)

<sup>&</sup>lt;sup>30</sup> Source: <u>https://www.globalinnovationindex.org/</u> (accessed on 23 May 2018)



#### Figure 1: India's Global Innovation Index Ranking vis-à-vis Select Countries Across Sub-indicators (2017)

Business Sophistication Market Sophistication

Source: <u>https://www.globalinnovationindex.org/analysis-indicator</u> (accessed on 28 June 2018)

### 4.2.3 Global Entrepreneurship Index

When foreign companies make decisions on the location of their startups, they look at the entrepreneurial health of the country. This includes a mix of entrepreneurial attitudes (which includes opportunity perception, startup skills, risk acceptance, networking and cultural support), entrepreneurial abilities (which includes opportunity startup, technology absorption, human capital and competition), and entrepreneurial aspiration (which includes product innovation, process innovation, high growth, internationalization and risk capital). In the Global Entrepreneurship Index of the Global Entrepreneurship and Development Institute, which measures the health of the entrepreneurship ecosystem in a sample of 137 countries, India was ranked 68<sup>th</sup> in 2018, which is low compared to most developed countries but high compared to a number of developing countries (see Table 3).

Countries	Rank
US	1
Switzerland	2
Canada	3
UK	4
Australia	5
Austria	14
Israel	16
Chile	19
Estonia	23
Korea	24
Singapore	27
Japan	28
China	43
India	68
Thailand	71
Mexico	75
Philippines	84
Indonesia	94

Table 3: Ranking of Select Countries in the Global Entrepreneurship Index 2018

Source: <u>https://thegedi.org/global-entrepreneurship-and-development-index/</u> (accessed on 29 June 2018)

### 4.2.4 Cross-Country Comparison of Patents Filed

The number of patents owned by an enterprise has often been used as one of the main indicators for determining innovation intensity of that enterprise. The number of patents filed is often used as a metric for measuring innovation in an economy (Powell and Snellman, 2004).

According to WIPO, global Intellectual Property (IP) filing is increasing (WIPO, 2017). Figure 2 provides the number of patent applications at the top 10 offices in 2016 by residents as well as non-residents.

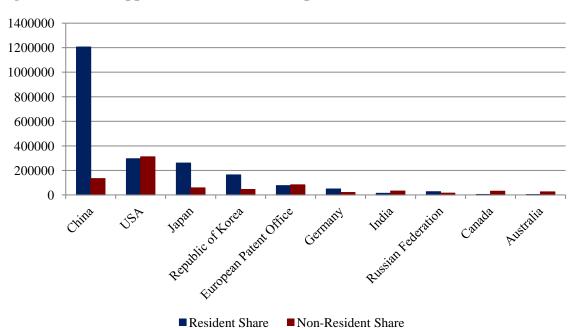


Figure 2: Patent Applications Filed at the Top 10 Offices in 2016

Source: Extracted from Statistical Tables, Figure A64, World Intellectual Property Organization Indicators - Patents, 2017, pp. 85-89

Figure 2 shows that approximately 30 per cent of all patent applications in 2016 were filed at China Patent Office. In India, while the number of patents filed are less than half of those filed in China, at the same time, out of the patents filed, around 66 per cent are filed by non-residents. This indicates that a large number of patents may be filed by foreign entrepreneurs and innovators who have businesses in India, and a lower level of patents are filed by residents. Thus, foreign companies including startups do play a key role in increasing patent filing in India. Data from WIPO also shows that while patent filing grew by 21.5 per cent in China, by 2.7 per cent in the US and by 1.5 per cent in Germany, it fell by 1.3 per cent in India. The more recent data provided by the DIPP shows that patent filing increased by 5 per cent in 2017-18 *vis-à-vis* 2016-17 (DIPP, 2018). This is probably due to several measures taken by DIPP and other government agencies to support innovation and increase patent filing.

To encourage innovation and move towards an innovation economy, it is important to protect IP. According to the Global Competitiveness Report (GCI) by the World Economic Forum (2017), India ranked  $52^{nd}$  out of 137 countries in the 'Intellectual Property Protection' sub-indicator, which is below China (ranked  $49^{th}$ ).

A low rank of a country in cross-country comparative indices does not mean that the country has not taken measures to improve the startup ecosystem. It implies that other countries may have taken more and better initiatives. Further, discussions with foreign embassies and data collected by them shows that comparatively more Indian startups tend to enter into foreign markets *vis-a-vis* entry of foreign startups in India. This is despite the cross-country startup promotion initiatives and establishment of joint startup hubs. This has resulted in outflow of technology and investment and creation of high quality jobs by Indian companies in foreign markets. India needs investment, technology, efficient and innovative businesses, and high

quality jobs. The next section looks at the presence and contribution of foreign startups to the Indian economy.

### 5. Presence of Foreign Startups in India

There is no database of foreign startups in India. The information in this section is based on a primary survey and information provided by foreign embassies, Invest India, accelerators and incubators, consultancy organisations, joint business councils/chambers of commerce and web browsing. In recent years, a number of foreign startups [including those by Non-Resident Indians (NRIs)] have established presence in India. Some of them have established offices while others provide their services online. Majority of them are from the US, which has strong diaspora connections. Table 4 shows that foreign startups are present in a wide range of sectors in India, with a focus on the ICT sector and use of ICT in sectors such as financial services. They have shown interest in participating in government initiatives such as Digital India and Smart City projects and are working in a number of areas to address a variety of social needs (reducing food wastage, enhancing income of farmers, improving sanitation, reducing air pollution, etc.).

A number of startups in areas such as e-commerce, food delivery, smart mobility, health and wellness and fashion are exploring the Indian market. The survey found that there are some sectors, such as fashion and retail, in which foreign startups have not been able to enter the Indian market. This is unlike the case of China, where startups like Frilly and Mei.com in the fashion sector, and Smartbuyglasses in the retail sector have been successful.<sup>31</sup>

Sector	Name of the Startup	Country of Origin of Startup/Founder
ICT	Ubiquity	Italy
	Sentimer	Spain
	Graymatics	US/Singapore
	Cloudcherry	US
	ANLYZ LLC	US
	B2X Care Solutions	Germany
	DOV-E	Israel
	Sigfox	France
	Margento BV	The Netherlands
Digital Payment, Data	bNesis	Poland
Services, Fintech, etc.	BlobCity Incorporated	US
	Seemba	Israel
	SoftBank	Japan
Mobility	BlaBlaCar	France
Blockchain Technology	Guardtime	Estonia
e-Learning	Perlego Limited	UK
	Central Test	France
	The Storytel Group	Sweden
	Lingvist	Estonia

**Table 4: Presence of Foreign Startups in Different Sectors in India** 

<sup>&</sup>lt;sup>31</sup> Source: <u>http://www.thexnode.com/blog/14-foreign-startups-companies-who-succeeded-in-china</u>; <u>https://www.inc.com/nina-ojeda/how-this-fashion-startup-is-using-ai-in-e-commerce.html</u> (accessed on 2 July 2018)

Sector	Name of the Startup	Country of Origin of Startup/Founder
Digital Marketing or	DCMN GmbH	Germany
Branding	SendinBlue	France
<b>Environment and Waste</b>	SweepSmart BV	Netherlands
Management	WaterHealth International	US
Agriculture	Evja	Italy
	PEAT	Germany
	Agribuddy Limited	Hong Kong, China
	Harvesting	US
Cold-Chain Logistics	Promethean Power Systems	US
Healthcare	PlenOptika	US
	Design Revolution (D-Rev)	US
	OneBreath Incorporated	US
Digital/Online Identity	Yoti	UK
Others	WeWork Companies Incorporated (co-sharing office space)	US
	Pininfarina (car designing)	Italy
	Kronokare Cosmetics Private Limited (cosmetics)	France

Source: Websites of Different Companies

#### 5.1 Reasons for Entering and the Entry Process

During the survey, most of the foreign startups pointed out that India is a large and fast growing market with a stable democratic system and educated workforce. Over the years, the Indian government has taken several steps to improve the ease of doing business, including introducing online portals for filing tax returns, fixing timelines for clearance of applications, and introducing the e-biz project for single window clearance, which has made this country an attractive market for foreign investors. A number of startups referred to how they are participating in various government projects. For example, Lyra Networks India is working with the Department of Post, Ministry of Communications, to digitise the devices carried by postmen. The Israeli startup Seemba<sup>32</sup> has a partnership with the Maharashtra government for the Bring Maharashtra Online programme.<sup>33</sup> Apart from these, the other reasons given by foreign startups are presented in Figure 3.

<sup>&</sup>lt;sup>32</sup> Also see <u>https://www.goseemba.com/</u> (accessed on 12 April 2018)

<sup>&</sup>lt;sup>33</sup> Source: <u>https://www.bringmaharashtraonline.com/</u> (accessed on 13 April 2018)

To work in government initiatives	• Yoti
Diaspora connection	<ul><li>CloudCherry</li><li>ANLYZ LLC</li><li>BlobCity Incorporated</li></ul>
Have products that cater to Indian market or address social issues	<ul> <li>PlenOptika</li> <li>SweepSmart B.V.</li> </ul>
To support global clients in India	• Sigfox to support Texus Instruments
Entrepreneur came to study in India	Cyril Feuillebois, founder of Kronokare Cosmetics
Implementation of e-governance and unsaturated market for new tehcnologies	Guardtime
As part of the commercialisation of joint Indian and foreign nation's R&D initiative (such as the United States-India Science & Technology Endowment Fund)	<ul> <li>Promethean Power Systems</li> <li>OneBreath Incorporated</li> <li>PlenOptika</li> </ul>

# **Figure 3: Reasons for Entering the Indian Market**

Source: Inputs from the Survey

Some foreign startups have come up with certain products such as those related to air or water purification, cheaper medical devices, or any other social innovation which can be tried in a large developing country with specific needs such as India. They, therefore, came to India. In this context, an interesting example is that of PlenOptika, which is presented in Box 3.

#### Box 3: How PlenOptika Came to India

Under the India and US government funded programme, USISTEF,<sup>34</sup> a Massachusetts Institute of Technology (MIT) based startup, PlenOptika,<sup>35</sup> developed a portable eye testing device with its Indian partner Aurolab (based in Tamil Nadu), the manufacturing division of Aravind Eye Hospital. After testing the product in Aurolab, and manufacturing it in India, the entrepreneur is now trying to scale up. This product is unique because it is portable, easy to use (it requires only 30 minutes of training), can accurately product distant vision, and offer value for money. PlenOptika has developed two models – one each for the US and Indian markets. The US model has more features and is priced at INR 450,000 (US\$6,745.50). The model for the Indian market has fewer features and is priced at INR 150,000 (US\$2,248.50). Both the models have same accuracy in testing distant vision. The startup now wants to sell its products to Indian hospitals and eye care clinics.

Source: <u>http://plenoptika.com/</u> (accessed on 2 July 2018) and inputs received during the survey

The foreign startups entered the Indian market through various routes. Some got the support of incubators and accelerators, others partnered with Indian companies, and some attended startup boot camps and international events, while others received the support of business councils, startup networks and consultancy organisations. Some startups have entered India through mergers and acquisitions. For example, the Germany-based B2X Care Solutions (established in the year 2006) entered India in the year 2014 by acquiring a majority stake in The Service Solutions (TSS), an Indian services company which is an Apple-authorised service provider and a service partner of key local and global smartphone makers.<sup>36</sup> This acquisition helped B2X Care Solutions to rapidly expand in India and the revenue of the company grew by 50 per cent annually since its market entry into India.

The survey also found that foreign startups tend to enter India when they have gained a certain scale and have already expanded globally. For example, a number of EU-based startups pointed out that they first enter and establish themselves in other markets such as the US and Singapore before venturing into India. The US companies pointed out that they first locate in countries such as Chile, Singapore and Israel where they innovate, try out the products and services, and subsequently come to India. This is because of certain issues, including the fact that it takes longer to set up a company in India, and there are better startup ecosystems in other countries such as Israel and Chile.

When asked about India *vis-à-vis* other destinations for startups, survey participants pointed out that compared to India, it is easier to get funding and faster to set up a company in Singapore. Also, the government is more receptive to try out new inventions, and the IP Rights regime is stronger. Among developing countries, Chile offers a robust ecosystem for innovators to try out products specific to developing country needs. The US, according to many including those startups run by entrepreneurs of Indian origin, offers an extremely flexible environment for innovation and startups to grow and prosper. A number of companies have their incubators in Israel, and the country is receptive to innovations and pilot projects. More recently, China and Republic of Korea have come up with several policies to attract innovation, and China has received a larger number of foreign startups than India.

<sup>&</sup>lt;sup>34</sup> Also see <u>http://usistef.org/about-the-fund.aspx</u> (accessed on 13 April 2018)

<sup>&</sup>lt;sup>35</sup> Also see <u>http://plenoptika.com/about/</u> (accessed on 13 April 2018)

<sup>&</sup>lt;sup>36</sup> Also see <u>http://www.theservicesolutions.com/tssapplesite/services.php</u> (accessed on 13 April 2018)

Overall, most of the companies interviewed are still in the process of establishing their presence in India. They pointed out that India is not an easy market to establish presence in and it will take them around 4-5 years to understand the market dynamics. However, some companies which have been in India for more than five years have experienced a high market growth. For example, the sudden surge in digital payments post-demonetisation, and Digital India initiative has helped Lyra Networks India to grow at a fast pace and the business is now five times more post-demonetisation.

### 5.2 Socio-Economic Impact of Foreign Startups

The survey found that the socio-economic impact of the foreign startups depends on the sector of operation, their ability to establish presence and scale-up at a fast pace, bring in technology and investment, and create jobs. The survey further showed that the ability of the startups to enter and establish presence in a foreign market depends on the work permit and visa regime of the concerned country. Whether the startup will continue to bring in skills or employ local professionals will depend on availability and cost of desired workforce and the country's policy. In the case of India, highly educated workforce is available at competitive rates. However, there are shortages of skilled workforce in certain areas such as artificial intelligence and machine learning and the startups sometimes find it difficult to get the right skills. Therefore, even though they prefer to appoint locally, they may have to bring in certain skills in the initial period to impact training and set up operations in India. Some startups have started employing locally. For example, Lyra Networks India employs 55-60 people in its development centre in India and plans to create 20 more jobs in the near future.

Foreign startups have been more successful in the services sector in India than in manufacturing. Many of them complained about the difficulties that they faced when they tried to establish manufacturing bases or source from Indian manufacturers. The approval process in India takes 6 to 8 months on an average compared to seven days to a month in Singapore. In some cases, where the foreign startups wanted to set up manufacturing facilities, it took six months to two years to commence business operations. They referred to issues such as multiple clearance requirements, issues with respect to land ownership, and difficulties in identifying a local partner. They mentioned that if they are able to set up manufacturing facilities with ease, it will contribute more to the Indian economy both in terms of employment creation and investment. At the time of the survey, many of them had set up sales offices in India and were importing products, due to the delays in establishing manufacturing facilities.

The survey found that some of the startups have innovative products and/or services which can help to improve the efficiency and productivity of Indian small and medium enterprises (SMEs). For example, Lyra Networks<sup>37</sup> India offers secure digital payments and data services to retailers which have helped improve their business performance. The French startup, SendinBlue, offers cloud-based digital marketing tools to over 50,000 growing companies (mostly SMEs).<sup>38</sup>

A number of startups such as the UK-based Yoti are helping to better implement government policies. Yoti has come up with a consumer app which can be downloaded on one's phone which creates one's own identity based on various government approved identities such as Aadhaar card, passport, Permanent Account Number (PAN) card, etc. The Estonian

<sup>&</sup>lt;sup>37</sup> Also see <u>https://www.lyra-network.com/en/</u> (accessed on 13 April 2018)

<sup>&</sup>lt;sup>38</sup> Also see <u>https://www.sendinblue.com/features/</u> (accessed on 12 April 2018)

Company Guardtime has developed a digital signature system (KSI-Keyless Signature Infrastructure) based on blockchain technology and has partnered with Inspira Enterprise in India to implement KSI in India. This technology has helped implement e-governance system in Estonia which led to saving of 2 per cent of Gross Domestic Product (GDP). It is expected that if this technology is adopted in India, it will reduce cost and improve the speed of governance.

Many foreign startups are working in the social sector to address pollution and other problems. For example, the US-based WaterHealth International provides clean, safe and affordable drinking water solutions to underserved populations across the world.<sup>39</sup> It has established presence in Hyderabad and has created a number of WaterHealth Centers in India.

A number of foreign startups have entered India to help farmers with agronomical and market information, farm management and planning, and mobile payments and other financial services. Farmers need information on inputs, prices, pest control, risk-management, and quality and certification standards and these startups (See Table 4 and Box 4) are catering to such needs. India needs investments in cold chains to prevent post-harvest losses. The US-based company Promethean Power Systems<sup>40</sup> has set up a manufacturing base in Pune, Maharashtra. The thermal energy-based technology of this company helps to preserve perishable foods and milk. Their rapid milk chiller is used by major brands in India such as Amul, Mother Dairy and Hatsun. The company initially came to India through the Indian-US governments' funded USISTEF initiative.

# Box 4: The Case of Harvesting - A California-based Startup

Harvesting, a California-based startup with an office in Bengaluru, has built an agrointelligence engine that utilises remote sensing and geo-spatial data alongside myriad traditional and alternative data points to assess a farmer's creditworthiness. It then shares this knowledge with banks and microfinance institutions (that issue farm loans), in the form of a credit scorecard. For the farmers, this company offers the artificial intelligencepowered engine, which conducts remote monitoring of farmlands, captures changes in vegetation or crop cover, and provides early warning systems such as harvesting risks which ensures that damages are minimised. This not only helps reduce wastage in the agricultural value chain, but also makes farmers more efficient, capable and smart, with greater access to financial services and better loan repayment records.

Source: Survey and <u>https://harvesting.co/</u> (accessed on 3 July 2018)

Overall, the survey found that the socio-economic impact of foreign startups in India has been positive. However, the positive impact is lower than in countries such as Ireland, China or Chile because the number of foreign startups that have entered the Indian market are less and those who have entered are facing some difficulties in scaling up.

# 6. Issues Faced by Foreign Startups in India

As stated earlier, India, unlike a number of countries, does not have a specific policy to attract foreign startups. The survey found that foreign startups are facing several barriers in

<sup>&</sup>lt;sup>39</sup> Also see <u>http://www.waterhealth.com/index.php/about-us/waterhealth-international</u> (accessed on 13 April 2018)

<sup>&</sup>lt;sup>40</sup> Also see <u>http://coolectrica.com/about-us/</u> (accessed on 13 April 2018)

India due to which some have exited the market or have slowed down their expansion plan. Some of the barriers faced by foreign startups in India are listed below.

# 6.1 Lack of Market Entry Related Information

Foreign startups pointed out that in the initial stage, they face difficulties in understanding the market entry process. In this context, it is worth mentioning that a number of initiatives have been taken by many foreign governments and embassies to help assist in the entry of their startups. However, startups still complain about the lack of consolidated information in a single website/portal. Only 3 out of the 30 startups that were interviewed had browsed through the Startup India Hub portal and registered on it. However, they did not find it to be user friendly or could not extract the required information. For example, the startups pointed out that after registering on the portal, while they got information on how to register a company in India, they were unable to get more details on how foreign startups can set subsidiaries in India, what is the cost of the same, and how to employ one to three employees for operations. Precisely, the portal does not clearly specify the steps needed to be taken by a foreign startup to start a business in India and what kind of clearances are needed. Further, the portal lists all types of visas rather than what the startup entrepreneur should apply for. Also, some of the information related to visas is not updated (for example, the information on e-visas).

# 6.2 Lack of Clarity in Government Policies

Government policies in India are evolving at a fast pace and this may have resulted in lack of clarity. While the Government of India has come up with numerous initiatives to support manufacturing in India and has allocated funds for the same, there have been gaps in linking the policies with each other and implementing them. For example, while the Make in India policy aims to attract foreign firms to manufacture in India, the Startup India policy is designed only for Indian firms.

The startups also pointed out that India is one of the most restrictive markets for FDI in sectors such as retail. There are restrictions on store based retailers in selling on-line while on-line retailers are not allowed to have inventory based models. This is a key reason why India did not attract much investment and technology from startups in retail, e-commerce and logistics unlike countries such as China. Local sourcing for startups in India is also much lower and, thus, startups are not able to build the value chains in India as they do in countries like China.

# 6.3 Multiple Regulatory Bodies, Multiple Clearances and Difficulties in Interacting with the Government

India is a large quasi-federal market where regulations and policies vary across states. Even at the Centre, the single window policy is not fully implemented. There is a lack of standardisation in procurement process across states. It takes a lot of time to get clearances to start a business. As mentioned in Section 5, it takes more time to set up a unit in the manufacturing sector than in the services sector. There are other issues, such as land records may not be available on a digital platform or the land ownership may not be transparent.

Out of the 30 startups surveyed, 20 mentioned that they did not get any response and/or adequate response to the queries posted on government websites. Sometimes they fix meetings from abroad, which get cancelled at the last moment after they have arrived in

India. While many startups want to work with the government on different projects, those who have worked in the past, have faced two major difficulties – first, the projects are not completed on time due to delays, which can be due to involvement of multiple government bodies and second, payments are not made on time. In both the cases, the startups had to bear financial losses.

# 6.4 High-skilled Labour Mobility Related Issues

Unlike many countries, India does not have any special visas for entrepreneurs or startups. This is despite the fact that the country is a major proponent of liberalising high-skilled labour mobility through the WTO and its trade agreements.

Focusing on specific issues related to work permits, foreign startups pointed out that in the initial stage of setting up the company, they need work permits for longer duration, say 2 years and for 2-3 employees. If they apply for more than one work permit, they face a lot of questions on why they are not employing locals. After providing appropriate responses, they are issued a work permit for one year, even if they make a request for 2 years. One survey participant pointed out that if a chief executive officer (CEO) of a company is given a one year work permit in a country where it takes 6-8 months to set up a business in manufacturing, it is not feasible for foreign startups to invest in manufacturing.

Further, there is a registration requirement for foreign nationals at a Foreign Regional Registration Office (FRRO) in India within 14 days of his/her first arrival, irrespective of the duration of stay.<sup>41</sup> The process is cumbersome and there were incidents of corruption and bribes, which prompted the government to make it online.

There is a minimum salary requirement for skilled or qualified foreign professionals of at least US\$25,000 per year.<sup>42</sup> This minimum salary requirement is a major hindrance for companies which work in social sectors and in rural areas. The salary, according to survey participants, is high, especially for skilled professionals who stay and work in villages. In startups, people often work for the passion of innovation and not for the remuneration. People with specialised skills also work with startups as interns. In the case of a foreign intern who has to be employed in an Indian company, the company has to pay the intern a minimum amount of INR65,000 per month. The survey participants pointed out that this is a very high amount for a startup to pay to an intern as they operate on tight budgets.

Overall, foreign startups pointed out that although the process of application of business visa has been streamlined and improved over the past few years, the process of application and grant of work permit needs government attention. The shorter duration of stay for entrepreneurs creates business uncertainty. Further, there should be clarity on whether spouses on dependent visas are allowed to work. The minimum wage requirement has to be examined for specialists and interns. The startups and foreign embassies further argued that since many of these issues are raised by India as barriers to high-skilled labour mobility in international negotiations, it will strengthen the country's position if the domestic regime is synergised with the request that India makes to its trading partners.

<sup>&</sup>lt;sup>41</sup> Also see <u>https://boi.gov.in/content/registration-requirements-foreign-national</u> (accessed on 16 April 2018)

<sup>&</sup>lt;sup>42</sup> Source: <u>https://www.startupindiahub.org.in/content/sih/en/startup-scheme/International/indian-visa.html</u> (accessed on 16 April 2018)

### 6.5 Lack of Availability of Right Skills

Startups pointed out that they want to employ locally as local skills are cheaper, but they often find it difficult to get the right skills or understand the process through which they can access the right skills. In the survey, 20 startups pointed out that they are facing difficulties in finding the right talent for specialised jobs in India in areas such as artificial intelligence, machine learning, robotics and big data. There are also shortages of cloud architects, data scientists, neural network specialists, skills required for natural language processing and software product designers. Thus, they have no options but to bring in some people who can train the Indian engineers. Further, startups may require employing experts on a part-time basis as they may not be able to afford the salary. There is no comprehensive database for the same, which can help to do an employee background check. Therefore, they have to depend on headhunting agencies.

A number of startups said that, although there are many headhunting agencies, they are finding it difficult to work with headhunters. First, the process is time consuming and costly. It takes on an average 6-8 months to get the right match for a CEO. Second, the headhunters at times oversell a candidate and sometimes they do not do a proper requirement matching. Third, there is a cost associated in engaging the headhunters.

Interestingly, foreign startups also pointed out that they do get the right skills from among the Indian students studying abroad or from those who have completed their post-graduate degrees and other specialised courses. Thus, even though there is a skill shortage in India, Indian diaspora has the skills.

There may also be differences in attitude, culture or curriculum across workforce from different countries. For example, in India, the workforce is less oriented towards innovation, patents and thinking out-of-the-box. The people may be obedient and good subordinates but startups require its employees to take ownership and right decisions. The local employees also need soft business skills. All of these require the startup to be in an environment which helps and support training specific to their requirements and help them to identify and engage local skills.

### 6.6 Issues Related to Company Incorporation and Transferring Working Capital

There are some issues related to company incorporation for foreign startups. One major issue is the need for residency in India for company directors, which is difficult for a small company to comply with. India does not have a system of e-residency as given in countries such as Estonia. India has introduced One Person Company (OPC) through the Companies Act, 2013 to support entrepreneurs who are capable of starting a venture on their own by allowing them to create a single person registered company.<sup>43</sup> It is a hybrid structure which combines features of a sole proprietorship and a company form of business. However, an OPC can only be formed by a naturally-born Indian resident and citizen. NRIs or foreign citizens cannot form an OPC. Since most shareholders of the company are foreign nationals, the registration of the company involves a lot of procedures and paperwork. In many cases, the validation of documents from the foreign countries has to be done even two to three years after the company has been established in India.

<sup>&</sup>lt;sup>43</sup> Source: <u>http://www.mca.gov.in/SearchableActs/Section2.htm</u> (accessed on 12 April 2018)

Some companies expressed that during and after the incorporation stage, there are issues related to transferring the working capital from the company in the foreign country to its subsidiary in India. The procedure to do so is cumbersome and in many instances, the money is not transferred seamlessly to India.

# 6.7 Infrastructure Bottlenecks

In India, the penetration of technology has been low and there is a lack of connectivity, especially in the remote areas. This has also led to low ranking of India in global crosscountry comparative indices (see Figure 1). There are also issues with quality of infrastructure such as power and telecommunication connectivity, broadband connectivity and internet connection speed. Further, the supply chain is fragmented which adds to the logistics costs.

# 6.8 Quality Standard

In the survey, foreign startups in manufacturing sector mentioned that they find it difficult to obtain the raw materials and intermediate products of right quality. Those in ICT mentioned issues related to data protection, cyber security, etc., and those working with farmers mentioned the high use of chemical and lack of food safety standards and product traceability to the farm level.

# 6.9 Difficulties in Establishing Global Value Chains

Due to the high import duties on raw materials and certain intermediate products, and variation in tariffs across different free trade agreement (FTA) partners, it is difficult to establish a value chain in India. Further, a product manufactured in a special economic zone within India may face a higher tariff in entering the domestic market than if it is imported from a country with whom tariffs have been reduced/or is zero as part of the FTA commitments. In India, the corporate taxes are higher than many startup destinations and a number of subsidies given by the government are either export linked or product linked or region specific or they focus on import substitutions, which can be prohibited or actionable under the WTO's Subsidies and Countervailing Measures Agreement.

### 6.10 **Protection of Innovation**

A number of startups raised concerns about protecting their innovation in India. They pointed out that in India, software is not patentable, which makes it difficult for the startups to protect algorithms. If the startup has an innovative process, it can be copied easily. In India, patent filing is low (see Figure 2). Further, there are delays in granting of patents (4 to 6 years on an average from filing of an application to grant of patent). There are issues related to enforcement of IP rights and courts can take several years to resolve a case. The government has come up with the Startups Intellectual Property Protection Scheme<sup>44</sup> where there are certain conditions as to who can apply. These conditions may be rigid even for domestic startups to comply with.

<sup>&</sup>lt;sup>44</sup> Source: <u>http://www.ipindia.nic.in/writereaddata/Portal/News/323\_1\_Scheme\_for\_facilitating\_start-ups.pdf</u> (accessed on 4 July 2018)

#### 6.11 Low Budget for R&D, Innovation and Marketing

The foreign embassies and startups were of the view that a low share in the budget is allocated for R&D in India. In joint government initiatives, it is much easier to get funds from foreign governments than from the Indian counterpart for showcasing innovation and creativity. Therefore, many of the joint startup events are held in partner countries than in India. This is probably one more reason why more Indian startups are going abroad compared to foreign startups coming to India.

#### 7. The Way Forward

In recent years, while some countries have imposed protectionist measures that have adversely affected high-skilled labour mobility, many of them have come up with startup visas, residency permits and other fiscal and non-fiscal incentives to attract foreign startups. Studies have shown that countries with such policies have benefited through investment and technology inflows and job creation in the domestic market. A number of developing countries have improved their ranking in cross-country comparative indices of innovation and entrepreneurship by attracting innovative foreign firms. Foreign talents have helped to mitigate the shortages of domestic talents in specific areas such as artificial intelligence and machine learning.

India has the potential to become an attractive destination for foreign startups and a number of them have recently entered the Indian market. This paper shows that foreign startups bring in investment, new technology and innovative business practices, which can help to speed up government initiatives such as Digital India, improve efficiency of SMEs in manufacturing and services sectors, enable informal sector (for example, retail) to become formal and be a part of the domestic and global value chain, improve productivity of the agriculture sector and farmer's income, address social and environmental concerns, reduce the cost and improve the service quality of healthcare, among others. India is facing a shortage of specific skills such as artificial intelligence, machine learning, big data, robotics, cloud architects, data scientists, neural network specialists, skills required for natural language processing and software product designers, which can be mitigated by attracting the talents in these areas, especially by using the network of Indian diaspora abroad. If the foreign startups scale up at a faster pace, they will create good quality jobs. Foreign startups can also help in increasing patent filing in the country. They can help in addressing infrastructure gaps, especially in the ICT sector, and can help in improving the country's ranking in various cross-country comparative indices. Partnership with foreign startups will help the Indian startups and SMEs to grow and access the global markets.

As India strives to become an innovation economy, it needs to have policies to attract talents, innovative companies and businesses. The Indian government has taken several measures to attract foreign investment and technology, which includes liberalisation of the foreign investment regime, and collaboration and MoUs with a number of trading partners on R&D, skill development and startups. However, India is yet to take a position with regard to incentives for foreign startups and/or entrepreneurs and on granting startup visas. Due to this, more Indian startups are investing and creating jobs in foreign countries than foreign startups coming to India. Further, despite several reforms undertaken and being an open economy, India is not able to leverage the recent policy initiatives to transform into an attractive destination for foreign companies in high-technology areas and improve its global ranking in key innovation indices. Most importantly, in spite of being a proponent of liberalisation of high-skilled labour mobility in its international engagements, India is not able to discuss the

mobility of high-skilled professionals and specialised skills in an aggressive and more innovative way. In international fora, it is portrayed as a country which has several barriers on high-skilled labour mobility but is requesting its trading partners for greater market access for the same. A policy on granting startup visas will strengthen India's position in international engagements. Easier startup mobility and greater use of high-skilled diaspora networks will also enable Indian companies to participate more in global value chains and enable the country to mitigate existing talent gaps and develop talents for the future.

Given this, the paper makes certain recommendations through which India can synergise its policies across different government initiatives, link domestic strategy with its trade negotiating strategy, improve its global ranking in various cross-country comparative indices, become an innovation and startup hub, attract foreign investment and technology, mitigate skill shortages in specific areas and create quality employment. These are listed below.

# 7.1 Design Policies to Attract and Support Startups

The Startup India initiative can be extended to foreign startups. This will not only help to synergise the different government initiatives (for example, Startup India initiative with Make in India initiative), but will also improve India's global positioning as a country trying to attract foreign investment and innovative technology. India has been a proponent of national treatment for high-skilled professionals in its trade agreements. A policy only for domestic startups counters India's own negotiating position, especially when India is trying to collaborate and develop startup hubs with other countries.

India must look at the fiscal and non-fiscal incentives given to startups in other countries and design an incentive package which will make it an attractive destination. The survey found that foreign startups give more importance to ease of doing business and non-fiscal incentives rather than fiscal incentives. They would like to have a faster clearances process for starting a business. The survey respondents also pointed out that non-fiscal incentives such as access to accelerators and incubators and help with networking and launch platforms will attract foreign startups to India as is happening in countries such as Chile.

The foreign startups would also like to have a lower and simpler tax regime rather than subsidies. While they appreciate the initiative taken by the government to have lower corporate tax for SMEs, it can adversely affect their scale expansion. Foreign startups pointed out that corporate tax, ideally, should not be more than 25 per cent for all companies, irrespective of their size, if India has to compete with other countries.

To address the skill shortages, the Startup India initiative can be linked to Skill India initiative. More precisely, the government can work closely with domestic and foreign startups, academic institutes and joint business councils to identify the skill gaps and the ways to address them through the Skill India initiative. Under the Skill India initiative, through the MoUs in skill development and capacity building with different countries, training packages can be designed in discussion with India and foreign startups so that it meets their requirements.

To attract foreign startups, it is important to focus on data protection, IP protection, cyber security and quality standards. In some of these areas, policies are evolving, and consultations with Indian and foreign startups and other companies will help to design a more comprehensive policy. It is important to speed up the patent filing process and government may collaborate with Indian and foreign companies, innovators, investment agencies, and

think-tanks to promote IP commercialisation. The government may also examine how countries such as Chile, Israel and more recently China are taking various measures for commercialisation of innovation and learn from their best practices.

It is also important to synergise domestic policy with trade policy and commitments in trade agreements. Unless that happens, India will not receive the desired investments, especially in manufacturing. The government needs to invest in R&D and attract private sector to invest in R&D.

Since foreign e-commerce, fashion, logistics and retail startups are investing much less in India and are sourcing less as well from the country compared to other developing countries such as China, India may relook at the restrictions on foreign investment, especially the restriction on foreign e-commerce companies to have an inventory based model. The policy should be such that startups can use their best business models to develop and integrate with the global value chains.

### 7.2 Have a Startup Visa and Use it to Push High-Skilled Labour Mobility

A number of countries have implemented or are in the process of implementing startup visas. It is important to examine the startup visa policies of different countries and explore the possibility of having a startup visa for India, which will help to ease the visa and work permit related barriers faced by foreign startups. There are differences across countries on how they have designed their visa policy. The Indian government may look at some of the visa regulations as is given in Table A1 in Appendix A. The policy generally includes granting a residence and work permit for a fixed period to entrepreneurs based on certain requirements such as creation of jobs, creating innovative products and services, and meeting certain annual turnover. In the case of most countries, the startup and entrepreneur visas are valid for two years or more. In some instances, before granting the visa, the entrepreneur's business plan is evaluated by a committee which mostly constitutes experts from industry and various government bodies. There can be a limit on how many people from the foreign startups are eligible for such a visa. The survey found that if a maximum of 5 visas are given per startup, it will help them. Within a maximum limit, the foreign startups may want to bring in owners, managers, specialists and/or interns, and they should be given the flexibility. The survey also found that such visas should not be linked to minimum wage requirements. The visa may allow family members to stay and work during the stipulated time frame. It is important that the application process for such a visa is fast tracked.

If India adopts a startup visa policy, it will not only help to attract foreign startups, create jobs and bring in innovation, but it can also be used to bargain for greater market access for high-skilled Indian professionals in countries such as the US. Further, India can partner with like-minded countries in the G20 and aggressively push for high-skilled labour mobility. It is also worth mentioning that in the recent years, India has taken several measures to facilitate the entry of foreign professionals and ease the barriers that they face.

Most of the survey participants applauded the e-Business visa facility (visa on arrival) to business visitors from selected countries, which has made it much easier for them to attend official meetings at short notice. Double entry is permitted on e-Business visa and the duration of stay is 60 days (as on 1 April 2017). They, however, pointed out that India may explore the possibility of granting multiple entries under e-Business visa. Giving the example of the US, they pointed out that it grants multiple entry business visas for ten years. India may look into the possibility of granting business visas for a longer duration.

Survey participants also appreciated the steps taken by the government to launch e-FRRO, an online immigration portal in 2018. The pilot project has been rolled out in Bengaluru, Chennai, Delhi, and Mumbai and will be implemented in phases in other locations. Once implemented across all FRROs, this initiative will take care of a number of concerns raised by foreign startups in India. Thus, there are initiatives taken by the Indian government to facilitate the entry of foreign nationals. These initiatives need to be marketed through international fora such as the G20.

# 7.3 Reduce Delays in Clearances for Starting a Business and Fast Track the Response to Queries

One of the key reasons given by the foreign startups for not establishing manufacturing facilities in India is the multiple clearances requirements and delays. The delay should be brought down to not more than 3 months. In this context, to speed up the process of setting up a company, the government may explore the possibility of allowing overseas Indians/Persons of Indian Origin (PIOs)/NRIs and also foreign citizens to set up an OPC.

The delay can be due to state and local level clearances and, therefore, the central government has to work closely with the states. States may be encouraged to set up startup clusters or hubs where incubators, accelerators, and other facilities are provided to startups. If startups work on government projects, then they should get their payments on time. Further, there should be a fast track mechanism of resolving queries posted on government websites.

# 7.4 Strengthen Invest India and Startup India Hub Portal

Invest India should play a more active role in attracting foreign startups to India and help them to enter into partnerships with Indian companies. The Startup India Hub portal should be updated with need based and relevant information and it should be a platform for sharing information on joint startup hubs and activities. It should also have clear guidelines and lay down the processes of how to start a business in India.

There is no database of foreign startups in India. Invest India may take the lead to develop such a database sector-wise and country-wise. It may work with foreign embassies and business councils to create the database. It is important to conduct a yearly survey on experiences of foreign startups in India. Such information will help the government to take measures, which will help to attract foreign startups to invest and scale up.

It is also important to market India as an attractive startup destination. The Startup Action Plan refers to a flagship event for startups along with other stakeholders such as investors, incubators and accelerators. However, such a year-on-year flagship event has not been formalised. If such an event is held, it can market India to foreign startups and provide a platform for domestic and foreign startups and other stakeholders to interact and share their experiences. Discussions with some foreign embassies show that while they have initiated some joint events, they could not continue as the Indian side did not have funds. It is important to have an India-centric event with allocation of funds on a yearly basis. Invest India can be made the nodal agency to organise the flag ship event similar to the Slush technology startup event in Finland<sup>45</sup>. This could be in different cities every year so that it can showcase India as a startup hub to foreign startups.

<sup>&</sup>lt;sup>45</sup> Source: http://www.slush.org/ (accessed on 3 May 2018)

To conclude, as a proponent of liberalisation of high-skilled labour mobility, India may implement innovative polices and then market them through international fora to build consensus on the wider issue of removal of barriers to high-skilled labour mobility and how it can be beneficial for the host country. This paper shows that India will gain by providing market access and national treatment to foreign startups, which will help to bring in technology, investment, mitigate skill shortages in specific areas and create good quality jobs. If the reform measures are implemented, it will also help to improve India's rank in different cross-country comparative indices and strengthen the country's position as a proponent of high-skilled labour mobility in global platforms such as the G20 and the WTO. It will help to develop global value chain in high technology areas. The government needs to synergise its domestic policies with commitments in trade agreements so that the country benefits from such agreements. The survey also identified a few areas for research, which will enable the government to take informed policy decisions and enable the country to move towards an innovation economy and reduce cost of doing business. These are (a) a survey based study on talent availability and skill gaps in high-technology sectors such as ICT (b) how startups can be engaged to develop innovative products and services to improve the competitiveness of key export items such as textiles, handicrafts and steel (c) how SMEs, especially business in remote areas, can be linked to value chains through innovative technology and (d) creation of digital e-commerce platforms and supply chain management models to reduce logistics costs and business inefficiencies.

### References

Aghion, P., Dewatripont, M., DU, L., Harrison, A. and Legros, P. (2012). Industrial Policy and Competition. *National Bureau of Economic Research Working Paper Series, Cambridge, UK*. Available at http://www.nber.org/papers/w18048 (accessed on 2 July 2018)

**Boeri, T., Brücker, H., Docquier, F. and Rapoport, H. (2012).** Brain Drain and Brain Gain: The Global Competition to Attract High-Skilled Migrants. *Oxford University Press,* ISBN: 13-9780199654826 (accessed on 15 June 2018)

**Bosetti, V., Cattaneo, C. and Verdolini, E. (2015).** Migration of skilled workers and innovation: A European Perspective. *Journal of International Economics*, ISSN: 0022-1996, 96(2), pp.311-322. Available at

https://www.sciencedirect.com/science/article/pii/S0022199615000665?via%3Dihub (accessed on 15 June 2018)

**Cerna, L. (2012).** Understanding the Diversity of EU Migration Policy in Practice: the Implementation of the Blue Card Initiative. *Journal of Policy Studies*, 34 (2), pp.180-200. Available at

https://rsa.tandfonline.com/doi/abs/10.1080/01442872.2013.767587#.WyNjGVUzaM\_ (accessed on 15 June 2018)

**Davis, T. and Hart, D.M. (2010).** International Co-operation to Manage High-Skill Migration: The Case of India-U.S Relations. *Review of Policy Research*, 27 (4), pp.509-526. Available at <u>https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1541-1338.2010.00454.x</u> (accessed on 19 June 2018)

**Department of Industrial Policy & Promotion (DIPP) (2018).** Conference on National Intellectual Property Rights Policy. Cell for IPR Promotion & Management, Department of Industrial Policy & Promotion, New Delhi.

**Duncan, N.T. and Waldorf, B.S. (2010).** High Skilled Immigrant Recruitment and the Global Economic Crisis: The Effects of Immigration Policies. *Department of Agricultural Economics, Purdue University, USA.* Available at https://ageconsearch.umn.edu/bitstream/58417/2/10-1.pdf (accessed on 19 June 2018)

**European Commission (EC). (2011).** European Agenda for the Integration of Third-Country Nationals. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. *COM (2011) 455 final. Brussels, Belgium.* 

**EC.** (2013). Entrepreneurship 2020 Action Plan: Reigniting the entrepreneurial spirit in Europe. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. *COM* (2012) 795 final. Brussels, Belgium.

**EC.** (2016). Europe's next leaders: the Start-up and Scale-up Initiative. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. *COM* (2016) 733 final. Strasbourg, France.

Facchini, G. and Lodigiani, E. (2014). Attracting Skilled Immigrants: An Overview of Recent Policy Developments in Advanced Countries. *National Institute Economic Review*, 229(1), pp.R3-R21. Available at

http://journals.sagepub.com/doi/abs/10.1177/002795011422900102#articleCitationDownload Container (accessed on 2 July 2018)

Hunt, J. and Gauthier-Loiselle, M. (2010). How Much Does Immigration Boost Innovation?. *American Economic Journal: Macroeconomics*, 2 (2), pp.31-56. Available at https://www.aeaweb.org/articles?id=10.1257/mac.2.2.31 (accessed on 15 June 2018)

Kauffman Foundation. (2017). America's New Immigrant Entrepreneurs. *Ewing Marion Kauffman Foundation, US.* 

Kerr, S., Kerr, B., Özden, C. and Parsons, C. (2016). Global Talent Flows. *Journal of Economic Perspectives*, 30(4), pp.83-106. Available at <a href="https://www.aeaweb.org/articles?id=10.1257/jep.30.4.83">https://www.aeaweb.org/articles?id=10.1257/jep.30.4.83</a> (accessed on 14 June 2018)

**Kerr, W. (2013).** U.S. High-Skilled Immigration, Innovation, and Entrepreneurship: Empirical Approaches and Evidence. *The National Bureau of Economic Research*, Working Paper no-19377. Available at <u>http://www.nber.org/papers/w19377</u> (accessed on 15 June 2018)

**Krueger, N.F. and Kumar, S. (2012)**. Making the United States Immigration Policy and the Startup Visa Act Proposal Effective: An Exploratory Study of High-Growth Indian American Immigrant Entrepreneurs. Available at <u>https://ssrn.com/abstract=2096426</u> (accessed on 4 July 2018)

Mukherjee, A. and Goyal, T.M. (2013). Examining Mode 4 Commitments in India and the EU's Agreements: Implication for the India-EU BTIA. *Robert Schuman Centre for Advanced Studies, European University Institute*. Available at <a href="http://cadmus.eui.eu/bitstream/handle/1814/29478/CARIM-India-2013%20-%2016.pdf?sequence=1&isAllowed=y">http://cadmus.eui.eu/bitstream/handle/1814/29478/CARIM-India-2013%20-%2016.pdf?sequence=1&isAllowed=y</a> (accessed on 19 June 2018)

Nathan, M., Rolfe, H. and Silva, C.V. (2013). The Economic and Labour Market Impacts of Tier 1 entrepreneur and investor migrants. *National Institute of Economic and Social Research, UK*. Available at

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data /file/257258/economic-research.pdf (accessed on 28 June 2018)

**Novick, N. (2016).** Importing Innovation? The "Startup Visa" and the EU's Entrepreneurship 2020 Action Plan. *University of California, San Diego, USA*. Available at <u>https://www.researchgate.net/publication/317645676\_Importing\_Innovation\_the\_Startup\_Vis</u> a\_and\_the\_EU's\_Entrepreneurship\_2020\_Action\_Plan (accessed on 19 June 2018)

**Petersen, A.M. and Puliga, M. (2017).** High-skilled labour mobility in Europe before and after the 2004 enlargement. *Journal of the Royal Society*, 14 (128). Available at http://rsif.royalsocietypublishing.org/content/14/128/20170030 (accessed on 20 June 2018)

Powell, W.W. and Snellman, K. (2004). The Knowledge Economy. Annual Review of

Sociology, 30, pp. 199-220. Available at

http://www.scirp.org/(S(lz5mqp453edsnp55rrgjct55))/reference/ReferencesPapers.aspx?ReferenceID=1286565 (accessed on 19 June 2018)

Salter, P. (2015). The World's Best Entrepreneur Visas. *Forbes Media*. Available at <u>https://www.forbes.com/sites/philipsalter/2015/06/02/the-worlds-best-entrepreneur-visas/#60ce0c247f47</u> (accessed on 28 June 2018)

Startup Genome. (2015). The 2015 Global Startup Ecosystem Ranking. California, USA.

**United Nations Conference on Trade and Development (UNCTAD). (2012).** World Investment Prospects Survey 2012-2014. Available at http://unctad.org/en/PublicationsLibrary/webdiaeia2012d21\_en.pdf (accessed on 4 July 2018)

Watson, T. (2015). The Startup Visa: Key to Job Growth & Economic Prosperity in America. ISBN: 9781783016976

West, D.M. and Karsten, J. (2015). Start-up Chile: A "start-up for start-ups" in Chilecon Valley. *The Brookings Institution, Washington DC, USA*. Available at <a href="https://www.brookings.edu/blog/techtank/2015/08/19/start-up-chile-a-start-up-for-start-ups-in-chilecon-valley/">https://www.brookings.edu/blog/techtank/2015/08/19/start-up-chile-a-start-up-for-start-ups-in-chilecon-valley/</a> (accessed on 2 July 2018)

**World Economic Forum. (2017).** Global Competitiveness Report 2017-18. Available at <a href="http://reports.weforum.org/global-competitiveness-index-2017-2018/competitiveness-rankings/#series=EOSQ052">http://reports.weforum.org/global-competitiveness-index-2017-2018/competitiveness-rankings/#series=EOSQ052</a> (accessed on 20 June 2018)

**World Intellectual Property Organization (WIPO). (2017).** World Intellectual Property Indicators 2017. Geneva, Switzerland. Available at http://www.wipo.int/edocs/pubdocs/en/wipo\_pub\_941\_2017.pdf (accessed on 20 June 2018)

# Appendix A

Country Issuing the Visa	Select Benefits to the Applicant	Select Conditions to be Met by the Applicant	
Austria – The Red- White-Red Card <sup>46</sup>	<ul> <li>Startup founders are eligible for residence and work permit (the Red-White-Red card), valid for 2 years</li> <li>The residency can be extended based on creation of jobs (at least 2 in a year), a certain annual turnover (EUR 200,000 minimum) and further financing by the startup (of EUR 100,000 minimum)</li> </ul>	<ul> <li>Must establish a company which can develop and launch innovative products, services, processing methods or technologies</li> <li>Must have controlling influence in the management of the company</li> <li>Must have capital amounting to at least EUR 50,000 with a minimum equity share of 50%</li> <li>Must have a fixed and regular personal income to cover living costs without resorting to welfare aid from local authorities</li> <li>Must provide evidence of a legal title (such as a lease agreement) to local accommodation</li> </ul>	
Canada – Start-up Visa <sup>47</sup>	<ul> <li>The visa is the fastest means of obtaining a permanent residency for business immigrants</li> <li>Applicants will receive support from reputable angel investors, venture capitalists and business incubators</li> <li>Applicants of all kinds of startups (not just technology startups) are eligible</li> <li>The spouse, common-law partner and children of the applicant may also apply for the visa under the same application</li> </ul>	<ul> <li>The business must be innovative, create jobs for Canadians and compete on a global scale</li> <li>Each applicant must hold 10% or more of the voting rights attached to all shares of the corporation outstanding at that time (up to 5 people can apply as owners)</li> <li>Applicants and the designated organisation must jointly hold more than 50% of the total voting rights attached to all shares of the corporation outstanding at that time</li> <li>Startup must be accepted into a Canadian business incubator program</li> <li>Must meet minimum level of Canadian Language Benchmark in English or French</li> <li>Must secure minimum investment of Canadian \$200,000 (from a designated Canadian venture capital fund) or Canadian \$75,000 (from a designated Canadian angel investor group)</li> </ul>	
Chile – Chilean Tech Visa <sup>48</sup>	<ul> <li>1-year resident visa</li> <li>A US\$40,000 grant for every approved application</li> </ul>	<ul><li>Business must be technology-driven and innovative</li><li>Must have a Chilean National ID or a</li></ul>	

#### **Table A1: Startup Visa Features and Policies of Select Countries**

<sup>&</sup>lt;sup>46</sup> Source: <u>https://www.migration.gv.at/en/types-of-immigration/permanent-immigration/</u> (accessed on 2 July 2018)

 <sup>&</sup>lt;sup>47</sup> Source: <u>https://www.canada.ca/en/immigration-refugees-citizenship/services/immigrate-canada/start-visa/eligibility.html</u> (accessed on 2 July 2018)
 <sup>48</sup> Source: <u>http://www.startupchile.org/programs/</u> (accessed on 2 July 2018)

Country Issuing the Visa	Select Benefits to the Applicant	Select Conditions to be Met by the Applicant	
	<ul> <li>Can be issued within 15 days of application</li> <li>Office space to launch the company</li> </ul>	<ul> <li>Chilean ID for foreigners</li> <li>Must have a recommendation letter from an investor, mentor or academic to advocate the experience and talent of the team or individual</li> <li>Must have a video pitch on YouTube or Vimeo in three minutes or less stating why the applicant is the perfect candidate to lead the project, how they will socially impact Chile and what problem they will be solving</li> </ul>	
Estonia – Estonian Start-up Visa <sup>49</sup>	<ul> <li>A visa is issued within 30 days and valid for 1 year, after which a temporary residence permit may be issued within 2 months and valid for 5 years</li> <li>Once the applicant is granted the visa, the same can also be extended to the family – spouse, minor children and other dependents</li> </ul>	<ul> <li>Must be a founder of the startup company, and not just an employee</li> <li>Must have financial resources of at least EUR 130 for every month the applicant wants to spend in Estonia</li> <li>Must have an innovative and scalable business plan</li> <li>Must have approval from the "Startup Committee" stating that the applicant has an innovative startup and can pursue the Startup Visa</li> <li>Must have evidence of accommodation in Estonia</li> </ul>	
France – The French Tech Visa <sup>50</sup>	<ul> <li>The visa is a fast-track procedure to receive a "<i>Passeport Talent</i>" ("Talent Passport") – the residence permit</li> <li>The visa is valid for 4 years on a renewable basis</li> <li>Visa holder's spouse also receives residence permit authorising them to live and work in France. Dependent children are authorised to live in France as well</li> </ul>	<ul> <li>Must have an economically innovative startup project that will develop in France</li> <li>Must have financial resources at least equal to the French annual minimum wage of EUR 17,981.60</li> <li>Must be a founder of the startup</li> <li>Must be selected by one (or several) of the French Tech Visa partner incubators and accelerators, through their regular process of selection (such as by calls for projects, etc.)</li> </ul>	
Italy – Italia Startup Visa <sup>51</sup>	<ul> <li>If all conditions are met, the visa can be issued within three months of application</li> <li>Valid for 1 year</li> <li>The visa holder can subsequently apply for a 1-</li> </ul>	<ul> <li>Technological innovation must be the only sector where the startup company is engaged</li> <li>Must show evidence of financial stability of at least EUR 50,000</li> <li>Must show proof of suitable</li> </ul>	

<sup>&</sup>lt;sup>49</sup> Source: <u>http://startupestonia.ee/visa/founder</u> (accessed on 2 July 2018)
<sup>50</sup> Source: <u>https://visa.lafrenchtech.com/</u> (accessed on 2 July 2018)
<sup>51</sup> Source:

http://italiastartupvisa.mise.gov.it/media/documents/Guidelines%20ISV%20ENG%2019\_05\_2017%20fin.p df (accessed on 2 July 2018)

Country Issuing the Visa	Select Benefits to the Applicant	Select Conditions to be Met by the Applicant	
	year residence permit within 180 days of visa collection, which can then be renewed for 2 or 5 years	<ul> <li>accommodation in Italy</li> <li>If the company is incorporated, the applicant must undertake to assume the position of president, managing director, member of the board of directors or auditor of the company</li> <li>The business potential of the project submitted by the applicant must be approved by the "Italia Startup Visa Committee"</li> <li>The startup must It must dedicate 15% of total expenses to R&amp;D</li> </ul>	
Japan – Startup Visa Implemented by Fukuoka City <sup>52</sup>	• Visa permits foreign entrepreneurs to receive a 6- month "Business Manager" visa without fulfilling the prerequisites of hiring 2 or more permanent employees or having investment/capital exceeding 5 million Yen	<ul> <li>Must submit a New Business Implementation Plan (NBIP) to Fukuoka City</li> <li>Based on the City's evaluation, the applicant must also get approval from the Immigration Bureau</li> <li>Must have a business that has the potential to improve Fukuoka City's industrial competitiveness at the international level or expand employment opportunities (industries such as health, medical, knowledge-creating, environmental, energy, logistics and trade industries are eligible)</li> </ul>	
Singapore - EntrePass <sup>53</sup>	<ul> <li>Valid for 1 year and can subsequently be renewed every 2 years</li> <li>No minimum salary required to apply</li> <li>Can have certain family members to live in Singapore with a Dependant's Pass – spouse, children and parents</li> <li>Application can be processed within 8 weeks</li> </ul>	<ul> <li>Must have a business implementation plan containing market plan, operation plan, financial projections, and profiles of management team</li> <li>Must be a private limited company registered with the Accounting and Corporate Regulatory Authority</li> <li>If registered, the company must be less than 6 months old at the time of application</li> <li>Company must raise funding of at least Singapore \$100,000 from a government investment vehicle, venture capitalist or business angel that is recognised by a Singapore Government agency, <u>or</u> the company must be an existing incubatee at an incubator or accelerator in Singapore that is recognised by the Government, <u>or</u> the applicant must have business experience or network and promising entrepreneurial track record of starting highly-scalable businesses</li> </ul>	

 <sup>&</sup>lt;sup>52</sup> Source: <u>https://www.city.fukuoka.lg.jp/keizai/r-support/business/startupviza\_english.html</u> (accessed on 2 July 2018)
 <sup>53</sup> Source: <u>http://www.mom.gov.sg/passes-and-permits/entrepass</u> (accessed on 2 July 2018)

Country Issuing the Visa	Select Benefits to the Applicant	Select Conditions to be Met by the Applicant
		<ul> <li>and has to establish, develop and manage a new or existing business in Singapore</li> <li>To bring a spouse or children on the EntrePass, the total annual business spending must be at least Singapore \$100,000 and the business must employ at least 3 local full-time employees or 1 local professional, manager or executive</li> </ul>
South Korea – Technology-Based Startup Visa (D-8-4) <sup>54</sup>	<ul> <li>Only takes 2-3 weeks for the visa to be approved</li> <li>No limitation on amount to be invested in the startup to be eligible for the visa</li> <li>No minimum ceiling on duration of stay. Visa valid for 1 year and can be renewed thereafter every year</li> <li>D-8-4 visa holders who run their business for 3 years or longer and attract more than 300 million won and hire 2 or more Koreans for 6 months or longer can apply for the permanent residence visa</li> </ul>	<ul> <li>Must be a technology-based startup</li> <li>Must have a Bachelor's degree (or higher) earned nationally or internationally</li> <li>Must have IPR ownership (patent, utility model, design or trademark)</li> <li>Must complete or participate in Overall Assistance for Startup Immigration System (OASIS) courses (which include topics on IPRs, startups, corporations, etc.)</li> <li>Must complete establishment and corporate registration at a commercial registration office of court. After that, business registration shall be fulfilled at a jurisdictional tax office</li> </ul>

Source: Compiled from multiple, country-specific government websites

<sup>54</sup> Source:

http://eng.snu.ac.kr/sites/default/files/notice/Technology%20based%20startup%20visa%20for%20foreign% 20entrepreneurs.pdf (accessed on 2 July 2018)

# LATEST ICRIER'S WORKING PAPERS

		S WORKING I AI EKS	
NO.	TITLE	AUTHOR	YEAR
361	LAND USE AND LAND	ANWARUL HODA	JULY 2018
	ACQUISITION LAWS IN INDIA		
360	UPGRADING IN THE INDIAN	SAON RAY	JUNE 2018
	AUTOMOBILE SECTOR: THE	SMITA MIGLANI	
	ROLE OF LEAD FIRMS		
359	THE ROLE OF WATERWAYS IN	Zeba Aziz	MAY 2018
	PROMOTING URBAN	Indro Ray	
	RESILIENCE: THE CASE OF	Sandeep Paul	
	KOCHI CITY	1	
358	TOWARDS SUSTAINABLE,	ASHOK GULATI	APRIL 2018
	PRODUCTIVE AND	GAYATHRI MOHAN	
	PROFITABLE AGRICULTURE:		
	CASE OF RICE AND		
	SUGARCANE		
357	SUPPORTING INDIAN	ASHOK GULATI	APRIL 2018
	FARMERS: PRICE SUPPORT OR	TIRTHA CHATTERJEE	
	DIRECT INCOME/INVESTMENT	SIRAJ HUSSAIN	
	SUPPORT?		
356	SOLID WASTE MANAGEMENT	ISHER JUDGE AHLUWALIA	APRIL 2018
	IN INDIA AN ASSESSMENT OF	UTKARSH PATEL	
	RESOURCE RECOVERY AND		
	ENVIRONMENTAL IMPACT		
355	CHANGING TASK CONTENTS	PANKAJ VASHISHT	MARCH
	OF JOBS IN INDIA:	JAY DEV DUBEY	2018
	IMPLICATIONS AND WAY		
	FORWARD		
354	TRADE RULES IN E-	ARPITA MUKHERJEE	MARCH
	COMMERCE: WTO AND INDIA	AVANTIKA KAPOOR	2018
353	SCALING UP ROOFTOP SOLAR	SAURABH TRIVEDI	MARCH
	POWER IN INDIA: THE	INDRO RAY	2018
	POTENTIAL OF MUNICIPAL	GREGOR VULTURIUS	
	SOLAR BONDS	AMRITA GOLDAR	
		LABANYA PRAKASH J	
		SANDEEP PAUL	
		AARSI SAGAR	
352	CROP INSURANCE IN INDIA:	ASHOK GULATI	FEBRUARY
	KEY ISSUES AND WAY	PRERNA TERWAY	2018
	FORWARD	SIRAJ HUSSAIN	
351	DEMONETISATION – A	RAJIVA RANJAN SINGH	JANUARY
	GOLDEN OPPORTUNITY FOR	ANANDITA BAGCHI	2018
	WIDENING THE TAXPAYER		
	BASE		
350	TRADE FACILITATION	NISHA TANEJA	JANUARY
	MEASURES TO ENHANCE	SANJANA JOSHI	2018
	WOMEN'S PARTICIPATION IN	SHRAVANI PRAKASH	
	CROSS-BORDER TRADE IN	SAMRIDHI BIMAL	
	BBIN		
	,		

#### **About ICRIER**

Established in August 1981, ICRIER is an autonomous, policy-oriented, not-for-profit, economic policy think tank. ICRIER's main focus is to enhance the knowledge content of policy making by undertaking analytical research that is targeted at informing India's policy makers and also at improving the interface with the global economy.

ICRIER's office is located in the institutional complex of India Habitat Centre, New Delhi. ICRIER's Board of Governors include leading academicians, policymakers, and representatives from the private sector. Dr. Isher Ahluwalia is ICRIER's chairperson. Dr. Rajat Kathuria is Director and Chief Executive.

ICRIER conducts thematic research in the following eight thrust areas:

- Macroeconomic Management Financial Liberalisation and Regulation
- Global Competitiveness of the Indian Economy Agriculture, Manufacturing and Services
- Multilateral Trade Negotiations and FTAs
- Challenges and Opportunities of Urbanization
- Climate Change and Sustainable Development
- Physical and Social Infrastructure including Telecom, Transport Energy and Health
- Asian Economic Integration with focus on South Asia
- Skill Development, Entrepreneurship and Jobs

To effectively disseminate research findings, ICRIER organises workshops, seminars and conferences to bring together academicians, policymakers, representatives from industry and media to create a more informed understanding on issues of major policy interest. ICRIER routinely invites distinguished scholars and policymakers from around the world to deliver public lectures and give seminars on economic themes of interest to contemporary India.

