



**Gokhale Institute
of Politics and
Economics**
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Centre for Excellence
in Entrepreneurship
and Development

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Powering businesses. Creating jobs.

ROUNDTABLE REPORT



BARRIERS TO SCALING UP OF NANO AND MICRO ENTERPRISES IN FOOD PROCESSING

24 FEBRUARY 2023

PREPARED BY: CENTRE FOR EXCELLENCE
IN ENTREPRENEURSHIP AND DEVELOPMENT

Table of Contents

Context of Roundtable	_____	01
Roundtable Session Schedule	_____	03
Summary of Discussions	_____	05
Short Bios of Speakers	_____	08

Context of Roundtable

Concept Note

(I) Background

The Food Processing sector in India is a potential source for stimulating economic growth, and it brings about synergy between all three sectors of the economy, viz. agriculture, manufacturing, and the service sector. The agricultural sector provides raw material for agro processing industries, which facilitates the farm to fork approach and helps to minimize post-harvest losses. Consequently, the service sector also gets a boost, as economic activities such as transport, storage, marketing, etc. are created. Food processing has also been identified as a key contributor to employment generation, as the labor force has an opportunity to move out from the overcrowded agricultural sector to the industry and service sectors. There is tremendous potential on the supply side in this sector, due to the wide variety of agricultural produce, favorable agro-climatic conditions, and growth of organized retail.

In value terms, India's food processing sector is already one of the largest in the world and is expected to reach US\$ 535 billion by 2025-26. While this sector is critical for the Indian economy, its contribution to Gross Value Added is barely 1.69% (Ministry of Food Processing Industries, 2022). There are several constraints to the growth of the Indian food processing enterprises. The sector is highly fragmented, with the unorganized sector comprising large number of nano, micro and small scale enterprises, dominating the market. These units are often unable to scale up to become medium sized enterprises, which directly impacts their employment generation potential. Thus, while there have been many government interventions to support this sector, the full potential of the sector is yet to be realized as small enterprises in this sector face multiple challenges, from marketing to technology adoption to credit, and others.

Given that food processing is a thrust area, it would be useful for both policy framers and food processing entrepreneurs to come on the same platform and discuss issues related to nano, micro and small-scale enterprises. This roundtable is an attempt in this direction and we expect to hold such roundtables every year.

(II) Need for this Roundtable

The Roundtable aims to build together stakeholders to contribute their experiences of nano enterprises and barriers to their scale-up. Therefore, two panels comprising different stakeholders would be constituted to discuss as follows:

- a) Industry perspective
- b) Policy perspective

Each panel would provide their insights on the barriers towards scale-up of these nano and micro enterprises in the food processing sector, as well as the potential solutions to address their growth challenges. This Roundtable would help aggregate insights from the field and create a policy-design dialogue on food processing nano entrepreneurship.

The Roundtable would be conducted under the aegis of the Centre for Excellence in Entrepreneurship and Development (CEED) at the Gokhale Institute of Politics and Economics. The meeting will serve as a brainstorming session on the project, where we will also plan and strategize several future initiatives. It is therefore proposed to have a day-long roundtable at Gokhale Institute on this topic.

The output of this roundtable will be a document that will:

- Understand barriers towards starting, functioning, and scaling up of nano and micro food processing enterprises
- Discuss policy-specific issues, their impact, and the way out
- Identify potential collaborations for research and policy advocacy

Roundtable Session Schedule

9am - 9:45 am	Welcome Breakfast
9:45am - 10:00am	<p>Inauguration</p> <ul style="list-style-type: none"> • Welcome & short intro about Gokhale Institute & CEED by Dr. Lalitagauri Kulkarni, Director, CEED (5min) • Felicitation of speakers by Dr. Lalitagauri Kulkarni (10min) • Context Setting by Omkar Sathe, Assistant Director, CEED (5min) • The Economic Opportunity in Food Processing by Prof Sangeeta Shroff, Agro-Economic Research Centre, Gokhale Institute of Politics and Economics (10min)
10:00 am - 11:30 am	<p>Session 1: Industry Perspectives on barriers faced by nano and micro entrepreneurs in food processing?</p> <ul style="list-style-type: none"> • Atul Mardikar, CEO, Udyogprerana • Shrikrishna Ozarkar, Business Head (Food), Neologic Engineers Pvt Ltd. • Dr. Sandip Gaikwad, Professor at MIT School of Food Technology Mahesh Kambli, Director (Business Development), BAIF AGRO and Bio-Technology Pvt. Ltd
11:30am - 11:45am	Tea Break
11:45am - 1:15pm	<p>Session 2: Policy Perspectives in scaling up of nano and micro enterprises in food processing</p> <ul style="list-style-type: none"> • Mahendra Pawar, AGM, Maharashtra State Agriculture Marketing Board • Subhash Nagare – Director (Agro Processing & Planning), Commissionerate of Agriculture, Maharashtra • Kishore Bhave, Project Director of ATMA North Goa • Dr. Satyasai Kovvali, Head of Research at NABARD (Rtd) • Sopan Ingale, Officer, FDA, Pune
1:15pm - 1:30pm	Summarising and concluding remarks by Omkar Sathe
1:30pm - 2:30pm	Networking Lunch

List of Speakers

Session I: Industry Perspective

1. Mahesh Kambli, Director - Business Development, BAIF AGRO and Bio-Technology Pvt. Ltd
2. Atul Mardikar, CEO, Udyogprerana
3. Dr. Sandip Gaikwad, Assistant Professor at MIT School of Food Technology
4. Shrikrishna Ozarkar, Business Head - Food Neologic Engineers Private Limited
5. Prof Sangeeta Shroff, Director, Agro-Economic Research Centre, Gokhale Institute of Politics and Economics

Session II: Policy Perspective

1. Subhash Nagare, Director of Agro Processing & Planning, Commissionerate of Agriculture, Government of Maharashtra
2. Mahendra Pawar, AGM, Maharashtra State Agriculture Marketing Board
3. Dr. Satyasai Kovvali, Head of Research at NABARD (Rtd)
4. Kishore Bhave, Project Director of ATMA, Government of Goa
5. Sopan Ingale, Food Safety Officer, FDA, Pune

Summary of Discussion (1)

Food Processing sector offers huge opportunities for small businesses

Prof Sangeeta Shroff discussed the potential that the food processing sector offers for business opportunities and is an industry which generates synergies in all three sectors- agriculture, manufacturing and service. Indian economy is labour surplus, therefore employment is an issue that can be solved through agro-processing. She commented that the predominant markets to capture right now are in Europe and other developed countries, since the margin is much higher and therefore capturing developed countries can help get profit margins for businesses. Demand for nutraceuticals is on the rise, especially in the post pandemic world. People in western countries buy turmeric tablets at exorbitant rates. Our exports for ginger and turmeric have increased a lot since covid-19. Therefore, there is huge potential to export processed healthy products to developed countries where demand is rising to increasing awareness of healthy lifestyle choices.

Need to change approach towards financing small businesses in the food processing sector

Participants discussed the various perspectives of the challenges that micro and nano enterprises faces whilst accessing finance. Firstly, it was discussed that the requirement for finance of these enterprises is not throughout the year. Normally microfinance organizations charge exorbitant rates, but certain microfinance organizations have subsidized rates, since they get crowdfunded. Additionally, micro finance startups can also play a role in lending credit to these enterprises. Speakers also agreed that micro and nano enterprises in the food processing sector require a relatively larger period (of up to 3 years) to achieve a break even point, therefore in need of significant credit. Participants also commented that small industries are financed on the basis of fixed assets, however, policymakers should consider financing on the basis of rolling funds. Therefore, there is a need for funding models to evolve where repayment kickstarts after a longer period. Speakers also commented on the fact that credit scores of farmers are often very poor. This restricts their ability to raise debt funding through regulated financial institutions. Further, speakers discussed that if there is R&D investment in developing a novel product, the ability to use that to raise funding is limited because patents are intangible assets and banks cannot effectively evaluate patents. Therefore, there is a need to understand the intricacies of funding models that prevail globally, which may assist in addressing the gaps in the systems seen in India.

Need for more skilled persons in the industry

Speakers discussed that there is a significant skill gap in the food processing value chain, such as hands-on knowledge of operating latest machinery and equipment, preservation techniques, competitive packaging, quality control, food safety and hygiene.

Summary of Discussion (2)

Marketing, Access to markets, Packaging - a persistent challenge

Participants discussed that the lack of market linkages is a challenge in the journey of micro and nano enterprises. A solution that was discussed to solve this challenge was, if we can standardize products as it entails benefits such as enhancing customer trust, easing distribution, expanding market reach, ensuring compliance with regulations. Speakers echoed the need of creating an umbrella brand for different clusters of food products, wherein this umbrella brand can ensure standardization and hygiene of products. This may be beneficial in assisting many small sellers to ensure consistent quality and ease out market entry. Speakers discussed the potential of the One District One Product (ODOP) scheme by the central government as a means to help in establishing market linkages, such as through handholding entrepreneurs to improve the quality and design of their products, expand their market reach, and connect with potential buyers (exhibitions, trade fairs, and e-commerce platforms). Another challenge faced by the micro and nano food processing industry is, the competition in packaging and marketing from big players. There is less accessibility to packaging experts who can guide these small businesses and therefore, availability of training in packaging for such firms is minimal. Speakers discussed that authentic branding can go a long way in tapping the potential of local produce, for example, the Goan cashew market has been captured by African imports. This is an example which illustrates the case of product upliftment through authentic branding. Initiatives such as the one being implemented by Agriculture Technology Management Agency, Government Of Goa is trying to identify good growers, process it and market it with labels to offer an authentic certification to the products. There is also scope for the overall market size to increase with increase in marketing investment.

Infrastructure has improved, but can do better

Speakers discussed that logistics is a big challenge, especially for micro and nano businesses in the food processing industry. Challenges in leveraging technology to streamline logistics operations and improve efficiency, and inadequate knowledge of new markets to expand their customer base and improve their economies of scale are two prominent ones for micro and nano enterprises. Another problem discussed was cold storage. Cold storage facilities have increased as compared to the pre-covid era. However, the facilities are product based. The same cold storage facility may not be useful for other products. Speakers highlighted that there needs to be thought put into developing better infrastructure to address this constraint.

Micro and nano businesses need to fully understand compliance guidelines within the industry

Speakers discussed that the lack of awareness or the lack of clarity on compliance measures in the food processing industry are two prominent scenarios seen in the case of micro and nano enterprises.

Summary of Discussion (3)

For example, D1 form of Food Safety and Standards Authority is one such compliance guidance that remains one of the most important ones not adhered to. Many fail to distinguish between a "registration" and a "license". Furthermore, there needs to be better education of the entrepreneurs on the different compliance guidelines for the different verticals within the food processing sector.

Lack of information on policies and industry knowledge is prevalent

Speakers addressed the concern of the improper flow of information of government schemes to the desired beneficiaries. The benefit doesn't reach the bottom. Firstly, nano and micro enterprises don't have the time or resources to apply for schemes. In such a scenario, can Digital Public infrastructure play a role in crashing the time/effort needed to apply and avail of schemes? Further, speakers discussed how the government needs to ensure that there is no duplication or overlap of schemes and in a multi stakeholder environment like the food processing industry, we need to achieve synergies. For better information flow, leveraging artificial intelligence by all relevant ministries was one of the possible solutions put forth in the forum. Some expert information systems can be developed wherein for example, if somebody wants to start a papad business, he/she should be able to know which schemes and subsidies are available and availing all this information in one single place would be beneficial. Further on, the speakers discussed that many of the new industry entrants are not aware of different verticals in food processing. Apart from vertical selection, another major hurdle is that many players are not aware of what capacity to be chosen. There is no training for the same. Additionally, not many entrepreneurs have the ability to evaluate the viability of a business. This is especially higher, since a lot of them would be 1st generation entrepreneurs. Therefore, steps need to be devised to lower the mortality rate of new businesses entering the market. Entrepreneurs don't have a grasp on what DPR (detailed project report) the industry requires. Most DPRs received in banks are prepared by CAs. Speakers discussed that this is currently being addressed wherein Government officials in Maharashtra are themselves creating DPRs, and outlining the business idea. Speakers further on discussed that availability of industry data is a constraint, such as, the information on pricing is not available. Mapping of existing industry could help gain an idea of both – the potential competition for a new entrepreneur, as well as the opportunities to start off as a vendor. They commented on how food processing technology experts can train existing and upcoming industry personnel and offer internships for students, train plant operators, supervisors, owners, lab technicians. Based on a report by the NSDC, the agricultural universities and governmental research institutes are the primary sources of training for the food processing industry. There are no private entities providing training due to the high costs associated with providing hands-on training. The report suggests that a public-private partnership (PPP) is the best option for private players to provide training. The private players can establish training academies near areas of high employment and implement an apprentice-trainer model. Currently, there is a lack of training courses for critical job roles, such as milling operators and personnel for catching/culling animals and deboning. Private training providers can focus on developing training modules for these areas to meet the industry's workforce requirements. The report also highlights the need for improved awareness regarding industry verticals and capacity selection.

Short Bios of Speakers

Atul Mardikar

Atul Mardikar has more than 35 years of experience in Food Processing and Post-Harvest Sector. His core strength is Food Entrepreneurship Development and have completed many projects in this sector so far. He works with Maharashtra and North East India Government too. He plays a role in Government Policy making in this sector. He plays a vital role in various institutions working in the Food Processing and Post-Harvest Sector.

He owns a dehydration unit based in Solapur, Sangli and Jabalpur. The name of Company is Prajakta Technology Pvt Ltd. He has poured 18 years of efforts taken for Research and Development for Dehydration of various fruits, vegetables, herbs, spices, flowers etc. to make a state of art processing unit. He has been titled as - "Father of Dehydration" by Association of Food Scientists and Technology (India) just because of this contribution. Apart from Prajakta Technology Pvt Ltd, he is an Editor and CEO at Udyogprerana.

Kishore Bhave, Project Director of ATMA North Goa

Before joining the agriculture department of Government of Goa, Kishore Bhave has worked at many places and postings through Goa. He has also worked as subject matter specialist at Krishi Vigyan Kendra South. He is presently working as project director, agriculture technology management agency north Goa district from the past two years.

Dr. Lalitagauri Kulkarni, Director, CEED

Dr. Kulkarni's research focuses on financial system reform and society to ensure that people and communities have access to affordable financial products and services in today's digital economy. It is within this context that her recent book redefines the narrative of financial inclusion policy.

Her research focuses on fintech, digitalisation and policy alternatives for inclusive development, and addresses the problems related to digitalisation from a gender perspective. Her work has been published in reputed journals, and also in regional vernacular media. She teaches macroeconomics and finance, financial economics and financial derivatives at the Institute.

Dr. Kulkarni has worked on research and consultancy projects for regulatory bodies and corporate firms in India. She coordinates the M.Sc. Financial Economics program at the Institute and has designed and developed the program. She is also the faculty in charge of executive training programs at the Institute.

Her PhD is in secondary market trading in life insurance, and it was an investigation of how unregulated money lending prevails in India, and how that can be institutionalised to prevent the exploitation of low-income policyholders.

Short Bios of Speakers

Maresh Kambli, Director (Business Development), BAIF AGRO and Bio-Technology Pvt. Ltd

Maresh Kambli is passionate about developing and nurturing brands in the food/retail space that display tremendous potential. This is something he discovered after trying his hands in several other fields and industries - from financial services to sales and even business development in the real estate domain. His big breakthrough came in the form of a daunting assignment: taking over as the CEO of Apna Bazaar Co-op (Food Retail).

A management leader with over 25 years of experience in the food and retail industry. This includes noteworthy, market-defining brands like Kamat's Restaurants (COO), Sayaji Foods (COO) and his last assignment: the Head of Retail for Haldiram's Nagpur, managing over 50 outlets for a brand that needs no introduction.

Omkar Sathe, Assistant Director, CEED

Omkar Sathe is a partner at CPC Analytics, a policy consulting firm with offices in Pune and Berlin. He is also the Assistant Director at Centre for Excellence in Entrepreneurship and Development (CEED) at the Gokhale Institute of Politics and Economics. CEED aims to drive entrepreneurship research, especially amongst nano and micro enterprises. Omkar's experience spans across public policy and corporate roles.

In public policy, he has worked with multilateral organizations like the World Health Organization, govt bodies like the Pune Municipal Corporation and the Government of Goa, NGOs like Save the Children, and think-tanks like Observer Research Foundation. Omkar's corporate experience has been with Asian Paints, Reliance Jio, and the Aditya Birla Group. His last corporate role was as the Head of Innovation at UltraTech Cement. Omkar is also a Steering Committee member of the Australia India Youth Dialogue, the tier-2 diplomacy track between the two countries. He is an alumnus of the Indian Institute of Management Calcutta.

Dr. Sandip Gaikwad, Professor at MIT School of Food Technology

Dr. Gaikwad is a Food Technologist. He is dynamic, dedicated and determined personality continuously engage in the growth and development of Food Science and Technology field through his innovative ideas and Initiatives.

He has qualified SLIET Test-2012, NIFTEM PhD Entrance Test-2014, GATE-2014 (Life Science), ASRB-NET-2015 (Food technology), UGC-NET-2015 (Food Technology) and UGC-NET-2018 (Management). He was awarded with many prestigious awards for his contribution to field of Food Technology, Agri Business management and Entrepreneurship development which includes "Young scientist Award-2018" given by Student Federation of Food Technology, India and "Best achiever aawaard-2017" given by NIFTEM, Ministry of Food Processing Industries, India.

Short Bios of Speakers

Dr. Gaikwad has published more than 40 research papers in national and international journals. He is currently working as Head, Dept. of Food Business Management & Entrepreneurship Development, MIT ADT University, Pune. He is also working as consultant and expert the field of Food Business and a mentor for Foodpreneurs Club and guided 15+ Food Startups from the same club. He is guiding many students to open doors of excellent opportunities in leading food processing industries and enables them to become successful entrepreneurs as well.

He completed his B. Tech in Food Technology from VNMKV, Parbhani and M. Tech from SLIET, Punjab in Food Engineering and Technology. He completed his PhD in food Business management from National Institute of Food Technology entrepreneurship and management, Delhi.

Prof Sangeeta Shroff, Agro-Economic Research Centre, Gokhale Institute of Politics and Economics

Sangeet Shroff is a Professor at Gokhale Institute and is currently heading the Agro-Economic Research Centre at the Institute, the oldest AERC in India. She has worked in diverse areas in the discipline of Agricultural Economics and has made contributions to policy.

She has published research papers and worked on projects sponsored by departments at state and central ministries. She has also worked with national and global bodies such as the Confederation of Indian Industry, and the World Bank. Prof Shroff was a Member of the Working Group on “Decentralised Planning in Agriculture” in the context of the Twelfth Five Year Plan (2012-2017) with the erstwhile Planning Commission. She teaches postgraduate students, guides PhD scholars, and participates in national and international conferences.

Dr. Satyasai Kovvali, Head of Research at NABARD (Rtd)

Dr. K.J.S. Satyasai retired as Chief General Manager, Department of Economic Analysis and Research (DEAR), the National Bank for Agriculture and Rural Development (NABARD), India. He joined as an agricultural economist in 1993, Dr. Satyasai has served NABARD in different capacities over the last 3 decades. He holds Ph.D. from Indian Agricultural Research Institute, New Delhi.

He has 36 years of applied economics research experience Including his stint at Institute of Economic Growth, Delhi, since 1986, as Foreign Professor at Konkuk University, Seoul and faculty member at the Banker’s Institute of Rural Development, India for an year. He has recently steered a large sample survey, NABARD All India Rural Financial Inclusion Survey (NAFIS) conducted by NABARD and initiated second round of NAFIS. He has several consultancy assignments and over 70 publications to his credit during his 36 years of career in applied economic research. He is active in professional associations of agri economists and reviewer to various journals. Besides, he gave talks at various fora. He guided quite a few students as well. He recently co-authored a book on Agricultural Development in Andhra Pradesh.

Short Bios of Speakers

His research interests are irrigation economics, agricultural development, microfinance, rural credit, financial inclusion among others. His latest works include Farmers Welfare in India, Journey of Indian Agriculture since Independence, Food and Nutritional Security in India, among others.

Shrikrishna Ozarkar, Business Head (Food), Neologic Engineers Private Limited

Born in a middle-class family in Nashik; he completed his entire education in Pune by completing degree in Mechanical Engineering from Pune University in 1987. After spending few years in SKF; he joined Alfa Laval and worked in Project Planning & execution in Dairy & Beverages sector of manufacturing department. He headed the Amul Project for Alfa Laval that time & completed that in a record time in the year 1995.

He started his entrepreneurial journey by starting his own small-scale industry for Food Processing Machinery in 1996 & eventually merged his business areas with Neologic in 2018. He was representing various Food Processing Machinery companies from Europe during this period.

Today, in industry; he is well known for simple, cost effective & energy saving Processing Solutions in Dairy, Fruit Pulps-Purees, Carbonated & Non-carbonated beverages, Prepared Food among other food processing areas. Professionally a hard-core technocrat, Chartered Engineer & Valuer; his interest in Agri processing was developed after experiencing the lack of industrial processing solutions during his years in industry. He has conducted more than 40 Seminars / Webinars / Sessions on various Food Processing aspects. He is also Guest Lecturer at IIM Ahmedabad for Post-Graduation in Food Processing.

He is Senior Director Consultant at BNI Pune West; international networking organization having more than 800 business members in Pune West & more than 3,00,000 all over the world. He is Member of MCCA (Maharashtra Chamber of Commerce for Industry & Agriculture), IICC (Indo-Italian Chamber of Commerce) & is empaneled consultant at NAFARI (National Agriculture & Food Analysis Research Institute).

Subhash Nagare – Director (Agro Processing & Planning), Commissionerate of Agriculture, Maharashtra

Subhash Nagare has been appointed in many key roles, starting with Deputy Director of Horticulture, Dhule and then later promoted as District Superintending Agricultural Officer, Akola, Jalgaon and Nandurbar. Mr. Nagare has also worked as the Divisional Agricultural Officer, Amravati. He has been a part of various training programs such as Agricultural Entrepreneurship Development in Delhi, International Banana Conference in Tamilnadu and training of VHL-MACP Agri business supply chain Management at VHL Institute at Netherland.

Key Takeaways (1)

<p>CREDIT</p>	<p><u>Key Challenges:</u></p> <ol style="list-style-type: none"> 1) Low credit scores 2) Access to insufficient credit 3) Non-inclusive funding models <p><u>Key Recommendations:</u></p> <ol style="list-style-type: none"> 1) Consider financing on the basis of rolling funds 2) Need for funding models to evolve where repayment kickstarts after a longer period 3) Need to understand the intricacies of funding models that prevail globally
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<p>MARKET ACCESS</p>	<p><u>Key Challenges:</u></p> <ol style="list-style-type: none"> 1) Competition in packaging and marketing from big players 2) Less accessibility to packaging experts who can guide these small businesses 3) Availability of training in packaging for such firms is minimal <p><u>Key Recommendations:</u></p> <ol style="list-style-type: none"> 1) Standardize products in order to - enhance customer trust, ease distribution, expand market reach 2) Rigorous implementation of ODOP scheme in different areas 3) Government intervention to identify quality products and assist in branding
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Key Takeaways (2)

<p style="text-align: center;">INFRASTRUCTURE</p>	<p><u>Key Challenges:</u></p> <ol style="list-style-type: none"> 1) Cold storage facilities do not serve the purpose for different kinds of food products 2) Challenges in leveraging technology to streamline logistics operations and improve efficiency <p><u>Key Recommendations:</u></p>
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<p style="text-align: center;">INDUSTRY KNOWLEDGE</p>	<p><u>Key Challenges:</u></p> <ol style="list-style-type: none"> 1) Inadequate knowledge of new markets to expand their customer base and improve their economies of scale 2) New industry entrants are not aware of different verticals in food processing 3) Many entrepreneurs lack the ability to evaluate the viability of a business 4) Many entrepreneurs don't have a grasp on what DPR (detailed project report) the industry requires 5) Availability of industry data is a constraint <p><u>Key Recommendations:</u></p> <ol style="list-style-type: none"> 1) Digital Public infrastructure can play a role in eliminating time/effort needed to apply and avail of schemes 2) Check for duplication or overlap of government schemes 3) Need to achieve synergies with other organisations in a multi stakeholder environment like the food processing industry 4) Leveraging AI by all relevant ministries for better information flow 5) Expert information systems can be developed wherein an entrepreneur should be able to know which schemes and subsidies are available in one single place
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