

AGRIPRENEUR START-UPS

MANUAL WITH OPERATIONAL GUIDELINES FOR
PROMOTION OF AGRIBUSINESS ENTERPRISES

V. Padmanand | Sushil Khodwekar
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World Bank Assisted

Maharashtra Agricultural
Competitiveness Project

Agri-Business Promotion Facility
Grant Thornton India LLP

AGRIPRENEUR START-UPS



मुख्यमंत्र्यांचे अवर मुख्य सचिव
महाराष्ट्र



Additional Chief Secretary to
Chief Minister
Maharashtra

24/08/2018

The teeming millions of unemployed or under-employed youth in the State and Country may be provided gainful employment only through MSME Start-ups. This publication brought out by the MACP presents the methodologies and tools successfully deployed for promoting Start-ups in this context. A most valuable contribution to policy-makers as well as implementers in the country.

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Date : 27/08/2018

Message

"Maharashtra has strived to lead initiatives along Government of India priorities. This is also in terms of "Start-up India" and "Doubling Farmer's Income". This publication documents related interventions and serve as a virtual tool kit for state governments as well as development practitioners across the country."

Bijay Kumar
27/8/18

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Maharashtra Agricultural Competitiveness Project
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List of Abbreviations

ACABC	Agri-Clinics and Agri-Business Centre
AGM	Annual General Meeting
AIFPA	All India Food Processors' Association
APEDA	Agriculture and Processed Food Products Export Development Authority
APLM	Agriculture Produce and Livestock Marketing
APMC	Agriculture Produce Market Committee
ASIDE	Assistance to States for Development of Export Infrastructure
ASSOCHAM	The Associated Chambers of Commerce and Industry of India
ATMA	Agriculture Technology Management Agency
BoT	Board of Trade
BOI	Business Opportunity Identification
BPP	Business Plan Preparation
CED-TN	Centre for Entrepreneurship Development in Tamil Nadu
CFTRI	Central Food Technology Research Institute
CGTMSE	Credit Guarantee Trust for Micro and Small Enterprises
CII	Confederation of Indian Industry
CSF	Critical Success Factors
DCMSME	Development Commissioner – Micro Small and Medium Enterprise
DFIs	Development Financial Institutions
DFRL	Defence Food Research Laboratory
DGCI&S	Directorate General of Commercial Intelligence and Statistics
DGFT	Directorate General of Foreign Trade
DOGR	Directorate of Onion and Garlic Research
DSCR	Debt Service Coverage Ratio
DST	Department of Science & Technology
DTF	Distance to Frontier
ED	Entrepreneurship Development
EDIs	Entrepreneurship Development Institutes
EOQ	Economic Order Quantity
EPC	Export Promotion Council
FCSC	Farmer Common Service Centre
FICCI	Federation of Indian Chamber of Commerce and Industry



FMCGs	Fast Moving Consumer Goods
FPCs	Farmer Producer Companies
FPOs	Farmer Producer Organisations
FSSAI	Food Safety and Standards Authority of India
GAP	Good Agriculture Practices
GDP	Gross Domestic Product
GMP	Good Manufacturing Practice
GoM	Government of Maharashtra
Govt.	Government
GST	Goods and Service Tax
GT	Grant Thornton India LLP
HACCP	Hazard Analysis and Critical Control Point
IARI	Indian Agricultural Research Institute
ICC	Indian Chamber of Commerce
IIP	Index of Industrial Promotion
IIP	Indian Institute of Packaging
IQF	Individual Quick Freezing
KVIC	Khadi and Village Industries Commission
LLP	Limited Liability Partnership
MACP	Maharashtra Agricultural Competitiveness Project
MCCIA	Mahratta Chamber of Commerce Industries and Agriculture
MCED	Maharashtra Centre for Entrepreneurship Development
MFI	Micro Financial Institution
MITCON	Maharashtra Industrial and Technical Consultancy Organisation
MNC	Multi National Company
MoA	Memorandum of Association
MoFPI	Ministry of Food Processing Industries
MoMSME	Ministry of Micro, Small and Medium Enterprises
MPCB	Maharashtra Pollution Control Board
MSAMB	Maharashtra State Agriculture Marketing Board
MSE	Micro and Small Enterprises
MSE-CDP	Micro and Small Enterprise– Cluster Development Programme
MSME	Micro, Small and Medium Enterprise
MSME-DI	Micro Small Medium Enterprise Development Institute
MUDRA	Micro Units Development and Reinance Agency Bank
NABARD	National Bank for Agricultural Reconstruction and Development
N-Ach	Need for Achievement
NBFCs	Non- Banking Financial Companies
NCDC	National Cooperative Development Corporation
NCDEX	National Commodity and Derivatives Exchange
NCR	National Capital Region
NDDDB	National Dairy Development Board



NGOs	Non- Government Organizations
NHB	National Horticulture Board
NHM	National Horticulture Mission
NIFTEM	National Institute of Food Technology Entrepreneurship and Management
NIMSME	National Institute of Micro Small and Medium Entrepreneurship
NOC	No Objection Certificate
NSIC	National Small Industries Corporation
NSTEDB	National Science and Technology Entrepreneurship Development Board
OLPE	Open Learning Programme in Entrepreneurship
PHD-CCI	Progress Harmony Development – Chamber of Commerce and Industry
PMEGP	Prime Minister’s Employment Generation Programme
PMMY	Pradhan Mantri MUDRA Yojana
PMRY	Prime Minister’s Rojgar Yojana
PMU	Project Management Unit
PPP	Public Private Partnership
REDPs	Rural Entrepreneurship Development Programmes
RoC	Registrar of Companies
RoCE	Return on Capital Employed
RoE	Return on Equity
RoI	Return on Investment
RSETI	Rural Self Employment Training Institutes
SFAC	Small Farmers’ Agri Business Consortium
SFURTI	Scheme for Regeneration of Traditional Industries
SIDBI	Small Industries Development Bank of India
SLM	Straight Line Method
SPV	Special Purpose Vehicle
Sq.Mt	Square Meter
ST	Scheduled Tribes
SWC	State Warehousing Corporation
TBI	Technology Business Incubators
TIC	Technology Incubation Centre
TEPP	Techno-Entrepreneur Promotion Programme
TFO	Total Financial Outlay
TPD	Tonnes Per Day
TPH	Tonnes Per Hour
USA	United States of America
USD	United State Dollar
USFDA	United State Food and Drug Administration
VIA	Vidarbha Industries Association
WDV	Written Down Value



Foreword

अशोक दलवाई, भा.प्र.से.
मुख्य कार्यकारी अधिकारी
भारत सरकार
कृषि एवं किसान कल्याण मंत्रालय
कृषि, सहकारिता एवं किसान कल्याण विभाग
राष्ट्रीय वर्षा सिंचित क्षेत्र प्राधिकरण



ASHOK DALWAI, IAS
Chief Executive Officer
Government of India,
Ministry of Agriculture and Farmers Welfare
Department of Agriculture, Cooperation & Farmers Welfare
National Rainfed Area Authority (NRAA)



The Agri-Business Promotion Facility (ABPF) under the World Bank assisted Maharashtra Agricultural Competitiveness Project (MACP) has pioneered one of the largest such development interventions in the country and perhaps the globe. This is by virtue of promoting over a thousand micro and small enterprise start-ups and about 400 Farmer Producer Companies (with common processing facilities). This Manual draws extensively from learnings under this project and interventions, and seeks to disseminate various methodologies and tools deployed particularly for start-up promotion. The authors and MACP have already published a manual for Board of Directors for FPCs, which was released by the Hon. Minister for Agriculture and Farmers' Welfare, Shri Radha Mohan Singh in the presence of state agriculture ministers recently.

It will be quite apt to consider a National perspective on the agri-business and food processing sector, as a foreword to this manual for start-ups in Agri-business. India with the second largest arable land in the world and diverse agro-climatic zones has significant production advantages in agriculture. The country has an advantage, in that more than 52 per cent of India's land is cultivable, compared to the global average of 11 per cent. India produces 88.97

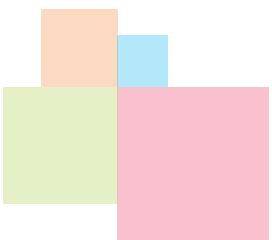


million tonnes of fruits and 162.89 million tonnes of vegetables. Also, it produces 6.23 million tonnes of meat and poultry, as well as 9.57 million tonnes of fish per annum.¹ India has a wide range of climate and soils enabling an array of horticultural crops such as fruits, vegetables and other tropical tuber crops; ornamental, medicinal and aromatic plants; plantation crops; spices, cashew and cocoa are grown.

India is also blessed with diverse agro-climatic conditions, around 46 soil types, long sunshine hours and an extensive cropped area of 142 million ha. This has helped the Nation emerge as the largest producer of milk in the world, second largest producer of fruits and vegetables, third largest producer of foodgrains and third largest producer of fish. Further, it is home to the largest number of livestock in the world. On the demand side, India offers a huge consumer base to the Agro & Food Industry with its population of 1.28 billion and increasing income levels. The agri-business, as also the Agro and Food processing industries in the country are increasingly seen as a potential source for driving the rural economy as they facilitate synergy between industry and agriculture and promote investments in the agricultural sector.

Notably, food constitutes the largest chunk of Indian consumer spend, at about 46.5 per cent share in the consumers' rupee! Reports estimate that the size of the food market has grown at a CAGR of 7.86 per cent during the last decade. Besides food, if one considers the consumers' spend on other agricultural products from agro-industries, like fibre, leather, chemicals, medicinal, floriculture, agro-forestry, etc., then the share of the agricultural sector in the consumers' rupee will be much higher.

In food, India is witnessing dramatic changes in consumption patterns, in the recent years. In just the last decade, it is seen that the share of cereals in consumer food expenditure has dropped from 33.8 per cent to 27.5 per cent, while on the other hand, the share of processed food and beverages has increased from 8.5 per cent to 12.8 per cent. The highest increase in value is in that of fresh Fruits and Vegetables (F&V) and that of animal protein (egg, fish and meat), where there has been an



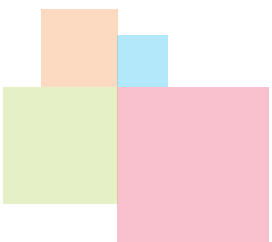
increase from 12.6 to 15.8 per cent and from 5.4 per cent to 6.6 per cent respectively. These trends signify that there is a consistent increase in the proportion of spending on high value categories such as fresh foods such as F&V and livestock products, fish, and processed food, including beverages.

In the light of the aforementioned consumption shifts, as well as resource and demand conditions, vis-a-vis the agri-business sector, a range of micro and small enterprises find increased scope in the gamut of agro sub-sectors, ranging from livestock farming to hatchery, poultry, pulses and cereals processing, carbonated beverages, spices, meat and fish processing, edible and non-edible oil milling, vegetable dehydration, fruit processing, fresh food supply chains, warehousing to cold-chain and other agri-logistics.

At the national level, other developments such as the move towards a unified national agricultural market, the promotion of village level aggregation and marketing hubs, the push for small and medium scale secondary agriculture, the recent reforms in shape of the Model Agricultural Produce & Livestock Marketing (Promotion & Facilitation) Act (APLM, 2017) along with a revamped agricultural market architecture, add to the potential and the opportunity for agri-business start-ups.

In this setting, integrated guidance and support need to be strengthened so as to achieve a higher 'success-rate' among start-ups that venture into agri businesses. Guidelines such as these, which help with the appropriate identification and selection of potential entrepreneurs, facilitate enterprise training and skill development, facilitate necessary credit and provide for mentoring or incubation services are most welcomed.

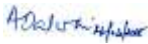
Now taking the case of Maharashtra, its importance as an agro and food processing destination in the country is well recognised. It has a large production and processing base. Maharashtra registers the highest level of production of fruits in India. It also accounts for much of the seed industry in the country. Export of fresh horticulture produce and procured food is in the range of 40-50 per cent of the country's total. The State of Maharashtra has undertaken many initiatives to develop agri-business enterprises and has met good success. The development of this document, will move these initiatives further.

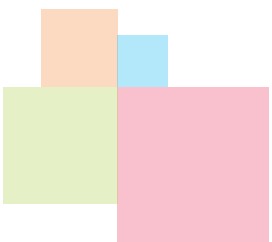


India's agricultural sector has a bright future, once all the farmers in the country are income secured. For this to happen, the optimal communion between farmers and businesses is necessary, to a level where even this subtle difference is diluted. It is hoped that these Guidelines will bring about such collaboration, to benefit many more tens of thousands of farmers and generate scores of thousands of jobs through agri-business start-ups.

It gives me great pleasure to commend this manual to the Nation and hope that many other states will learn from the interventions taken in Maharashtra and adopt them for an even greater impact in their own regions. I congratulate the Grant Thornton team for bringing out this highly apt and useful document.

New Delhi
August ,2018


Dr. Ashok Dalwai (IAS)
CEO, NRAA and Chairman,
“Committee on Doubling
Farmers' Income”



Preface

An entrepreneur is one who organises, operates and assumes the risk of a business venture. S/he perceives a need in the market – place, and then mobilises manpower, material and capital in such a manner that addresses the need. Further, such an individual is not necessarily “born”, S/he may be moulded to assume the mantle of entrepreneurship.ⁱⁱ With this belief, agencies and practitioners of Micro, Small and Medium Enterprises (MSME)ⁱⁱⁱ development in India have been pursuing interventions towards fostering entrepreneurship. This circumstance is coupled with a growing realisation of the importance of SMEs worldwide. They account for 95-99 per cent of firms in most Developed as well as rapidly developing economies.^{iv} Evidently, in India and Maharashtra the share of MSMEs in manufacturing is about 45 per cent and in exports about 40 per cent. Notwithstanding interventions, while the business environment and “entrepreneurial culture” in some locations generate a supply of the entrepreneurial breed, dedicated initiatives and programmes have yielded mixed results.^v Despite interventions through a plethora of policy – making and field level implementing institutions, the impact of programmes in terms of SME start-ups is often lack-lustre with a considerable loss by way of scarce resources. This manual seeks to redress such circumstance.^{vi} It is not only those of family business background who may successfully initiate an enterprise. Learnings derived over interventions under the World Bank supported Maharashtra Agricultural Competitiveness Project (MACP) by the Agri-Business Promotion Facility (ABPF) serve as the empirical basis of this manual.

Agri-Business Promotion Facility services under the MACP are provided by the Grant Thornton India LLP. The interventions under the MACP have also led to the evolution of over a 1000 start-ups in agri-business. The methodology adopted in promoting such a large number of start-ups in a short time frame is also presented in this volume. This manual also supports the call for an integrated approach towards entrepreneurship development and is to also serve as an operational manual for promoting start-ups in the agri-business sector.

In Part-One chapter 1 of the manual considers the entrepreneurship start-up eco-system and approach in terms of definitions, approaches, schemes and institutions as well as approach under the MACP. An



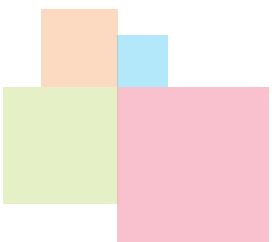
operational methodology along with learnings under the MACP is also considered.

The theories on entrepreneurship also comprise, psychological theories such as those developed by McLelland which concentrate on personality traits and strong Need for Achievement. For a self-employed worker, the main expectation and objective may be to provide a reasonable standard of living for her/himself. Therefore, constant growth need hardly be necessary thrust. Notably, some socio-culture factors are internal such as personality factors. Others such as family background, traditions and perceptions towards entrepreneurship, and business environment in the context of stable and attractive environment are external. Some individuals embark on an entrepreneurial adventure by virtue of a “positive – pull” vis-à-vis the charms of being an entrepreneur as against the absence of alternate avenues to earn a (desired standard of) living. Some entrepreneurs are therefore born, while others evolve on the basis of the environment or personality characteristics. All typologies of individuals participate in government sponsored entrepreneurship development programmes in India including in Maharashtra.

Chapter 2 considers the incubation centre approach and some incubation centres abroad and in India for start-up promotion. Incubators may themselves conduct ED related training programmes. Scope for synergizing incubator activities with existing EDP conducting institutions also exists. This is likely to result in greater numbers of sustainable start-ups. An incubation centre may provide equipment and common facilities in addition to shop-floor space to help assist entrepreneurs. It may also help small entrepreneurs develop and test their products in terms of quality assurance, market acceptance and the like on a commercial scale. In many cases, an incubation centre works in close association with concerned academic, vocational and R&D institutions. In India, the National Science and Technology Entrepreneurship Development Board (NSTEDB) has promoted several Technology Business Incubators (TBIs). TBIs foster innovative start-up firms, thus the process of incubation is strongly intertwined with the innovation process that occurs in the supported enterprises.

Chapter 3 considers various Entrepreneurship Development (ED) institutions in India and their Entrepreneurship Development Programmes (EDPs). It considers the typical profile of ED institutions and profiles institutions in Maharashtra.

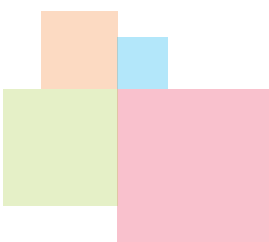
Subsequently, chapter 4 presents the conventional EDP (Training input-structure). It is ideal that EDPs are sector-specific (that is, for example, food processing EDPs) than general as to ensure focus in



inputs, support, and therefore results in terms of sustainable start-ups. The duration of this training phase is typically of about one-month. Class-room training inputs offered in an EDP may be envisaged in terms of motivational, informational, opportunity guidance, legal and statutory system, soft skill competency, as well as business plan and managerial inputs. Participants are then technically trained by being placed as “interns” in an existing institute or enterprise. If firms related to required technical areas are not available or accessible, they may be trained in appropriate technical training facilities. Thereafter, counselling is provided to trainees as they work in the field and prepare a detailed business plan, usually seeking assistance from financial institutions. Typical financing instruments offered for start-ups by FIs may vary on the basis of moratorium, collateral requirements and promoter's contribution, etc.

Chapter 5 considers the selection of potential start-ups. The selection methodology may indicatively assess entrepreneurial competencies, and also candidates from the point of view of business acumen and home-work and resolve to pursue an entrepreneurial career. The latter may be in terms of a preliminary or hypothetical business idea. In order to assess basic competencies in a person, the candidate may provide one illustration each from his/her past experience on displaying any few of entrepreneurial competencies. The experience may be related to jobs, past or current attempt at enterprise, over educational career etc. Individual interviews maybe conducted for each candidate by an interviewer or panel of experts representing related institutions. The interviews need to evaluate both the entrepreneur as well as his /her preliminary business idea (even hypothetical, if any). Other than soft skills, initiatives and resolve to pursue an entrepreneurial career in terms of, in-principal support from FIs may be given due weightage when selecting potential start-ups to be supported. A Letter of Intent from FIs to support the project will be of some comfort.

Chapter 6 considers Business Development Service (BDS) and mentoring needs for start-ups. The services of several public as well as private BDS providers may be availed of by SMEs. Some of these institutions include the National Small Industries Corporation, the Office of the Controller General of Patents Design and Trademarks, large industry associations such as Federation of Indian Chambers of Commerce and Industry (FICCI), Central Food Technological Research Institute (CFTRI), Mysore and the Confederation of Indian Industry. Entrepreneurship Development Institutions such as NMSME and the Entrepreneurship Development Institute of India,



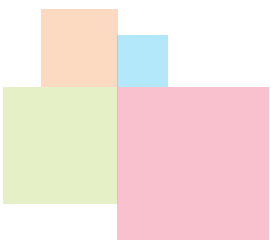
technical consultancy organizations such as the Maharashtra Industrial and Technical Consultancy Organization.

Chapter 7 presents the profile of key institutions related to MSME development and start-up facilitation. Several development agencies and Ministries of the Central Government of India play a critical role in promotion of start-ups and agri-business. These include the Ministry of Commerce and Industry, the Ministry of MSME, the Ministry of Food Processing Industries, Ministry of Science and Technology, Ministry of Entrepreneurship and Skill Development, etc. There are also state government institutions like the Directorate of Industries and Commerce/Small Industries Department which support employment generation by means of implementing schemes for: training and financing of educated unemployed youth in the context of self-employment and entrepreneurship; it also offers a range of schemes for food processing units.

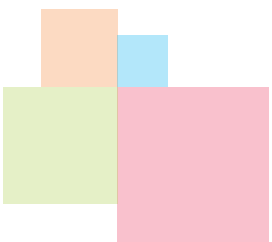
Thereafter, Chapter 8 considers elements of the business environment and Ease of Doing Business in India. The government had introduced 37 reforms in areas such as insolvency resolution, protecting the interest of minority shareholders and simplifying the process of taxes to ensure the faster resolution of commercial disputes. The big jump in India's ease of doing business ranking has a lot to do with the reforms undertaken by the Maharashtra government. Since ease of doing business in India is assessed based on data collected from Mumbai and Delhi, the performance of the two cities is key to improving the rank.

Chapter 9 considers various institutions related to food processing. The Ministry of Food Processing Industries (MoFPI) is a ministry of the Government of India responsible for formulation and administration of the rules and regulations and laws relating to food processing in India.

Chapter 10 considers the integrated approach adopted under ABPF-MACP – Operational guidelines and methodology. The different approaches towards promoting entrepreneurship development are initially considered with their limitations. The approaches considered include the group entrepreneurship approach, the incubation centre approach, the EDP approach and the mentoring approach. There are a range of approaches and strategies followed worldwide for entrepreneurship development. These include: (i) The group entrepreneurship and self-help group- SHG (and today even FPO led approach sometimes supported through micro credit and finance institutions or developmental or donor organizations). The success of the Bangladeshi “Grameen Bank” model of micro



enterprise development through SHG's led to this approach being propagated and formatted in many countries. In India, the emerging success stories of the FPO led micro-enterprise development model in locations such as Maharashtra under the Maharashtra Agricultural Competitiveness Program (MACP) has led to this approach being propagated and promoted in many regions by the state governments in India and the World Bank. However, typically SHGs involved in income generating activities are limited and those into processing (as against trading) activity are even more limited. (ii) The incubation centre and pilot plant approach which has also been adopted by many agencies including the Ministry of Science and Technology in India. But, the scale of start-ups by virtue of these centres are limited. Also, they are typically either skewed towards more hi-tech projects or suffer from limited mentoring, business plan or credit linkage capabilities. (iii) The Entrepreneurship Development Program (EDP) approach through which tens of thousands of trainees are trained every year in India alone. Such EDPs invariably involve offer of training inputs in entrepreneurship competencies, business opportunity identification, conduct of market survey, technical training in some cases, basic book keeping, business plan preparation, assistance (in some cases in securing loans).^{vii} These EDPs are of between 2 weeks to 2-3 months in duration. However, many such EDPs (there certainly are exceptions) are seen to largely focus merely on success rate in “training” than in terms of number of candidates who actually start up enterprise operation. The latter at best varies from between 10-30 per cent at best. Also, survival beyond the teething stage is often hardly even monitored. (iv)The approach involving provision of mentoring services is undertaken by organisations such as the Youth Business International (YBI) head quartered in the UK and Bharatiya Yuva Shakti Trust (BYST) which is India based. Some of them such as the BYST works closely with chambers /associates of existing enterprises (such as the Confederation of Indian Industry) whose members provide voluntary services in terms of mentoring support of 2 to 3 years for new entrepreneurs. However, apparently related initiatives have limitations in terms of limited number of start-ups and scale of operation and interventions. It is in this circumstance that the search for ideal case illustrations of a few successful start-ups catalysed through this facility is captured in the following sections. In the light of limitations in these approaches, an integrated approach comprising apt identification and selection of potential entrepreneurs, facilitation of EDP training if not already trained, facilitate necessary credit and provision of mentoring services. The activity following identifying



candidates is organising a start-up meet, where selection is made. This is followed by provision of guidance to facilitate start-up followed by incubation and mentoring services.

Part-II of the manual presents the scope of agri-business opportunities in the sector and business plan and management inputs that may be provided to potential start-ups and imbibed by facilitators.

In Part 2 chapter 1 in this part considers the scope of the food processing sector in Maharashtra: production and processing base. Maharashtra has the highest production of fruits in India. It is ranked first in grapes, pomegranate and banana and onion production and ranked second in papaya and sapota production. Maharashtra also ranks 9th in vegetable production with 5.6 per cent of India's total vegetable production. With regard to fruit crops, Maharashtra is virtually the fruit bowl of the country. In fact, production of Alphonso mango in the state accounts for 75 per cent of India's export of mangoes. The state is a leader in the sugar milling industry with more than 150 co-operative sugar mills. The state also accounts for 40 per cent of total turnover of seed industry of the country. Export of fresh fruits and vegetables from Maharashtra accounts for 40 per cent of total export of F&V of the country. Export of processed food from Maharashtra accounts for 50 per cent of total exports from the country. The state houses more than 6500 MSMEs and more than 300 large scale food processing industries. Some of the critical challenges faced by the sector in the state are: inadequate farm proximate post – harvest infrastructure for handling and storage of food items/ perishables; relatively low level of processing. This validates the need for focusing on promoting start – ups in related activities.

Chapter 2 considers various entrepreneurial traits. Skills may be considered as both hard as well as soft skills. Hard skills have a reference to managerial and technical skills. Soft skills have more to do with the personality and behavioural traits and characteristics of an entrepreneur.

Chapter 3 considers opportunity identification to specific location and profiling of business idea. There are various phases in opportunity identification such as, preparing a personal, that is, entrepreneur profile, developing a list of basic criteria, study a location and generate an inventory of ideas/opportunities, and conduct a quick scrutiny of ideas prior to selection. The parameter on the basis of which an entrepreneur may be profiled may include education, work of professional experience, professional and



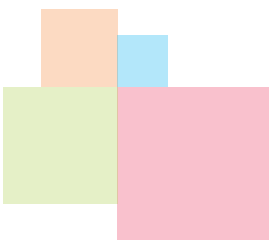
educational qualifications, the fundamental objectives (in terms of perhaps, a means to living to be “one's own boss”, or nAch) for establishing a firm.

Chapter 4 considers various legal constitutions of start-ups. Some basic legal forms of business may be visualized in terms of sole proprietorships, partnerships as well as limited companies and FPOs/Cs. A Limited Liability Partnership (LLP) is a partnership in which some or all partners (depending on the jurisdiction) have limited liabilities.

Chapter 5 considers economics and financials of a business plan. Analysis of financial feasibility of a business plan considers the cost of establishing a project, means of finance, and income and expenditure as well as profitability projections on an annual basis. Income, expenditure and profit projections are typically made till the period of repayment to financial institutions. Capacity utilization and income estimates need be projected over time, usually, at least till the period corresponding to the repayment of term loans from institutions. Expenditure estimates may consider elements related to raw material, consumables, power, fuel and utilities, wages and salary, repairs and maintenance expense on fixed and other assets, rent, taxes and insurance, administrative expenses, selling expenses (such as commission to dealers), as well as interest on term loans. Basic data requirements may be viewed in terms of product/s or services, (line-wise) installed capacity per annum on the basis of working in single/double (that is eight or sixteen hour) shifts for (usually) 300 days a year. Further, operating capacity estimates are required for about 3 years at the least.

Chapter 6 covers regulatory compliance requirements such as FSSAI, USFDA, HACCP and Udh yog Aadhar.

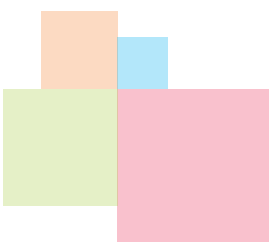
Chapter 7 considers various schemes of the Central and State Government of India. The important schemes of the MoFPI include the Mega Food Park, Cold Chain and Kisan Sampada schemes. The other important schemes of the GoI include Prime Minister's Employment Generation Programme, Credit Guarantee Fund Scheme for Micro and Small Enterprises, Mudra Loan Scheme, Agri-Clinics and Agri-Business Centres Scheme, Scheme of Fund for Regeneration of Traditional Industries, Micro and Small Enterprises, Development of Commercial Horticulture through Production and Post-Harvest Management of Horticulture Crops, Capital Investment subsidy scheme for construction/expansion/modernization of cold storage and storages for Horticulture Products and Venture Capital Assistance Scheme for Agribusiness Development.



Part-III of the manual presents case studies on successful start-up, those who have commenced production as well as those who are just initiating the project. This is to understand critical issues such as how is a business identified, how is it finalised, what are the investment cost implications and what is the manufacturing process and USP of a related project.

In Part 3 Chapter 1 in this considers various case illustrations on start-ups. In this chapter example of successful units into secondary processing are presented. FPCs can learn with regard to opportunity identification and management from these micro and small-sized start-ups catalysed under the MACP. Subsequently, case illustrations providing a diverse basket of project options are considered.

V. Padmanand Sushil Khodwekar Kunal Sood Chetan Bhakkad



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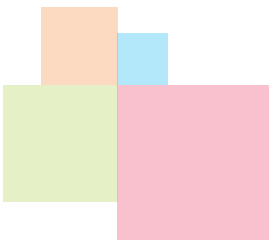
who has virtually spear-headed related development interventions in the country. This manual also presents some illustrations on the interventions in the State of Maharashtra and elsewhere. Shri. Sudhirkumar Goel, former ACS (Agriculture and Marketing) Government of Maharashtra have served as fountain-head of innovation ideas for the development of the state. Our thanks are also due to Shri. Jeevan Bunde (ABS-ABPF, MACP), Shri. D. L. Tambhale (Coordinator Agri & AHD), Shri. N. M. Naik (SAO, Buldhana), Rajendra Sable (SAO, Sangli), Shri. B. S. Dhumal (Nodal Officer, PIU-Agri., MACP), Shri. Anil Kumar Shitole (former Nodal officer, PIU-Agri., MACP), Shri. Kamalakar Patil (Coordinator, PIU-Agri., MACP), Dr. Abhay Gaikwad (Coordinator-Agri-Marketing PCU, MACP), Dr. Sanjay Pandhare (M&E Specialist) Vijay Gophane (Former AME-ABPF, MACP) and Yogesh Lonkar (AME-ABPF, MACP), amongst others for their contribution.

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V. Padmanand Sushil Khodwekar Kunal Sood Chetan Bhakkad



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The project development objectives are to increase the Productivity, Profitability and Market access to the farming community in Maharashtra. This project has facilitated the development of 400 Farmer Producer Companies (FPCs) involving about 4.5 lakh farmers. It has also facilitated 1090 Agri-business start-ups which include individual as well collective groups. This has been through the facilitatory role of an Agri-Business Promotion Facility. This project has initiated Market led Agriculture Technology Transfer for improving farmers' access to markets. Crop demonstrations have led to improved yield through a package of practices approved by State Agricultural Universities (SAU). Intensified crop diversification through various high yielding varieties as measurable attainments have been achieved. This has led to improved income generation for producers at farm levels. There have also been substantial gains in the livestock sector under small ruminants. The price realisation has witnessed 20 per cent increase, as well as improvement in health of livestock brought to the market for trading. Through a mechanism of Farmers' Common Service Centers (FCSCs), setting up rural haats platform to enable regular weekly sales, providing computerized auction systems (CAS) on E-platform as a pilot study as well as providing training on standardized accounting systems, in various APMCs with electronic display systems has led to improved turnover and arrivals.

The project has an independent price forecasting cell to assist the farmers (CIAMI-Center for Indian Agricultural Marketing Intelligence) to take calculated economic decisions. Price forecast based on statistical and econometric models are released before kharif sowing and harvesting so as to enable farmers take informed decisions on commodities based on global and National scenarios.

The project has leveraged and attracted market finance to the benefit of farmers in a major way with IDA credit from the World Bank. The project has leveraged a total investment of USD 215 Million of which contribution received from the World Bank is USD 100 Million.

This manual (second in the series from the project), presents such ventures already launched successfully in the form of case studies focusing partly on innovations. The first book launched in April 2018, concerned formation and successful management of FPCs. This book is a stepping stone for start-ups and paves the way towards a new era of agri business growth in India.





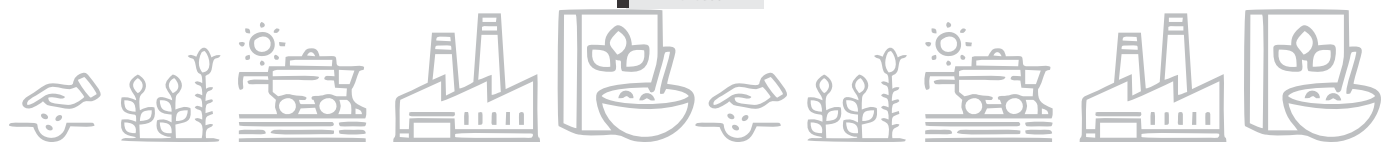
Kunal Sood is a partner with Grant Thornton India LLP. Grant Thornton is a leading professional services firm providing assurance, tax and advisory services. Kunal leads the Government advisory practice of the firm, which works with Central Ministries, State Governments and multilateral agencies in promoting development. The current engagements led by Kunal are with NITI Aayog, World Bank, ADB, about 6 central ministries and more than a dozen state Governments. Over the past 5 years, Kunal has focussed on promoting agri-business and food processing, covering the farm to fork value chain. On one hand, he is leading several engagements with the Ministry of Food Processing Industries, aimed at promoting investments in infrastructure for food processing industries including Mega food parks, cold chains and backward and forward linkages. On the other hand, he is assisting Ministry of Agriculture and several state governments in implementing their programme targeted at aggregating farmers and establishing their industry linkages. Overall, Kunal has over 17 years of experience in development advisory. He has assisted Governments, Multilateral Organisations, Industry bodies and private sector in designing and implementing programmes for promotion of industrial infrastructure, MSMEs, skills, agribusiness, livelihoods and investments. The assignments comprise programme management, capacity building, monitoring and evaluation, policy and strategy formulation. During his professional career he has served multilateral organisations like UNIDO, National Resource Institutions like EDII and various advisory organisations. His sector experience includes food processing, leather, textiles, plastics, engineering, unorganised sector, etc.





Chetan Bhakkad holds a Master's degree in Public Policy from St. Xavier's College Mumbai and a Master's degree in Management Studies from the Xavier Institute of Management Studies. He has over 10 years of experience in project development, management, implementation and monitoring, of various central sector schemes/ programs of Govt. of India. Currently, he is working as an Associate Director with Grant Thornton India LLP. He also has extensive experience working with various Central Governments such as the Ministry of Food Processing Industries, Ministry of Tourism etc., in providing implementation and monitoring support for various schemes and programmes. He has significant experience of working in the state of Maharashtra with various government departments and nodal agencies like Urban Development, Agri Marketing, Rural Development, Textiles and Cooperation, Tourism, etc. for various projects and schemes.

Chetan has played the role of finance and policy advisor for the Agri Business Promotion Facility under World Bank assisted Maharashtra Agricultural Competitiveness Project and carried out value chain development interventions and mobilisation of private sector investment in the agri business sector within state. He has also been involved extensively in investment promotion activities and capacity building of agri- entrepreneurs and start-ups.



From the Editorial Team's Desk

“Small is beautiful”

E.F. SCHUMACHER

As the Nation grows, we need a new set of “Y” minds, who would venture into areas hitherto unventured. In this concept, the government has initiated various steps in the form of evolving an enabling environment and facilitating ease of doing business to improve rural incomes and employment generation in the last 5 years. Is this enough to achieve objectives? We need a “one stop solution” manual which will guide development, facilitate one and all in urban and rural areas to guide and evolve sustainable start-ups in the field.

World over, small ventures have taken the concerned Nations to desired levels of “Safe Food Concepts” (Swiss chocolates are one such example of a cottage industry). Global and Indian case studies have been illustrated in this manual indicating as to how to realise this objective. Other than institutional hand holding in the form of credit, there are many other support services required to ensure the evolution of sustainable agri-business start-ups. These are also delineated.

The phrase “Small is beautiful” ascribed to Schumacher, was adapted from a phrase by his teacher Leopold Kohr. It is often used to champion small, appropriate technologies that are believed to be more labour intensive and also empower people to achieve more. We as a Nation, need continuously to champion such a cause in our country. This is in the light of the fact that the livelihood of perhaps a third of the country's populace is dependent on the MSME sector.

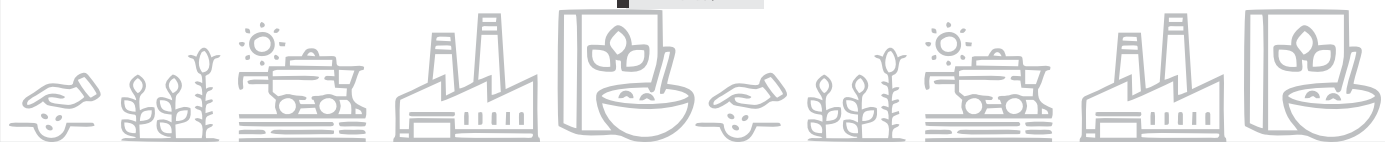
Schumacher's philosophy is one of “enoughness” approaching both human needs and limitations and appropriate use of technology. It grew out of (note: we have 6 lakh villages) his study of village based economies, which he later termed Buddhist economics.

Education is the greatest of resources. This book addresses the issue, so that job seekers initiate start-ups and become job providers. If our Nation has to address the urban/rural divide and gaps with a focus on resolving rural and urban unemployment, this is the manual to kick-start the movement.

We end the editorial with a quote from the King of Bhutan.

“Gross national happiness is more important than gross national product.”

H.M. Jigme Singye Wang Chuck



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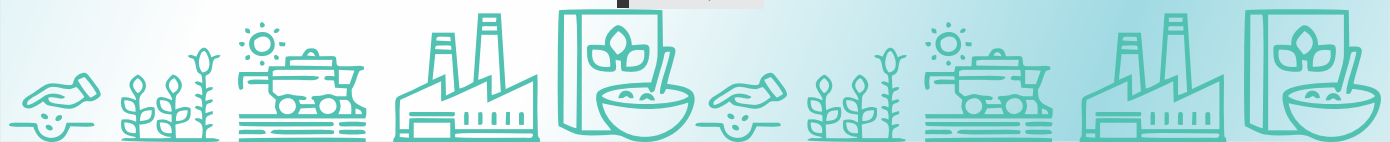
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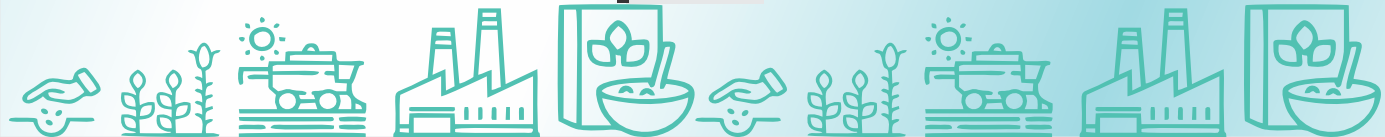
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PART I:

**START-UP ECO-SYSTEM AND
APPROACH: DEFINITION,
APPROACHES, SCHEMES
AND INSTITUTIONS;
APPROACH UNDER
MACP-OPERATIONAL
GUIDELINES AND
METHODOLOGY**



CHAPTER 1

AN ENTREPRENEUR AND ENTREPRENEURSHIP INTRODUCED

Highlights

The term entrepreneur was applied to business initially by the French Economist Cantillon in the 18th century to describe a person who purchases the means of production for combining them into marketable products.

The theories on entrepreneurship also comprise, psychological theories such as those developed by McClelland which concentrate on personality traits and strong need for achievement.

For a self-employed worker, the main expectation and objective may be to provide a reasonable standard of living for her/ himself. Therefore, constant growth need hardly be necessary thrust.

Some socio- culture factors are internal such as personality factors. Others such as family background, traditions and perceptions towards entrepreneurship, and business environment in the context of stable and attractive environment are external.

Some individuals embark on an entrepreneurial adventure by virtue of a “positive – pull” vis-à-vis the charms of being an entrepreneur as against the absence of alternate avenues to earn a (desired standard) of living.

Some entrepreneurs are therefore born, while others evolve on the basis of the environment or personality characteristics. All typologies of individuals participate in government sponsored entrepreneurship development programmes in India including in Maharashtra.



Entrepreneurs have strong motivation to achieve higher goals and realise their dreams and vision. They choose planned and moderate risk with reasonable, if not high probability of, success. Entrepreneurs are also strong motivators in terms of influencing different stakeholders and make them think and act in her/his way. Basically, the term “entrepreneur” is derived from the French verb entrepreneur which means “to undertake”. The term entrepreneur was applied to business initially by the French Economist Cantillon in the 18th century to describe a person who purchases the means of production for combining them into marketable products. The theories on entrepreneurship also comprise, psychological theories such as those developed by McClelland which concentrate on personality traits of an entrepreneur and their strong need for achievement.

1.1. DEFINING AN ENTREPRENEUR AND ENTREPRENEURSHIP

There are several definitions for the term entrepreneur^{viii} as well as for entrepreneurship. These are presented below:

- Pickle and Abrahamson consider an entrepreneur as “one who organises and manages a business undertaking, assuming risk for the sake of profit. The entrepreneur evaluates perceived opportunities and strives to make decisions that will enable a firm to realise sustained growth”.
- J. B. Say expanded Cantillon’s ideas and defines an entrepreneur as an organiser of a business.^{ix}
- J.A. Schumpeter considered an entrepreneur as a person who introduced innovations—that is one who introduces something new in an economy.
- Knight describes entrepreneurs as persons who bear uncertainty.
- Richard Cantillon stresses on the entrepreneur as a risk bearing agent of production.

1.2. THEORIES ON ENTREPRENEURSHIP

One taxonomy of entrepreneurs is in terms of goals. Typically, small business varies from self-employed, artisan to high-tech growth firms. For a self-employed worker the main expectation and objective may be to provide a reasonable standard of living for her/ himself. Therefore, constant innovation and growth need hardly be necessary thrust nor mandate.

1.1.1. Psychological theories and the Need for Achievement (N-Ach)

Another taxonomy has reference to psychological traits. Psychological theories such as those developed by McClelland concentrate on personality traits, motives as well as competencies of an individual and highlight that entrepreneurs have a strong need for achievement.^x Brockhaus (1982) also suggests that this attribute may help distinguish the successful vis-à-vis the unsuccessful and is the most important factor that contributes to performance other than business environment. The background of individuals also determines the capacity to take risk. Evidently, there are various socio-cultural as well as institutional factors contributing to the growth of entrepreneurship in different regions. Some socio-culture factors are internal such



as personality factors. Others such as family background, traditions and perceptions towards entrepreneurship, and a business environment in the context of stable and attractive environment are external.

The “born”, the evolved, and developed entrepreneur

While some entrepreneurs are born into family- business, a first – generation entrepreneur typically commences his entrepreneurial adventure by virtue of his soft or hard skill competencies relevant to launching and managing a business. Arguably, some individuals embark on an entrepreneurial adventure by virtue of a “positive – pull” vis-à-vis the charms of being an entrepreneur as against the absence of alternate avenues to earn a (desired standard) of living.

Evidently, while intrinsic competency and capability factors play a role, family culture (born into a business family) and other elements of the socio- cultured environment critically under- pins career choice and the move into entrepreneurship. Some entrepreneurs are therefore born, while others evolve on the basis of the environment or personality characteristics. All typologies of individuals participate in government sponsored entrepreneurship development programmes in India including Maharashtra.



CHAPTER 2

INCUBATION CENTRES FOR START-UP PROMOTION

Highlights

This chapter initially highlights that incubators may themselves conduct ED related training programmes, the scope for synergizing incubator activities with existing EDP conducting institutions also exists. This is likely to result in greater numbers of sustainable start-ups. This is a model being considered in some locations in India. For instance, the Centre for Entrepreneurship Development in Tamil Nadu (CED-TN) has also been operating a food processing incubator.

An incubation centre may provide equipment and common facilities in addition to shop-floor space to help assist entrepreneurs. It may also help small entrepreneurs develop and test their products in terms of quality assurance, market acceptance and the like on a commercial scale. In many cases, an incubation centre works in close association with concerned academic, vocational and R&D institutions.

In India, the National Science and Technology Entrepreneurship Development Board (NSTEDB) has promoted several Technology Business Incubators (TBIs).

With the exception of virtual incubators, most incubators provide some sort of physical premises in a specific location. As a matter of fact, a critical parameter determining the performance of an incubator is its location and the offer of appropriate facilities.

The Department of Science and Technology plays a pivotal role in promotion of science and technology incubators in the country. TBIs foster innovative start-up firms, thus the process of incubation is strongly intertwined with the innovation process that occurs in the supported enterprises bolstering research.

The chapter also considers National and global incubation services. Some of the globally famous include Agro pole in France. India has several centres established by ICAR, NABARD and ICRISAT in the Agri processing sector.



Incubation centres are typically established in regions that are especially weak in terms of basic factor conditions conducive for industry. In some cases, such incubation facilities and their infrastructure and equipment may be required to reduce start-up costs and successfully transcend the teething stage of operation in projects. While incubators may themselves conduct ED related training programmes, the scope for synergizing incubator activities with existing EDP conducting institutions also exists. This is likely to result in greater numbers of sustainable start-ups. This is a model being considered in some locations in India. For instance, the Centre for Entrepreneurship Development in Tamil Nadu (CED-TN) also operates a food processing incubator.

Salient features of an incubation centre

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In India, the National Science and Technology Entrepreneurship Development Board (NSTEDB) has promoted several Technology Business Incubators (TBIs).

There is no gain saying the criticality of the location and offer of appropriate facilities by an incubator. Also, most incubators offer convenient lease options and many charge nominally. While some incubators offer basic facilities like conference rooms and restaurants, others offer specialized support services in terms of counselling and financial assistance for entrepreneurship training. Incubation centre as well as certain specialized infrastructure (such as cold stores, warehouses, testing labs) may ideally be established on a PPP mode. The PPP Schemes may involve government contribution towards the part of capital expenditure outlays while sustainable operation of facilities is left to Special Purpose Vehicle of industry associations or consortia of SMEs. The scheme for TBIs in India is centred in and around academic and R&D institutions by the NSTEDB in the early 2000s. Assistance in this context by the government is for both capital as well as recurring expenditures for a stipulated period.

Technology Business Incubators Introduced

The Department of Science and Technology (DST) plays a pivotal role in promotion of science and technology in the country. A technology business incubator (TBI) supported by DST as well as other institutions is an organisational setup that nurtures technology based and knowledge driven companies by helping them survive during the startup period in the company's history, which lasts around the initial two to three years. Some incubators do this by providing an integrated package of work space, shared office services, access to specialized equipment along with value added services like fund raising, legal services business planning, technical assistance and networking support.

The earliest incubation programs, in the 1980s, in the United States of America focused on a variety of technology companies or on a combination of light industrial, technology and service firms today referred to as mixed-use incubators. However, in more recent years new incubators have emerged globally targeting industries such as food processing, medical technologies, space and ceramics technologies, arts and crafts, and software development.



Technology Business Incubators and their Unique Benefits

Technology Business Incubators (TBIs) are a venture of universities, public research institutes, local government and private players to promote and bolster a new technology intensive enterprise. In this type of incubation, the targeted talent consists of innovative, mostly technology-oriented, or knowledge-intensive service sector enterprises. Interactions with the academic sphere and public research are almost always a substantive element of the incubation process in such incubators as well. Certain unique characteristics are apparent as mentioned below:

- TBIs foster innovative start-up firms, thus the process of incubation is strongly intertwined with the innovation process that occurs in the supported enterprises, bolstering research.
- TBIs also help develop a knowledge driven economy.

2.1. ROLE OF THE GOVERNMENT VISUALIZED

The role of the government may be visualized in terms of evolving an enabling policy environment, strengthening factor conditions, establishing specialized infrastructure including common facilities and handholding for new entrepreneurs, and canalizing credit, venture capital and subsidies for start-ups. A rather apt illustration of the scope of interventions by the Government and appropriate availing of a conducive policy and schemes is that of the floriculture segment in India.

Inducing Entrepreneurship in the Floriculture segment

Entrepreneurship in the high tech export oriented floriculture (in poly houses or greenhouses) is an option that has great potential in many developing countries as demonstrated by the Kenyan, as well as Indian experience. For inducing entrepreneurship in the high tech floriculture area, various initiatives have been pursued. In India, floriculture locations were identified by the Government (Deploying Dutch expertise).^{xiii} Locations were narrowed down on the basis of favorable agro-climatic as well as factor conditions. Agro climatic conditions required appropriate soil, water, and temperature conditions. Factor conditions included infrastructure & transport facilities to markets, etc. The availability and cost of power (controlled temperature) as well as diesel (transport to international airports) is a critical element in this industry. In India, Bangalore and Pune regions were selected as locations. Floriculture clustering was to be specifically encouraged in these locations. Thereafter, conducive Government Schemes encouraged entry and start-up by firms. Targets on lending to firms in this prioritised sector were imposed on FIs and subsidy schemes were introduced to encourage SME start-ups. Certain specialised institutions and infrastructure were evolved – cold storage facility at airports, tissue culture laboratory training centre and induction centre. Agricultural colleges also offered related courses and encouraged their students to explore small scale floriculture as a career option.

Techno-preneurs are particularly supported by government programmes. In India, the National Science and Technology Entrepreneurship Development Board (NSTEDB) setup under the aegis of the Ministry of Science and Technology in India operates the Techno Entrepreneur Promotion Programme (TEPP) which assists technology-based entrepreneurs. It has promoted several Technology Business Incubators (TBIs). Notably, promotion of technology and techno-preneurs in Pakistan is being undertaken by the National University of Sciences and Technology (NUST) to incubate their technology-based companies at its Technology Incubation



Centre (TIC). So also, Malaysia has also been successful in setting up a number of Technology incubators, such as the MSC Central Incubator and Technology Park Malaysia in Cyberjaya, and the Johor Incubator Centre in Kuala Lumpur.

2.2. BUSINESS INCUBATORS WORLD-WIDE

A critical parameter determining the performance of an incubator is its location and the offer of appropriate facilities ^{xiii}

Charges Levied on Incubatees

Most incubators offer convenient lease options. Some have time limits on how long a firm can stay in an incubator while a few others don't. While some incubators levy rental rates comparable to market rates others charge only a fraction of such rates. In some cases, incubatees, viz., tenants are charged the same rate, while in others differential charges are levied depending on parameters such as a firm's turnover and employment generated.

Specialised Support Services

While some incubators have basic physical facilities like conference room, restaurants, telecom facilities, even hostel facilities, others also offer specialised services. Many business incubators such as the genesis incubator facilitate a counselling service. The genesis incubator in the USA houses a local chapter of the SCORE (Service Corp of Retired Executives) association, which is national, non-profit association of volunteer members. It also partners with the US Small Business Administration (SBA).

A technology incubator at the West Bohemian University in Plzen, near Prague in the Czech Republic is one that offers financial assistance to entrepreneurs as to cover the cost of training even up to 50 percent. Some private incubators such as Internet Incubation.com supports more by way of supporting in terms of business planning and marketing.

Many incubators offer value-added facilities and services. For instance, in the AREA Science Park in Trieste, Italy, a public body setup under the aegis of the Ministry for University and Science and Technology Research, common facilities are shared. Tenants use a wide range of services in terms of secretarial services, conference and training facilities and guest houses. The wide range possible professional services an incubator can offer for example, includes services vis-a-vis legal matters, accounts, training, staff, testing and quality, and packaging facilities. Some incubators such as the Bahrain Business Incubators at Bahrain operate in close co-ordination with EDP programmes. ^{xiv} The Bahrain Development Bank as well as UNIDO have been conducting EDPs in the country. The bank finances the trainees. The incubation facility established by the government is utilised by start-ups. This in turn, reduces the level of risk capital that needs to be committed by new entrepreneurs until they learn the ropes, as well as test the market. The Edison Technology Incubator is based in Enterprise Development Inc. (EDI) at Case Western Reserve University, Cleveland, Ohio. Business leaders and academic schools are involved in this initiative committed to the economic development of the region. EDI's initiatives comprise, the operation of the Edison Technology, Incubator for technology-focussed start-ups, business counselling and training and seminars on entrepreneurship. Incubating tenants are expected to graduate in a period of three years.



Countries like France have a range of “techno-poles” spread across the country. Some incubators are briefly profiled in the tabulation below:

Table 1: A profile of some reputed business incubators worldwide

Incubator	Board focus of service
Denmark BIC Nord	SMEs are provided a wide gamut of incubation services (bic-nord.dk)
France Agro pole	The facility is a science and technology park in the food processing segment offering a gamut of services in terms of logistics infrastructure, support financial services and start-up assistance in close association with the local support system (agropole.com)
Angers Techno pole	Start-ups are assisted by way of guidance in business planning, legal issues, market surveys match making for partnerships and credit (angerstechnopole.com)
U.K. Cranfield creates.com and Cranfield Innovation Centre	Housed with the premises of Cranfield School of Management, students as well as other potential entrepreneurs from the region are provided assistance in terms of business planning, developing pilot-websites, generate seed capital and initiate training (www.cranfieldcreates.com). The Cranfield Innovative Centre is an incubation centre that helps knowledge industries graduate into the Cranfield Technology Park.
Cardiff Business Technology Centre (CBTC)	Located in Cardiff University campus, it facilitates by way of space for hi-tech firms.
Aberdeen Science and Technology Park	Developed by a private enterprise and Aberdeen City Council and supporting institutions of higher institutions of higher education, incubates entrepreneurs in software, biotechnology and such areas (www.astp.co.uk)
Centre for Advanced Industry	The North of England Microelectronics Institute (NEMI) manages the facility. NEMI is a PPP initiative that tie ups with local universities and targets hi-tech firms (www.nemi-cai.co.uk)
India ICICI InfoTech Incubation Centre	The facility provides technical and managerial mentoring to SMEs as well as venture capital assistance (www.icici.com)
China Suzhou New and High-Tech Innovation Service Centre	Assists technology based start-ups
BitUnion.com	It serves as a bridge to / between incubators, investors and hi-tech firms.



2.3. TECHNOLOGY BUSINESS INCUBATORS IN INDIA

Technology Business Incubators in India have existed since 1980s under the Government of India and since late 1990s under the private sector. They have played a critical role in encouraging risk taking and public research in the information technology industry. Their success led to a massive increase in the number of incubators being setup in the country with over 300 registered incubators operating in the country. The Government of India under the aegis of Department of Science and Technology provides for institutional mechanism for promoting knowledge driven and technology intensive enterprises. This is primarily situated under the National Science and Technology Entrepreneurship Development Board (NSTEDB).

The objectives of the NSTEDB have been defined to be:

- To promote and develop high-end entrepreneurship for S & T manpower as well as self employment by utilising S & T infrastructure and by using S & T methods.
- To facilitate and conduct various informational services relating to promotion of entrepreneurship.
- To connect agencies of the support system, academic institutions and Research and Development (R & D) organisations to foster entrepreneurship and self-employing using S & T with special focus on backward areas.
- To act as a policy advisory body with regard to entrepreneurship

Amity Innovation Incubator

The Amity Innovation Incubator is a pioneering concept in the context of Indian Universities. Supported by DST, Ministry of Science and Technology, GOI, 'Amity Innovation Incubator' has in a very short time of its existence earned an enviable position for itself with start-ups which have regularly been on top of the innovation curve and have been recognized on platforms like 'The Power of ideas' Read Herring Global winner, Tata NEN and NASSCOM Innovation Awards to name a few. It is located in Noida. Its focus area is on Rural Innovation and Social Entrepreneurship, Information and Communication Technologies (to include Social media and E-commerce, Mobile computing and technologies analytics, cloud computing and Big Data), Education and Education Technologies, Food and allied Technologies, Biotechnology and Life Sciences, Nanotechnology and Material Sciences.

2.3.1. ICAR-CIRCOT-ABI Centre

ICAR-CIRCOT Agri Business Incubation (ABI) Centre was sanctioned by ICAR under the XIIth Plan Scheme of National Agricultural Innovation Fund (NAIF) Component II (Incubation Fund) in 2016. This centre envisages facilitating incubation of new start-ups/entrepreneurs and enterprises for innovative technologies by providing need based physical, technical, business and networking support, facilities and services to test and validate their venture before successful establishment of enterprises. Presently, the ICAR-CIRCOT-ABI centre is promoting entrepreneurs in fields of antimicrobial textile finishing, degossypolised cottonseed meal for poultry feed, cotton rubber composite batons for the police force, various application of nano cellulose in paper and composites. The main objectives of the centre are: Incubation and business development in cotton and its by-products.



Contact: 5, Adenwala Rd, Grant Road West, Matunga, Mumbai, Maharashtra 400019
(www.circot.res.in) Phone: 022 24127273

Technologies available at ICAR-CIRCOT for start-ups, entrepreneurs and innovators:

- 1) Eco-friendly preparation of absorbent cotton for medical and hygiene products:
 - Antimicrobial
 - UV protection
 - Water repellence Nano-finishing Technologies for Cotton Textiles.
- 2) Cotton rich blends for functional textile applications.
- 3) Innovative finishing processes for garments and home textiles: Mosquito repellent, pesticide protection cloths and denim.
- 4) Software module for non-metameric colour matching in textiles.
- 5) CIRCOT Calibration Cotton for global outreach.
- 6) Sustainable business model for cotton at village level.
 - Quality based trading
 - Supply chain logistics (custom hiring) for chipped cotton stalk supply
 - Value addition to cotton biomass
 - CIRCOT mini card for sliver preparation
- 7) Microbial Degossypolisation of cottonseed meal for poultry, fish and piggery sectors.
- 8) Enhancing farmers and other stakeholders' income by Cotton value chain through start-up and entrepreneurship development.
- 9) Cotton Trading based on Quality Parameters for better price and remuneration to farmers.

2.3.2. NABARD Agri-Business Incubation Centre (NABIC) - TNAU

The first of its kind NABARD Agribusiness Incubator in the Country with a grant-in-aid of INR 12.38 Crore is sanctioned to TNAU and is established in the Agricultural College and Research Institute, Madurai. This incubator has been sanctioned based on the performance of the "Technology Business Incubator-ABIS" functioning in the Directorate of Agribusiness Development, TNAU, Coimbatore.

Contact: Agribusiness Incubation Society, Tamil Nadu Agricultural University
(www.tnau.ac.in) Phone: 0422 6611310

2.3.3. Agri Business Incubator of NAARM (NAARM-ABI)

The National Academy of Agricultural Research Management (NAARM) has been recently entrusted with the responsibility from Indian Council of Agricultural Research (ICAR)



under its National Agriculture Innovation Fund (NAIF) to support about 27 Agri-business Incubators, mostly to its own institutions except ICRISAT. ICAR-NAARM has been the nodal agency to draft the guidelines for selection and implementation of ABIs. These ABIs were granted on competitive Programme mode. NAARM along with ICRISAT is now entrusted for capacity building and handholding of these 27 ABIs which are in function since 2015. a-IDEA and NAARM have jointly developed the proposal for an ABI under NAIF fund of ICAR for establishment of ABI at NAARM (out of the 27 ABIs of ICAR, 1 ABI has been allotted to NAARM which is NAARM-ABI).

NAARM acts as Clearing House under NAIF (National Agricultural Innovation Fund). Grant of NAIF XII plan scheme, Intellectual Property and Technology management renamed as National Agricultural Innovation Fund (NAIF) has identified National Academy of Agricultural Research Management (NAARM) for the following.

- Training, Capacity Building and other facilitation required for advancing the objectives of innovation fund and incubation fund and otherwise for the XII plan scheme.
- IPR- related research and developing a clearing house and facilitation centre.
- Helping any ICAR institute/ agricultural University that is not able to get desired level of support for any important requirements.
- Developing a mechanism for nurturing and supporting grass root innovations.
- NAARM Hyderabad is providing hand holding support to the agri-business incubators by inter-alia developing modules, guidelines and other forms of learning material for capacity building and create a mechanism for facilitation scientific and technical cooperation through information exchange on IP management and technology commercialization in the network of created agri-business incubators. It also provides need based support and guidance for monitoring of IP rights and license agreements, business process analysis and valuation and pricing for harnessing the commercial potential of technology.

Contact: Rajendranagar, Hyderabad, Telangana 500030 (www.naarm.org.in) Phone: 040 24581300

2.3.4. International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

ICRISAT is an international non-profit organization that undertakes scientific research for development. It plays a vital role in leveraging and aggregating programs and services to promote agri-businesses and enhancing partnerships through entrepreneurship development, innovation and value addition, which can open up opportunities for farmers to take their products and technologies to a global market.

The ICRISAT global headquarters is located in Patancheru near Hyderabad, Telangana, India. The research station offers an insight into the integration of agricultural sciences and research-for- development activities across the whole value chain – high end science using germ plasm from the gene bank, genomics laboratory, phenotyping and genetic engineering facilities, through



to the agribusiness centre, watershed management and crop production field experiments.

The research station also has a land area of 1,390 ha, of which 800 ha is arable. The experimental farm is representative of the dry land environment – consisting of two major soil groups found in the semi- arid tropics, the red alfisols (300 ha) and the black vertisols (500 ha) – that allows testing of breeding lines and crop production systems in two different environments within one location. The arable areas in the two soil types are subdivided into irrigated and non-irrigated, sprayed and non-sprayed, and low and high fertility areas to represent low and high input environments.

Contact: Patancheru 502 324 Telangana State, India (www.icrisat.org) Phone: 040 3071307

2.3.5. MANAGE Agri Clinics & Agri Business Incubation Centre (AC&ABC)

This AC&ABC is hosted at National Institute of Agricultural Extension Management (MANAGE). Through the AC&ABC scheme, MANAGE has trained 53,544 professionals, of which 23,246 have started their own enterprises. The Incubation Centre is intended to nurture all interested potential agri-preneur. The main focus areas are Agri input, ICT in agriculture, animal husbandry, nutrition and health, Farmer Service Centres, dairy, post-harvest technology, farm mechanisation, supply chain management, fishery and warehouse management.

MANAGE was established in 1987, as the National Centre for Management of Agricultural Extension at Hyderabad by the Ministry of Agriculture and Farmers Welfare, Government of India as an autonomous Institute from which its acronym 'MANAGE' is derived. Its status was elevated to that of a National Institute in 1992 and re-christened to its present name i.e., National Institute of Agricultural Extension Management.

Contact: Rajendranagar, Hyderabad, Telangana 500030 (www.agriclinics.net)

Phone: 7997253355

2.3.6. Atal Incubation Centres – NITI Aayog

The Government of India has setup the Atal Innovation Mission (AIM) at NITI Aayog. The purpose of this Mission is to promote a culture of innovation and entrepreneurship in India. The Government recognises the need to create world class incubation facilities across various parts of India with suitable physical infrastructure in terms of capital equipment and operating facilities, coupled with the availability of sectoral experts for mentoring start-ups, business planning support, access to seed capital, industry partners, trainings and other relevant components required for encouraging innovative start-ups. Accordingly, AIM supports the establishment of Atal Incubation Centres (AICs) that would nurture innovative start-up businesses. The scheme is known as Atal Incubation Centre. (AIC).

The objective of the scheme is to promote and establish world class incubation centres in specific subjects/sectors such as manufacturing, transport, energy, health, education, agriculture and



water and sanitation in India. Functions of AICs are: Assist incubatees in creating a sustainable, scalable and profitable business model; provide physical infrastructure and value-added support services; create a strong network of mentors who would provide sector specific knowledge; conduct events and inspirational programs; provide training and mentorship to entrepreneurs; forge partnerships and networks with academia, industry, funding sources, existing incubators and others for the start-ups to leverage; enable access to prototyping facilities, markets and pilot implementation for the product/services; developing business plans, building networks etc.; an ideal application would be a collaboration between a corporate sector entity and a research oriented/academic institution with aligned areas of focus.

Contact: 101, Type-IV, DIZ Area, Sec-4, Gile Market, New Delhi 110001 (www.niti.gov.in)
Phone: 9463998484

2.4. THE FOUNDATIONAL BASIS FOR TECHNOLOGY BUSINESS INCUBATORS

The goals behind technology incubators in developing economies operate with a twofold approach, with economic considerations balancing a desire to increase research output and innovation. In the last decade, this has been carried out by establishing Technology Business Incubators (TBIs) at various reputed institutions around the country, in both management institutes as well as scientific universities. Goals of a TBI programme, as stated by NSTEDB are as follows:

- Creation of technology based new enterprises
- Creating value added jobs and services and facilitating transfer of technology
- Fostering the entrepreneurial spirit
- Speedy commercialisation of Research and Development output
- Specialised services to existing Small to Medium Enterprises

The TBI programme in India has been quite successful and has even given rise to private incubators that operate under a very similar model but focus more on creating private capital (sometimes tied to company platforms such as Microsoft's Azure cloud) than tangible public research. This has culminated with the Government in India creating a separate startup fund of close to 2 Billion U.S Dollars in the budget for the year 2014 - 2015 which it uses to both aid incubators as well as co-fund upcoming startups with private entities.



CHAPTER 3

ENTREPRENEURSHIP DEVELOPMENT INSTITUTIONS

Highlights

The activity mix of a typical leading ED institution includes institutionalising entrepreneurship in education curricula, conduct of EDPs and trainers training programmes, micro enterprise and micro finance development, performance and growth of existing SMEs, as well as strengthening other ED related organizations and the support system.

MSME Development Institute of Mumbai, Maharashtra Centre for Entrepreneurship Development, R-SETI and a range of institutions undertake ED training and start-up programmes in Maharashtra. Similar Institutions operate in many states.

MCED pursues a variety of programmes sponsored by different government bodies, international agencies and donors as well as Development Financial Institutes. Furthermore, in India, Entrepreneurship is part of the coursework in many academic and MBA course offering institutions.

The Small Industries Development Bank of India the National Bank for Agriculture and Rural Development have been supported many ED institutions, NGOs and MFIs in their start-up initiatives.



The activity mix of an apex ED institution may include institutionalising entrepreneurship in education curricula, conduct of EDPs and trainers training program, micro enterprise and micro finance development, performance and growth of existing SMEs as well as strengthening ED related organizations and the support system. Several institutions in India have been playing a related role. These include national institutions such as the Entrepreneurship Development Institute of India (EDII) and the National Institute of Micro, Small and Medium entrepreneurship (NIMSME), as well as other National and State level (regional) ED institutions offering services such as training research and consultancy. In Maharashtra, there is the Maharashtra Centre for Entrepreneurship Department (MCED) headquartered at Aurangabad and the Maharashtra Industrial and Technical Consultancy Organisation (MITCON) in Pune. They undertake a variety of programs sponsored by different government bodies, international agencies and donors as well as Development Financial Institutes. Notably, in India, Entrepreneurship is part of the coursework in many academic and MBA offering institutions.

Table 2: Some National level institutions

Name	Contact
National Institute for Micro, Small and Medium Enterprises (NIMSME), Hyderabad	Yousufguda Police Lines, Yousufguda, Hyderabad, Telangana 500045, Ph: 040 23608317
Entrepreneurship development Institute of India (EDI), Ahmedabad	Gandhinagar - Ahmedabad Rd, Next to Apollo Hospital, Bhat Village, Gandhinagar District, Ahmedabad, Gujarat 382428, Ph: 079 23969151
National Institute for Entrepreneurship and Small Business Development (NIESBUD), New Delhi	A-23, Block A, Industrial Area, Sector 62, Noida, Uttar Pradesh 201301 Ph: 0120 4017001
Indian Institute of Entrepreneurship (IIE), Guwahati	Near Game Village, Lalmati, Guwahati, Assam 781029, Ph: 0361 2300840
Industrial and Technical Consultancy Organisation of Tamilnadu Limited (ITCOT), Tamil Nadu	50 – A Greams Road, Chennai, Tamil Nadu, INDIA Ph: 044 42936800
WEBCON Consulting (India) Limited, West Bengal	Chatterjee International Centre, 4th floor, 33A, J.L.Nehru Road,, Kolkta, West Bengal 700071, Ph: 033 2226 6527
HARDICON, Haryana	209, Chiranjiv Tower, 43, Nehru Place, New Delhi-110019, Ph: 011-26428101 to 103
Bharatiya Yuva Shakthi Trust, New Delhi; Pune	Confederation of Indian Industry, Office D, 10th Floor, Godrej Eternia-C, 'B' Wing, 3, Off Mumbai Pune Highway, Wakdewadi, Shivajinagar, Pune 411 005, Ph: 020 66075816 - 19
Andhra Pradesh Industrial and Technical Consultancy Organisation Ltd. (APITCO), Andhra Pradesh	41, Kolla Vari St, Naidupet, Krishnalanka, Vijayawada, Andhra Pradesh 520013, Ph: 08662522822



Bihar Industrial and Technical Consultancy Organisation Ltd. (BITCO), Bihar	Indira Bhavan, 6th Floor, Ram Charitra Singh Peth, Near Railway Crossing, Patna, Bihar, Ph: (0612) 234308
Gujarat Industrial and Technical Consultancy Organisation Ltd. (GITCO)	Gitco House', Opposite Sardar Patel Stadium, Navrangpura, Navrangpura, Ahmedabad, Gujarat 380009, Ph : 079 2644 6174
Himachal Consultancy Organisation Ltd. (HIMCON)	1201 - 1210, MDR13, Basant Vihar, Mehli, Shimla, Himachal Pradesh 171009, Ph: 0177-2627537
JITCO, Jammu and Kashmir	#22, & 24-26, DIC Complex, Exhibition Ground, Jammu-180001, Ph : 0191-2520078
Consultancy Organisation Ltd. (KITCO), Kerala	Femith's, Puthiya Road, Chakkaraparambu, Vennala, Ernakulam, Kerala 682028, Ph : 0484 4129000

Gaps in the different types of Entrepreneurships Development programmes call for deploying an appropriate approach. This chapter provides an elaboration in this perspective.

3.1. ACTIVITY PORTFOLIO OF ED INSTITUTIONS

The Activity Portfolio of some leading ED institutions may be visualized in different strategic areas, that is, education, conduct of EDPs and/or trainers training programmers, micro enterprise and micro finance development, performance and growth of existing SMEs and strengthening ED related organizations and the support system. Other special projects related to ED may be perused on an ad-hoc basis depending on donor, government or MSME sector requirements. The following sub-sections elaborate:

Entrepreneurship in Education:

The activities under this strategic area sometimes include:

- Offers of a Post Graduate Diploma in Business Entrepreneurship and Management, and Post Graduate Diploma in management of NGOs (involved in promoting entrepreneurship).
- A distance education programme that is, an Open Learning Programme in Entrepreneurship (OLPE) with a view to reaching out to larger mass by means of establishing and supporting OLPE centres in educational institutes (colleges and polytechnics) across country.
- Conduct of FDPs in entrepreneurship for identified faculty from such institutions to help them play the role of entrepreneurship and business counsellors, such faculty also coordinates initiatives of the Department of Science and Technology (DST) promoted Entrepreneurship Development Cells (EDCs) in technical institutions and college of engineering.

Micro Enterprise and Micro Finance Development:

The activities under this strategic area may be envisaged in terms of –

- Capacity building of NGOs to organize Rural Entrepreneurship Development Programmes (REDPs), and conduct of training of trainers 'program for extension works of NGOs to promote micro enterprises. Typically, such program is partly funded or subsidized by Development Finance Institutions (DFIs) or directly by the concerned Ministry.



- Training program on Business opportunity identification and Business Plan preparation for EDP Coordinators.
- Conduct of short duration regional Entrepreneurship Development orientation program for unemployed youth, besides banker's orientation programs.
- Training program for developing Rural Business Development Service providers. The basic objective of such program being to develop a Cadre of grassroots consultants who could offer business development services to micro enterprises and also extend professional support to NGOs.
- Initiative to bring NGOs and bankers on a common platform to improve credit flow to trained entrepreneurs by organizing NGO-Banker interface seminars.
- Coordinating initiatives to address factors that hinder women from taking up entrepreneurship, suggest policy changes at the national level, in consultation with the stakeholders

Performance and growth of existing Enterprises:

The activities under this strategic area may be envisaged in terms of –

- Initiatives with MFIs, NGOs, and community based organizations as well as local self-governments to develop capacities of women SHGs and encourage them to grow their income generation activities.
- Organizing short-duration Performance Improvement Programs.
- As a part of capacity building initiatives, training programs on Project identification, preparation and appraisal. This may involve organizing Trainers Trainings Programmers and establishing business counselling clinics; organizing enterprise growth programs.
- Organizing cluster development and BDS market promotion related studies and interventions, providing handholding and BDS support to cluster development interventions across country.

ED organizations and Support Systems: Initiatives in this context may be envisaged in terms of capacity building of bankers on appraising and supporting MSME projects, and capacity building of government functionaries in terms of ED as well as cluster value chain development.

Other activities, options: A Centre for Research on Entrepreneurship may serve as bridge between academia and training and consultancy in the field of “Entrepreneurship”. The major objective being to encourage young researchers and offer fellowships to research scholars in Entrepreneurship and related fields.

3.2. SUPPORTING ED INSTITUTIONS IN MAHARASHTRA

3.2.1. MSME Development Institute, Mumbai

The office of the Development Commissioner (MSME), New Delhi, under the Ministry of MSME, formulates the policy governing the Micro, Small and Medium Industries in the country, to chalk out schemes and programmes for development of the MSME Sector. It also monitors the implementation of policies and activities of promotion and development of the MSME Sector in the Country through its network of MSME-Development Institutes in all the States, with active involvement of State Directorate of Industries.



The MSME-Development Institute, Mumbai was established in the year 1954. This Institute provides support/services to the State Government as well as co-ordinates various activities for the prospective and existing entrepreneurs at the state level for promotion and development of small-scale industries. About 23 districts of Maharashtra are under the jurisdiction of this Institute and its Branch Development Institute at Aurangabad. Another Institute at Nagpur looks after the remaining 11 districts of Maharashtra.

MSME-DI, Mumbai provides various types of extension services and assistance in setting up of units, promoting and developing products and Services for MSMEs. The Institute has Technical Officers to provide guidance in trades including the Food Industry, Management and Economic Investigation, Export and Industrial Design. The main objective of the Institute is to provide technical and consultancy services to the small scale industry and provide promotion and extension services to small scale/ancillary and tiny units and clusters. Besides this, training, library, exhibition and economic information, workshop facilities are also provided. A number of EDPs as well as ESDPs are conducted by Mumbai and branch institutes in Nagpur and Aurangabad.

3.2.2. Maharashtra Centre for Entrepreneurship Development (MCED)

MCED works as a catalyst for developing successful Entrepreneurs for social advancement. MCED strives to foster an environment through which entrepreneurs get information and tools for success. It works with leading institutions and researchers nationwide to create awareness of the powerful economic impact of entrepreneurship to develop and disseminate proven programmes that enhances entrepreneurship skills and abilities and improves the environment in which entrepreneurs start and grow business. MCED also works relentlessly for improving the technological advancement of underprivileged youth. MCED has a panel of facilitators and trainers and undertake dozens of entrepreneurship development programmes every year.

3.2.3. MITCON Consultancy and Engineering Services Ltd., Pune

The Company is currently a deemed government company. MITCON is involved in offering a range of services for industry and start-ups. The services are in terms of consultancy in infrastructure projects, project guidance, cluster development interventions and entrepreneurship.

3.2.4. Rural Self Employment Training Institute (R-SETI)

The State Government in consultation with the banks in SLBC, assign districts preferably to the respective Lead Banks in the States to set up R-SETIs. There shall be single bank's sponsorship of the R-SETI in a district to avoid any overlapping/disruption in management. Land for setting up the R-SETIs is allotted to the concerned Banks, free of cost, by the State Governments. The construction of the building for the R-SETIs is undertaken by the concerned Bank, Trust/Society. In case the banks so desire they may request the State Government for assistance for construction. Till the time a suitable land is identified and building constructed the typical R-SETIs start operation from hired premises. Each R-SETI offers about 30 to 40 Skill Development Programmes in a financial year in various avenues. All the programmes are of short duration ranging from 1 to 6 weeks. A general classification of the types of programs are as follows:



Agriculture Programmes - Agriculture and allied activities like Dairy, Poultry, Apiculture, Horticulture, Sericulture, Mushroom cultivation, floriculture, fisheries and etc.

Product Programmes - Dress designing for men and women, Rexine utility Articles, Agarbathi manufacturing, Football making, Bags, Bakery Products, Leaf Cup making, recycled paper manufacturing, etc.

Process Programmes - Two Wheeler repairs, Radio/TV repairs, Motor rewinding, Electrical Transformer Repairs, Irrigation pump-set repairs, Tractor and Power tiller Repairs, cell Phone Repairs, Beautician Course, Photography and Videography, Screen Printing, Photo Lamination, Domestic Electrical Appliances Repair, Computer Hardware and DTP.

General Programmes - Skill development programmes for women, etc.

Other Programmes - related to sectors like leather, construction, hospitality and any other sector depending on local requirements.

In R-SETIs:

Land is allotted by the concerned State government free of cost, with nominal registration expenses. The sponsoring banks are free to choose the mechanism of the land transfer depending upon their own corporate culture and philosophy. Government of India provides one time grant assistance to the RSETIs up to a maximum of INR 1 Crore for meeting the expenditure on construction of building (minimum covered area should be 8000 sqft.) and furniture for the same. This assistance would also be provided if Banks already have land and wish to start a R-SETI there. One - time funding support up to a maximum of INR 1 Crore can also be provided to existing RUDSETI type Institutions for upgrading present infrastructure up to the minimum standards prescribed in these guidelines. In situations where the land transfer is likely to take time due to lengthy procedures the Banks may start functioning immediately from hired premises. Rent for hiring of premises may be borne up to a maximum of INR 10 Lakh for a period not exceeding three years out of the INR 1 Crore grant of Government of India. MoRD through the DRDAs provides support towards cost of training for rural BPL candidates to the sponsor Banks at the rate of INR 200 per candidate per day to a maximum of INR 4000 for training up to 4-week duration and maximum of INR 5000 for training of longer duration. Other recurring costs for the RSETIs i.e. that of the training expenses faculty salaries, logistics, etc., is borne by the sponsoring banks or through other sponsoring organizations like SIDBI or NABARD.



Role of the Small Industries Development Bank of India (SIDBI)

The Bank extends loans and grants to various agencies working for the promotion and development of small-scale industries and tiny industries under its Promotional and Developmental Assistance scheme. The various promotional & developmental activities and support services to the SSI sector of the Bank are: Enterprise Promotion with emphasis on Rural Industrialisation is being accomplished through the following schemes, viz. (i) Micro Credit Scheme (MCS) (ii) Rural Industries Programme (RIP) [promotion of rural enterprises in selected states]; (iii) Mahila Vikash Nidhi (MVN) [assistance of NGOs for economic development of women]; (iv) Entrepreneurship Development Programmes (EDPs) [support for conducting EDPs]; Human Resource Development; marketing assistance; Technology Bureau for small enterprises; Cluster Development Programme, etc. Under MCS assistance is extended through soft loan to well managed NGOs for on lending to the rural poor with an emphasis on women, for taking up industrial activities at a micro level and pursuing income-generating activities. SIDBI Foundation for Micro Credit (SFMC) was launched by SIDBI in 1999 for channelizing funds to the poor in line with the success of pilot phase of Micro Credit Scheme. SFMC's mission is to create a national network of strong, viable and sustainable Micro Finance Institutions (MFIs) for providing micro finance services to the economically disadvantaged people, especially women. SFMC is the apex wholesaler for micro finance in India providing a complete range of financial and non-financial services such as loan funds, grant support, equity and institution building support to the retailing Micro Finance Institutions (MFIs) so as to facilitate their development into financially sustainable entities, besides developing a network of service providers for the sector. SIDBI has helped develop a Code of Conduct Assessment Tool, which applies to providing credit services, recovery of credit, collection of thrift, etc. for MFIs to assess their degree of adherence to the voluntary microfinance Code of Conduct formulated by the MFIs.

Role of the National Bank for Agriculture and Rural Development (NABARD)

NABARD, through its' Micro Credit Innovations Department has continued its role as the facilitator and mentor of microfinance initiatives in the country. The overall vision of the department is to facilitate sustained access to financial services for the unreached poor in rural areas through various microfinance innovations in a cost effective and sustainable manner. The NGO sector has played a prominent role of working as a Self Help Group Promoting Institution (SHPI) by organizing, nurturing and enabling credit linkage of SHGs with banks. NABARD later co-opted many others as SHPIs including the rural financial institutions (RRBs, DCCBs, PACS), Farmers' Clubs (FCs), SHG Federations, Individual Rural Volunteers (IRVs) etc. These stakeholders were encouraged to take up promotion of SHGs by way of promotional grant assistance from NABARD. This savings led microfinance model has now become the largest coordinated financial inclusion programme in the world covering almost 100 million households in the country. JLGs are informal groups of 4-10 members who are engaged in similar economic activities and who are willing to jointly undertake to repay the



loans taken by the group from the Banks. JLGs basically are Credit groups of small/marginal/tenant farmers/ asset less poor who do not have proper title of their farmland. Regular savings by the JLG members is purely voluntary and their credit needs are met through loans from financial institutions and such loans could be individual loans or group loans against mutual guarantee. Apart from extending refinance support of 100% to the financing Banks, NABARD also extends financial support for awareness creation and capacity building of all stakeholders under the Scheme. NABARD also extends grant support for formation and nurturing of JLGs to Banks and other JLG Promoting Institutions (JLGPIs). NABARD, while promoting NABARD Financial Services Ltd. (NABFINS) has envisaged that NABFINS shall evolve into a Model Microfinance Institution to set standards of governance among the MFIs, operate with exemplary levels of transparency and operate at reasonable/moderate rates of interest. It is a NBFC – MFI which commenced its operations in 2009. NABARD is the major shareholder of this MFI, others being Government of Karnataka, Canara Bank, Union Bank of India, Bank of Baroda, Federal Bank and Dhanalakshmi Bank. NABFINS extends loans to SHGs through its own trained Business & Development Correspondents (BDCs). NABFINS also extends loans to other second level organizations like Federations as well. NABARD is continuing its refinance assistance to NABFINS.

NABARD since 2006 has been supporting need-based skill development programmes (MEDPs) for matured SHGs which already have access to finance from Banks. MEDPs are on-location skill development training programmes which attempt to bridge the skill deficits or facilitates optimization of production activities already pursued by the SHG members. Grant is provided to eligible training institutions and SHPIs to provide skill development training in farm/off-farm/service sector activities leading to establishment of micro enterprises either on individual basis or on group basis. Over the years around 4.68 Lakh SHG members have been covered through 16,406 MEDPs. As skill upgradation trainings alone have limited impact on livelihood creation among the SHG members, it was thought prudent to create sustainable livelihoods among SHG members and to attain optimum benefit out of skill upgradation and a new scheme titled Livelihood and Enterprise Development Programme (LEDP) was launched in December 2015. It envisages conduct of livelihood promotion programmes in clusters. There is provision for intensive training for skill building, refresher training, backward-forward linkages and handholding & escort supports. It also encompasses the complete value chain and offers end-to-end solution to the SHG members. It is to be implemented on a project basis covering 15 to 30 SHGs in a cluster of contiguous villages where from SHG members may be selected. The skill upgradation training is provided in batches of 25-30 members and covers agri & allied activities as well as rural off-farm sector activities. LEDP will not only facilitate promotion of sustainable livelihoods but also derive full advantage from promotional assistance. NABARD provides grant support for skill upgradation programmes, establishment of demonstration unit and need based critical infrastructure.



CHAPTER 4

CONVENTIONAL EDP

(TRAINING INPUT-STRUCTURE)

Highlights

It is ideal that EDPs are sector-specific (that is, for example, food processing EDPs), than general as to ensure focus in inputs, support, and therefore results in terms of sustainable start-ups.

The training phase is typically of about one-month duration. Class-room training inputs offered in an EDP may be envisaged in terms of motivational, informational, opportunity guidance, legal system, soft skill competency, as well as business plan and managerial inputs.

Participants of the training programme are then sometimes trained as interns in existing firms. If firms related to required technical areas are not available or accessible, they may be trained in appropriate technical training facilities. Thereafter, counselling is provided to trainees as they work in the field and prepare a detailed business plan, usually seeking assistance from financial institutions.

This is followed by counselling in terms of business plan guidance for preparation of a plan and for facilitation of credit linkages followed sometimes by mentoring support. The need for an appropriate credit instrument cannot be re-emphasised.



Many institutions such as R-SETI, MCED, MITCON and NGOs offer conventional EDP inputs sponsored partly by the DST, MoFPI and state government. An EDP (Training and handholding) structure illustrated in this chapter is that of specialised sector-specific EDPs that is conducted in any sector (for example, agro-processing). It is ideal that EDPs are of sector-specific nature than general as to ensure focus in inputs, support, and therefore results in terms of sustainable start-ups.

In terms of input structure, an EDP may include class-room training on subjects related to entrepreneurship skills, start-up, and management for a duration of 4 weeks. This phase may be followed by technical training in terms of hands-on-in-plant training or in appropriate technical institutions for a period of 4 to 12 weeks. Thereafter, for about a month, trainees may be counselled on preparing a bankable business plan conjointly with a detailed market and feasibility study. The duration of this phase is typically of about one-month duration. Class-room training inputs offered in an EDP may be envisaged in terms of motivational, informational, opportunity guidance, legal system, soft skill competency, as well as business plan and managerial inputs.

As a critical support initiative to the conduct of EDPs, an appropriate financing instrument may be evolved in association with financial institutions.^{xv} Some (indicative) features of such an instrument, in the context of smaller firms is also presented in this chapter in terms of promoter's contribution, repayment period, interest charges, moratorium, nature of facility and collateral requirements. The importance of a credit guarantee mechanism is emphasized.

4.1. INPUT –STRUCTURE

The training and counselling inputs imparted over an EDP to develop selected potential entrepreneurs into well-groomed, competent entrepreneurs typically may include various broad steps as discussed below.^{xvi}

- Class room (entrepreneurship and management training): Training may encompass inputs related to entrepreneurship skills, business planning and enterprise management. The duration of such training may be of four-week duration.
- Technical training: This is practical (hands-on) and may also be in-plant depending on access to related facilities in a region. The duration of training may vary from four to twelve weeks depending on the level of expertise required and concerned product category.
- Counselling: Assisting trainees to prepare business plan alongside conduct of detailed market and feasibility study in the field. The duration of this phase is typically of about one-month duration.

Usually, actual training commences with basic entrepreneurship inputs, and experience sharing with local entrepreneurs in specific sectors. Thereafter, trainees' preliminary exposed to related enterprises through visits to establish firms, followed by information inputs.^{xvii} The trainees are sent to the field for identifying business opportunities after opportunity guidance inputs. Thereafter, they are offered basic training in market survey techniques, followed by conduct of a preliminary market survey report. This is followed by the preparation of a preliminary business plan.



Interactions with financial institutions are also facilitated at this stage for joint assessment of feasibility, scope and limitations of project options vis-à-vis the trainees own profile and resources. Business plans are thus tentatively finalized.

Subsequently, trainees are provided with managerial inputs comprising of marketing, financial management, and book keeping. They are then offered inputs on technical aspects. This is followed by inputs on business planning and in preparation of a detailed and bankable plan. Thereafter, enterprise management inputs are offered along with inputs on legal requirements, and government rules and regulation governing start-ups and management.^{xviii}

Class room training lasts for about four weeks, followed by the technical training phase lasting, on an average, for one to three months. Upon technical training, trainees are better equipped to conduct a more detailed feasibility study in the field and prepare a business plan (also considering consortia based options) with appropriate counselling assistance.

4.2. ENTREPRENEURSHIP AND MANAGEMENT RELATED INPUTS

The coverage of the classroom training inputs may be envisaged in terms of motivational, informational, opportunity guidance, legal system, soft skills competency and business plan related, as well as managerial inputs. An indicative tabulation of the curriculum is presented below: ^{xix}

Entrepreneurship and motivational inputs: Entrepreneurship inputs are imparted to trainees to increase their need for achievement (nAch), and help appreciate, as well as develop necessary entrepreneurial competencies.

Soft-skill competence: The necessary soft skills underpinning success entrepreneurship needs to be appreciated and developed. Accordingly, inputs on developing skills by way of problem-solving, creativity, interpersonal and communication skills, as well as negotiation skills are offered.

Legal System: Inputs related to legal aspects may also be provided to trainees to make them aware of local, national, as well as international regulatory environment for doing business. Inputs may be sectors as well as product specific in terms of quality and conformance related issues, labour and environment-related standards and other statutory requirements.

Information inputs: Information inputs help trainee understand the aspects involved in start-ups, as well as the support institutions and service providers present in the region. Various Business Development Service (BDS) providers, along with their services, are profiled. Trainees are also made aware of the structure, roles, and MSME promotional schemes of different arms of the government machinery.

Business Opportunity Identification (BOI): It is necessary to scan the environment to appreciate available business opportunities. In this regard, BOI inputs help trainees develop an inventory of various option vis-à-vis possible businesses, and assess feasibility in the context of business potential as well as their own personal profile.

Formulation of Preliminary Business Plan (PBP): The drafting of a preliminary business plan of one or a few business possibilities will help appreciate basic project parameters. This will further narrow down on to specific idea and also serve as the basic foundation for compilation of a full-fledged business plan.



Business Plan Preparation (BPP): This input enables the trainee to finalise, draft and assess a bankable business plan. A business plan document also needs to be structured appropriately in such a manner as to secure institutional finance, wherever required. Such a plan needs to incorporate findings and strategic options in the light of findings from market survey, technical as well as economic-financial feasibility analysis. Such a plan also acts as a road map for implementing the project idea. Trainees are expected to finalise their plans about four weeks after the phase of technical training.

Management Inputs: Practical management tools need to be imbibed by trainees. The objective of such inputs is to help trainees develop an understanding of their application in different functional areas of management. Such inputs may be seen to comprise inputs related to the capital and cost structuring of the project, effective marketing, production as well as financial management.

4.3. TECHNICAL TRAINING FOLLOWED BY COUNSELLING SUPPORT

As a part of technical training, trainees are placed in an operating firm, preferably of similar scale of operation as one they are likely to initiate. In fact, this phase provides trainees an exposure into the technical as well as operational aspects of the functioning of an enterprise. They are exposed to management and also pick up the tricks of the trade. Where firms related to required technical areas are not available or accessible, they may be trained in appropriate technical training facilities. Thereafter, counselling needs to be provided to trainees as they work in the field and prepare a detailed business plan, usually seeking assistance from financial institutions.

4.4. A NOTE ON A TYPICAL FINANCING INSTRUMENT FOR EDP TRAINEES

As a critical support initiative to the conduct of EDPs, different financial institutions may offer varying instruments.^{xx} The (indicative) important features of such instruments that need to be considered include:

- **Promoters Contribution:** Ten to thirty-three percent. Scope of an investment subsidy offered by the government to reduce the equity as well as debt burden of an entrepreneur also prevails.
- **Period for repayment:** Three to five and to even Upto seven years on a case to case basis.
- **Financial Charges:** Interest on loans charged by the FIs may be typically in the range of 9-12 percent. However, that charged by NBFCs and MFIs may be on the higher side.
- **Period of Moratorium:** A moratorium period of a month to even a year may be offered, varying with the time required for a project to commence operations from date of sanction of loan assistance.
- **Nature of facility:** The loan facility in some cases may be a composite loan. Repayment may be in Equated Monthly Instalment for smaller projects, or quarterly repayment in case of larger ones.



- **Collateral requirements:** Typically, collateral requirements may be stringent, except in rare cases where the project is not deemed particularly risky due to various circumstances. Essentially, the primary security will be the created, either in terms of fixed asset or stock hypothecation. In addition, collateral by way of land is typically required. Commercial banks may also seek recourse to cover under the Credit Guarantee Fund Trust Scheme for Micro and Small Enterprises on a case to case basis. In addition, MFIs who typically are not members of lending institutions under such schemat may consider group guarantee from SHG members or guarantee from other individual entrepreneur financed in the same location as is sometimes their practice.

Other than conventional debt or equity options, there are other options for financing business operations. For instance, hire-purchase and lease-finance are possible options to financing.

Non-conventional financing options in India

Some prominent players in the Indian context include many like Kothari, and Sundaram Finance. Fixed assets may be procured through these means. The main distinction between hire-purchase and lease-financing is that in the case of the former, the transfer of ownership of an asset occurs at the end of the stipulated period. However, in the case if lease-financing, ownerships vests with the lessor. Commercial banks as well as Non-Banking financial companies (NBFCs) and equipment suppliers offers such options.

A not very uncommon option in some emerging sectors is Venture Capital financing which is typically provided to new projects with new ideas. Application of new technology is also encouraged. In India loan or equity stake is provided or assured by venture capital offering institutions such as the Small Industries Development Bank of India (SIDBI), and the Industrial Credit and Investment Corporation of India (ICICI).

With regard to export business, export finance is usually available. This refers to credit facilities offered to exporters at pre and post-shipment states and is provided as packing credit (sometimes) advance against export incentives, and advance against duty drawback.

Other options may be viewed in terms of factoring and bills discounting, that are important indirect lending options provided by commercial banks as well as financial companies. The factor or agents assumes the responsibility of debt collection for such service. The factor is the financial institution that usually releases eighty to eighty-five percent of the amounts due as advance to the seller. In case of bills discounting, usually 75 percent of value of the raised sales invoice is disbursed as advance. When payment is made, the financial institution collects the same.



CHAPTER 5

SELECTION OF POTENTIAL START-UPS

Highlights

The selection methodology of potential entrepreneurs to be guided and groomed may indicatively assess entrepreneurial competencies and also assess candidates from the point of view of business acumen and home-work and resolve to pursue an entrepreneurial career. The latter may be in terms of a preliminary/ hypothetical business idea.

In order to assess basic entrepreneurial competencies in a person, the candidate may be asked to provide one illustration each from his/her past experience on displaying entrepreneurial competencies. The experience may be related to jobs, past or current attempt at enterprise, over educational career etc. Individual interviews maybe conducted for each candidate by an interviewer or panel of experts representing related institutions. The interviews need to evaluate both the entrepreneur as well as his /her preliminary business idea (even hypothetical, if any).

Other than soft and hard management skills, initiatives and resolve to pursue an entrepreneurial career in terms of in-principal support from FIs may be given due weightage when selecting potential start-ups. A Letter of Intent from FIs to support the project will be encouraging.



5.1. INTRODUCTION TO THE METHODOLOGY

The selection methodology may involve a written test or a personal interview. Both the written test and personal interview may be considered over the selection process. The selection methodology may indicatively assess entrepreneurial competencies, and also assess candidates from the point of view of business acumen and resolve to pursue an entrepreneurial career. The latter will be in terms of a preliminary/hypothetical business idea or plan.

5.2. WRITTEN TEST

The written test may have 2 sections and may involve a duration of 60 minutes. Notably, it is necessary to indicatively assess the entrepreneurial competency base of candidates.

Some of these soft skill competencies may include a “Need for Achievement” (nAch) which indicates a preference to take up challenging activities. It also reflects persistence to realise targets. Also, other important competencies include the “Need for Autonomy/Independence” and “risk taking ability”. The enterprising individual typically works in an unconventional manner; does not blindly follow the majority and takes calculated risks after establishing challenging targets. Another important set of competencies is with reference to “creativity and innovativeness”. This reflects an enquiring bent of mind. Finally, “persistence and resolve” reflects a high internal locus of control. A high internal focus of control ascribes success and failures in initiatives to him/herself rather than to external factors, believes can determine/influence his own future; is self-confident and believes results are related to efforts than to mere chance.

Some entrepreneurial competencies: Persistence, initiative, seeing and acting on opportunities, information seeking, concern for work quality, commitment to work contract, efficiency, systematic planning, self-confidence, use of influencing strategies.

Section 1: In order to indicatively validate assessment and study basic entrepreneurial competencies in a person, candidates may be requested to provide one illustration each from his/her past experience on displaying any 4 competencies. The experience may be related to his/her job, past or current attempt at enterprise, during educational career, etc. Maximum 6 sentences each of 4 competencies may be provided (20 minutes). Further substantiation of basic entrepreneurial competencies is necessary to facilitate assessment.

Section 2: Writing down a simple hypothetical/proposed preliminary business idea in max 300 words. This may indicate the earnestness of a candidate in pursuing an entrepreneurial career. Has serious thought been given to any project? (30 minutes). Evaluation may also give due to consideration to quality of the idea and also basic norms of support institutions including financial institutions.

The hypothetical/preliminary business idea need include

1. Short description of the proposed project

- Nature of activity and its uniqueness
- Total investment required
- Raw material input availability/source, if applicable (any problem in availability)?



- Infrastructure (will the enterprise operate from already owned premises or from leased/rented premises?)
- Who are the main buyers of the products (large firms/ small firms/sold to customers through wholesalers and retailers, etc.)?
- Market for the product/service (firm tie up with reputed companies/required marketing capabilities, etc.)

Based on qualitative evaluation of responses, candidates may be evaluated

Evaluatory norms: Section 1 may carry a maximum of 25 marks; section 2 may also carry a maximum of 25 marks. Candidates will have to secure a minimum of 13 marks in each section and a minimum of 25 marks in total out of a maximum of total 50 marks in this stage of the selection process. Candidates may be also expected to write down a simple hypothetical/proposed preliminary business idea in maximum 500 words. This will indicate the earnestness of a candidate in pursuing an entrepreneurial career. Has serious thought been given to any project? (30 minutes).

5.3. PERSONAL INTERVIEW (PI)

Interview: Individual interviews may be conducted for each candidate. The experts may include any or all three of the following: representative from a bank/MSME-DI/DIC/FI/PD-ATMA.

De-facto/factual information vis-à-vis the candidate/potential entrepreneur may be probed:

1. Information on candidates default/dues with FIs/others, if any
2. Candidates' educational qualification and training.
3. Value of assets in the name of the candidate (land/building/moveable asset/cash).
4. Work /business experience of the candidate.
5. Family background-service/business-manufacturing/trading, etc.

Evaluatory norms: The interviews need to evaluate both the entrepreneur as well as his /her preliminary business idea (even hypothetical, if any). The interview may be conducted for 20 minutes. Interviewer or interviewers may unanimously grade the candidates on a total of 50 marks for the interview. Candidates need to secure a minimum of 25 marks in the interview. Interviewers may also study performance/response sheets of candidates in the written tests. Questions by the interviewers may probe responses related to the two sections completed in the written test.

The candidates may be selected on the basis of scores vis-à-vis maximum total score of 100. Those scoring below 50 may be straight away rejected. In some cases, personal interview covering indicated aspects may alone be deployed, if necessary. This is particularly if the number of candidates is not large.



CHAPTER 6

BUSINESS DEVELOPMENT SERVICE (BDS) AND MENTORING NEEDS FOR START-UPS

Highlights

The services of several public as well as private BDS providers may be availed of by SMEs. To illustrate, in India the National Small Industries Corporation (NSIC) Ltd. though essentially a term lender offers schemes and various BDS, the institution also has a Technology Transfer Centre that provides information on technology offers from R&D organizations and facilitates joint venture ties and manufacture under license.

The services of the Office of the Controller General of Patents, Design and Trademarks may be leveraged, TIFAC also facilitates assistance on the patenting front. The institution offers entrepreneurship management and skill development programs; several apex associations serve as institutes for convenient policy advocacy. Large industry associations such as Federation of Indian Chambers of Commerce and Industry (FICCI) and the Confederation of Indian Industry also provides several value-added services to members.

Some BDS providers offering training and management consultancy comprise entrepreneurship development institutions such as NMSME and the Entrepreneurship Development Institute of India, technical consultancy organizations such as the Industrial and Technical Consultancy Organization of Tamil Nadu and professional institutions like the Institute of Cost and Works Accountants of India.

For global sourcing and marketing and related BDS assistance may be availed from the concerned Export Promotion Council (EPCs). ED institutions and MSME-DI provide training services. ICAR labs also provide technology inputs.

Critical private service providers include machinery and equipment service providers.



Services from different types of BDS providers are necessary, and may be availed by entrepreneurs and their enterprise start-ups

6.1. PUBLIC AND PRIVATE LED BDS OPTIONS ^{xxi}

Typically, in India, the services of several public as well as private BDS providers may be availed of start-ups. To illustrate, in India, the National Small Industries Corporation (NSIC) Ltd., though essentially a term lender, offers raw material procurement assistance as well as marketing and hire purchase schemes and various BDS. The institution also has a Technology Transfer Centre that provides information on technology offers from R&D organizations and facilitates joint venture ties and manufacture under license. Their services include assistance in IT solutions in business operations, technical trouble-shooting and infomediary services. Somewhat similar institutions, MSME-DIs who are field level implementing bodies of the Office to the DC-MSME are located across the country. They offer technical consultancy to SMEs in terms of preparation of project reports, organizing workshops on quality, patent issues and such, for the benefit of industry. The economic investigation and statistics department conducts industrial potential surveys of districts sick unit studies for rehabilitation and offers export related BDS. The institution also offers entrepreneurship management and skill development programs; several apex associations serve as institutes for convenient policy advocacy. Large industry associations such as Federation of Indian Chambers of Commerce and Industry (FICCI), and the Confederation of Indian Industry also provide several value-added services to members For instance, an Agribusiness Information Centre at the FICCI, disseminates information on relevant trade, technologies and also facilitates B2B linkages.^{xxii} FICCI's quality forum and intellectual property development activities are also other areas of services provisions. Typically, BDS are required in different functional areas.

The tables below elaborates ^{xxiii}

Functional Requirement	BDS Services	Typical BDS provides
Production	Fabrication, lay-out, process engineering, mould making, designing.	Process, design and quality consultants and machinery manufacturers.
Marketing	Market research, brand promotion, business to business links, training on the marketing front.	Specialized private consultant, buying agents and houses, govt. and private training institutes and TCOs.
Project identification	EDP training, counselling on business opportunities .	EDP institutions (NGOs), TCOs, MSME-DIs, DICs, Business Incubators, etc.
Project planning and initiation	Business plan preparation, grant/subsidy and loan syndication.	Specialized consultant, TCOs, Chartered Accountants, MSME-DIs, NSICs, Concerned desks of Financial Institutions, etc.



Project implementation	Selection and procurement of plant and machinery, registration of firms, drawing of lease agreement, securing statutory clearances, etc.	Technical experts from concerned CSIR ^{xxiv} labs, machinery suppliers, MSME-DIs, private service providers, technical institutions like CFTRI
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6.2. SOME BDS PROVIDERS IN INDIA

This section elaborates on some BDS options for start-ups and existing MSMEs in India.

Packaging: The Indian Institute of Packaging (www.iip.in.com) offers related services.

Patents: While the services of the Office of the Controller General of Patents Design and Trademarks (<http://ipinda.nic.in>) may be leveraged, TIFAC also facilities assistance on the patenting front.

Management and Entrepreneurship Training: Some BDS providers offering training and management consultancy comprise entrepreneurship development institutions such as NIMSME (www.nimsme.org) and the Entrepreneurship Development Institute of India (www.edindia.org), technical consultancy organizations such as the MITCON or ITCOT and professional institutions of Cost and Works Accountants of India (<http://icmai.in>).

Credit: Credit needs may be seen in terms of both working capital and term loans. The services of a local Chartered or Cost Accountants may be availed of, to prepare proposals. For purpose of credit rating, the services of the Small and Medium Enterprise Rating Agency (SMERA) may be availed of. ^{xxv}

Global Links: Services of intra-country chambers and services of trade desks of relevant countries may be availed of for country specific market information. Ties with inter-country chambers of commerce could also be of great use. Market linkages are facilitated by the FICCI, Federation of Indian Export Organization (FIEO), and various inter-country chambers of commerce. Some contact points for related BDS include: Concerned Export Promotion Councils (www.commercemin.nic.in) institutions such as the Indian Institute for Foreign Trade (IIFT), International Trade Centre (www.intracen.org) ITPO (India Trade Promotion Organization-www.indiatradepromotion.org) Trade desks such as JETRO (Japan External trade Organisation-www.jetro.go.jp), NBSO (The Netherlands Business Support Office (www.nlembassy.pl)) and the SIPPO (Swiss Import Promotion Programme-www.sippo.ch); D&B (Dun & Bradstreet-www.dnb.co.in) which also sells market information: ZDH –SEQUA (The German Confederation of Skilled Trades and Crafts www.zdh.de); CBI (Centre for the Promotion of Imports from Developing Countries (www.cbi.nl)). ^{xxvi}

Business plans: BDS in terms of planning new, expansion, diversification plans may be sourced from local and R&D and technical institutions as well as Chartered and Cost Accountants. The services of civil engineers and chartered accountants may also be availed of to prepare layouts for larger projects. For global procurement or marketing related BDS assistance may be availed from concerned Export Promotion Council namely APEDA^{xxvii} in term of addresses of competitive manufactures of input abroad and also the NSIC (for competitive



procurement from public sector manufacturers). For global sourcing/import, the service of agencies providing information such as TANSITA-FNF and the Dun & Bradstreet may also be availed of.

Technology, value addition, and product diversification: Services of concerned R&D institute or CSIR laboratory may be availed of. Technology-related service providers include the National Research Development Corporation (www.nrdcindia.com) which markets technologies developed by government institutions. There are also several rural technology demonstrations –cum-training centre in India. The Technology Information Forecasting and Assessment Council an arm of the Department of Science and Technology (DST) pursues technology assessment and forecasting and is an information provider. The CFTRI is a critical support institution. Invariably, EDP training also helps to develop technical skills in typical micro-sized projects.

Importance of Technical Training

Cashew resource based business opportunity

GLD Industries, Dhule, was established in the year 2018. The promoter undertook technical training in cashew processing and decided to launch his business venture near his place of domicile in Dhule. The important equipment deployed in the enterprise involve a roaster, peeling machine, cutter, colour, sorter and etc. The unit has production capacity of about 1.5 Tonnes per day. The project was launched with an investment of INR 15 Lakh of which cost of machinery and equipment is about INR 9.5 Lakh. The unit is a typical business idea based on resources available in a region.

Business idea based on “fragmented market” demand: Mini Dal Mill

“AK Dal Mill” was established in 2017 in Kapadana taluka in Dhule District. Upon attending an EDP, the promoter identified a gap in terms of dal milling facility in the region and the large market in Dhule. The equipment deployed in the unit comprise INR 3.25 Lakh of mini dal mill, polisher, grading machine and etc. The processing capacity of the unit is 500 kg per hour and total project cost is INR 6 Lakh. The manufacturing process in related enterprise involves cleaning, grading, de-stoning and then drying, grading, de-husking, splitting, polishing and packaging. Considering 300 days of operation and on double shift basis, the project turnover of the unit is INR 70 Lakh with direct employment generation for 5 workers. The unit requires large quantity of pulses as inputs and hopes to procure raw material from local market and FPCs in Dhule and other neighbouring districts. The USP of the unit line is selling organic and unpolished dal.

Critical private service providers include machinery and equipment service providers. The tabulation following presents some of them.



Table 3: List of some Machinery Manufactureres and Suppliers

Sr. No	Company	Technology /Service	Contact Person	Contact No.
1	Rohit Infrastructure	PEB Infrastructure and Solar Systems	Rohit Jagdale	9545300030-Suman Ji/15/16/39/25
2	Royal Fiber House	Prefabricated Portable Cabins and Storage	Gaurav Deshmukh (Proprietor)	9657729000/9284435354
3	Ecofrost Technologies	Micro Cold Storage	Venkatesh Ji/Akshay Nagale	8978800154
4	Rinac India Ltd	Refer Vans	Mr. Siva/ Mr. Chetan Khamkar And Anil Ivare	9445009605
5	Salasar Agrotech Pvt. Ltd.	Cleaning and Grading, Dal Mill, Rice Mill, Color Sorting	Sanjiv Upadhay	8806208800
6	Venus Sorting Technologies Pvt. Ltd.	Color Sorting (Grains and Cashew)	Makesh Khumar R.	9952855855
7	Unifab India Solutions	Maize Seed Separators & Dryers	Sanket Bachav	8422944459
8	Interface Solution	Automatic Weighing and Bagging And Bag Loaders	Nikesh Aanandikar	7757045687
9	Shruti Flexi Pack Private Limited	Vffs & Hffs Packing Machines	Sharayu Sawant	9892618924
10	Safeseal Machines Pvt. Ltd.	Packing, Carton Sealing, Etc	9321202112-Tanmay Sutar Ji (Director)	Kolhapur HO: 9371672126/9321202112 Mumbai Branch: 9322599203/9022979685
11	Sagar Engineering	Pulping, Canning and other Food Processing Technologies	Prakash Sawant	9422632838
12	Delta Cashew Machines Pvt. Ltd	Cashew Processing Technologies	Mr. Patil	9657722184
13	Trilok Food India	Retort Technology For RTE	Gaurang Kotnis	9422018180



14	Enprosyst Solution Private Limited	Fruits, Dairy Processing Tech	Gajanan Hattekar	9730408640/ 9970829260
15	S. S. Equipments	Various Snack And Rte Product Machines, Soymilk Plant, Soy Nugget Plant, Noodle Manufacturing Plant	Rahul Sharma (Ceo)	+91-9422202772 +91-9422211985
16	Sanjivani Agro Machinerics	Cattle Feed Units	Sanjay Ingle	
17	A. R. Enterprises	Bread Making Machines, Biscuit Making Machines, Biscuit Baking Machines, Bread Baking Machines And Packing Machines	Rizwan Khan	022-25007860
18	Adarsh Engineering Works	Sorghum Cane Crushers, Oil Expeller Machine, Tel Ghani Machine	Praveen Sharma	9422102490/ 9370302490
19	Auram Packaging System	Packaging Machines And Material Handling Systems	Suhas Nandkarni	022-25415807
20	Concept Packaging International Pvt.Ltd.	Carton Sealers and Case Sealers, Weigher and Metal Detector, Strapping Machine, Conveyors Systems, Coding Machines, Liquid Filling Systems, Packing and Wrapping Machines.	Shriram Gopal	022-24037530
21	Dsk Milkotronics Pvt. Ltd.	Dairy Automation Solutions	Hemant Bhosale	7767800181
22	Fan Bro Erectors	Roasting Machines, Ribbon Blender, Industrial Agitators, Storage Tanks, Fruit Crushing Mill, Juice Extractor, Steam Jacketed Kettle, Coating Pan, Dump Tank, Road Mill Tankers and Spray Driers	Uday Phansalkar	8447543742
23	Flexo Pack Machine Pvt.Ltd.	Packaging Machines and Material Handling Systems	Sanjeev Kumar	0129 4012236
24	Kaps Engineers	Hammer Mills, Pulverizers	Amit Mehata	8447530717



25	Next Gen Drying Systems. Pvt. Ltd.	Cashew Processing Technologies, Vegetables & Fruits Cutting Machines, Vegetables & Fruits Peeling Machines, Vegetables & Fruits Grading Machines, Washing Machines, Dehydration Machines, Pulping Machines, Dry Pulveriser, Conveyors, Pack House Equipment, Frozen IQF Line.	Shivanand	9822653515
26	Padmatech Engineering Systems	Powder Granulation Plants, Ribbon Blender, High Speed Mixers, Effluent Treatment Plant (Etp), Bulk Handling Systems, Pomegranate Aril Extractor Hand Tool	Mr. Makarand	9822552882
27	Process Masters	Fruit And Vegetable Washer, Elevator, De-Stoner Pulper /Finisher Hot Break System/Pre- Heater, Juice Extractor, System Pasteurisation, Retort/Exhauster, Dehydration Equipment, Material Handling & Conveying System, Canning/Bottling Line	Uday More	9822841127
28	Renuka Enterprises	Peda Laddu Machine, Flour Mixing Machine, Extruded Snack Machine, Milk Packing Machine, Onion Cutter Machine, Atta Chakki	Mr. B. Prabhakar	9822658092
29	Shreeram Associates	Mini Dall Mill, Mini Oil Mill, Groundnut Decorticator, Conveying Systems	Manoj Khandelwal	9823090002
30	Padsons Industries	Seed Cleaning and Grading, Dal Mill, Weigh Balance and Moisture Meters	Amit Padgilwar	9921363339



31	Science For Society	Solar Dryer	Ms. Sheetal Somani	7588565627
32	Next Gen Drying Systems. Pvt.Ltd	Custard Apple Pulp Extractor	Mr. Shivanand	9822653515
33	Buhler India Pvt. Ltd.	Grain Milling, Flour Milling, Color Sorting, Food Processing and Automation	Surojit Bhasu	9643811908
34	Agrosaw	Cleaning, Grading, Sorting and Handling Of All Kinds Of Seeds, Grains, Pulses, Spices, Oil Seeds, Fruits and Vegetables	Mohammad Farook	9410270043
35	Dollar Engineering Industries Pvt. Ltd.	Bakery Equipment	K.P. Jayprakashan	9845037555
36	Agroripe	Ripening Chamber	Sunil Bhatt	9225137161
37	Arfa Agro Products	Multipurpose Poly House Solar Dryer	Shaik Karimulla	9849788786
38	Best Engineering Technology	Mobile Steam Boiler For Turmeric	Veer Thank	9440344335
39	Kaps Engineers	Pulveriser/ Grinder	Amit Mehta	8447530717
40	Tinytech Plants	Oil Extraction Machine	Mr. Manish	9227606570
41	Adarsh Engineering Work	Oil Extraction Machine	Praveen Sharma	9422102490
42	NDRI Karnal Campus	Solar Conditioned Dryer	A.K. Singh	9416292406
43	IIHR	Shrink Packaging Of Fruits And Vegetables	R.R.B. Singh	080-28466420
44	Krishna Grain System Pvt.Ltd	Seed Cleaning And Grading, Material Handling, Silo Storage	Mr. Rakesh	8447523018
45	Vertex Industries	Material Handling Equipments	Mr. Rana	8587833357
46	Atlas Copco	Air Compressors	Shiv Pillai	9370996643
47	Aqua Engineering	Material Handling Equipments - Elevators, Food Processing Engineering	Karan Rawal	9909016156



48	Agilent Scientific Instruments	Food Testing Lab Equipments	Ravi Zope	9619679549
40	Pristine Plants India Pvt. Ltd.	Soy Milk Plant	Dibyendu Roy	9811062230

Overseas BDS providers: Senior Experteen Services (SES, Germany - (www.ses-bonn.de), the Netherlands Management Co-Operation Programme (NMCP–PUM-www.nmcp.nl), are regularly using international BDS providers for assistance on several functional areas ranging from market development to technology and product development.



CHAPTER 7

PROFILE OF KEY INSTITUTIONS RELATED TO MSME DEVELOPMENT AND START-UP FACILITATION

Highlights

Several development agencies and Ministries of the Central Government of India play a critical role in promotion of start-up and agri-business.

The Ministry of Commerce and Industry serves as the nodal Ministry for non-small firms in the country. Two key Departments function under its ambit: The Department of Commerce, as well as the Department of Industrial Policy and Promotion (DIPP). The Ministry of MSME also pursues policy advocacy on behalf of the MSME sector with other ministries and Department of the Government. The MSME or office of the Development Commissioner, MSME (DC-MSMSE) is an attached office to the Ministry serving as the Apex body for assisting the Ministry in formulating, implementing and monitoring related policies and schemes.

Some of the other related Ministries include the Ministry of Food Processing Industries and the Ministry of Science and Technology.

Directorate of Industries and Commerce/Small Industries Department supports employment generation by means of implementing schemes for: training and financing of educated unemployed youth in the context of self-Employment and entrepreneurship; it also offers a range of schemes for food processing units.



Introduction

Several Ministries of the Central Government and Department at the state level in India play a critical role in promotion and strengthening of start-ups in agri-business and their growth. This chapter profiles as well as elaborates on some of the key Ministries in this regard. Some key players may be viewed in terms of Ministry of Commerce and Industry, the Ministry of Micro, Small and Medium Enterprises, Ministry of Food Processing Industries, Ministry of Science and Technology and the Industries Departments in the State Governments.

7.1. MINISTRY OF COMMERCE AND INDUSTRY: DEPARTMENT OF COMMERCE

The Ministry of Commerce and Industry serves as the nodal Ministry for non-small firms in the country. Two key Departments function under its ambit: The Department of Commerce, as well as the Department of Industrial of Industrial Policy and Promotion (DIPP). The major function of the Department of Commerce is to create an appropriate institutional framework as well as policy environment for facilitation and growth of external trade. In this context:

- The department formulates foreign trade policy including policies for export promotion.
- It has overall responsibility in the development, operation and maintenance of Special Economic Zones (SEZs), including fiscal issues, policy vis-à-vis investment and regulatory framework.
- The department also pursues multilateral, regional and bilateral negotiation over interactions with other countries and agencies such as the World Trade Organization.
- It carries out investigations regarding anti-dumping and countervailing duties.

The ministry has several divisions and related offices:

- **Main divisions:** Main divisions include, for example, the trade policy division and the foreign trade territorial division.
- **Attached office:** An attached office comprises the Directorate General of Foreign Trade (DGFT). This office implements the foreign trade or EXIM policy to promote exports. It is also a licensing and monitoring authority with several offices at the regional level.
- **Subordinate offices:** it comprises the Directorate General of Commercial Intelligence and Statistics (DGCI&S).
- **Others:** Some other organizations include the Indian Council of Arbitration for quick settlement of disputes.
- **Advisory Bodies:** It comprises the Board of Trade (BOT) to maintain continuous dialogue with industry. The BOT is constituted by Public and Private Stakeholders related to exports, and advices on policy issues, incentives and procedures. ^{xxviii}
- **Autonomous Bodies:** It includes various agri related Coffee, Rubber, Tea, Tobacco and Spices Boards. Others comprise the Export Inspection Council, the Indian Institute of Foreign Trade and the Indian Institute of Packaging who are involved in training and research related activities. ^{xxix}

Contact: Department of Commerce, Ministry of Commerce and Industry, Udyog Bhawan, New Delhi 110107, India (www.commerce.gov.in) Phone: 011-23062261



7.2. THE MINISTRY OF COMMERCE AND INDUSTRY: THE DEPARTMENT OF INDUSTRIAL POLICY AND PROMOTION

The DIPP serves as a facilitator of investment and industrial development emphasis on enhancing investment, technological upgradation, productivity, quality and design. The key roles and functions of the department comprises of:

- Formulation and implementation of Industrial Policy and strategies for industrial development in conformity with developmental needs and National objectives to make Indian industry globally competitive.
- Support state governments initiatives by up-gradation of industrial infrastructure and promotion of industrialization of backward regions.
- Infrastructure and technology transfer related facilitation.
- Policy formulation and approval of foreign technology collaboration for enhancing productivity upon international benchmarking.

Formulation of FDI policy and serving as nodal department for investment related issues in bilateral and Regional economic operations agreements.

- Formulation and administration of policies relating to Intellectual Property Rights (Patents, trademarks, Industrial design and Geographical Indication of Goods).
- Compilation of monthly industrial production statistics for use in the construction of Index of Industrial Promotion (IIP)
- Monitoring of select industries: such as Cement, Leather and Leather Goods Industry, Light Engineering, Electrical Engineering Industry Paper and Newsprint, Marble, Granite etc.

Main duties are also pursued by its attached and subordinate offices

- **The attached offices include:** Offices of the Economic Advisor which renders advice in formulating policies on trade, competition and labour issues related to industrial performance. The wholesale Price Index and other economic and statistical data are also compiled. The Tariff Commission functions as an expert committee to recommend appropriate levels of tariff.
- The subordinate offices under the DIPP include the Office of the Controller General of Explosives; Office of the Controller General of Patents, Designs and Trade Marks.
- Other organizations and Grantee institutions include: Central Manufacturing Technology Institute, National Productivity Council and Quality Council of India.

Contact: Udyog Bhawan, New Delhi 110107, India (www.dipp.nic.in) Phone: 011-23061222



7.3. THE MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES), OFFICE OF THE DEVELOPMENT COMMISSIONER MSME

The Ministry of MSME designs policies and schemes in consultation with stakeholders. It also pursues policy advocacy on behalf of the MSME sector with other ministries and Department of the Government. The MSME or office of the Development Commissioner, MSME (DCMSME) is an attached office to the Ministry serving as the apex body for assisting the Ministry in formulating, implementing and monitoring related policies and schemes.

Mandate: The essential function of the Ministry is to strengthen the MSME sector in terms of its competitiveness and generate additional employment opportunities. To realise slated objectives, the ministry strives to ensure inputs to the sector in terms of:

- Adequate credit from financial institutions
- Funds for technology upgradation
- Adequate infrastructural facilities
- Modern testing facilities and quality certification laboratories
- Modern management practises and skill upgradation through advanced training and marketing assistance.
- A level playing field at par with large industries sector.

Related Bodies: The ministry implements policies, programmes and schemes through its attached offices: the office of the Development Commissioner, MSME (DCMSME) and the National Small Industries Corporation (NSIC) Ltd.

Office of the DC-MSME: Serving as the apex body under the Ministry, the Office also provides common facilities, technology support and marketing assistance. Support is offered through its Micro, Small and Medium Enterprise Development Institutes who serve as implementing arms in the field, field testing stations, etc. The office also has a network of process cum product development centre and autonomous technology and training support institutes.

- **National Industries Small Corporation Ltd.:** The NSIC support commercial aspect of the function related to promoting growth of MSEs. Some schemes and activities of the organisation are: Supply of machines on easy hire purchase terms, a composite term loan scheme, procurement and supply of imported raw material, export and domestic marketing, facilitating participation in government stores purchase programmes, technical training, as well as provision of advisory services.

- **MSME Board:** The MSME Board serves as the apex advisory and non-statutory body constituted by the Government of India.

- **National Institutes for Entrepreneurship Development:** The National Institute of MSME (NIMSME), Hyderabad, and other similar institutions offer training and pursue research in the area of entrepreneurship.



Performance Credit Rating Scheme

The scheme is being implemented through National Small Industries Corporation (NSIC) Limited. The main objective of the scheme is to provide a trusted third party opinion the capabilities and creditworthiness of the MSEs so as to create awareness amongst them about the strengths and weakness of their existing operations Rating under the scheme is being carried out through empanelled rating agencies, i.e., CRISIL, CARE, ONICRA, SMERA, ICRA and Brickwork India Ratings. Under this Scheme, rating fee payable by the micro and small enterprises is subsidized for the first year only and that is subject to maximum of 75 percent of the fee or INR 40000/-, whichever is less.

Marketing Assistance Scheme

The scheme is being implemented through National Small Industries Corporation (NSIC) Limited. The main objectives of the scheme are to enhance the marketing competitiveness of MSMEs; to provide them a platform for interaction with the individual/institutional buyers; to update them with prevalent market scenario and to provide them a form for capturing the new market opportunities through organizing/ participating in various domestic and international exhibitions/trade fairs, Buyer-Seller meets intensive- campaigns and other marketing events.

International Cooperation (IC) Scheme

Technology infusion and/or upgradation of Indian micro, small and medium enterprises (MSMEs), their modernization and promotion of their exports are the principal objectives of assistance under the Scheme. The Scheme would cover the following activities:(a) Deputation of MSME business delegations to other countries for exploring new areas of technology infusion/upgradation, facilitating Joint ventures, improving market of MSMEs products, foreign collaborations, etc.; (b) Participation by Indian MSMEs in international exhibitions, trade fairs and buyer- seller meets in foreign countries as well as in India, in which there is international participation; (c) Holding international conferences and seminars on topics and themes of interest to the MSME. IC Scheme provides financial assistance towards the airfare and space rent of entrepreneurs State/Central Government Organizations, Industry/Enterprise Associations and Registered Societies/Trusts and Organizations associated with the promotion and development of MSMEs are eligible to apply.

Assistance to Training Institutions Scheme

The Scheme envisages financial assistance for establishment of new institutions (EDIs), strengthening the infrastructure of the existing EDIs and for supporting entrepreneurship and skill development activities. The assistance shall be provided to these training institutions in the form of capital grant for creation/strengthening of infrastructure and program support for conducting entrepreneurship development and skill development program. Maximum assistance for creation or strengthening of infrastructure for about INR 150 Lakh on matching basis, not exceeding 50 percent of project cost. However, for the North Eastern region (including Sikkim), Andaman & Nicobar and Lakshadweep, the maximum assistance on matching basis would be INR 270 Lakh or 90 percent of project cost, whichever is less. Any State/Union Territory Government, Training Institutions, NGOs and other development agencies can apply for assistance for creation or strengthening of infrastructure. Training Institutions who wish to conduct training programs under the Scheme will have to enrol themselves with any of the



three National Level EDIs of the Ministry viz. NIESBUD, Noida; IIE Guwahati and NIMSME, Hyderabad. Maximum assistance per trainee per hour for entrepreneurship development and skill development programmes is INR 5 Lakh INR 6 Lakh for NER, A&N and Lakshadweep.

Scheme of Fund for Regeneration of Traditional Industries (SFURTI)

With a view to making the traditional industries more productive and competitive and facilitating their sustainable development, the Govt. of India announced setting up of a fund for regeneration of traditional industries. The objective is to organize the traditional industries and artisans into clusters to make them competitive and provide support for their long term sustainability and economy of scale, and provide sustained employment for traditional industry artisans and rural entrepreneurs to enhance marketability of products of such clusters by providing support for new products, design intervention and improve packaging and also the improvement of marketing infrastructure. The objective is also to equip traditional artisans of the associated clusters with the improved skills and capabilities through training and exposure visits and to make provision for common facilities and improved tools and equipment for artisans in order to strengthen the cluster governance systems with the active participation of the stakeholders, so that they are able to gauge the emerging challenges and opportunities and respond to them in a coherent manner. Funding for the cluster varies from INR 1.5 Crore to INR 8 Crore in view of the size and scale of the project. Funding pattern under the scheme has provision for soft interventions including skill training, capacity building, design development, etc. hard interventions including Common Facility Centres, Raw Material Bank (RMB) training centres, etc. and cross cutting thematic interventions which include brand building and promotion, news media marketing, e-commerce, innovation, R&D initiatives and developing linkages between clusters.

Contact: Room No 123, Udyog Bhawan, Rafi Marg, New Delhi - 110011

(www.msme.gov.in) Phone: 011-23061431

7.4. MINISTRY OF FOOD PROCESSING INDUSTRIES (MOFPI)

The MoFPI established in 1988 is concerned with the formulation and implementation of policies and plans in the food processing sector. It is also focused on investment and export promotion and evolution of a conducive environment for firms in the sector. Fiscal incentives are canalised. In terms of development support, assistance is offered for R&D, HRD, and establishing analytical and testing laboratories. As promotional support, assistance is offered for organising workshops, exhibitions, conducting studies, and for relevant publications.

The Ministry of Food Processing Industries (MoFPI) is a ministry of the Government of India responsible for formulation and administration of the rules and regulations and laws relating to food processing in India. The ministry was set up in the year 1988, with a view to develop a strong and vibrant food processing industry, to create increased employment in rural sector and enable farmers to reap the benefits of modern technology and to create a surplus for exports and stimulating demand for processed food. The strategic role and functions of the Ministry fall under three categories;



- Policy support developmental and promotional
- Technical & advisory
- Regulatory.

It is concerned with the formulation and implementation of policies and plans for all the industries under its domain within the overall national priorities and objectives. Its main focus areas include development of infrastructure, technological up-gradation, development of backward linkages, enforcement of quality standards and expanding domestic as well as export markets for processed food products.

The Ministry acts as a catalyst and facilitator for attracting domestic and foreign investments towards developing large integrated processing capacities, by creating conducive policy environment, including rationalization of taxes & duties. It processes applications for foreign collaborations, Export Oriented Units (EOUs) etc. and assists/guides prospective entrepreneur in his endeavour.

Post liberalization, it has approved a large number of joint ventures, foreign collaborations, industrial licenses and 100 percent EOU proposals in different food processing areas and has taken major policy initiatives to facilitate an accelerated growth of the industry. The Ministry offers several schemes of assistance for units in the sector.

Contact: Block A, Siri Fort Institutional Area, Siri Fort, New Delhi, Delhi, India

(www.mofpi.nic.in) Phone: 8410455747

7.5. MINISTRY OF AGRICULTURE AND FARMERS WELFARE

The Ministry of Agriculture and Farmers Welfare (formerly Ministry of Agriculture), an independent Ministry of the Government of India, is the apex body for formulation and administration of the rules and regulations and laws related to agriculture in India. The three broad areas of scope for the Ministry are agriculture, food processing and co-operation.

Contact: Krishi Bhavan, Dr. Rajendra Prasad Road, New Delhi (www.agriculture.gov.in)

Phone: 011-23782691

7.6. MINISTRY OF SCIENCE AND TECHNOLOGY: DEPARTMENT OF SCIENCE AND TECHNOLOGY (DST)

The Ministry has three Divisions. An important division of direct relevance to industry is the Department of Science and Technology. The Departments' programmes and activities are aimed at encouraging and promoting indigenous science and technology in the country. The department facilitates scientific research by means of supporting autonomous institutions under its ambit. It also offers support for infrastructure development by way of scientific facilities and assists National and professional bodies to undertake promotional activities. The DST and NSTEDB operate under the ambit of the Ministry.



7.7. OTHER KEY INSTITUTIONS

7.7.1. Directorate of Industries and Commerce/Small Industries Department

Some initiatives pursued by such departments of the State Governments include facilitation in terms of partly financing establishment of industrial infrastructure in regions in association with Central Government schemes and industry. They may also include establishing specialised 'parks' for women entrepreneurs. Further, it also supports employment generation by means of implementing schemes for: training and financing of educated unemployed youth in the context of self-Employment and entrepreneurship. Also, the mandate of such Departments is, typically, to provide single Window clearance facility for entrepreneurs.

Contact: Directorate of Industries, New Administrative Building, 2nd Floor, Madame Cama Road, Opp. Mantralaya, Mumbai – 400032 (www.maharashtra.gov.in) Phone: 022-22028100

7.7.2. MSME-DIs

The MSME-DIs are field level institutes of the Office of the DCMS-ME operating under the Ministry of MSME, Government of India. The institute also has a few branch offices across the State. MSME-DIs offer technical consultancy to SMEs in terms of counselling, preparation of business plans, and organizing seminars and workshops on quality, environment, and patent issues. Officers also serve as Cluster Development Executives. The economic investigation and statistics department conduct district level industrial potential surveys, and pursue rehabilitation studies for sick units. The institution offers export as well as technology related BDS, and also conducts Entrepreneurship, Management Development as well as Skill Development Programmers for industry and start-ups.

Table 4: Some MSME-DIs in India

Sr. No.	Offices of MSME-DIs	Website	Contact
1	MSME-DI, Agartala	www.msmedi-agartala.nic.in	21, Harish Thakur road, Agartala -799001 Ph: 0381-2322640
2	MSME-DI, Agra (UP)	www.msmediagra.gov.in	34, Industrial Estate, Nunhai, (U.P.), Agra -282 006. Ph: 0562-2280879
3	MSME-DI, Ahmedabad	www.msmediahmedabad.gov.in	Harsiddh Camber, 4th Floor, Ashram Road, (Gujarat), Ahmedabad -380 014. Ph: 079-27540619, 079-7544248
4	MSME-DI, Allahabad (UP)	www.sisiallahabad.gov.in	E-17/18, Industrial Estate, Naini, Allahabad -211 009. Ph :0532-2697468/6810



5	MSME-DI, Bangalore	www.msmedibangalore.gov.in	Rajaji Nagar, Industrial Estate Bangalore -560 044. Ph: 080-23151540/582/583
6	MSME-DI, Chennai (Tamil Nadu)	www.msmedi-chennai.gov.in	65/1, G.S.T. Road, Guindy, P.B. 3746, Chennai -600 032. Ph: 044-22501011, 044-22501475
7	MSME-DI, Cuttack (Orissa)	www.msmedicuttack.gov.in	Vikas Sadan, College Square, Cuttack -753 003. Ph: 0671-2548006 /077 /049
8	MSME-DI, Gangtok (Sikkim)	www.sikkim.nic.in	Tadong Housing Colony, P.O. Tadong, Gangtok -737102. Ph: 03592-231262 /880
9	MSME-DI, Guwahati	www.sisiguwahati.gov.in	Industrial Estate Bamuni Maidam, Guwahati -781 021. Ph: 0361-2550052, 2550073
10	MSME-DI, Haldwani (Uttaranchal)	www.msmedihaldwani.gov.in	Kham Bungala Campis, Kaladungi Road, Haldwani -263139. Ph: 05946-228353
11	MSME-DI, Hubli (Karnataka)	www.msmedihubli.gov.in	Industrial Estate, Gokul Road, Hubli -580 030. Ph: 0836- 2332334/2330589/2335634
12	MSME-DI, Hyderabad (A.P.)	www.msmehyd.ap.nic.in	Narsapur Cross Roads, Bala Nagar, Hyderabad -500 037. Ph: 040-23078857
13	MSME-DI, Imphal (Manipur)	www.msme-diimphal.nic.in	C-17/18, Takyelpat Industrial estate, Imphal -795 001. Ph: 0385-2449096
14	MSME-DI, Indore (M.P.)	www.sisiindore.nic.in	10, Industrial Estate, Polo Ground, Indore -452 003. Ph: 0731-2420723
15	MSME-DI, Jaipur (Rajasthan)	www.msmedijaipur.gov.in	22, Godown, Industrial Estate, Jaipur -302 006. Ph: 0141- 2212098/3099/ 0553
16	MSME-DI, Jammu (J & K)	www.msmedijammu.gov.in	36, B/C, Gandhi Nagar, JAMMU -180 004. Ph: 0191-2431077
17	MSME-DI, Kanpur (U.P.)	www.sisikanpur.gov.in	107, Industrial Estate, Kalpi Road, Kanpur -208 012. Ph: 0512-2295070, 0512-2295071
18	MSME-DI, Karnal (Haryana)	www.sisiharyana.gov.in	Industrial Development Colony, Near ITI, Kunjpura Road, Karnal -132 001. Ph: 0184-2230910



19	MSME-DI, Kolkata (West Bengal)	www.sisikolkata.gov.in	111 & 112, B.T. Road, Kolkata -700 035. Ph: 033-25770595/598
20	MSME-DI, Ludhiana (Punjab)	www.sisildh.gov.in	Industrial Area B, Ludhiana -141 003 Ph: 0161-2531733 /735
21	MSME-DI, Margao (Goa)	www.msmedigoa.gov.in	Opp. Konkan Railway Station (Kepem Road), P.O. Box 334, Margao -403 601. Ph: 0832-2705092/93, 2725979
22	MSME-DI, Mumbai (Maharashtra)	www.msmedimumbai.gov.in	C- Block, C.G.O. Complex, Seminary Hill, Nagpur-440006. Ph: 022-28576090/ 28573091/28579092
23	MSME-DI, Muzaffarpur (Bihar)	www.msmedimzfpur.bih.nic.in	Institute, Goshala Road, P.O. Ramna, Muzaffarpur -842 002. Ph: 0621-2282486
24	MSME-DI, Nagpur (Maha- rashtra)	www.sisinagpur.nic.in	C- Block, C.G.O. Complex, Seminary Hill, Nagpur -440006. Ph: 022-28576090/ 28573091/28579092
25	MSME-DI, New Delhi (New Delhi)	www.msmedinewdelhi.gov.in	Okhla Industrial Estate, New Delhi -110 020. Ph: 011- 26847223, 26838118/269
26	MSME-DI, Patna (Bihar)	www.msmedipatna.bih.nic.in	Patilputra Industrial Estate, Patna -800 013. Ph: 0612-2262719, 0612-2262186, 0612- 2262208
27	MSME-DI, Raipur (Chattisgarh)	www.msmediraipur.gov.in	Near Urkala Railway Station Girgaon, Raipur. Ph: 0771-2102700
28	MSME- DI, Ranchi (Jharkhand)	www.sisiranchi.nic.in	Kokar Industrial Estate, Ranchi -834001. Ph: 0651-2544161/392
29	MSME-DI, Solan (H.P.)	www.sisihimachal.nic.in	Chambaghat, Solan -173213. Ph: 01792-230766
30	MSME-DI, Thrissur (Kerala)	www.msmedithrissur.gov.in	Kanjany Road, Ayyanthole, Thrissur -680 003. Ph: 0487-2360216/686



CHAPTER 8

BUSINESS ENVIRONMENT: EASE OF DOING BUSINESS IN INDIA, MAHARASHTRA

Highlights

The good news for start-ups is that the World Bank's Doing Business Report 2018 ranked India 100th out of 190 countries surveyed. This was a 30 place jump over a last year's ranking of 130th.

In the recent past, government had introduced 37 reforms in areas such as insolvency resolution, protecting the interest of minority shareholders, and simplifying the process of taxes to ensure the faster resolution of commercial disputes.

The big jump in India's Ease of Doing Business ranking has a lot to do with the reforms undertaken by the Maharashtra government. Since ease of doing business in India is assessed based on data collected from Mumbai and Delhi, the performance of the two cities is key to improve the rank.



8.1. EASE OF DOING BUSINESS IN INDIA

The good news for start-ups is that the World Bank's Doing Business Report 2018 ranked India 100th out of the 190 countries surveyed. This was 30 place jump over last year's ranking of 130th.

Notably, government has since introduced over 37 reforms in areas such as insolvency resolution, protecting the interest of minority shareholders, and simplifying the process of taxes to ensure the faster resolution of commercial disputes. Another major step taken by the government was the introduction of the Bankruptcy and Insolvency Act, 2017. Once implemented, the act will make it easier to exit or attempt a revival of a business, thereby improving the nonperforming assets (NPAs) dilemma for the financial services sector. This will help firms by making the rehabilitation process and/or liquidation process easier. The GST and the Banking and Insolvency Act has also been recently introduced. India has also made dealing with construction permits less cumbersome by implementing an online system to stream line the process in the municipalities of New Delhi and Greater Mumbai. The online system has reduced the number of steps and overall time required to obtain a building permit in India. However, a lot needs to be done to make it easier to acquire both land and the permits necessary to build on that land. To plug such possible lacunae in the WB report, the Department of Industrial Policy and Promotion (DIPP) is undertaking its own much wider evaluation across the country.

Notably, despite India's phenomenal progress, its ranking comes below most of its fellow BRICS countries. Russia topped the BRICS with a ranking of 35 in 2018, followed by China (78) and South Africa (82). Of the BRICS, only Brazil (125) was ranked lower than India. Furthermore, India was outranked by a host of Asian economies like South Korea (4), Hong Kong (5), Taiwan (15) and Thailand (26). Other Asian countries like Vietnam (68) and Indonesia (72) also outranked India.

World Bank Recognises India's Reforms		
Parameters	2016	2017
Getting Electricity	70	26
Enforcing Contracts	178	172
Starting Business	155	155
Registering Property	138	138
Resolving Insolvency	136	136
Construction Permits	183	185
Getting Credit	42	44
Protecting Minority Investors	8	13
Paying Taxes	157	172
Trading Across Borders	133	143

Source: www.doingbusiness.org



About Doing Business

Basically, the Doing Business project provides objective measures of business regulations and their enforcement across 190 economies and selected cities at the subnational and regional level. Doing Business captures several important dimensions of the regulatory environment. It provides quantitative indicators on regulation for starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. Doing Business also measures features of labour market regulation. Doing Business encourages economies to compete towards more efficient regulation and offers measurable benchmarks for reform. In addition, Doing Business offers detailed subnational reports which exhaustively cover business regulation and reform in different cities and regions within a nation. These reports provide data on the ease of doing business, rank each location, and recommend reforms to improve performance in each of the indicator areas. This year's report covers 11 indicator sets and 190 economies. Most indicator sets refer to a case scenario in the largest business city of each economy, except for 11 economies that have a population of more than 100 million as of 2013 (Bangladesh, Brazil, China, India, Indonesia, Japan, Mexico, Nigeria, Pakistan, the Russian Federation and the United States) where Doing Business, also collected data for the second largest business city. The data for these 11 economies are a population-weighted average for the 2 largest business cities. The distance to frontier (DTF) measure shows the distance of each economy to the "frontier," which represents the best performance observed on each of the indicators across all economies in the Doing Business sample since 2005. An economy's distance to frontier is reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represents the frontier. The ease of doing business ranking ranges from 1 to 190. ^{xxxi}

Procedures to legally start and operate a company (number)

- Pre-registration (for example, name verification or reservation, notarization)
- Registration in economy's largest business city
- Post-registration (for example, social security registration, company seal)
- Obtaining any gender-specific permission that can impact company registration, company operations and process of getting national identity card

The business:

- Is a limited liability company (or its legal equivalent). If there is more than one type of limited liability company in the economy, the most common among domestic firms is chosen.
- Operates in the economy's largest business city and the entire office space is approximately 929 square meters (10,000 square feet).
- Is 100 percent domestically owned and has five owners, none of whom is a legal entity; and has a start-up capital of 10 times income per capita and has a turnover of at least 100 times income per capita.
- Performs general industrial or commercial activities, such as the production or sale of goods or services to the public. The business does not perform foreign trade activities and does not handle products subject to a special tax regime, for example, liquor or tobacco.
- Leases the commercial plant or offices and is not a proprietor of real estate and the amount



of the annual lease for the office space is equivalent to 1 times income per capita.

- Does not qualify for investment incentives or any special benefits.
- Has at least 10 and up to 50 employees one month after the commencement of operations, all of whom are domestic nationals.
- Has a company deed which is 10 pages long.

8.2. EASE OF DOING BUSINESS IN MAHARASHTRA

The quantum jump in India's ease of doing business ranking has a lot to do with the reforms undertaken by the Maharashtra government. Since ease of doing business in India is assessed based on data collected from Mumbai and Delhi, the performance of the two cities is key to improve the rank.

About Doing Business in Maharashtra

As a part of "ease of doing business" initiatives, the state government has proposed labour reforms in the Industrial Disputes Act to ease the closure of factories without any hassles of retrenching the labourers in the state. According to the officials from the labour department, any factory having more than 100 employees requires government permission for closure. Now, it has proposed to increase that number to 300 in the Industrial Disputes Act. It has also proposed to add a new section in the Act for raising any dispute related to retrenchment or dismissal from service within three years only. At present, there is no such bar on raising the dispute and can be raised at any time.

Further, it has also proposed that factories would not require any prior permission of the government for closure if the employers pay sixty days' average pay for every completed year of continuous services at the time of retrenchment. Currently, there is no such provision in the Act. It also proposes to increase the compensation to be given to retrenched labourers by three times.

The Retail Trade Policy provides for online registration for small enterprises with less than nine employees, and also allows farmers to sell directly to retailers, bypassing the Agricultural Produce Market Committee (APMC), a statutory market committee constituted by the State Government. The single window policy for business in general for seeking various permissions and licenses, will operate through an online portal. The government pays an interest amount in case it does not give a VAT refund within 90 days. This has now been reduced to 60 days.

How does one perceive the ease of doing business in Maharashtra?

Not only a favourable ecosystem or availability of skilled manpower, the ease of doing business also includes government permissions, solution to problems faced by new industrialists and simplicity in methodology required for obtaining government permits etc. Maharashtra has set up an example in creating an environment to support ease of doing business. For example, with respect to start-ups earlier there were about 47 permits required to construct a building, which is now reduced to about eight permissions only. Earlier, it took about 140 days to obtain government permits for any business to start, which can now be obtained within 60 days. This indicates the state government's keenness to support more and more new business set ups. More importantly, most of the permits and other requirements to be fulfilled for setting up a



business in Maharashtra are now done online. For big industries also, the Maharashtra Industries Department has opened a separate office named 'MAITRI', which stands for Maharashtra Industries Trade Related Investment Centre. The Industries Department of Maharashtra has been one of the pioneers in adopting IT in its ecosystem for the benefit of the State and the industries in the region. 'MAITRI' is one such example of digitisation initiative taken up by the department. 'MAITRI' enables businesses to obtain around half of the 44 government permits online instantly. The department is in the process of making this entire permit system online within a span of two months. One has to fill up a single form called CAF (Combined Application Form) for all the 44 government permits which automatically gets delivered to various departments and the common feeds are auto-populated. Further, one also understands the time frame for obtaining each permit, when applied through the online process. If the permits are not obtained on time, the matter automatically gets escalated to senior authorities for action.



CHAPTER 9

INSTITUTIONS RELATED TO AGRI-BUSINESS AND FOOD PROCESSING

Highlights

There are a range of specialised institutions supporting enterprises in the sector including the CFTRI, IARI, IIP, NIFTEM, IIFPT, NCDC, APEDA, NABARD, NHB, etc.

A number of Development Financial Institutions like NABARD and SIDBI are also important stakeholders in this regard.

Many leading industry associations and chambers are also involved in related activity. These include the Indian Chamber of Commerce, PHD Chamber of Commerce, Vidarbha Industries Association, etc.



9.1. NATIONAL LEVEL INSTITUTIONS AND INDUSTRY ASSOCIATIONS

9.1.1. National Institute of Food Technology Entrepreneurship (NIFTEM)

The National Institute of Food Technology Entrepreneurship and Management (NIFTEM) is a public research university located in Sonapat district of Haryana. Founded in 2006, the institute is reputed for its undergraduate and postgraduate programmes in food engineering. The institute also offers management programmes. NIFTEM is the brainchild of the Ministry of Food Processing Industries (MoFPI) Government of India. NIFTEM works actively for assisting in setting up food standards, businesses incubation and also knowledge sharing. It is also an apex institution in the field of food technology and management, networking and co-ordinating with other institutions in the same field in India and Abroad. NIFTEM is established at Kundli, District Sonapat, Haryana, as an international centre of excellence to cater to the needs of various stakeholders such as entrepreneurs, industry, exporters, policy makers, government and existing institution.

Contact: Plot No. 97, Sector 56, HSIIDC Industrial Estate, Kundli, District-Sonapat, Haryana -131028 (www.niftem.ac.in) Phone: 9215611973

9.1.2. Indian Institute of Food Processing Technology (IIFPT)

The Indian Institute of Food Processing Technology (Formerly Indian Institute of Crop Processing Technology) (IIFPT) is a pioneer Educational and R&D Institution under the Ministry of Food Processing Industries (MoPFI). Considering the vital importance of strengthening R&D efforts in the post-harvest processing of foods, MoPFI strengthened and upgraded this formerly named Paddy Processing Research Institute (PPRC) as a National Level Institute. In February 2008, the institute in Thanjavur was upgraded as a National Institute and renamed as the Indian Institute of Crop Processing Technology.

IIFPT has a total of 11 departments catering to the needs of students and researchers: Department of Food Engineering; Department of Food Packaging and System Development; Department of Food Product Development; Department of Food Safety Quality and Testing; Department of Food Biotechnology; Department of Primary Processing, Storage and Handling; Department of Computational Modelling and Nanoscale Processing Unit; Department of Technology Dissemination; Department of Incubation Centre; Department of Academics and Human Resource Development; Department of Planning and Monitoring.

Contact: Indian Institute of Food Processing Technology, Ministry of Food Processing Industries, Government of India, Pudukkottai Road, Thanjavur - 613005, Tamil Nadu, India. (www.iifpt.edu.in) Phone: 04362 228155



9.1.3. Indian Chamber of Commerce (ICC)

Founded in 1925, Indian Chamber of Commerce (ICC) is the leading and only National Chamber of Commerce operating from Kolkata. Its membership spans some of the most prominent and major industrial groups in India. The ICC constituents are mainly large manufacturing units with operations all over the country and abroad. A large number of corporate bodies of India form the backbone of the organization. Leading industrial promotion organizations, banks and financial institutions, as well as governmental organizations, are members of the ICC and lend a diversified membership base for the Chamber. This apart, the ICC Secretariat accommodates a number of important national level industry associations, as members, around the country. Some of the important Industry Associations are the Indian Sugar Mills Association, the West Bengal Cold Chain and Cold Storage Owners Welfare Association, the Indian Chemical Merchants and Manufacturers Association, and the Gunny Trades Association

Contact: 4, India Exchange Place, Kolkata-700001 (www.indianchamber.org)

Phone: 033-22313377 / 22313380

9.1.4. PHD - Chamber of Commerce and Industry

The PHD Chamber of Commerce and Industry, established in 1905, is a proactive and dynamic National apex chamber, headquartered at Delhi, working at the grass-root level and with strong National and international linkages. The Chamber acts as a catalyst in the promotion of industry, trade and entrepreneurship. The Chamber has its headquarters in Delhi and regional offices in Chandigarh, Lucknow, Jaipur, Bhopal, Shimla, Jammu Srinagar Patna and Ranchi and it has its presence Pan India, through regional and state chambers with a memorandum of understanding. It is also represented in more than 130 Central and State Advisory/ Consultative bodies. Both Central and State Governments consult PHD Chamber before announcing or formulating any major economic / industrial policy. PHD Chamber operates through various Expert Committees / Task Forces comprising of representatives of member companies and experts. With the in-house expertise at PHD Chamber, the Chamber provides advice to Indian firms on many issues of their business. These include, apart from National and regional economic and industry related issues, corporate affairs, taxation, capital markets, labour and industrial relations, skill development, agri-business, environment, etc. PHD Chamber is authorised by the Government of India to issue certificate of origin (non-preferential) to Indian exporters. The Chamber also attests commercial documents of various types. Recommendation letters for visas for business promotion to foreign diplomatic missions in India are also issued for representatives of Indian companies. Notably, the PHD Chamber organises focussed entrepreneurial development training programmes in cooperation with the Konrad Adenauer Foundation of Germany.

Contact: PHD House, 4/2 Siri Institutional Area, August Kranti Marg, New Delhi - 110016 (www.phdcci.in) Phone: 011-26863801-04



9.1.5. National Cooperative Development Corporation (NCDC)

The National Cooperative Development Corporation (NCDC) was established by an Act of Parliament in 1963 as a statutory Corporation under Ministry of Agriculture and Farmers Welfare. Functions of the NCDC are planning, promoting and financing programmes for production, processing, marketing, storage, export and import of agricultural produce, food stuffs, certain other notified commodities e.g. fertilisers, insecticides, agricultural machinery, lac, soap, kerosene oil, textile, rubber etc., supply of consumer goods and collection, processing, marketing, storage and export of minor forest produce through cooperatives, besides income generating stream of activities such as poultry, dairy, fishery, sericulture, handloom etc. NCDC also finances projects in the rural industrial cooperative sectors and for certain notified services in rural areas like water conservation, irrigation and micro irrigation, agri-insurance, agro-credit, rural sanitation, animal health, etc. Loans and grants are advanced to State Governments for financing primary and secondary level cooperative societies and direct to the national level and other societies having objects extending beyond one State. Today, the Corporation also goes in for direct funding of projects under its various schemes of assistance on fulfilment of stipulated conditions. NCDC is endowed with in-house technical and managerial capabilities in the areas of Cooperation, Organisation and Methods, Financial Management, Management Information Systems, Sugar, Oilseeds, Textiles, Fruits & Vegetables, Dairy, Poultry and Livestock, Fishery, Handlooms, Civil Engineering, Refrigeration and Preservation to help cooperatives to identify/formulate projects and successfully implement them.

Contact: 4, Siri Institutional Area, Hauz Khas, New Delhi – 110016 (www.ncdc.in) Phone: 011-26962478

9.1.6. The Agricultural and Processed Food Products Export Development Authority (APEDA)

The Agricultural and Processed Food Products Export Development Authority (APEDA) was established by the Government of India under the Agricultural and Processed Food Products Export Development Authority Act passed by the Parliament in December, 1985. APEDA links Indian exporters to global markets besides providing comprehensive export oriented services. It provides referral services and suggest suitable partners for joint ventures. APEDA'S export basket ranges from typically Indian ethnic products like pickles, chutneys, sauces, curries etc. to rice, honey, fresh and processed fruits and vegetables, beverages, guar gum, poultry, livestock products, confectionery, cut flowers food grains, aromatic plants and other Indian delicacies. Products Monitored by APEDA include: Fruits, Vegetables and their Products; meat and meat products; poultry and poultry products; dairy products; confectionery, biscuits and bakery products; honey, jaggery and sugar products; cocoa and its products, chocolates of all kinds; alcoholic and non-alcoholic beverages; cereal and cereal products; groundnuts, peanuts and walnuts; pickles, papads and chutneys; guar gum; floriculture and floriculture products; herbal and medicinal plants.

Contact: 4th Floor, Unit No.3 & 4, Building No. 2, Banking Complex, Sector 19A, Vashi, Navi Mumbai, Maharashtra 400704 (www.apeda.gov.in) Phone: 022 2784 0949



9.1.7. National Horticulture Board

The NHB is registered as a Society under the Societies Registration Act 1860, with its headquarters at Gurugram. It offers a number of schemes of assistance for promotion of the horticulture sector. The main objectives of the NHB are to improve integrated development of Horticulture industry and to help in coordinating, sustaining the production and processing of fruits and vegetables. Detailed objectives of the Board are as under:

- Development of hi-tech commercial horticulture in identified belts and make such areas vibrant with horticultural activity, which in turn will act as hubs for development of horticulture.
- Development of modern post-harvest management infrastructure as an integral part of area expansion projects or as common facility for cluster of projects.
- Development of integrated, energy efficient cold chain infrastructure for fresh horticulture produce.
- Popularization of identified new technologies/tools/techniques for commercialization / adoption, after carrying out technology and need assessment.
- Assistance in securing availability of quality planting material by promoting setting up of scion and root stock banks/mother plant nurseries and carrying out accreditation/rating of horticulture nurseries and need based imports of planting material.
- Promotion and market development of fresh horticulture produce.
- Promotion of field trials of newly developed/imported planting materials and other farm inputs; production technology; PHM protocols and promotion of applied R&D programmes for commercialization of proven technology.
- Promotion of farm mechanization in horticulture through demonstration.
- Promotion of applied R&D for standardizing PHM protocols, prescribing critical storage conditions for fresh horticulture produce, bench marking of technical standards for cold chain infrastructure etc.
- Transfer of technology to producers/farmers and service providers such as gardeners, nurserymen, farm level skilled workers, operators in cold storages, work force carrying out post-harvest management including processing of fresh horticulture produce and to the master trainers.
- Carrying out studies and surveys to identify constraints and develop short and long term strategies for systematic development of horticulture and providing technical services including advisory, consultancy services, etc.

Contact: National Horticulture Board, Ministry of Agriculture and Farmers Welfare, Government of India, 85, Institutional Area, Sector – 18, Gurugram – 122015 - Haryana (www.nhb.gov.in) Phone: 0124 234 2992

9.1.8. National Bank for Agriculture and Rural Development (NABARD)

National Bank for Agriculture and Rural Development (NABARD) is an apex development financial institution in India, headquartered at Mumbai with regional offices all over India. NABARD is India's specialised bank for Agriculture and Rural Development. International



associates of NABARD include World Bank-affiliated organizations and global developmental agencies working in the field of agriculture and rural development. These organizations help NABARD by advising and providing monetary aid for the upliftment of the people in the rural areas and optimizing the agricultural process. NABARD has been instrumental in grounding rural, social innovations and social enterprises in the rural hinterlands. It has in the process partnered with about 4000 partner organisations in grounding many of the interventions be it, SHG-Bank Linkage programme, tree-based tribal communities' livelihoods initiative, watershed approach in soil and water conservation, increasing crop productivity initiatives through lead crop initiative or dissemination of information flow to agrarian communities through farmer clubs.

Contact: Plot C-24, G Block, Bandra Kurla complex, BKC Road, Bandra East, Mumbai, Maharashtra 400051 (www.nabard.org) Phone: 022-26539895

9.1.9. Small Industries Development Bank of India (SIDBI)

SIDBI has been established under an act of Parliament and has a mandate to assist small firms. This, it does directly or via refinancing commercial banks and institutions. SIDBI's financial assistance to the Small sector have three major dimensions: (1) direct assistance to primary lending institutions (2) direct assistance to firms (3) development and support services. The institution also offers support by way of foreign currency assistance for equipment purchase, and venture capital assistance. It serves as the nodal institution for supporting industry by way of a Credit Guarantee Trust for Micro and Small enterprises (CGTMSE) of the Office of the DCSSI, and the Technology Upgradation Fund Scheme and also the Industrial Infrastructure Development scheme of the DCMSME.

Contact: Ganeshkhind Rd, Model Colony, Shivajinagar, Pune, Maharashtra 411016 (www.sidbi.in) Phone: 020-25675269

9.1.10. Industrial Development Bank of India

The bank was established as an apex DFI but has progressively moved into universal banking. The bank has been playing a key role in offering support for the establishment of developmental institutions such as the Entrepreneurship Development Institute of India. It has also been supporting initiative in the small scale by offering research grants. Today, the institution has a more commercial outlook, and is progressively focusing more on the SME from its erstwhile exclusive thrust on large enterprises.

Contact: DBI Tower, WTC Complex, Cuffe Parade, Colaba, Mumbai 400005 (www.idbi.com) Phone: 1800-200-1947

9.1.11. The Associated Chambers of Commerce and Industry of India (ASSOCHAM)

The Associated Chambers of Commerce and Industry of India (ASSOCHAM) is one of the apex trade associations of India. The organisation represents the interests of trade and commerce in India, and acts as an interface between issues and initiatives. The goal of this organisation



is to promote both domestic and international trade, and reduce trade barriers while fostering conducive environment for the growth of trade and industry of India. The Association's head office is located in New Delhi and regional offices are located in the cities of Ahmedabad, Bengaluru, and Kolkata. Basically, ASSOCHAM covers a membership of over 4 Lakh companies and professionals across the country. ASSOCHAM members represent the following sectors:

- Trade (national and international)
- Industry (domestic and international)
- Professionals (E.g.: CAs, lawyers, consultants)

ASSOCHAM operates 59 Expert Committees that provide an interactive platform to members for interaction and aid formulating policy recommendations to facilitate economic, industrial and social growth. The association has a special role in promoting international trade, and often hosts international trade delegates to India, along with sending delegations of Indian business groups to foreign locations. ASSOCHAM is a member of the International Chamber of Commerce, the World Business Organisation, through ICC, India. It is authorised by the Government of India to issue Certificates of Origin, certify commercial invoices, and recommend business visa.

Contact: 5, Sardar Patel Marg, Chanakyapuri, New Delhi, Delhi 110021 (www.assochem.org)
Phone: 46550555

9.1.12. Confederation of Indian Industry (CII)

The Confederation of Indian Industry (CII) is a business association in India. It is a non-government, not-for-profit, industry-led and industry-managed organization. Founded in 1895, it has over 9,000 members, from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 300,000 enterprises from around 265 national and regional sectoral industry bodies. CII works with the Government on policy issues. With 65 offices, including 9 Centres of Excellence, in India, and 11 overseas offices and institutional partnerships with 355 counterpart organizations in 126 countries, CII serves as a reference point for Indian industry and the international business community.

CII has over 500 'Intellectual Groups' – Councils, Committees, Task Forces, Working Groups, among others – working at the national and regional levels, across industry sectors. These Groups give shape to and articulate member concerns to Government policy makers, Regulators, Think Tanks etc. They work pro-actively with Government to formulate policies.

CII International works under the CII International Policy and Trade Council. The council also work towards developing markets for Indian exporters; identifying the requirements of the minor sectors to make them extra ambitious; promoting cooperation with counterpart systems; adopting an aggressive approach with foreign governments on various international affairs regarding the Indian economy. The CII International works at close proximity with the Ministry of External Affairs, the Ministry of Commerce and Industry and the Indian embassies / missions' overseas for creating helpful policies and agendas for trade and investment. They also work closely with the foreign embassies / missions in India, international institutions / multilateral agencies. CII has broadened its focus of work through more Regional and Country Committees like: Africa, ASEAN + ANZ, East Europe, GCC, LAC, etc.



Contact: The Mantosh Sondhi Centre, 23, Institutional Area, Lodi Road, New Delhi - 110 003 (www.cii.in) Phone: 011 45771000

9.1.13. Food Safety and Standards Authority of India (FSSAI)

Food Safety and Standards Authority of India (FSSAI) is an autonomous body established under the Ministry of Health and Family Welfare, Government of India. The FSSAI has been established under the Food Safety and Standards Act, 2006 which is a consolidating statute related to food safety and regulation in India. FSSAI is responsible for protecting and promoting health through the regulation and supervision of food safety.

The FSSAI has its headquarters at New Delhi. The authority also has 6 regional offices located in Delhi, Guwahati, Mumbai, Kolkata, Cochin, and Chennai. 14 referral laboratories notified by FSSAI, 72 State/UT laboratories located throughout India and 112 laboratories are NABL accredited private laboratories notified by FSSAI. FSSAI was established by Government of India in September 2008 under Food Safety and Standards Act, 2006. The following are the statutory powers that the FSS Act, 2006 gives to the Food Safety and Standards Authority of India (FSSAI):

- Framing of regulations to lay down food safety standards
- Laying down guidelines for accreditation of laboratories for food testing
- Providing scientific advice and technical support to the Central Government
- Contributing to the development of international technical standards in food
- Collecting and collating data regarding food consumption, contamination, emerging risks etc.
- Disseminating information and promoting awareness about food safety and nutrition in India

The Food Safety and Standards Authority of India is a statutory body under the Food Safety and Standards Act, 2006. The Food Safety and Standards Act (FSS), 2006 is the primary law for regulation of food products. This act also sets up the formulation and enforcement of food safety standards in India. The FSSAI appoints food safety authorities on the state level.

Contact: 902, Hallmark Business Plaza, Opp. Gurunanak Hospital, Bandra (E), Mumbai-400051 (www.fssai.gov.in) Phone: 022-22617672

9.1.14. Federation of Indian Chambers of Commerce and Industry (FICCI)

The Federation of Indian Chambers of Commerce and Industry (FICCI) is an association of business organisations in India. FICCI draws its membership from the corporate sector, both private and public, including SMEs and MNCs. The chamber has an indirect membership of over 250,000 companies from various regional chambers of commerce. It is involved in sector specific business plus building, and business promotion and networking. It is headquartered in the National capital New Delhi and has presence in 12 states in India and 8 countries across the world.

Confederation of Indian Food Trade and Industry (CIFTI) established by FICCI in 1985 caters to Indian Food Industry. It deals with policies, trade affairs and capacity building. CIFTI provides institutional support and partners with the Government and the Indian private sector



in promotion and development of Indian food processing industry. CIFTI was established by FICCI in 1985. FICCI Arbitration and Conciliation Tribunal (FACT) provides arbitration services for settling commercial disputes. FACT was established in 1952[9] and aims at settling business disputes outside the traditional framework offered by courts of law through arbitration and conciliation, as the case may be.

Contact: Federation House, Tansen Marg, New Delhi, 110001 (www.ficci.in)
Phone: 011-23738760-70

9.1.15. All India Food Processors' Association (AIFPA)

All India Food Processors' Association (AIFPA) was established in the year 1943 by some highly motivated and visionary processors mainly processing fruits and vegetables. Subsequently the Association took in its fold food processors from other sub-sectors of the industry. Member Industries account for a large percentage of the total production of this industry in India as well as that of total exports of processed food products.

It strives to promote, encourage and support Indian Food Processing Industries and raise the technical standards, product quality and safety to match global standards; to actively participate in evolving quality standards and safety measures under the Food Safety and Standards Act-2006; to seek redressal of the problems of the food industry that impedes their growth and development; to conduct Workshops & Training Programmes to acquaint about GMP, GHP & HACCP and new Technological Developments etc. and also organise National/International Seminars; to collect, classify and circulate statistics and other information relating to production of agri-horti produce, production of processed foods in India and agri-food exports from India; to encourage research projects to study technical problems relating to the Industry; to conduct and promote market research/market studies in India and abroad on processed food products; to publish a bimonthly technical Journal i.e. "Indian Food Packer" and monthly "E-Newsletter" as a non-profit activity, which aims to keep the food processing units abreast of the latest worldwide developments in Food Processing, new product & processes, additives, research programmes, regulatory issues etc.

Contact: 206, 2nd Floor, Auribindo place Market, Hauz Khas, New Delhi, Delhi 110016 (www.aifpa.net) Phone: 011-26510860

9.1.16. Mahratta Chamber of Commerce, Industries & Agriculture - MCCIA, Pune

MCCIA is a Non Government, Non-Profit Association which caters to the needs of Industries in the Western Maharashtra region in India. MCCIA has also been playing a significant role in accelerating the industrial and economic development of Pune region for more than seven decades now. Main missions of MCCIA are: Develop the Pune Region into a world class centre by improving its physical and social infrastructure; promote Information Technology and Biotechnology as focal industries by leveraging the existing educational, industrial and agricultural resources in Maharashtra; be an effective voice of Trade, Commerce, Industry and Agriculture by:



- Recommending appropriate policy guidelines to the concerned authorities
- Forging a common platform with affiliated bodies with a view to project a unified voice for all Associations active in Commerce, Industry & Agriculture
- Providing a platform for Networking and Knowledge sharing specially to enhance the abilities of the members to forge ahead in the Competitive World

Contact: 505, A-Wing, MCCIA Trade Tower, ICC Complex, 403, Senapati Bapat Rd, Laxmi Society, Model Colony, Shivajinagar, Pune, Maharashtra 411016 (www.mcciapune.com) Phone: 020 2570 9000

9.1.17. Vidarbha Industries Association (VIA)

The premier organization for the promotion and development of industry in the region, Vidarbha Industries Association is more than five decades old. Its office bearers enjoy representation on several Central and State Government Committees for industry. VIA is affiliated to FICCI, AIMO, MEDC, CII etc. Towards the promotion and harnessing of balanced industrial development, the VIA tirelessly encourages entrepreneurial spirit through its efforts which include:

- Continuous interaction and dialogue with all departments of central Govt., state Govt., local Govt., banks and Financial Institutions on all matters concerning industries and to help formulate policies for rapid industrialization of the region.
- Resourcing projects ideas for entrepreneurs.
- Organizing conference Seminars, educative and informative programmers on various topics of functional interest for entrepreneurs/ industries.
- Playing the role of catalyst between industries and educational /research institutes for optimum utilization of knowledge and skill.
- Creating comprehensive database of technology and information relating to industry for member entrepreneurs.
- Devising and implementing schemes to promote entrepreneurship among ladies and youngsters.
- To provide facilities for exchange of information and opinion of interest to the industry.

The main vision of VIA is “to promote Vidarbha as preferred investment destination and create conducive environment for socio economic growth through industry and services”. Missions include: To act as a catalyst between various stakeholders and authorities to create harmonious environment for accelerated industrial growth; to provide unified platform for policy advocacy at all levels; to create, nurture and develop entrepreneurship & business leadership and to enhance managerial and technical competency & excellence.

Contact: Udyog Bhavan, Civil Lines, Civil Lines, Nagpur, Maharashtra 440001 (www.viaindia.com) Phone: 0712 256 1211

9.1.18. Central Food Technological Research Institute (CFTRI), Mysore

CSIR-Central Food Technological Research Institute, abbreviated to CSIR-CFTRI, is one of the 42 national research laboratories in India, set up under the aegis of the Council of Scientific



and Industrial Research (CSIR). It was opened in 1950 in Mysore, Karnataka. C.F.T.R.I. also has extended resource centres in Hyderabad, Lucknow and Mumbai, rendering technical assistance to numerous entrepreneurs. It holds several patents and has released many publications. The institute is engaged in research in the production and handling of grains, pulses, oilseeds, spices, fruits, vegetables, meat, fish and poultry. The institute develops technologies to increase efficiency and reduce postharvest losses, add convenience, increase export, find new sources of food products, integrate human resources in food industries, reduce costs, and modernize. CSIRCFTRI has developed over 270 products, processes and equipment designs, and close to 1600 licensees have availed themselves of 160 of these technologies for commercial exploitation.

Contact: Cheluvamba Mansion, Opp. Railway Museum, Mysuru, Karnataka 570020
(www.cftri.com) Phone: 0821-2516802

9.1.19. Defence Food Research Laboratory (DFRL), Mysore

The Defence Food Research Laboratory (DFRL) is an Indian defence laboratory of the Defence Research and Development Organisation (DRDO). Located in Mysore, Karnataka, it conducts research and development of technologies and products in the area of food science and technology to cater the varied food challenges for the Indian Armed Forces. The different areas of work of this institution are: Research and development in food science and technology; studies in the development of convenience foods, preservation of foods, food safety, food packaging, and studies in the spoilage of foods and safety of processed foods; production and supply of processed foods on a limited scale to the Armed Forces and other bodies for national missions; toxicological, nutritional, and biochemical studies; development of pack rations, their quality assurance methods; preservation and packaging methods for long distance transportation of perishable products; evaluation of nutritional requirements of troops deployed under different climatic conditions.

The Laboratory has testing facilities and analytical instruments such as GC, Nanodrop spectrophotometer, Atomic Absorption Spectrophotometer, Lovibond Tintometer, etc. Animal house enables nutritional and safety evaluation of a variety of foods. Some of the recent additions to the processing and testing equipment include, High pressure processing, Pulsed electric field processing, Khoa making machine, controlled atmosphere system, integrated soya paneer plant, blast freezer and plate freezer lyophilizer, polymer twin screw extruders, Food Scanner, Texturometer, Hydrosorb, Hybridization oven, Image analyser, Thermogravimetric Analyser, Differential scanning colorimeter, Dynamic mechanical analyser, Alveoconsisto graph, Cell counter, Gradient thermal cyler, Scanning electron microscope, FPHLC, Gel Documentation system, IR Spectroscope and Atomic Force microscope.

The Laboratory has developed some analytical test kits for evaluation of deteriorative changes in food such as meat testing kit, test kit for E.coli detection, presumptive test kit for coliform detection, acidity testing paper strip, pesticide detection kit.

Contact: Siddhartha Nagar, Mysore - 570 011 (www.drdo.gov.in) Phone: 0821-2473949



9.1.20. Indian Agricultural Research Institute (IARI), Delhi

The Indian Agricultural Research Institute (IARI), commonly known as the Pusa Institute[3], is India's national Institute for agricultural research, education and extension. It is financed and administered by the Indian Council of Agricultural Research (ICAR). The IARI was responsible for the research leading to the "Green Revolution in India" of the 1970s. It is serving the cause of science and society with distinction through first rate research, generation of appropriate technologies and development of human resources. In fact, the Green Revolution was born in the fields of IARI and its graduates constitute the core of the quality human resource in India's agricultural research and education. The Institute has all along been adjusting and improving its policies, plans and programmes to effectively respond to the needs and opportunities of the nation.

Currently, the Institute has 20 divisions 5 multi-disciplinary Centres situated in Delhi, 8 regional stations, 2 off-season nurseries, 3 All India coordinated research projects with headquarters at IARI and 10 national Centres functioning under the all India coordinated research projects. It has the sanctioned staff strength of 3540 comprising scientific, technical, administrative and supporting personnel.

Contact: Hill Side Road, Pusa, New Delhi, Delhi 110012 (www.iari.res.in)
Phone: 011-25843375

9.1.21. Indian Institute of Packaging (IIP), Mumbai

Indian Institute of Packaging (IIP) is a national apex body which was set up by the packaging and allied industries and the Ministry of Commerce, Government of India with the specific objective of improving the packaging standards in the country. The Institute is an autonomous body working under the administrative control of the Ministry of Commerce. The Institute endeavours to improve the standard of packaging needed for the promotion of exports and create infrastructural facilities for overall packaging improvement in India. This is achieved through the Institute's multifarious activities which are today, in line with those of premier packaging institutes the world over. The Institute aims to make India a focal point for contemporary developments in Art, Science, Technology and Engineering, with respect to the field of Packaging. The Institute began in a very humble way, with an office at Mumbai. It has now expanded, with its Head Quarters at Mumbai and Centres located at Delhi, Kolkata, Hyderabad and Chennai.

Major activities of IIP are:

- Training and Education
- Research and Development

Contact: Plot E-2, Rd Number 8, Chakala Industrial Area (MIDC), Andheri East, Mumbai, Maharashtra 400093 (www.iip-in.com) Phone: 022-2821 9803



CHAPTER 10

THE INTEGRATED APPROACH UNDER ABPF-MACP – OPERATIONAL METHODOLOGY

Highlights

This chapter presents the integrated approach incorporated by the ABPF under the MACP. Several institutions have been pursuing Entrepreneurship Development initiatives. The institutions are in the public sector (Government, donor), as well as the private sector (industry, associations, NGOs). Some institutions in India are National institutions such as the Entrepreneurship Development Institute of India (EDII) and the National Institute of Micro Small and Medium Enterprises (NIMSME), as well as state level (regional) ED institutions such as the MCED in Maharashtra offering services such as training research and consultancy.

The need for integrated approach towards entrepreneurship development and promoting start-ups is in the light of limitations in various approaches in vogue.

The group “entrepreneurship” approach is largely oriented towards consumption activities than income generation activity. Also typical financiers of SHGs are MFIs with cost of capital being on the higher side – appropriate for trading than manufacturing activity. Also, group entrepreneurship typically is in relatively low investment projects and house-hold then even micro-sized projects.

The incubation centre and pilot plant approach is largely yet to evolve into one linked with FIs and BDS providers as to provide adequate incubation or mentoring services to incubatees.

In the typical EDP approach, success rates in terms of start-ups are often only 10-30 percent at best. Survival beyond teething stage is not monitored and projects are typically only of a few lakhs or less in terms of investment.

In the “mentoring” approach, the number of start-ups facilitated is very limited.

In the light of the above, an ideal approach need focus on selecting potential winners/serious candidates and those who display entrepreneurial tendency and skills. These could, for instance, include individual members of SHGs, passed out students from technical, trainees of EDP programmes, vocational and other academic institutions, wards of existing enterprises through industry chambers and small business potential loan applicants approaching FIs.



In the approach, those identified at the regional or district level could be subsequently invited to a start-up meet at PD ATMA where based on brief personal interview on competencies and study of profile of the candidates may be further shortlisted and selected. Selection may also require an LoI from any FI to be submitted by potential candidates for start-up candidates.

This may be followed by guidance on business planning and securing of debt capital from FIs, followed by incubators and mentoring services by way of registering under Udyog Aadhar, training, securing FSSAI license, etc.



10.1 RESULT ORIENTED ENTREPRENEURSHIP DEVELOPMENT PROGRAM

Under the MACP Agri-business start-ups have to be identified and supported for development. A range of start-ups ranging from those in spices, fruit and vegetable processing, manufacture of health food supplements, etc. Farmers, preferably FPO/C member (non-MACP) are also supported under the MACP project with INR 10 Lakh by way of grant-in-aid assistance.

An entrepreneur is one who organises, operates and assumes the risk of a business venture. S/he perceives a need in the market – place, and then mobilises manpower, material and capital in such a manner that addresses the need. Further, such an individual is not necessarily “born”, S/he may be moulded to assume the mantle of entrepreneurship.^{xxxiii} With this belief, agencies and practitioners of Micro, Small and Medium Enterprises (MSME)^{xxxiv} development in India have been pursuing interventions towards fostering entrepreneurship. This circumstance is coupled with a growing realisation of the importance of SMEs worldwide. They account for 95 to 99 percent of firms in most Developed as well as rapidly developing economies.^{xxxv} Evidently, in India and Maharashtra the share of SMEs in manufacturing is about 45 percent and in exports about 40 percent.

10.2. UNDERPINNINGS OF THE INTEGRATED PERSPECTIVE

Notwithstanding interventions, while the business environment and “entrepreneurial culture” in some locations generate a supply of the entrepreneurial breed, dedicated initiatives and programmes have yielded mixed results. Despite interventions through a plethora of policy – making and field level implementing institutions, the impact of programmes in terms of SME start-ups is often lack-lustre with a considerable loss by way of scarce resources. This manual seeks to redress such circumstance. It is not only those of family business background who may successfully initiate an enterprise. Learnings over interventions under the World Bank supported MACP by the ABPF-GT serve as the empirical basis of this manual.

10.2.1. Institutes and programmes in the entrepreneurship ecosystem

Several institutions worldwide have been pursuing Entrepreneurship Development initiatives. The institutions are in the public sector (Government, donor), as well as the private sector (industry, associations, NGOs). Some institutions in India are national institutions such as the Entrepreneurship Development Institute of India (EDII) and the National Institute of Micro Small and Medium Enterprises (NIMSME), as well as state level (regional) ED institutions such as the MCED in Maharashtra offering services such as training, research and consultancy. EDII, NIMSME, a couple of other national institutions as well as 14 other state level and regional institutions including the Maharashtra Centre for Entrepreneurship Development (MCED) pursue a variety of programs sponsored by different government bodies as well as Development Financial Institutions. In addition, the NSTEDB promotes the implementation of Entrepreneurship Awareness Camps in specialized institutions, Entrepreneurship Development Training Programme, Faculty Development Programme, an Open Learning Programme in Entrepreneurship and Technology-based Entrepreneurship Development Programme. Subsequently, it has created entrepreneurship development cells in many institutions to undertake part of the syllabus in management course in universities in states of management and engineering collages.



Despite such initiatives, evidently, there is need to implement an appropriately structured Entrepreneurship Development Programme. This is because, while there are several entrepreneurship development approaches deployed worldwide, evidently, they have notable limitations.

As a matter of fact, there are various approaches adopted in India, the critical objective is to generate start-ups so as to provide employment opportunities and facilitate regional or decentralized industrial and economic development. Nonetheless, there are perceptible gaps in various approaches currently adopted that lead to sub-optimal allocation of sources, as well as poor success rates in terms of sustainable start-ups. There is, therefore, a need to address limitations in different approaches and deploy an ideal Entrepreneurship Development(ED) approach. Some of these approaches and their gaps are elaborated in the following tabulation.

Approaches and their limitations

The Approach-Group entrepreneurship approach:	Typical limitations in the group entrepreneurship approach are that:
<p>The approach-group entrepreneurship (SHGs) supported through Micro Credit and Finance Institutions (MFIs): The success of the Bangladeshi “Grameen Bank” model of micro enterprise development through Self Help Groups (SHGs) led to this approach being propagated and promoted in many countries including India.^{xxix} This is effectively a ‘Group Entrepreneurship’ approach. In India, in many states (e.g. Maharashtra, Kerala and Andhra Pradesh) 100s of thousands of such SHGs have been evolved. The salient features of the approach include the following:</p> <p>Mutual guarantee, peer pressure and relatively higher amount of loans per loanee account have encouraged this type of lending by banks. Default rates in this approach have also been relatively very low. Invariably such group ‘entrepreneurship’ initiatives are pursued by and targeted on members of the female gender. They are seen to be relatively more comfortable in this in working together in groups and also as good loan repayments. Governments also set targets to Nationalized and private sector Financial Institutions (FIs) to lend to such micro entrepreneurship initiatives. Banks invariably support such initiatives not directly but through micro-finance institutions. This is because the cost to bankers is on the higher side for directly lending to and therefore evaluating, disbursing and monitoring small loans. However, there are evidently, several limitations in the approach.</p>	<p>Other than a few cases, most such SHGs are seen to largely avail of such credit for consumption expenditure rather than for income generation activities. In fact, the rates of interest charged on the micro borrowers by MFIs are even usurious in many cases making it hardly viable to deploy the funds for entrepreneurship in the manufacturing sectors. Higher return yielding trading activities (are at best pursued individually or jointly) consumption spending alone may be the option! In most such cases the banks (commercial and developmental) end to MFIs for onward lending to micro enterprises and SHGs. Banks offers funds to MFIs @below PLR and MFIs evolve and ‘onward’ lend to SHGs. MFIs have become big business and monitoring of loans, norms on effective rates of interests on loans, the ultimate use of funds are often not effectively monitored.</p>



<p>The Approach-Incubation centre and pilot plants: Incubation centre have been successfully established and operated across several countries and sectors in the Developed World. Typically, such centre serves to minimize the initial investment implications, and facilitate professional advice while an entrepreneur launches new or innovative product or service, or is trying his hand at his new entrepreneurial career. In countries like India, incubation centre has been established in the Food Processing, IT, and other sectors with NGOs and Government agencies, and even the private sector serving as implementing Agencies. But, many are operating at far below capacity (if at all!). Some facilities operating with reasonable success are located at Bangalore, India (Food Processing incubation centre are operating by the Association of Women Entrepreneurs of Karnataka). In addition, many Technology Business Incubation (TBI) centres established with assistance by the Department of Science and Technology (DST) are operating at academic and technology institutions in India. Evidently, Chinese business incubators are relatively more successful in terms of capacity utilization and sustainable operations as unlike the DST approach, they focus on assisting existing enterprises incubate new ideas, products and process rather than incubate new entrepreneurs and their ideas.^{xi}</p>	<p>Typical limitations in incubation centre and pilot plants: In many of the incubation centre established in developing countries like India, through industry associations, as well as academic and technical institutions and government bodies, strong linkages are yet to be evolved with other service providers who may catalyse sustainable enterprise start-ups. Such service provision may be visualized as banks and venture capitalists, BDS in terms of effective training inputs on entrepreneurship, counselling and handholding service providers, and provision of adequate business opportunity and project implementation guidance to potential incubatees.</p>
<p>The Approach-The conduct of Entrepreneurship Development Programme: there are hundreds of entrepreneurship development institutes (Govt., Autonomous, and NGOs) in India conducting EDPs. In India alone, tens of thousands of candidates (“potential” entrepreneurs) are trained every year by these institutions. The gamut of related institutions includes MSMEDIs, National and state level Entrepreneurship Development Institutes, Technical Consultancy Organizations, Industry Associations and NGOs. The cost of conducting these EDPs are partly subsidized or sponsored by Development Banks (such as SIDBI or the National Bank for Agriculture and Rural Development), different Ministries, (such as the Ministry of Food Processing Industries), and international donors (such as European Union and the International Labour Organization).</p>	<p>Typical limitations in conventional EDPs: Many such EDPs (there certainly are exceptions) are seen to largely focus merely on training success rates in terms of actual start-ups in terms of number of candidates trained varies between 10 percent to 30 percent at best. The survival beyond teething stage is often hardly even monitored! The focus of training inputs is invariably largely on ‘facilitating start-ups’ and not on efficient enterprise management. This is a serious lacuna in the context of the most ‘successful’ start-ups failing in the first one year of operation.</p>



<p>These EDPs invariably involve offer of training inputs on entrepreneurship competencies, business opportunity identification, conduct of market plan preparation, assistance (and in some cases in securing loan). They are of varying duration ranging from between 2 weeks to 1-2 months.</p>	<p>The opportunity guidance inputs and business plans are often evolved in sub-sectors wherein, the country or region does not have relative Comparative Advantage and often projects are established (if at all!) in terms of minimum economic size than optimal economic size. Projects are therefore, in effect, still born!</p>
<p>The Approach-Provision of mentoring services to facilitate start-ups and teaching: Organizations such as the Youth Business international (YBI, headquartered in the U.K.), and the Bharatiya Yuva Shakti Trust (BYST, based in India) and also some institutions such as the National Small Industries Corporation, India facilitate mentoring and handholding support services to MSEs. Some of them such as the BYST works closely with chambers and associations of existing enterprises (for example, the CII) whose members provide voluntary service in terms of mentoring support for two to three years for new entrepreneurs.</p>	<p>Typical limitations in the mentoring approach: The service is certainly valuable. However, the scale of interventions by some institutions adopting this approach is sometimes relatively low. Linkages with other service providers (such as FIs, EDP and technical training institutions), so essential to facilitate sustainable start-ups, are also relatively low, in turn, affecting up-scaling potential. In India, for instance, some such Institutions facilitate launch of barely 100 enterprises a year!.^{xlii}</p>

10.3 AN IDEAL ENTREPRENEURSHIP DEVELOPMENT MODEL

In the light of evident gaps in different approaches, there is need for a result oriented and integrated approach to EDPs. Ideally, Government and donor assistance need to be gauged not by mere achievements of targets in terms of amount of loans offered to SHGs, number of SHGs, the numbers of EDPs sponsored and conducted, or candidates trained. Results would have to be evaluated in terms of numbers of successful and sustainable start-ups! The ingredients of an ideal Entrepreneurship Development approach may be envisaged as follows:

10.3 1. Identification and selection of potential entrepreneurs: Select potential winners/serious candidates and those who prima facie display entrepreneurial tendency and skills. These could, for instance, include individual members of SHG (or SHGs themselves), passed out students from technical or Vocational and academic institutions, those who have approached FIs for loans, wards of existing entrepreneurs, small business loan application to FIs.

10.3 2. Provide apt training: Appropriate EDP training inputs with adequate focus of inputs on ‘optimal’ business plan preparation and successful enterprise management than on mere start-up. In many cases, it may be more apt to select trained candidates from ED programmes and provide for their start-up support.

10.3 3. Facilitate credit: Tying up with FIs and appropriate intermediaries (NBFCs and MFIs for lending to start-ups.



10.3 4. Mentoring services: Establishment of appropriate market linkages between large firms and start-ups (vendors, distributors, sub-contractors) where feasible; and between FPO/Cs and start-ups as part of procurement linkages for the latter. Appropriate means of providing mentoring and counselling support in the start-ups and take-off or teething stage (of one to two years) in a business. This could be by means of developing and supporting mentor 'clubs' (involving actors like successful entrepreneurs and private counsellors)

10.4. THE OPERATIONAL METHODOLOGY ADOPTED IN MAHARASHTRA

In the Maharashtra context and in the light of the methodology adopted, the following methodology and guidelines may be considered.

10.4.1. Identification and selection

The selection base of potential candidates included:

- PMEGP candidates recommended by the DIC
- Candidates who have been short listed by banks (LoI offered) including lead bank in a specific district
- Candidates trained by KVK, KVIB/C, MCED, MITCON and other NGOs
- Candidates recommended by banks
- SHGs supported by the DIC
- Ghat Sheti supported by the GoM, etc.
- Other candidates and producer groups recommended by the State Govt.
- EDP candidates recommended by the Project (MACP)

10.4.2. Start-up meets

Upon compiling a data base of such potential entrepreneurs in each region or district, they may be invited to a start-up meet at the district level. Typically, only 15-20 percent of entrepreneurs identified and who participate in these meets are preliminarily selected. These meets are typically held at the office of the PD, ATMA or at the DIC. Between 50-100 potential candidates participate in such typical events. In all these meets brief personal interviews and in some area a written assessment is also undertaken to evaluate candidates. The profile of the candidate is also considered.

10.4.3. The typical profile of each candidate:

The typical profile of candidates may be viewed in terms of:

- EDP trained candidate: These include EDP trained candidates by different institutions and NGOs.
 - Lead/Educated Farmer: These include established farmers keen on forward integration.
 - Agri background or interest in Agribusiness: These include those with education or work experience in Agriculture and/or agri business.
 - Avail of resources (land, capital etc. with favourable credit history)
 - Selection of Candidates
- Interviews for assessment of basic competencies and readiness for entrepreneurship is undertaken. As indicated in some cases a written assessment is also undertaken to evaluate candidates.



Identification	Selection	Typical Profile
<ul style="list-style-type: none"> • Conducting start-up meets at district level • Tie up with training institutes like RSETTI, KVKs, MCED, MITCON, NGOs etc. • Tie up with lead banks, DIC, MSAMB, State Bodies etc. 	<ul style="list-style-type: none"> • Conducting start-up meets at the district level • Personal interview on competencies and profile also considered 	<ul style="list-style-type: none"> • EDP trained candidate • Lead/Educated Farmer • Agri background or interest in Agribusiness • Avail. of resources (land, capital with good credit history, etc.)

10.4 4. Role of ABPF Consultant:

The role of the ABPF-Grant Thornton consultant may be viewed in terms of:

- Identification and Mobilization of agri entrepreneurs
- Finalization of potential agri-business activity; guidance in technology selection
- Guidance in preparation of bankable Business Plan/submission of application form
- Assistance in securing bank loan; and leveraging grant-in-aid support (in some cases)
- Backward Linkages with FPC's.
- Incubation mentoring and handholding support over the “teething” stage.

10.4 5. Typical agri-business enterprises may be viewed as:

Horticulture, spices and RTE processing units: Units like Pulping, Juice, Ketchup, Dehydration, Spices, IQF, RTE and RTC units.

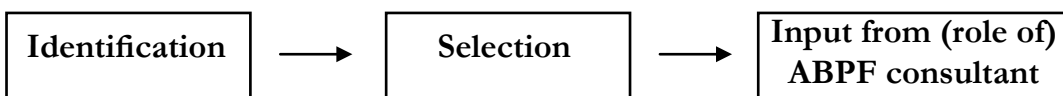
Cereals and Grains: Units like dal mills, rice mills, flour mills, Oil Mills, Snacks, etc.

Other Units: Cashew processing unit, animal feed, poultry feed, aerated drinks, dairy, bakery, milk processing, etc.

Infrastructure facilities: warehouse, silos, cold storage, ripening chambers, onion storage, etc.

Services: Business like Soil Testing, agri business clinics, food testing labs, goat breeding centres, custom hiring centres and poultry farms etc.

The complete process may be viewed as:



PART II:

SCOPE OF AGRI BUSINESS OPPORTUNITIES IN THE SECTOR; BUSINESS PLAN AND MANAGEMENT INPUTS FOR START-UPS



CHAPTER 1

SCOPE OF THE FOOD PROCESSING SECTOR IN MAHARASHTRA: PRODUCTION AND PROCESSING BASE

Highlights

Maharashtra has the highest production of fruits in India. It is ranked first in grapes, pomegranate and banana and onion production and ranked second in papaya and sapota production. Maharashtra also ranks 9th in vegetable production with 5.6 percent of India's total vegetable production.

In spite of the strong raw material base and presence of large food processing units, the full potential of the sector is yet to be tapped as supporting farm proximate post-harvest infrastructure for horticultural crops is not fully developed. In fact, lack of processing and storage facilities and inefficient supply chain results in wastages (mainly in the form of value losses) estimated at 30-35 percent in the case of fruits and vegetables. Some of the critical challenges faced by the horticulture sub-sector in the state are: inadequate farm proximate post – harvest infrastructure for handling and storage of food items/perishables; relatively low level of processing. This implies the need for focusing on promoting start – ups in related activities.

Demand for processed milk and high value added milk products such as skimmed milk powder, dairy whitener, cheese, cottage cheese, flavoured milk is growing at double digits. The pulp market is growing at a double digit rate backed by strong domestic demand from mainly large firms such as HUL, Pepsi, Parle etc. for fruit beverages and also exports demand in the Middle east, US and Europe markets.

The wheat flour market is also increasing on account of growth in organized retail market in India and growing urban and semi urban areas. Also demand for wheat flour is growing on account of rapid growth in Pasta and noodles segment. Further exports in the wheat flour is growing exponentially.

As per industry experts, RTE and RTC segments are expected to grow at over 20 percent for next 5 years.



1.1. PRODUCTION SCENARIO

Agri –business Profile of Maharashtra and its Constraints

On the basis of geographical features, Maharashtra is divided into 3 natural regions, that is: The Konkan comprising the coastal area; Sahyadri hill ranges (also known as Western Ghats); and The Deccan Plateau. The major portion of the state is semi-arid with three distinct seasons of which the rainy season spreads over July to September. The agro and food processing sectors may be considered in terms of a number of sub-sectors: food crops, horticulture, plantation crops, spices, condiments, poultry, animal husbandry and fishery. Notably, Maharashtra has the highest production of fruits in India. It is ranked first in grapes, pomegranate and banana and onion production and ranked second in papaya and sapota production. Maharashtra also ranks 9th in vegetable production with 5.6 percent of India's total vegetable production. ^{xliv}

The large horticulture base as well as animal husbandry base has encouraged numerous start-ups in these sub-sector in states like Maharashtra.

Resource based project options

Marketing pickles and squashes to premier hotels and through door delivery services

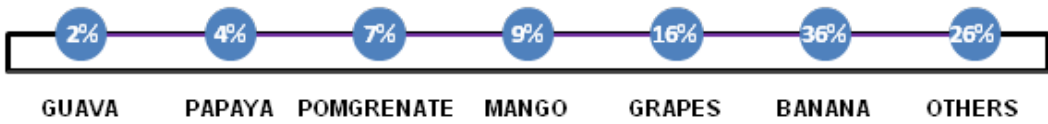
“Devgiri Agri Venture” established in 2017 is involved in cleaning, grading and packaging of fruits and vegetables. The large horticultural base in the Aurangabad region helped the promoter identify the opportunity. The manufacturing process deploys 1 TPD machines and the unit was established at a project cost of INR 25 Lakh with about 75 percent or INR 18.75 Lakh as loan from the State Bank of India. The enterprise has been selling its pickles and squash products to three and five star hotels as well as it offers home delivery across Aurangabad city. This marketing strategy is its unique selling proposition. The unit presently enjoys a turnover of INR 40 Lakh.

Marketing milk products through own sales outlets

“Sawant Multifood Pvt Ltd” in Akole Taluka is Ahmednagar district was established in 2016-17. This unit was established to manufacture milk based products like curd, lassi, peda, paneer, ghee, khoa, etc. The large resource base in the region served as a rationale during project opportunity identification. In case of manufacture of khoa: milk is heated in a steam jacketed kettle, citric acid is added, the whey is separated out by decortication, the solid mass is retained in a hooper and pressed, which is later cut into pieces and immersed in water cooling subsequently packaged. The unit's USP is marketing through own sales outlet ensuring purity and quality and higher margins. The enterprise has deployed equipment of 1000 kg per day as capacity and presently enjoys a turnover of about INR 42 Lakh per annum. The promoter was trained in a EDP sponsored by MOFPI and supported subsequently by ABPF-GT under the MACP.

With regard to fruit crops, Maharashtra is virtually the fruit bowl of the country. The state produces over approx. 13.4 Million MT of fruits. The state has been ranked first amongst Indian states accounting for 15 percent of the overall fruit production of the country. The major production hubs in the state in case of fruits is depicted below.^{xlv}





The key production centres are presented in the table following:

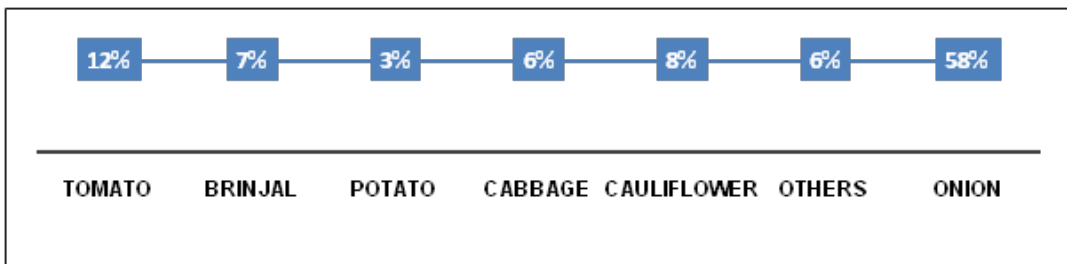
Table 5: Concentration of Major Fruit Crop Production hubs in Maharashtra

Sr. No.	Fruits	Production Hubs
1	Banana	Jalgaon, Hingloi, Nandurbar, Beed, Nanded, Pune, Ahmednagar, Kolhapur
2	Lime/Lemon	Ahmednagar, West Solapur
3	Mosambi	Aurangabad, Beed, Nanded
4	Orange	Amravati, Nagpur, Buldhana, Washim
5	Grapes	Nashik, Solapur, Pune, Ahmednagar, Satara, Sangli
6	Guava	Ahmednagar, Nashik, Satara, Beed, Pune, Aurangabad, Jalgaon
7	Mango	Ratnagiri, Sindhudurg, Thane, Raigad, Aurangabad, Nanded, Latur, Hingoli
8	Papaya	Ahmednagar, Pune, Nashik, Dhule, Jalgaon, Amravati
9	Pomegranate	Solapur, Satara, Ahmednagar, Nashik, Pune, Sangli, Beed, Aurangabad
10	Sapota	Thane, Pune, Ahmednagar

(Source: Department of Agriculture and Co-operation, Maharashtra)

The state produces over 10.1 Million MT of vegetables every year. The key vegetables produced in the State of Maharashtra are Onion, Tomato, Cauliflower and Brinjal. Statistics regarding the percentage share in State Vegetables production is depicted below. Maharashtra is one of the major onion producing states in India. The crop is mainly cultivated in Nashik, Ahmednagar, Pune, Satara and Solapur. The major production hubs in the state in case of vegetables is depicted below.

Figure 1: Major Vegetable Crops of Maharashtra - Graphical Representation



The key production centres in the state are captured in the table following:



Table 6: Concentration of Major Vegetable Production Hubs in different Districts of Maharashtra

Sr. No.	Vegetables	Production Centres
1	Brinjal	Nagpur, Satara, Solapur, Pune, Sangali, Dhule, Aurangabad, Beed, Nashik, Latur, Amravati
2	Cabbage	Nashik, Pune, Satara, Nagpur, Ahmednagar, Sangli
3	Cauliflower	Nashik, Satara, Pune, Nagpur, Ahmednagar, Beed
4	Okra	Satara, Pune, Solapur, Jalgaon, Thane, Dhule, Nashik, Sangli
5	Onion	Nashik, Ahmednagar, Pune, Satara, Dhule, Jalgaon, Beed, Aurangabad, Latur, Nandurbar, Solapur
6	Peas	Pune, Thane, Nandurbar
7	Potato	Satara, Pune, Kolhapur, Ahmednagar
8	Tomato	Nashik, Ahmednagar, Pune, Beed, Satara, Solapur, Latur, Nagpur

(Source: Department of Agriculture and Co-operation, Maharashtra)

Maharashtra's strength in the horticulture sector is apparent from the fact that it is the largest producer of seedless grapes, mandarin oranges, banana, tomato and onion. In fact, production of Alphonso mango in the state accounts for 75 percent of India's export of mangoes. The state is a leader in the sugar milling industry with more than 150 co-operative sugar mills. The state also accounts for 40 percent of total turnover of seed industry of the country. Export of fresh fruits and vegetables from Maharashtra accounts for 40 percent of total export of F&V of the country. Export of processed food from Maharashtra accounts for 50 percent of total exports from the country. The state houses more than 6500 MSMEs and more than 300 large scale food processing industries. Diverse agro climatic conditions and various soil types add strength to the State horticulture sector in terms of seasonality and type of produce.

In spite of the strong raw material base and presence of large food processing units, the full potential of the sector is yet to be tapped as supporting farm proximate post-harvest infrastructure for horticultural crops is not fully developed. In fact, lack of processing and storage facilities and inefficient supply chain results in wastages (mainly in the form of value losses) estimated at 30-35 percent in the case of fruits and vegetables. Some of the critical challenges faced by the horticulture sub-sector in the state are: inadequate farm proximate post-harvest infrastructure for handling and storage of food items/perishables; relatively low level of processing. This implies the need for focusing on promoting start-ups in related activities.

Production Base for Food Processing in Maharashtra ^{xlvi}

The data presented vis-à-vis production base is largely for the year 2017-18.

1. Beans

India produces about 23.34 Lakh MT of beans per annum. Maharashtra has one of the best qualities of Beans in India and also exported in bulk to other countries. Beans being perishable and tender in nature require cold storage infrastructure to maintain the quality. The total production of beans in Maharashtra was 0.54 Lakh MT in the year 2017-18.



2. Capsicum

India produces about 2.88 Lakh MT of capsicum per annum. Capsicum, also known as red pepper or chili pepper, is an herb. The fruit of the capsicum plant is used to make medicine. Capsicum is used for various problems with digestion including upset stomach, intestinal gas, stomach pain, and cramps. It is also used for conditions of the heart and blood vessels including poor circulation, excessive blood clotting, high cholesterol, and preventing heart disease. Maharashtra is one of the major producing state of capsicum followed with Tamil Nadu and Karnataka. The total production of capsicum in Maharashtra was 0.37 Lakh MT in the year 2017-18.

3. Tomato

India produces 187.31 Lakh MT of tomato per annum. Tomato is consumed in diverse ways, including raw, as an ingredient in many dishes, sauces, salads, and drinks. While tomatoes are botanically berry-type fruits, they are considered culinary vegetables, being ingredients of savory meals. The major producing compation of tomato are China, India and United States of America and the major producing states for tomato are Madhya Pradesh, Karnataka and Andhra Pradesh in India. The total production of tomato in Maharashtra was 1.01 Lakh MT in the year 2017-18.

4. Cabbage

India produces 88.05 Lakh MT of cabbage per annum. Cabbage heads generally range from 0.5 to 4 kilograms (1 to 9 lb), and can be green, purple and white. China, India, Russian Federation are the major exporting countries of cabbage. The major producing states for Cabbage are West Bengal, Odisha, and Bihar in India. The total production of cabbage in Maharashtra was 1.98 Lakh MT in the year 2017-18.

5. Cauliflower

India produces 80.89 Lakh MT of cauliflower pre annum Cauliflower is an annual plant that reproduces by seed. Typically, only the head (the white curd) is eaten.^{xlvii} Cauliflower is an excellent source of vitamin C, vitamin K, folate, pantothenic acid, and vitamin B6. It is a very good source of choline, dietary fibre, omega-3 fatty acids, manganese, phosphorus, and biotin. Additionally, it is a good source of vitamin B1, B2, and B3, the minerals potassium and magnesium, and protein. China is one of the major producing country of cauliflower, followed by India and Spain and the major production regions of cabbage are Haryana, Assam and Chhattisgarh in India. The total production of cauliflower in Maharashtra was 2.33 Lakh MT in the year 2017-18.

6. Brinjal

India produces 125.15 Lakh MT of brinjal per annum. Brinjal are soft seeded even at full maturity. Yields about 35 tonnes/ha in a crop duration of 150 days.^{xlviii} China is one of the major producing country of Brinjal followed by India and Egypt. The producing states in of Brinjal are West Bengal, Odisha and Gujarat in India. The total production of brinjal in Maharashtra was 4.18 Lakh MT in the year 2017-18.

7. Okra

India produces 58.26 Lakh MT of okra per annum. The immature pods are used for soups, canning and stews or as a fried or boiled vegetable. The hibiscus like flowers and upright plant



(3 to 6 feet or more in height) have ornamental value for backyard gardens. India is the major producing country of Okra followed by Nigeria and Iraq. The major producing states for Okra are West Bengal, Bihar and Gujrat in India. The total production of okra in Maharashtra was 1.29 Lakh MT in the year 2017-18.

8. Green Chillies

India produces 29.55 Lakh MT of green chillies per annum. India is the world's largest producer, consumer and exporter of chillies in the world. Chillies are the most common spice cultivated in India. Chillies are valued principally for their high pungency and colour. The major Indian Chilli growing states are Andhra Pradesh (46 percent), Karnataka (15 percent), Maharashtra, Madhya Pradesh, Orissa, West Bengal, Rajasthan and Tamil Nadu. Indian Chilli can be grown during the entire year at one or the other part of the country. The total production of green chillies in Maharashtra was 3.46 Lakh MT in the year 2017-18.

9. Mango

India produces 186.42 Lakh MT of mango per annum. Mango is one of the most important commercial fruit for India. India is the largest producer and exporter of mango in the world. Major producing countries of mango are India followed by China, Kenya and Thailand. In this circumstance, Maharashtra is one of the major producing states of mango followed by Uttar Pradesh, Andhra Pradesh and Karnataka. The total production of mango in Maharashtra was 5.88 Lakh MT in the year 2017-18.

10. Custard Apple

India produces 2.98 Lakh MT of custard apple per annum. The custard apple is believed to be a native of the West Indies but it was carried in early times through Central America to southern Mexico. It has long been cultivated and naturalized as far South as Peru and Brazil. It is commonly grown in the Bahamas and occasionally in Bermuda and Southern Florida. Major producing countries of custard apple are Australia followed by Brazil, Egypt, and South Africa. In India, Maharashtra has the highest cultivated area of custard apple followed by Assam, Bihar and Madhya Pradesh. Total production in the state was 1.04 Lakh MT in the year 2017-18.

11. Orange

India produces 41.12 Lakh MT of orange per annum. The orange is a high yield mandarin hybrid cultivated extensively in the wider Punjab region of India and Pakistan. Orange's trees are highly productive; it is not uncommon to find 1000 fruits per tree. The fruit matures in January or February. It peels easily and has a high juice content. The major exporting countries of orange are Qatar, Saudi Arabia, Malaysia, Iran and Singapore. The total production of orange in Maharashtra was 8.34 Lakh MT in the year 2017-18.

12. Sweet Orange

India produces 34.68 Lakh MT of sweet orange per annum. The orange (specifically, sweet orange) is the fruit of the citrus species in the family Rutaceae. Major countries producing sweet orange include Brazil, Unites States and China Maharashtra is the leading producer of sweet orange followed by Madhya Pradesh, Rajasthan and Assam. The total production of sweet orange in Maharashtra was 3.55 Lakh MT in the year 2017-18.



13. Tur

Pigeon pea or red gram, also known as arhar or tur, is mainly cultivated and consumed in developing countries of the world. It is an important pulse crop in India and contributes about 20 percent to the total production of pulses. India is a largest producer of pigeon pea in the world and contributes more than 60 percent of total world production followed by Myanmar, Malawi and Tanzania. It is a rich source of protein to large population of the country. The total production of Tur in Maharashtra is about 10.34 Lakh MT annually

14. Moong

The mung bean (*Vigna radiata*), alternatively known as the moong bean, green gram or mung is a plant species in the legume family. The mung bean is mainly cultivated in India, China, and Southeast Asia. It is used as an ingredient in both savoury and sweet dishes. The total production of Moong in Maharashtra is about 2 Lakh MT annually.

15. Urad (Black Gram)

Black gram is a member of the Asiatic *Vigna* crop group. It is an annual pulse grown mostly as a fallow crop in rotation with rice. Similar to the other pulses, black gram, being a legume, enriches soil nitrogen content and has relatively short (90-120 days) duration of maturity. Black gram is commonly known as Urad in India. India is its primary origin and it is mainly cultivated in Asian countries including Pakistan, Myanmar and parts of southern Asia. About 70 percent of world's black gram production comes from India. Major producing states of urad in India are Andhra Pradesh, Uttar Pradesh and Maharashtra. The total production of urad in Maharashtra is about 2.06 Lakh MT annually.

16. Other Pulses

The total production of other pulses like Chickpea in Maharashtra is about 0.44 Lakh MT annually.

17. Total Pulses

India produces 40.47 Lakh MT of pulses per annum. The state pulse production in 2017-18 is 1.34 Lakh MT. Pulses is one of the key commodities that is being imported and Maharashtra is one of the only few regions where it is cultivated. Thus, from the point of view of making India self-sufficient the crop has immense potential.

18. Guava Production

India produces 291.34 Lakh MT of guava per annum. Total state production of guava in 2017-18 was 32.40 Lakh MT.

19. Banana

The state production of Banana is about 41152 Lakh MT. per annum. India is the largest producer of bananas followed by China and the Philippines. Banana is the most important fruit crop in India followed by mango, and is available year-round. India is the second largest producer of fruits in the world and ranks first in the production of banana. At present, banana is being cultivated throughout the warm tropical regions of the world. Hi-tech cultivation of the crop is an economically viable enterprise leading to increase in productivity, improvement in produce quality and early crop maturity with premium price. The chief banana growing states



in India are Maharashtra, Gujarat, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Orissa and Bihar. Maharashtra was the second largest producer of Banana next to Tamil Nadu in the year and produced 48.30 Lakh MT in an area of 83,000 ha. Major markets like Delhi, Mumbai and Ahmedabad determine the price of the produce. Though more than 90 percent of banana is consumed as table variety and only 3 to 5 percent is processed (both skin and inner part can also be eaten raw or cooked), with changing consumer preference, there is a good potential for processing of banana. The fruit can be processed in different forms/products such as banana puree, banana based industries, banana processing, banana concentrate, banana pulp, banana wine, banana beer, banana chips, wafers and banana powder. Processing start-ups may be encouraged through the FPO route or through individual enterprise. Some of the value chain leaders in this sub-sector include Haldiram, Kissan and Hot Chips.

20. Sapota Production

Maharashtra is the leading producer of sapota in India. India produces 12.93 Lakh MT of sapota per annum. In 2017-18, total sapota production in Maharashtra was about 1.42 Lakh MT.

21. Other fruits

India produces 15.68 Lakh MT of fruits per annum. There are fruits rather unique to the state like Kokum fruit. The districts of Kolhapur followed by Ratnagiri and Sindhudurgh produce close to 20 percent of state output of such fruits in total. In 2017-18, total state fruits production is 0.61 Lakh MT.

Production of Vegetables in the Zone of Influence

Maharashtra is rich in vegetable production and Ahmednagar, Nashik and Pune are the highest vegetable producing districts, with production of about 61.77 Lakh MT, 29.87 Lakh MT and 13.89 Lakh MT respectively. Vegetable production has immense potential due to growing domestic and international demand. The total state vegetable production in is about 147.95 Lakh MT. annually.

22. Onion Production

India produces 209.31 Lakh MT of onion per annum. Notably, institutes like Directorate of Onion and Garlic Research have evolved advanced low cost post-harvest management technology to support farmers. The total state production of onion in Maharashtra was 11.13 Lakh MT in the year 2017-18.

23. Potato Production

India produces 434.17 Lakh MT of potato per annum. Maharashtra as a state has a wide supply of potato. The total state production for potato in 2017-18 was 2.54 Lakh MT.

24. Cucumber Production

India produces 12.01 Lakh MT of cucumber per annum. Gadchiroli is the highest cucumber producing district in the state. The total state production for cucumber in 2017-18 is 0.54 Lakh MT.

25. Paddy

Paddy is an important kharif crop in Maharashtra. Production in terms of area and tonnage 16.12 Lakh ha and 31.20 Lakh MT respectively. The productivity has also risen from 1,467 kg/ha in 1990-91 to 1,935 kg/ha in 2013-14.



26. Maize

It has been noticed that there is an increasing shift for production of maize in some regions. This is in view of large requirement for animal feed, poultry feed and snack food. The total state production of maize in Maharashtra is about 19.43 Lakh MT annually.

Maize is one of the most important cereal crops in the world. It is next to rice, wheat and sorghum in respect of area and production in India. Increasing use of maize as animal feed and increasing interest of consumers in nutritionally enriched products are the driving forces behind the emerging importance of maize crop in India. Maize is also playing an important role in the crop diversification policy of various states. Maize is predominantly a kharif crop. Aurangabad, Nagpur, Dhule, Buldhana, Jalna, Nasik and Jalgaon are major maize producing districts in Maharashtra. Some of the value chain leaders in this sub-sector include Kellogg's, Venky's, Suguna, ITC, Patanjali and Greendot Health Foods Ltd.

27. Jowar

Maharashtra is the highest Jowar producing state in the country. The produce may be majorly used for preparation of multi grain flour, which can be used as an ingredient for products related to healthy foods, diabetic foods, etc. Ahmednagar is the highest Jowar producing district in the state. This district is followed by Solapur, Parbhani and Osmanabad. The total state production of jowar in Maharashtra is about 28.47 Lakh MT annually.

28. Egg Production

Maharashtra is rich in egg production. Nasik and Pune are the highest egg producing districts in the state, with a production of 9932 Lakh and 7375 Lakh respectively. The state produces a total of about Forty Seven Thousand lakh eggs annually.

29. Cow's Milk

Cow's milk is an excellent source of calcium, vitamin A and vitamin D, which is essential for strong bones. It also contains casein protein which is good for health.

- Indigenous Cow Milk
- Crossbreed Cow Milk

Indigenous cow milk is the milk produced by indigenous/Indian cattle breed like dangi, deoni, gaolo, gir, khillar, red kandhari, etc. The nutritional value of the milk of Indian cows (if not fed with grass, polluted with chemical fertilizer and plastic) is very high. On the other hand, it is one of the best medicines for many diseases. The total production of indigenous cow milk in Maharashtra is about 3.86 Lakh MT. annually.

Crossbreed is the milk produced by crossbreed cow like exotic cattle, jersey crossbreed, Holstein Friesian crossbreed, etc. The total production of crossbreed cow milk in Maharashtra is about 46.96 Lakh MT. annually.

30. Buffalo milk

Buffalo milk contains higher total solids than cow milk, which makes it thicker. It has 100% more fat content than cow's milk, which makes it creamier and thicker. Due to high peroxidase activity (family of enzymes that are a catalyst for reactions), buffalo milk can be preserved naturally for a longer period. It contains more calcium to a phosphorous ratio with less sodium and potassium



which makes it a better nutritional supplement of infants. Two types of buffalo milk are;

- Indigenous Buffalo Milk
- Nondescript Buffalo Milk

The total indigenous buffalo milk production in the state of Maharashtra is about 21.14 Lakh MT and the total nondescript buffalo milk in Maharashtra is about 17.18 Lakh MT. annually.

31. Soybean

The production of soybean in India is concentrated in the three states of Madhya Pradesh, Maharashtra and Rajasthan, which contribute to around 93 percent of total soybean production. Important soybean producing districts in Maharashtra are Latur, Amravati and Nagpur. Soybean is taken as a kharif crop in Maharashtra and sown in the months of June and July. Best part of the soybean crop is processed into meal and oil. There are other options: oil extracted from soybean is made into margarine, cooking oil and salad dressings. Some of the value chain leaders in this sub-sector include Adani Wilmar, Mahyco, Eagle Seeds, Biotech, Gokul Refoil and Solvent. The total production of soybean in the state of Maharashtra is about 86 Lakh MT annually.

32. Pomegranate

India produces 23.06 Lakh MT of pomegranate per annum. Pomegranate is widely cultivated throughout India, and the drier parts of South-East Asia, Malaysia, the East Indies and tropical Africa. The fruit has high medicinal value, low calorie and high nutrient make-up. It is very popular among consumers and food processors due to its rich colour, sweet-sour flavour and high antioxidant content. Processors are also adding and blending pomegranate with many products such as jelly, ice cream bars, truffles and chewing gum. Pomegranates are available in juice and concentrated supplement form. In India, Maharashtra ranks first among pomegranate producing states, followed by Karnataka and Gujarat. In Maharashtra, pomegranate is commercially cultivated in Nasik, Solapur, Sangli, Ahmednagar, Dhule, Pune, Aurangabad, Satara, Osmanabad and Latur districts. Pomegranate is harvested round the year. 'Bhagwa' is a major variety cultivated in Maharashtra. Some of the value chain leaders include Tropicana and Paper boat.

The peak price periods are between July and August as imports for the EU are low during this period. With regard to some large processors, a few players such as Fresh Top, Bensons International, Mazda Specialty Machine Systems and Jain Irrigation are processing pomegranate. However, utilisation of capacity in their units is low because of limited raw material availability and higher prices in some periods. The total production of pomegranate in the state of Maharashtra was 17.71 Lakh MT in the year 2017-18.

33. Grapes

Grape is one of the major fruit crops widely grown in many states of India. It is delicious and consumed as fresh fruit in India, and also used for producing raisins, wine and other products such as essential oil and pectin. It is also used as input for the production of cattle feed and in the preparation of candy. Maharashtra is a leading state in cultivation, production (2,160 thousand MT) and export of grapes in the country. The state commands the highest area under grape cultivation with a productivity of 24 MT/ha. Maharashtra produces 83.5 percent of total grape produce in the country, and most of it in Nasik district covering 0.14 Lakh hectares with



a production of 3.25 Lakh MT, followed by Sangli covering 5,320 hectares and producing 0.93 Lakh MT. Maharashtra covers 70 percent of the total area under grape in India. Karnataka is another major producer of grapes after Andhra Pradesh. Mumbai and Delhi are the major consuming markets where bulk of the produce goes from Maharashtra. Although the cultivation is mainly concentrated in the three districts of Nasik, Sangli and Solapur, a large number of farmers in the neighbouring districts like Pune, Ahmednagar and Satara are switching over to grape cultivation. Out of the total production, around 60 to 70 percent of the seedless grape is produced in Nasik alone. Sangli/Solapur area is a dry belt where grapes are mostly converted to raisins. The main varieties grown in Maharashtra are Thomson Seedless, Tas-e-Ganesh and Sonaka. Other varieties gaining popularity are Sharad seedless and Flame seedless. Grapes are cultivated in 60.20 thousand hectares with total production of 16 Lakh tonnes and productivity of around 25 tonnes/ ha in India because of the special “Arbour Training System” provided for grape cultivation. Productivity is the highest among other grape-growing countries in the world. About 85 percent of the total production, irrespective of the variety, is consumed fresh, while a limited quantity is utilised for the production of wine, dry fruits like raisins, etc. About 2.5 percent of fresh grapes are exported to the Middle East and the European countries. Indian grapes, after facing rejection from EU market back in 2010-11 due to high level of pesticide residue, have rebounded with a record export of 1.92 Lakh MT. Some of the value chain leaders in this sub-sector include Coca Cola India, Real Juice, Pepsico, Sula Wines, etc.

Grape is successfully grown in regions of Maharashtra with a temperature range of 80 to 420 and rainfall of 50 cm to 60 cm. Most of the exporters have advance arrangement with a group of farmers who are given extensive advisory services throughout the year and mostly geared to get Global GAP certification. Out of the total production in the state, 0.60 Lakh to 0.75 Lakh MT meet high quality parameters and have made a good penetration into the EU market. In fact, India has almost exclusive window for one and half months in April and May when EU gets supply from India only. The supplies from Chile are at the fag end and arrivals from Egypt are almost a month late. Refrigerated transport is required for the transportation of the produce. Nasik, being the key market for grapes, has an abundance of pack houses and cold storages. Besides, nearby areas have witnessed a substantial growth in wineries; SULA wine has established its brand name in the Indian market.

1.2. PROCESSING SCENARIO

Essentially five stages, that is, on – farm inputs, farm production, procurement by processors, processing and retailing define the value chain activities within the industry. The food processing industry particularly may be broadly categorized in to two major segments:

- **Primary Processing:** It includes basic steps of processing like sorting, grading, packing, etc. for consumption. Finished products in this case include packed milk, fruits & vegetables, cleaned and graded pulses and grains, sorted and graded spices and condiments and salt, all largely unbranded.
- **Secondary & Tertiary Processing:** This includes value added processing yielding dairy products, bakery products, processed pulses (Dal), processed fruits & vegetable like juices, jams, pickles, dehydrated vegetables and confectionary. These products undergo higher level of processing to convert into value added new or modified products.



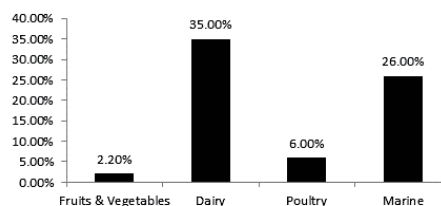
The sub-sector wise processing options are tabulated below:

Table 7: Sub-sector wise processing options

Sub-sectors	Primary Processing	Secondary Processing	Tertiary Processing
Milk	Grading and Refrigerating	Cottage Cheese, Simmered & Dried Milk	Processed Milk, Spreadable Fats, Yogurt
Fruits & Vegetables	Cleaning, Sorting, Grading & Cutting	Slices, Pulps, Flakes, Paste, Preserved & Flavoured	Ketchups, Jams, Juices, Pickles, Candies, Chips, etc.
Grains and Cereals	Sorting & Grading	Flour, Rice, Pulses, Milling	Biscuit, Noodles, flakes, Cakes, Namkeen, Soya and Olive Oil
Meat & Poultry	Sorting & Refrigerating	Cut, Fried, Frozen & Chilled	Ready to Eat Meals
Marine	Chilling & Freezing	Cut, Fried, Frozen & Chilled	Ready to Eat Meals
Beverages	Sorting, Bleaching & Grading	Leaf, Dust & Powder	Tea Bags, Flavoured Coffee, Soft Drinks
Spices	Cleaning, Sorting & Grading, drying	Roasting, Grinding, cracking, blending (whole, chopped, powdered)	Sterilisation, Extraction, powder blends, Essential oils

1.3. Extent of Processing in the Industry

The level of processing has been the key driver for the growth of the industry. The graph depicted highlights the level of processing in various segments of the food processing industry. Apparently, the level of processing in India across all segments is relatively lower when compared with other countries such as



United States & China. Thus, there is immense potential for the food processing industry to add value by enhancing the level of processing in various segments

1.4. Growth of Key Products and Segments in Food Processing Industry

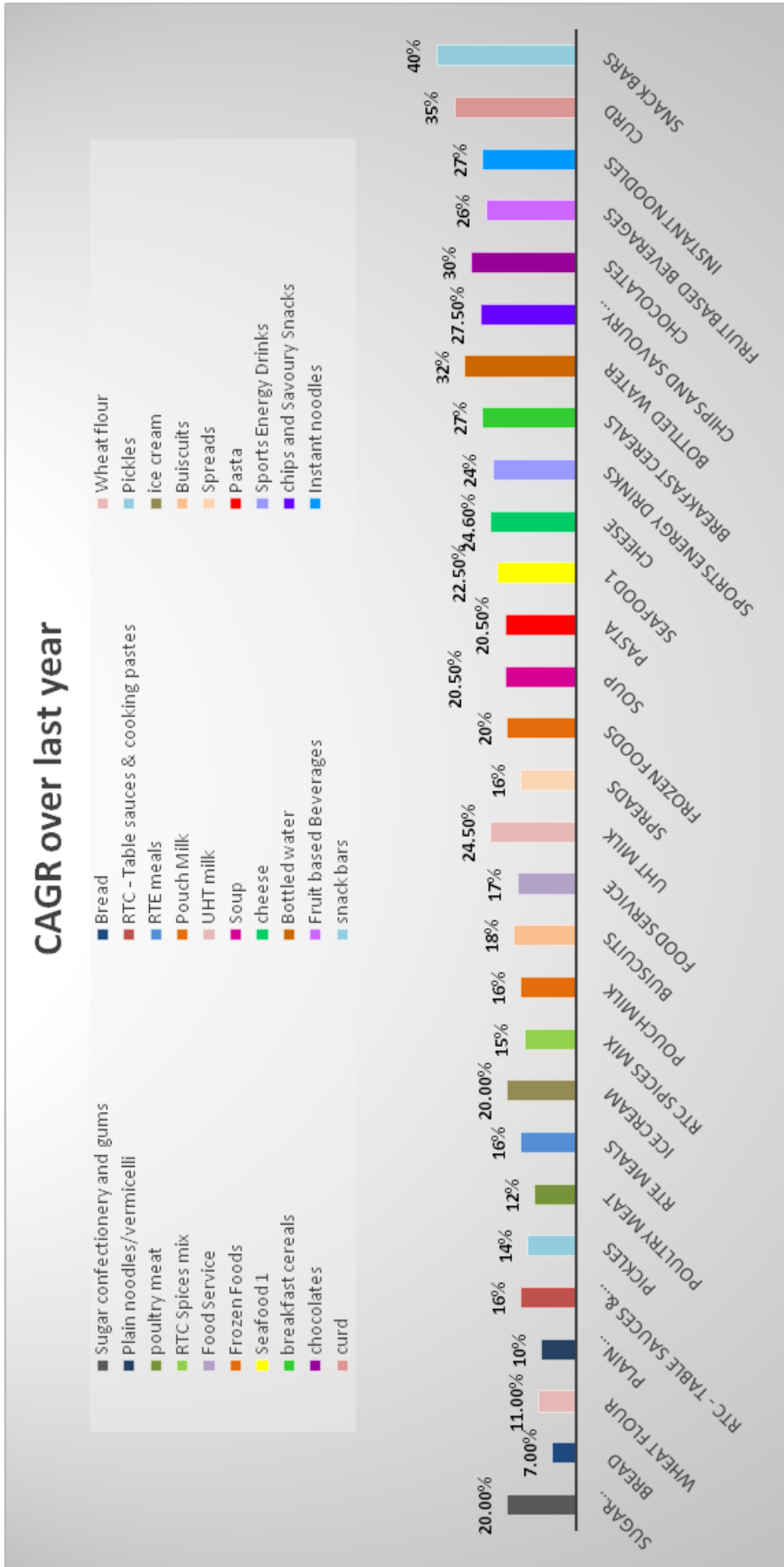
Most of the traditional segments in the primary processing level for various value chains are growing and integrating with international markets. This trend can mainly be seen in the grains and cereals, dairy, poultry meat and fresh F&V segment. Many Global players are venturing into India to capture this segment and ensure sustainable supply and value chain management in various value activities.

Coupled with this trend, the value added processing segment mainly in the secondary and tertiary processing levels is growing rapidly mainly on account of growing urbanisation, increased disposable incomes and export demand.

Based on research and industry consultation we have categorised various segments in the value chain in high, medium and low growth areas based on previous 5 years' growth and expected growth in the coming years.



Figure 2: Growth of Key Products in the Food Processing Industry



Value Chain	High Growth Segments (Above 15percent)	Medium Growth Segments (10- 15percent)	Low Growth Segments (5-10percent)
Milk & Milk Products	• Milk	• Ghee	
	• Processed Milk	• Cheese	
	• Flavoured Milk		
	• Curd & Yogurt		
	• Ice-cream		
	• Skimmed Milk		
	• Dairy whitener		
Fruits & Vegetables	• Pulps	• Frozen	
	• Concentrates	• Dehydrated	
	• Pickle		
	• Potato wafers/flakes		
	• Fruit Beverages		
	• Spices		
Grains & Cereals	• Breakfast Cereal	• Pulses	Bread
	• Biscuits	• Instant Mixes	
	• Pasta	• Cattle Feeds	
	• Instant Noodles		
	• Ready to Eat & Ready to Cook Meals		
	• Noodles & Vermicill		
Meat & Poultry	RTE Non- Veg Meals		

Based on the above analysis and macro level market demand assessment, we have further studied the sub – sectors are profiled: and activities in below section. The indicative project investment in advanced machinery and engineering with moderate to high level automation which is generally the norm for larger, small and medium scale units is also presented micro and typical small scale project models of some are further presented in detail in Part 3: Chapter 1.

• **Milk and Milk Products**

Segment Overview	India is among the fastest growing dairy markets in the world and has become the largest global producer of milk, since Fiscal 2013.
	About 42 percent of the total milk produced in India is purchased by consumers directly from milk farmers in raw form whereas 58 percent goes for processing and is sold as processed milk and value added milk products.
	Demand for milk is more than the supply in the present scenario.
	Demand for value added products like skimmed powder, dairy whitener, butter, ghee and cheese is increasing rapidly.
Size	Indian dairy industry is worth around INR 3,700 Billion of which processed milk comprises of 70 percent.



Market Concentration	Urban and semi urban areas for processed milk and milk products while exports comprises of mainly high value added milk products
Products	Processed milk and Milk products like Ghee, Cottage cheese, cheese, curd & related products, Butter, Ice-creams, sweetened condensed milk & milk powder.
Key Players	Nestle Mother Dairy Heritage Amul
Linkages	
Backward	Co-operative model
	Dairy farmers
	Village Collection Centres (VCC) & Bulk Milk Chilling Centres
Forward	Retail
	Supplier of ingredients to consumer food manufacturers
	Institutional
Key Infrastructure	Standard Unit Size/ Plant Capacity- 10,000 LPD
	Project cost- INR 3-3.5 Crores
	Land- 1-1.5 Acres
	Water- 20 KL/Day
	Power- 100 KV
	Manpower- 25 to 30
Built-up Area- 5000-8000 Sq. ft.	
Key In – House Facilities	Milk Chilling Plant
	Processing Area
	Product Specific Facilities
Plant & Machinery	Raw Milk Reception Dock
	Can washer
	Weighing & Dump Tank
	Processing area for cream separator, chiller, pasteuriser and homogeniser
	Product specific area for packaging, refrigeration and storage
Common Facilities	Cold Storage
	Tetra Packing
	Waste water treatment plant
	WTP
	Boiler
	Reefer vans
Critical Success Factors for the Segment	Processed Milk Units to be located in proximity to milk producing areas.
	Access to efficient means of transport
	Proximity to markets for retail supply
	Supply of quality cattle feed and fodder
Project Impact	Employment Generation
	Direct employability at the milk processing plant would be 25-30
	Indirect employability of 300-400 including dairy farmers, transportation manpower, etc.



	Catchment Area/Supply Chain
	Raw Material: 12000-15000 milk producing cows and Buffaloes. Availability of good quality cattle feeds and fodder
	Income Potential: Dairy farmers on average earn between INR 25 to 30 Thousand per annum

Sources: GT Analysis, various industry source

- Demand for processed milk and high value added milk products such as skimmed milk powder, dairy whitener, cheese, cottage cheese, flavoured milk is growing at double digits
- Increased scope for exports of value added milk products
- Dairy segment is currently processing only 35 percent of milk produced and while organized sector contributes to about only 15 percent it, thus there is huge scope for scaling it up
- Increased demand for quality cattle feed riding on the growing dairy segment has propelled the growth for a large number of cattle feed units
- Investment opportunities at the primary level is Collection centre, Bulk Milk Chilling plants and secondary and tertiary level to set up dairy processing plant

• Fruits and Vegetables

Segment Overview	India is world's second largest producer of fruits and vegetables accounting over 10 percent of world production.		
	Domestic consumption of F&V is mainly in the primary form while exports comprise of mainly primary or secondary stage processed commodities.		
	Domestic Market for processed F&V is at a nascent stage with demand more for table varieties but is growing rapidly in the Urban and Metro centres.		
	F&V processing industry in India is highly decentralized with a large number of units confined to cottage/household scale and small scale sector.		
Size	India is the second-largest producer of fruits and vegetables in the world, accounting for about 10 percent of the global production.		
Annual Growth	The Industry is expected to grow over 4 percent till 2017.		
Market Concentration	Pulps, concentrates, dehydrated and frozen commodities comprise mainly exports and institutional sales in the domestic market		
Products	Juices, Pulps, concentrates, Dehydrated and canned products, frozen, purees, squash, jams, pickle etc.		
Key Players	Hindustan Unilever Limited	ITC	Fieldfresh
	Nestle	Heritage	Godrej



Linkages	
Backward	Contract farming
	APMC mandis
	Direct procurement from individual farmers
	FPOs
Forward	IQF, Spiral, Dehydration
	Retail vendors
	Super-marts
	Pulping and juice or sauce making units
	Pack Houses
Major Segments and Sub Segments	<pre> graph TD A[Fruits & Vegetables] --> B[Fresh F&V] A --> C[Dry Fruits] A --> D[Processed F&V] B --> B1[Grapes, Mangoes, Bananas, Chillies, etc.] C --> C1[Jams, Jellies, Pickle, Sauce, Food Paste, etc.] D --> D1[Juice/Concentrate] D --> D2[Canned F&V, Potato Flour] </pre>
High Growth to Medium Growth Potential units in F&V Indicative project parameters)	Pickles
	Capacity: 2 MTPD
	Land: 0.25 acres
	Investment: INR 1.00 Cr.
	Water: 7 KL/Day
	Power: 10 Kw
	Manpower: 10
	Raw Material: Lemon, Mango and Carrot
	Other Facilities: Dry Warehouse and Cold Store
	F&V Processing
	Capacity: 1 MT/Hr.
	Land: 1 acre
	Investment: INR 3.00 Cr.
	Water: 40 KL/Day
	Power: 40 Kw
	Manpower: 25
	Raw Material: Fresh fruits and vegetables
	Other Facilities: Bottling Line and Cold Store
	Fruit Canning
	Capacity: 5 MTPD
Land: 0.75acres	
Investment: INR 2.00 Cr.	
Water: 10 KL/Day	



	Power: 30 Kw
	Manpower: 12
	Raw Material: Litchi, Guava, Mango and Baby Corn
	Other Facilities: Dry Warehouse and Cold Store
	Squashes/Jams/Ketchup
	Capacity: 2 MTPD
	Land: 0.5 acres
	Investment: INR 2.50 Cr.
	Water: 10 KL/Day
	Power: 10 Kw
	Manpower: 10
	Raw Material: Lemon, Mango and Litchi
	Other Facilities: Dry warehouse and Pulping Line
	F&V Powder
	Capacity: 2.5 MTPD
	Land: 0.75 acres
	Investment: INR 3.50 Cr.
	Water: 20 KL/Day
	Power: 25 Kw
	Manpower: 10
	Raw Material: Banana, Litchi, Mango and Tomato
	Other Facilities: Dry warehouse and Cold Store
	Juices & Fruit Drinks
	Capacity: 20 KLD
	Land: 1 acre
	Investment: INR 3.00 Cr.
	Water: 25 KL/Day
	Power: 30 Kw
	Manpower: 15
	Raw Material: Frozen & Aseptic Pulp
	Other Facilities: Dry Warehouse, Pulping Line and Cold Store
	Spice Grinding Units
	Capacity: 5 MTPD
	Land: 0.75 acres
	Investment: INR 3.00 Cr.
	Water: 20 KL/Day
	Power: 30 Kw
	Manpower: 15
	Raw Material: Ground Spices, Seed-Spices, Spices
	Other Facilities: Dry warehouse, Roasting, Grinding

Sources: MoFPI, GT Analysis, Industry Sources



- Pulp market is growing at a double digit rate backed by strong domestic demand from mainly large firms such as HUL, Pepsi, Parle etc. for fruit beverages and also exports demand in the Middle east, US and Europe markets
- Pulping segment mainly comprises of Mango with around 3 Lakh to 4 Lakh tonnes of mango annually processed for pulping
- Apart from mango, demand for guava, papaya pulp is also increasing
- Demand for frozen vegetables mainly comprises of green peas, potato finger chips, carrot and other mixed vegetables on account of growing demand from the Middle East and Europe on exports while on domestic front its mainly in Urban areas
- Dehydrated products mainly from exports and demand from defence sector in domestic markets

• Grains and Cereals

Segment Overview	India produced 257.55 million tonnes of different food grains in 2011–12.		
	Major grains, such as rice, wheat, maize, barley and millets such as Jowar, Bajra, and pulses are produced in India.		
	Wheat, rice and maize together account for about 80 percent of the country's total production.		
	Groundnut, mustard, sunflower and soya bean oilseeds form over 92 percent of the country's total oilseed production.		
	Growth in processing infrastructure in India may help the industry to optimally leverage its raw material advantage.		
	India is world's largest producer and exporter of Guar gum		
Size	India will continue to be one of the largest producers of cereals with more than 200 million tons of production annually.		
Annual Growth	Industry is expected to grow over 16 percent till 2017		
Market Concentration	Majorly Export Oriented. India produces 20 percent of the world rice production, one of the world's largest producers of cereals and grains.		
Products	Cereals (for breakfast), biscuits, cakes, flour mixes and dough and other readymade powders (idli, dosa and gulab jamun).		
Key Players	Britannia	Sunfeast	Nestle
	Aashirvaad	India Gate	ITC
Linkages			
Backward	E-choupal model of ITC		
	Direct Procurement from farm		
	FPOs		
Forward	Flour Mills		
	APMC Mandi		
	Retailers		



	Super-marts
	Exports
Major Segments and Sub Segments	<div style="text-align: center;"> <p>Manufacturer of Grain Mill Products</p> <pre> graph TD A[Manufacturer of Grain Mill Products] --> B[Milling] A --> C[Processing & Manufacturing] B --> D[Flour] B --> E[Rice] B --> F["Dal/Pulses /Other Grains"] C --> G[Flour Mixes] C --> H[Readymade Powders] C --> I[Cereals & Breakfast Food] </pre> </div>
High Growth to Medium Growth Potential units in F&V	Pasta Products
	Capacity: 100 MTPD
	Land: 1.25 acres
	Investment: INR 5.00 Crore
	Water: 20 KL/Day
	Power: 40 Kw
	Manpower: 40
	Raw Material: Wheat Flour, Maida
Other Facilities: Dry Warehouse and Silos	
	Breakfast Cereals
	Capacity: 25 MPTD
	Land: 1 acre
	Investment: INR 5.00 Cr.
	Water: 12 KL/Day
	Power: 40 Kw
	Manpower:15
	Raw Material: Maize, Corn, Rice and Wheat
Other Facilities: Dry warehouse and Silos	
	Bakery
	Capacity: 2 MTPD
	Land: 0.50 acres
	Investment: INR 3.00 Cr.
	Water: 2 KL/Day
	Power: 50 Kw
	Manpower: 15
	Raw Material: Yeast, white wheat flour and sugar oil
Other Facilities: Dry Warehouse and Silos	
	Integrated Flour Mill
	Capacity: 30 MTPD
	Land: 1 acre
	Investment: INR 3.00 Cr.
	Water: 15 KL/Day
	Power: 170 Kw



	Manpower: 20
	Raw Material: Wheat
	Other Facilities: Dry warehouse and Silos
	Cattle Feeds
	Capacity: 25 MTPD
	Land: 0.75 acres
	Investment: INR 3.50 Cr.
	Water: 5 KL/Day
	Power: 40 Kw
	Manpower: 10
	Raw Material: Maize, Rice, Soybean
	Other Facilities: Dry warehouse and Silos
	Rice Mill
	Capacity: 20 MTPD
	Land: 1.5 acres
	Investment: INR 4.00 Cr.
	Water: 10 KL/Day
	Power: 150 Kw
	Manpower: 20
	Raw Material: Rice
	Other Facilities: Dry Warehouse, Silos
	Maize and Rice Grifts
	Capacity: 20 MPTD
	Land: 0.5 acres
	Investment: INR 3.00 Cr.
	Water: 3 KL/Day
	Power: 25 Kw
	Manpower: 10
	Raw Material: Maize
	Other Facilities: Dry warehouse and Silos

Sources: GT Analysis, Various Industry Sources

- Wheat flour market is increasing on account of growth in organized retail market in India and growing urban and semi urban areas. Also demand for wheat flour is growing on account of rapid growth in Pasta and noodles segment. Further exports in the wheat flour is growing exponentially
- According to industry sources the Pasta and noodles segment is estimated to be growing between 20per-cent -25per-cent. Total pasta production capacity in India is 1 lac MT in 2011 less than 1per-cent of total pasta production in world as per International Pasta Organisation.
- Key large players in the pasta and noodles segment are ITC, Bambino, HUL and Future Group.



- Exports for Pasta and Noodles is envisaged to grow rapidly because of surplus wheat availability in the domestic markets
- Breakfast Cereals and Bakery products are growing mainly on account of increased domestic demand
- Top key growth segments in the Grains and Cereals value chain are Pasta and Noodles, Breakfast Cereals, Bakery, Flour and Cattle Feed

Ready to Eat

Segment Overview	Packaged foods market is largely organized and has been witnessing strong growth across categories.		
	Potato chips and potato-based products constitute about 85 percent share of the Indian snack market.		
Size	RTE sector is estimated to be worth around INR 2900 Crore		
Annual Growth	RTE segment has been growing between 25-30 percent for last few years and expected to continue the same till 2019		
Market Concentration	Dominated by large players that contribute around 84 percent of the market		
	Exports cover over 60 percent – 80 percent revenue		
	Domestic market mainly comprises of Metro and semi metro cities		
Products	Nuggets, Samosas, Paranthas, Tikkas, Instant mixes, soups , RTE meals in veg and non-veg, etc.		
Key Players	IITC	Tasty Bite	ADF Foods Ltd
	MTR	Heinz	Kohinoor Foods Limited
Linkages			
Backward	Backward linkages are mainly for key vegetables.		
	Flour, oils and other materials are procured directly from market		
Forward	Super Marts		
	Retail Stores		
	Exports		
Critical Success Factors for the segments	Close proximity to Metro and Semi Metro Cities and Ports for Exports.		
	Tie-up with Super Marts and retailers in International and Domestic Markets.		
High Growth to Medium Growth Potential units in the RTS Segment	Nuggets, Tikkas, Samosa etc.		
	Capacity: 500 Kg/Day		
	Land: 1.5 acres		
	Investment: INR 3.00 Cr.		
	Water: 20 KL./Day		
	Power: 60 Kw		



	Manpower: 20
	Raw Material: Cereals, Vegetables, Refined Oils
	Other Facilities: Ambient Storage, Cold Store, IQF, Deep and Spiral Freezers
	Instant Mixes
	Capacity: 25 Kg/Hr.
	Land: 0.25 acres
	Investment: INR 1.50 Cr.
	Water: 5 KL/Day
	Power: 20 Kw
	Manpower: 10
	Raw Material: Cereals, vegetables, Oil, Spices
	Other Facilities: Ambient, Storage, IQF and Frozen
	Processed Meat
	Capacity: 200 Kg/hr
	Land: 1.5 acres
	Investment: INR 6.00 Cr.
	Water: 50 KL/Day
	Power: 100 Kw
	Manpower: 35
	Raw Material: Cereals, Meat, Spices and Oil
	Other Facilities: Ambient Storage, IQF, Frozen and Spiral Freezer

Sources: GT Analysis, Various Industry Sources

- As per industry experts RTE and RTC segments are expected to grow at over 20 per-cent for next 5 years.
- Demand for RTE markets is mainly in the exports segment
- Demand for RTC and Instant mixes in domestic as well as exports markets is mainly where a large



CHAPTER 2

ENTREPRENEURIAL TRAITS

Highlights

Skills may be considered as both hard as well as soft skills. Hard skills have a reference to managerial and technical skills. Soft skills have more to do with the personality and behavioral traits and characteristics of an entrepreneur.

An open mind and efforts help remove barriers hindering creativity within a person. Innovativeness and problem solving attitude along with negotiation skills vis-à-vis different stakeholders, that is, with government officials, bankers, suppliers, workers, as well as customers and consumers are important.

Many projects fail during the teething stage. In order to avoid over-enthusiasm to cloud rationale, it may be appropriate to allow a project idea to thaw for a while, and have a business plan vetted by appropriate stakeholders and experts. It is necessary not to consider ill-conceived plans, and also avoid cash crisis in business.



The chapter serves as an introduction into the behavioural traits and soft skills of a successful entrepreneur. An entrepreneur may be visualized as one who initiates and launches an economic or business activity. She/he may be distinguished in terms of specific characteristics, some of the most critical of these being a need for Achievement (nAch) and strong motivation, as well as possessing information on various aspects related to launching and successfully managing a business.

Typically, successful entrepreneurs possess many necessary soft skills in terms of seeking information using personal networks and other sources, work quality concern, persistence and steadfastness in pursuing targets, initiative, orientation towards efficiency, planning systematically, problem solving, motivation skills, amongst others.^{xix} While soft skills are critical, failures occur despite an entrepreneur possessing these skills due to gaps in terms of hard skills, perhaps, in terms of opportunity identification, project evaluation, mismanagement of liquidity initiating and operating an enterprise.

2.1. ENTREPRENEURIAL SOFT SKILLS

An entrepreneur may be viewed as an embodiment of several skills that help successfully establish and operate an enterprise. Such skills may be considered as both hard as well as soft skills. Hard skills have a reference to managerial and technical skills. Soft skills have more to do with the personality and behavioural traits and characteristics of an entrepreneur. Typically, successful entrepreneurs possess some or all of the following soft skills:

- **Seeking information:** uses personal as well as professional contacts, and consults support institutions and other sources to secure maximum information on an activity or option prior to pursuing it.
- **Work quality concern:** Evinces concern for quality in every activity or tasks. Strives to outdo others in initiatives. Continuously benchmarks own initiatives/output with competitors.
- **Persistence:** Steadfastly pursues targets.
- **Initiatives:** Attempts to explore activities on own initiative in order to successfully complete a task. Does not wait to be asked or guided in pursue every small activity.
- **Orientation towards efficiency:** Strives to accomplish tasks more efficiently, and optimise resources.
- **Planning systematically:** Attempts to plan efficiently by breaking-up larger tasks into smaller ones to complete them, and makes allowances for untoward problems.
- **Problem solving:** Explore innovative solutions to problems; keeps alternative strategies in hand to target possible problems that may arise.
- **Self-Confidence:** Display a high degree of self confidence in abilities and in accomplishment task.
- **Assertiveness:** Strives to assume leadership when working in a group and does not succumb to group or peer pressure on any issue unless personally convinced.
- **Persuasion:** competent at motivating and convincing others of own point of view (or to buy a service or product).



- **Employment of influence strategies:** Employ a mix of strategies to influence others – networking, employ/influence appropriate/ influential persons to realise their targets etc.
- **Exploiting opportunities:** Exploits emerging opportunities, including the unexpected to the fullest.
- **Commitment to work contract:** Assume full responsibility for failure in any initiative and makes personal sacrifices, if necessary, to deliver as promised. Customer satisfaction is a personal mission.

In the context of these competencies some of the more critical entrepreneurial traits are a need for achievement (n-Ach), that is, a strong desire to continuously realise new goals and not rest till they are realised.

Also, entrepreneurs prefer working independently and ‘be their own boss’. Many of these soft skills may certainly be cultivated, and are interrelated and reinforcing. Benchmarking of such soft skills may be made with reference to role model entrepreneurs

2.2. AN ELABORATION ON SOME CRITICAL SKILLS

While all the soft skill competencies are deemed important. A few distinguishes successful entrepreneurs from those who fail.ⁱⁱ Some of them are considered in this section.

Innovativeness and a Problem solving attitude: An open mind and efforts help remove barriers hindering creativity within a person. In routine life, many problems are often not even noticed. Sometimes when we face an unusual or difficult problem, there is no routine reaction. In such cases, various options need to be explored. Some means to develop a problem solving attitude may be visualised in terms of developing an ability to perceive a problem and its magnitude, trace casualty and explore alternative remedies, and finally implement an appropriate.

Negotiation and networking: Negotiation may be viewed vis-à-vis different stakeholders, that is, with government officials, bankers, suppliers, workers, as well as customers and consumers. It is a process of arriving at perspectives and points of view. Negotiations has several features; it involves reconciling conflicting/differing expectations and also effective communication. Successful negotiation addresses concern of all concerned parties and results in a win-win settlement for relevant stakeholders The negotiation process involves preparation and presentation, bargaining, and agreement and closure. Preparation entails deciding what one requires and what one is willing to offer. It will also include some assessment of the opposite party needs, its strength and weaknesses. Response of the other party should be studied while negotiating and appropriate modifications made in presentation. The process of bargaining would help parties to arrive at a mutually acceptable position. This would be concluded in a manner that will foster long term relationship.

2.3. FAILURES DESPITE SOFT SKILLS, RELEVANCE OF HARD SKILLS

While soft skills are critical, failures occur despite an entrepreneur possessing these skills due to gaps in terms of hard skills in initiating and operating an enterprise.

Start-up Lacunae: Often projects are ill-conceived as an entrepreneur sometimes pursues it merely because others are seen to be doing well in it. The project may not match the profile of



an entrepreneur, may merely reflect a passing fad, or cater to a limited market. Gaps in terms of basic management and hard skills may also affect project conception. This may be in terms of under-estimation of project cost, or contingencies. Many projects fail during the teething stage. In order to avoid over-enthusiasm to cloud rationale, it may be appropriate to allow a project idea to thaw for a while, and have a business plan whetted by appropriate stakeholders and experts.

Cash short falls kill a business: An important causality for failure in enterprise is the mismanagement of cash. Such mismanagement may be viewed in terms of expansion plans being implemented without due consideration to the liquidity position, and funds for working capital (short term capital) diverted to long-term investment in equipment. Several measures may be adopted to ward-off a cash crisis in enterprise. These may be viewed in term of effective inventory management, controlling credit sales, purchasing inputs at discount such as deploying leased than purchased equipment and getting some jobs done on job-work. Cash budgeting, as to plan for cash needs-which may vary even within one operating cycle, and adopting selling incentives to ensure sale of products or services offering maximum 'contribution 'are other means to stave away a cash or liquidity crisis.



CHAPTER 3

OPPORTUNITY IDENTIFICATION IN SPECIFIC LOCATION AND PROFILING OF BUSINESS IDEA

Highlights

There are various phases in opportunity identification such as, preparing a personal, that is, entrepreneur profile, developing a list of basic criteria, study a location and generate an inventory of ideas/opportunities, and conduct a quick scrutiny of ideas prior to final selection.

The parameter on the basis of which an entrepreneur may be profiled may include education, work of professional experience, professional and educational qualifications, the fundamental objectives (in terms of perhaps, a means to living to be “one’s own boss”, or nAch) for establishing a firm.

Preliminary selection of an idea may be also on the basis of potential and existing firms in the area: Existing industries in an area provide an important basis for opportunity identification. Projects under consideration are also relevant in this context-launching similar project; producing raw material for existing industry; further processing of the output of existing industry; service needs of existing industry.

The parameters for final selection may include: Who are the customers (middle-men) and consumers (end-users)? What is the market in terms of geographic as well as segment terms? What is the degree and basis of competition (e.g. cost, differentiation, or niche) is there scope for competitive positioning and realising sustainable competitive advantage vis-à-vis competitors? Is the investment implication feasible? Are necessary technological know-how and other material inputs available? How is the proposed project location ideal? Are factor conditions (e.g. specialised testing facilities) in the region appropriate? What are implications of government policy and schemes option?

Franchising is essentially an arrangement in which a manufacturer or sole distributor offers exclusive rights of local (particular territory) distribution to independent retailers in return for royalties and conformance to standard operating procedures.



This chapter elaborates on the technique of conducting an assessment survey in a particular region and also on the methodology of profiling ideas.^{lii} The methods of both desk research and field survey need to be coupled for efficacy. In this context, interactions with several stakeholders need to be pursued, and a multitude of sources of information tapped. Some such stakeholders as well as sources of information may be visualized as existing entrepreneurs in a similar line of activity, machinery manufacturers wholesalers, retail outlets, providers, financial institutions, representatives of industry associations as well as government departments, and supporting private and public service providing institutions. Newsletters, journals from all these points of contact could serve as must-reads.

There are various phases in opportunity identification such as, preparing a personal, that is, entrepreneur profile, developing a list of basic criteria, study a location and generate an inventory of ideas/opportunities, and conduct a quick scrutiny of ideas prior to selection. This stage could be followed by preparation of a detailed business plan which will also serve as a check on a project viability. Generation of ideas specific to a particular location may consider parameters in terms of natural and other regional resources (including skilled manpower), existing/anticipated industries, extension of current activity, demand potential/led, innovative options.^{liii}

3.1. METHODOLOGY

The methods may be considered in terms of desk research as well as field survey. Desk research is to secure secondary published data from various sources. Sources of secondary data may include project profiles from supporting government and private sources, journals of technical or R&D institutions, statistical reports and areas assessment surveys from the government institutions (such as the MSME-DIs, in India), directorates of industry, magazine and periodicals, project reports of other firms financed by bankers, as well as newsletter of chambers/ industry associations. For purposes of primary data collection, a tentative list of important sources may be made. In the regional context, these may be viewed in terms of:

Table 8: Sources and nature of data

Stakeholders for data	Nature of information
District industries Centre and Directorate of Industrial and Commerce, Technical Consultancy Organisations, and Financial Institutions, KVK, ED Institutions, Lead Banks, ATMA, Agricultural universities, etc.	Data on existing enterprises, potential projects, well performing as well as failing enterprises in the region, relevant of government policy and schemes, contact points with support associations, NGOs
Industry Associations, entrepreneurs in relevant sectors	Important constraints experienced by firms, business potential of a project in general, scope for availing/establishing necessary common facilities, policy circumstances.

Compilation and Tabulation of Information

Upon completion of an assessment survey to indicatively isolate a range of opportunities, the findings may be tabulated. Information in term of rationale for selection, sources of technology, indicative project cost, and critical success factors vis-à-vis background of the entrepreneur may be considered.



The parameter on the basis of which an entrepreneur may be profiled may include education, work of professional experience, professional and educational qualifications, the fundamental objectives (in terms of perhaps, a means to living to be “one’s own boss”, or nAch) for establishing a firm.

Phase 2- Specify essential criteria for opportunity identification and assess

a location: the methodology for assessing a location have been considered in the previous sub-section. An entrepreneur need evolve customised criteria for herself/himself. The following aspects presented below may be considered.

- **Preference vis-à-vis location:** small firms are typically established in proximity to their place of residence. Isolating the convenient location need pre-empt the scan for opportunities.
- **Perception vis-à-vis return and risk:** what is the attitude towards business risk? Would lower earnings but a more stable job-working options preferred?
- **Scale of activity:** how much is one willing to invest as equity or borrow as debt?
- **Slated returns:** while in some projects a 30 percent return on investment may be acceptable, in others, such as in trading, higher returns may be anticipated.
- **Activity preference:** any preference vis-à-vis specifies activities, sub-sectors?
- **Location preference:** a profiling of personal preferences in the manner presented above will facilitate scanning a location for ideas. Entrepreneurs looking for smaller projects typically prefer locations close to their place of domicile.

Phase 3-Idea generation: The ability to generate ideas, typically, depends on: Natural and other regional resources (including skilled manpower), existing/anticipated industries, extension of current activity, demand potential/led, innovative options. These are discussed below.

Resource potential: Relate to ideas related to local/regional resource profile in terms of agriculture, minerals, and skilled human resources.

Potential and existing firms in the area: Existing industries in an area provide an important basis for opportunity identification. Projects under consideration are also relevant in this context-launching similar project; producing raw material for existing industry; further processing of the output of existing industry; service needs of existing industry.

Demand driven options: A study of demand trends and trade flows (including export-import trends) vis-à-vis a region may also serve as a basis for opportunity identification.

Extension of current activity: The prevailing skill or market base of an existing or potential entrepreneur may also serve as the basis for idea generation, for instance, traders forward or backward integrating into manufacturing activities.

Opportunity Identification: Based on local and growing demand

Promoters of “Bhumata Food Products” target local demand for spices and atta by restaurants in the town of Nevasa in Ahmednagar district. Training from the regional Krishi Vignan Kendra (KVK) has helped them develop technical competence in processing. “Rujal Production” promoted by a lady entrepreneur had its project idea finalised in the light of the growing demand for herbal and food supplements in the region. Technical training at the KVIC helped her develop technical competence in processing.



Phase 4-Quick scan of inventory-An inventory of opportunities and ideas is hardly adequate. A quick –scrutiny may be made upon interaction with different stakeholders.

Opportunity Identification: Product USP in flavoured milk paneer and cocoa

“BBM Industries” has been in operation since 2017. The promoter was trained under MCED and RSETI initiatives and decided to undertake dairy product processing at a project cost of about INR 20 Lakh. Support from the Bank of India was leveraged and the unit employs 6 persons and processes dairy products like paneer and also chocolates of different flavours in Nagpur. The unit makes paneer with strawberry and pineapple flavours. It makes chocolate using cocoa powder, cocoa butter and honey. The unit has deployed equipment like milk processing machine, storage tank, weigh scale and packing equipment. The manufacturing process involves standardisation, heating (900C), cooling (700C), addition of coagulant (coagulant at 700C), draining, hooping and pressing while processing milk.

Opportunity Identification: Product USP in vegetable extract based noodles

“Vermi Extruded Foods” was established in Aurangabad in 2018. The unit is into processing vegetable extract based wheat noodles. The promoter identified the project opportunity over EDP training at RSETI, Aurangabad. The machinery deployed in the unit at a total project cost of INR 22 Lakh involves a vegetable dehydration machine, mixture machine, grading machine and extruder. The manufacturing process involves blending of maida, starch and sodium bicarbonate, adding colour, doughing, transferring into a noodle making machine and packaging. With an operating capacity of about 1000 kgs per day the unit enjoys an annual turnover of INR 30 Lakh. The unit’s USP is in terms of manufacturing vegetable extract based noodles based on beetroot, spinach, tomato, fenugreek, etc.

Business rationale hinging on limited competition: Bakery

“Welcome Bakers Point” was established in the year 2017 in Dhule District, Maharashtra. The major bakery products of the unit are toast, khari, bread, bun bread, ladi breads etc. The target market is the local market in Dhule and markets in other neighbouring districts. The important machineries used are oven, atta spiral machine, bakery equipment, khari making machine and cutting machine. The investment on these machineries are INR 12 Lakh and the total project cost is about INR 16 Lakh. The manpower deployed in the unit is 6.

The manufacturing process involved in this unit is Pre-mixing, kneading, moulding, baking, cooling and slicing. The USP of the unit is marketing through the weekly village bazaar and presence of few outlets in the district.

Data requirements for quick scan

Fundamental data requirements for quick scan may be visualised in terms of product applications /users, critical success factors, options vis-à-vis different scales of operation, perceived competition, expected earnings, as well as perceived risks in business.



Phase 5-Opportunity selection: Final selection may also require detailed business plan preparation comprising market, technical and financial viability analysis. Some criteria in the context of final selection may involve the following:

Parameters for final selection

1. Who are the customers (middle-men) and consumers (end-users)?
2. What is the market in terms of geographic as well as segment terms?
3. What is the degree and basis of competition (e.g. cost, differentiation, or niche) is there scope for competitive positioning and realising sustainable competitive advantage vis-à-vis competitors?
4. Is the investment implication feasible?
5. Are necessary technological know-how and other material inputs available?
6. How is the proposed project location ideal? Are factor conditions (e.g. specialised testing facilities) in the region appropriate?
7. What are implications of government policy and schemes on the option?

The travails of an entrepreneur....and his/her resolve

Caselet 1: Managing Competition

“Gurukrupa Foods” is a corn puff manufacturing unit at Nagpur, Maharashtra. While he had undergone extensive training to understand the nuances of the business, setting up of the unit and operations of same were not as easy as he expected. In the very beginning, he faced several problems in receiving some mandatory administrative approvals. For instance, it took him more than 5 months just to get a Building Plan Approval from the local authorities. Subsequently, he started production by making corn puff balls, which became an instant hit in his targeted rural market (replacing small packs of pop corns, earlier preferred by children). But, this success too was short lived with several larger companies like Balaji’s, Haldirams, etc., also launched new and innovative new products similar to Kurkure. This led to severe decline in his sales. To counter the situation, he decided to diversify with similar product. For this it was important to further invest in new extrusion line.

Since, technology was not locally available, he had to travel several times to Faridabad and Rajkot to finalise his expansion set-up. This too took few months and even after the production started, he faced new challenge in terms of marketing. He now faced competition from several popular brands who had highly competitive pricing policy too (due to their large scale production and economies of scale). High packaging costs were a major constraint in competing with these giants. While his simple transparent packaging worked in rural areas, it was more difficult to penetrate in urban markets. The promoter also faced problems in securing term loan for the project. Even after submission of Business Plan, available collateral and other documents, banks were not comfortable with the unit’s turnover and were sceptical about its marketing efficiencies. He had to further wait for one whole year to change that situation. In a nut shell, entrepreneurs may face several difficulties and need confront them with resolve and confidence.



Caselet 2: Managing bankers

Guruseva Agro Food Products, Aurangabad was launched by a dynamic woman entrepreneur in 2015-16. She had been trained by the MCED under an EDP programme. The training involved entrepreneurship and management training as well as technical training including on aspects like business plan preparation, logo designing, label making and creating brand image. The project involved processing of sweets and snacks. She initially started manufacture at the household-level with own capital. Soon he decided to expand and had a business plan prepared for INR 22 Lakh. The proposal was submitted to a bank. The District Level Committee under the chairmanship of the collector had sanctioned and recommended the proposal. However, the bank refused to support. After several months of meeting different bankers supported by orders of the District Collector to the Lead District Manager to take action of her plan was sanctioned by the Bank of Maharashtra, Aurangabad.

Caselet 3: Entrepreneur moving into family business

“Diet Food International” commenced operations in 2015-16. One of the key promoters was the ward of a dal miller in Nagpur. He studied for his Chartered Accountancy and was always involved in procurement and operations. He wanted to initiate export orientation in the family business and launched “Diet Food” along with his good parent. The unit was backed by his careful planning and already has a turnover of about INR 40 Crore and employs about 15 persons. Notably, the unit is fully automatic “Buhler” technology based with a capacity of 3 TPH.

Caselet 4: First generation entrepreneurship

“Kalpataru Agro processors” was established by a promoter in Aurangabad upon guidance by experienced EDP professionals under the MACP. The promoter is a commerce graduate and was an auditing practitioner. He had the entrepreneurial drive within him and attended a “start-up meet” organised by ABPF-GT. As he was of accounting background in terms of education and experience, he was quite unaware of means of identifying and evaluating business opportunities in the agro-food sector. He was guided to conduct a market survey and study business ideas in different sub-sectors namely micro drip irrigation system, Krushi Seva Kendra, plastic pipe manufacturers, cattle feed manufacturers, etc. As the envisaged project location of Supa and Parner is rich in wheat produce, the promoter was guided into establishing a cleaning, grading and packaging unit in food grains under a brand-name “Madhur”. He was assisted in terms of a business plan and realising institutional credit to the tune of INR 22.50 Lakh. He has since graduated from cleaning and grading to atta manufacturing. Notably, the promoter was also guided to secure FSSAI license and Udyog Aadhar.

The promoter of “Kulkarni Bakers” was working as an accounts officer in Trimurti Foods Pvt. Ltd. in Ahmednagar. Having a farmer’s background, he had always been considering of starting an agro food industry and networked with the ATMA office, Aurangabad and secured information regarding agro food industries and various schemes of govt. for enterprise promotion. With work experience in bakery and confectionary, he was familiar with food related processing activity. He then availed of training from KVIC Nashik and decided to start all types of delicious cake processing facility. Subsequently, he received INR 10 Lakh as loan from the Corporation Bank under the MUDRA scheme and launched his own bakery unit.



Caselet 5: A case of business expansion

“Sankul Gruh Udyog” is promoted by a woman entrepreneur who happens to be a science graduate. She had been operating a spices grinding service unit in Aurangabad for the last 2 decades. In order to upscale her entrepreneurial activity she considered various business activities and upon intervention with other entrepreneurs and on the option to manufacture multigrain flour. With support of the ABPF in the form of a business plan, the promoter could leverage INR 37.5 Lakh as assistance for Term Loan and Working Capital. The ABPF-GT also guided the promoter in selection of machinery and equipment in terms of cleaner and grader, pulveriser and packing machine. She was also referred to the Department of Food Science, Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri, for securing formulae and process for enhancing the shelf life of products. The promoter today is marketing even through own portal. The promoter is now planning the franchise route to expand her market reach.

Mistakes in terms of narrowing-down on the appropriate opportunity

Typically, errors in the selection of opportunities occur due to:

Dissonance with entrepreneur skill and competencies: The Entrepreneur may not have the required technical expertise or market links in the context of the specified project.

Offerings sans uniqueness: In a scenario of several firms offering similar products, the basis of competition is price-in turn affecting viability of some vis-à-vis others.

Phase I- Profile of entrepreneur: Entrepreneurs sometimes blindly consider an opportunity as they see others doing well in similar projects –without considering their own capabilities in this regard. Gaps in capabilities or market saturation affect performance.

Lacunae in information: There are many entrepreneurs who identify business ideas based on inaccurate information.

A special note on the franchising option

Franchising options are also expanding rapidly worldwide. Franchising is essentially an arrangement in which a manufacturer or sole distributor offers exclusive rights of local (particular territory) distribution to independent retailers in return for royalties and conformance to standard operating procedures. The firm offering the franchise is the franchisor and the franchisee is an entrepreneur of firm who are guaranteed right of use of a franchisers business format in a particular territory for a fee. A master franchisee acts as a franchisers agent in a larger territory. Franchisee fee may also involve training support to the franchisee.



Case illustration on errors in Opportunity Identification

The “Samruddhi Cattle feeds” at Aurangabad turned out to be an unsuccessful start-up. The Gangapur taluka agriculture officer had directed the promoter to participate in a district level meet at Aurangabad organized by ATMA and MACP under the ABPF facility. After participation in this start-up meet and BDS workshop at Aurangabad, he decided to start a poultry feed unit. He decided not to invest in land and building and took a shed on rent basis in MIDC, Waluj area, Aurangabad. The unit commenced operations in 2016, however, started facing problems of working capital as well as in marketing where it was difficult to displace existing brands in the market who were selling the poultry feed (granule palletes) at cheaper rates. Notably, most customers were farmers and 80% of market was in rural area. The promoter was advised to set up the unit in Gangapur in order to serve this market. However, he decided to set up the unit in MIDC, Waluj area. The unit is now non-operational.



CHAPTER 4

START-UPS: LEGAL ENTITY OPTIONS

Highlights

Some basic legal forms of business may be visualized in terms of sole proprietorships, partnerships as well as limited companies. A sole proprietary concern is a business owned by an individual. The owner secures all profits and has unlimited liability for all losses.

In a Limited Liability Partnership's structure, partners are shielded to the extent of their investments. Partners in regular partnership concern assume unlimited and personal liability.

In India, a section 25 company is a "not-for-profit" entity for promoting objects such as infrastructure, technology or needs prior Government approval for changing its objects. It cannot however issue dividends to members The Company deploys profits/surplus for furthering objectives.

The deed must specify the profit sharing and loss bearing proportion of net profit or loss of the business of partnership after remuneration to partners and other terms and conditions agreed by the partners as per the deed of partnership.

A Private Limited entity facilitates expansion of membership base and relatively free entry and exit of members and is more sustainable. Unlike a partnership, death of a partner and legal action between partners will not dissolve/rock the consortium entity. A company has a distinct legal entity, different from its members. Its assets and liabilities are in its own name, not its members. This element also contributes to sustainability regardless of possible disputes between some members.

A public limited enterprise must have at least 7 members whereas a private company may have only 2 members. A Public Company need have a minimum paid up capital of INR 5 Lakh. Application with supporting documents needs to be filed with the concerned registrar of companies. In the case of private limited companies, capital may be raised by private arrangements whereas for a public limited company it may be raised from the public. Initially shares will be issued to subscribers to its memorandum and other members. Issued capital must not exceed authorized capital.

A Limited Liability Partnership (LLP) is a partnership in which some or all partners (depending on the jurisdiction) have limited liabilities. In an LLP, each partner is not responsible or liable for another partner's misconduct or negligence.

Separate legal entity: Like a company, LLP also has a separate legal entity. So the partners and the LLP in are distinct from each other. This is like a company where partners are different from the company.



Some basic legal forms of business may be visualized in terms of sole proprietorships, partnerships as well as limited companies. A sole proprietary concern is a business owned by an individual. The owner secures all profits and has unlimited liability for all losses. Personal assets of a sole proprietor can be seized by creditors. Earnings are added on to an individual's other sources of income and taxes paid on total income. A limitation is that as it is not constituted as a distinct and separate legal entity, that may be divided and sold to others, mobilisation of equity capital from the market is difficult in the case of partnerships, there are two options. In the case of a general partnership, active owners, called general partners, assume unlimited liability for all debts in operation.

In the case of a Company, the assets and liabilities of Company are owned by the Company. Owners have limited liability. However, a major limitation is the element of double taxation, in terms of both the profit of the concern as well as dividend incomes of shareholding individuals of other firms are taxable. A private limited entity.^{lv} Facilitates expansion of membership base and relatively free entry and exit of members and is more sustainable. A private limited entity can, however, restrict right to transfer its shares. It can have a maximum of 50 members not excluding employees (who may also be shareholders). A public limited enterprise must have at least 7 members whereas a private company may have only 2 members. A Public Company need have a minimum paid up capital of INR 5 Lakh. In India, a section 25 company is a "not-for-profit" entity for promoting objects such as infrastructure, technology or needs prior Government approval for changing its objects. It cannot, however, issue dividends to members. The Company deploys profits/surplus for furthering objectives.

There are several options that may be considered.^{lv} The following sub-sections elaborate in the Indian context.

4.1. INDIVIDUAL ENTREPRENEURSHIP OPTIONS

4.1.1. Partnership

A general partnership concern may involve 2 to 20 individuals. The name of a partnership firm may be similar to another existing firm. However, there should be no fraudulent intention, that is, for instance, sanction, approval or 'patronage' of the Government should not be implied. A deed must be duly stamped as per requirements of the Indian Stamp Act of 1889 and a copy filed with the Registrar of firms. Typically, smaller projects not involving high debt requirements or resource outlays are registered as partnership firms.

The deed must specify the profit sharing and loss bearing proportion of net profit or loss of the business of partnership after remuneration to partners and other terms and conditions agreed by the partners as per the deed of partnership. This, for instance, may include:^{lvi}

- Specification that no partner can assign, sell, lease or otherwise transfer interest without the consent of all other partners;
- Additional partners may be admitted into partnership with the consent of all partners;
- Any partner can retire from the partnership by giving one-month notice in writing; on the death, retirement or insolvency of a partner; the other partner shall continue the business of partnership;



- Disputes should be referred to the arbitration and should be settled in accordance with ‘the provision of the ‘Arbitration and Conciliation Act, 1966 and statutory modification thereof.
- In other respects, provisions of the Indian Partnership Act, 1932 would be applicable.
- Specification of the managing partner and working partner as well as on 2 operators of the partnership, the bank account need to be specified.

4.1.2. Private Limited Companies

A Private Limited entity facilitates expansion of membership base and relatively free entry and exit of members and is more sustainable. Unlike a partnership, death of a partner and legal action between partners will not dissolve/rock the consortium entity. A Private Ltd. entity can, however, restrict right to transfer its shares. It can have a maximum of 50 members not excluding employees (who may also be shareholders). In a Private Company, its Articles of Association ensure several features. These include:

- Cannot make offer in terms of public subscription to shares/ debentures.
- Offers invitation and accept deposits only from members and directors/ their relatives. Minimum paid up capital need be INR 100,000.
- Shares in a company are freely transferable, subject to certain conditions.
- A company is managed by a Board of Directors. A company specifies both a Memorandum and Articles of Association.
- A memorandum need indicate name of the consortium, registered office, objects, capital and liability etc. The Board of Directors may retain control with regard to transfer of shares to new members The quorum for a meeting of the board needs to be decided.
- The articles of association specify internal regulations of the company that help govern management of internal affairs and conduct business. These may be changed by members passing a special resolution.
- The above need to be filed with the registrar of companies.

Assets in the name of the firm contribute to sustainability: A company has a distinct legal entity, different from its members Its assets and liabilities are in its own name, not its members This element also contributes to sustainability regardless of possible disputes between some members This feature also makes it the preferred constitution from a lending-banker’s perspective. It can own property and operate a bank account.

‘Going concern’ with limited liability also indicating sustainability orientation: A company is a perpetual entity and exists unless wound up or having achieved its objectives. Shareholders/membership of a company may change. Such change and even death of members do not affect the existence of the company. Liability of a member is limited to face value of shares held by the member.

Modalities for incorporation: The modalities for incorporation include the following - specify in order of preference at least 4 names indicative of the main objects of the company; name should not resemble that of any other registered company- other provisions are similar to that of a partnership; apply to the concerned ROC to ascertain the availability of name in Form-I A of General Rules and Form; draft and sign Memorandum and Articles of Association



vetted by ROC; the Memorandum and Articles need to be signed by at least two subscribers in their own hand, with father's name, occupation, address and the number of shares subscribed for and the signing should be witnessed by at least one person.

The following forms need to be filled and signed: Declaration of compliance (Form-I); Notice of situation of registered office of the company (Form-18). Particulars of Director, Manager or Secretary (Form 32)

4.1.3. A Public Limited Entity

A public limited enterprise must have at least 7 members whereas a private company may have only 2 members A Public Company need have a minimum paid up capital of INR 500,000. Application with supporting documents needs to be filed with the concerned registrar of companies. The following need be submitted:

- Memorandum and articles of association (duly stamped) with duplicates
- Copy of letter of registrar - name availability
- Documents indicating payment of necessary registration and filing fee (bank draft, etc.)
- Documents evidencing directorship and situation of registered office and declaration of compliance with requirements of the Companies Act for giving consent to act as a director in case of a Public Ltd. Co.

The registration fee payable is related to the amount of authorised capital of the company.

Upon complying with requirements the registrar will register the company and issue a certificate of incorporation of company and the company's existence as a legal entity is confirmed. Thereafter, share capital is issued.

Issue of capital: In the case of private limited companies, capital may be raised by private arrangements whereas for a public limited company it may be raised from the public. Initially shares will be issued to subscribers to its memorandum and other members Issued capital must not exceed authorised capital. In India, a public limited entity need obtain a certificate of commencement of business (see Ministry of Corporate Affairs - www.mca.nic.in).

Private versus public limited entities: The tabulation following presents some of the critical distinguishing features^{vii} of public vis-a-vis private limited firms.

Table 9: Public versus Private entities

Parameter	Private Company	Public Company
Number of members	Minimum number of members is two, maximum being 50	Minimum of 7 members with no maximum limit
Directors	Minimum of 2 directors	Minimum of 3 directors; There are also provisions regarding appointment in terms of consent, and qualification shares



Prospectus	Filing of a prospectus or a statement in lieu of prospectus with the registrar of companies is not necessary before a company allots shares	Filing of prospectus or statement is necessary
Statutory Meeting	Not necessary to hold a statutory meeting	Entity must hold a statutory meeting and forward the same to the registrar
Allotment of shares	Can commence allotment of shares before minimum subscription has been applied for	Cannot commence allotment prior to subscription of shares
Memorandum and Articles of Association	Two members need sign	Seven members need sign
Transfer of shares and filling of balance sheet	Transfer of shares is restricted by articles. Need not file a balance sheet with the registrar	Shares are freely transferable. Balance sheets must be filed with the registrar.

4.1.4. Section 25 Company

In India, a Section 25 company is a ‘not-for-profit entity’ evolved as a limited entity for promoting objects such as infrastructure, technology or commerce. In fact, a Sec. 25 company needs prior Government approval for changing its objects. Also, it cannot however issue dividends to members. The Company deploys profits/surplus for furthering objectives. The Central Govt. by grant of licence (under Sec 25 of the Companies Act, 1956) registers a limited liability company. As a matter of fact, in India, Special Purpose Vehicles (SPVs) of industry associations for implementation of PPP projects are often constituted as Section 25 companies.^{lviii} This is particularly where the financial implications are very large. The obligations and privileges are that of Limited companies with assets in the name of the company.

Non-Banking Financial Corporations (NBFCs) viz. MFIs may be licensed under Section 25 of the Companies Act, 1956, but not providing credit beyond INR 50,000 for a business unit may be governed under this act. Sec 25 Companies have benefit of exemptions from certain provisions of the Companies Act, 1956:

- Exempted from publication of name and registered address by the company.
- Prior approval of Central Government for increasing the number of directors is not necessary.
- The quorum of the Board Meeting is 8 members or 1/4th of its total strength, whichever is less, but it should not be below 2 members in any case.
- Sec 25 companies can hold Board Meetings, Executive Committee meetings once every 6 months (not necessarily every quarter).



4.1.5. Limited Liability Partnership

A Limited Liability Partnership (LLP) is a partnership in which some or all partners (depending on the jurisdiction) have limited liabilities. In an LLP, each partner is not responsible or liable for another partner's misconduct or negligence. This is an important difference from the traditional unlimited partnership under the Partnership Act, in which each partner has joint and several liability. In an LLP, some partners have a form of limited liability similar to that of the shareholders of a company. Unlike corporate shareholders, the partners have the right to manage the business directly. In contrast, corporate shareholders have to elect a board of directors who hire managers.

Limited Liability Partnerships are distinct from limited partnerships in some countries, which may allow all LLP partners to have limited liability, while a limited partnership may require at least one unlimited partner and allow others to assume the role of a passive and limited liability investor. As a result, in these countries, the LLP is more suited for businesses in which all investors wish to take an active role in management.

However, partners may be deemed liable for omissions or actions done by themselves if they lacked the relevant authority from the partnership or the affected party knew that such partner lacked authority or had no reason to believe that such person was a partner in the partnership. Registration is what vests such legal personality upon the entity. Registration is done by the registrar of Companies after meeting. The requirements set out in the Limited Liability Partnerships Act.

The Limited Liability Partnership Act 2008 was published in the official Gazette of India in 2009. The first LLP was also incorporated in the year 2009. LLP is different from a Limited Partnership. It operates like a limited partnership, but in an LLP each member is protected from personal liability, except to the extent of their capital contribution in the LLP. In India, for all purposes of taxation (service tax or any other stipulated tax payment), an LLP is treated like any other Partnership firm. Partners liability is limited to their agreed contribution in the LLP.

The Registrar of Companies (RoC) registers and controls LLPs too.

Some characteristics of an LLP:

- Separate legal entity: Like a company, LLP also has a separate legal entity. So the partners and the LLP in are distinct from each other. This is like a company where partners are different from the company.
- No requirement of minimum capital: In the case of companies there should be a minimum amount of capital that should be brought by the members or owners who want to form it. But to start an LLP there is no requirement of minimum capital.
- Minimum number of members: To start a limited liability partnership at least two members are required initially. However, there is no limit on the maximum number of partners.
- No requirement of compulsory audit: All the companies, whether private or public, irrespective of their share capital, are required to get their accounts audited. But in case of LLP, there is no such mandatory requirement. A limited liability partnership is required to get the audit done only if: If the contributions of the LLP exceeds INR 25 Lakh or If the annual turnover of the LLP exceeds INR 40 Lakh.



The benefits of an LLP are many:

- It is more flexible to organize the internal structure of LLP. Comparatively, it is complex to organize the internal structure of a company.
- There is no maximum limit for the number of partners in LLP. In the private limited company, shareholders are limited to the extent of 200 shareholders.
- Raising and utilization of funds depends on the partners will. Funds can be bought and utilized only as per the norms listed under the Companies Act, 2013.
- LLP is exempt from Dividend Distribution Tax (DDT). Company has to pay DDT on dividend distribution.
- The professionals like CA, CS, Advocates, engineers, Doctors prefer to register LLPs.

4.2. GROUP ENTREPRENEURSHIP OPTIONS

Self Help Groups and Farmer Producer Organisation may also undertake entrepreneurial activity. The concept of Producer Company in India was introduced to allow cooperatives to function as a corporate entity under the Ministry of Corporate Affairs. A Producer Company in India is typically registered under the Companies Act, 2013.

The Companies Act defines a producer as any person engaged in any activity connected with or relatable to any primary produce (Produce: “things that have been produced or grown, especially by farming”). A Producer Company is thus a body corporate having an object that is one or all of the following:

- production, harvesting, procurement, grading, pooling, handling, marketing, selling, export of primary produce of the Members or import of goods or services for their benefit.
- Further, the Producer Company must deal primarily with the produce of its active Members and is allowed to carry on any of the following activities by itself or through other entities – on behalf of the members.
- processing including preserving, drying, distilling, brewing, vinting, canning and packaging of produce of its Members;
- manufacture, sale or supply of machinery, equipment or consumables mainly to its Members;
- providing education on the mutual assistance principles to its Members and others;
- rendering technical services, consultancy services, training, research and development and all other activities for the promotion of the interests of its Members;
- generation, transmission and distribution of power, revitalisation of land and water resources, their use, conservation and communication relatable to primary produce;
- insurance of producers or their primary produce;
- promoting techniques of mutuality and mutual assistance;
- welfare measures or facilities for the benefit of Members as may be decided by the Board;
- any other activity, ancillary or incidental to any of the activities which may promote the principles of mutuality and mutual assistance amongst the Members in any other manner;
- financing of procurement, processing, marketing or other activities which include extending of credit facilities or any other financial services to its Members.



To register a Producer Company in India, the following members in any of the combination is necessary:

- Ten or more individuals, each of them being a producer; or
- Two or more producer institutions; or
- A combination of ten or more individuals and producer institutions.

The registration process for a Producer Company is then similar to that of a Private Limited Company. DSC and DIN must first be obtained for the proposed first Directors of the Producer Company. Once, DSC and DIN are obtained, application for name reservation can be filed with the Registrar of Companies (ROC). The name of a producer company must end with the words “Producer Limited Company”. Once, name is approved by the ROC, application for incorporation can be filed in the prescribed format for incorporating the Producer Company. If the Registrar is satisfied with the application for incorporation of Producer Company, then he/she will approve the same and issue Certificate of Incorporation. Once, a producer company is incorporated, it shall function similar to a private limited company subject to certain provisions. However, unlike a Private Limited Company, a Producer Company does not have a limit on the number of members. Further, though the name of a Producer Company ends with the words “Producer Limited Company”, it shall under no circumstance become or be deemed to become a public limited company.



CHAPTER 5

BUSINESS PLAN

Highlights

The purpose of business plan is: To highlight resource needs & means to procure them; to demonstrate the viability of the business proposition and the potential to repay credit realised, and study risk. A business plan must include the purpose of the business plan, promoter's profile, details of the proposed project, market potential, manufacturing process, Income & Expenditure statement and profitability projections.

An enterprise needs to secure a sustainable competitive advantage in terms of cost advantage, differentiation advantage or niche market advantage. Market research provides important information to identify and analyse the market needs, market size and competition.

The method of collecting information as part of market study includes a study of secondary information i.e. published information. It also includes primary study by interaction with existing and potential enterprises, traders, industry associations, financial and other support institutions. The information needs for market analysis include: segmentation of customers and consumers; estimating demand and its determinants; competition and supply and marketing channel: product promotion and policy.

Product mix and pricing decisions are important for projecting and optimising sales revenues, planning a marketing strategy and while offering sales incentives. For pricing decisions, marginal cost based pricing method is an option. Two aspects critical in a market plan are channel motivation and selling incentives.

Technical analysis of a project involves: technology choice; production programme; plant capacity; manpower requirement; selection of location; layout plan and pollution control and waste disposal plan.

The economics of a business plan considers the cost of establishing a project, means of finance, and income and expenditure as well as profitability projections on an annual basis. Income, expenditure and profit projections are typically made till the period of repayment to financial institutions.

The significant elements of project cost are cost of land, buildings, machinery and other fixed assets, as well as technical know-how expenses, preliminary and pre-operative expenses



including interest during construction period, working capital margin and contingency costs. The project cost comprises provision for contingency, that is, provision made for escalation of cost of equipment, for instance, in the lag between plan preparation and project implementation.

The common means of finance are term loan, subsidy or equity. Equity capital is promoters' contribution or money contribution by others in terms of deposits and unsecured loans.

Capacity utilization and income estimates need be projected over time, usually, at least till the period corresponding to the repayment of term loans from institutions. Expenditure estimates may consider elements related to raw material, consumables, power and utilities, wages and salary, repairs and maintenance expense on assets, rent, taxes and insurance, administrative expenses, selling expenses (such as commission to dealers), as well as interest cost.



5.1. INTRODUCTION: CONTENT STRUCTURE

This chapter provides an introduction to a business plan for a micro-sized or small enterprise. The purpose of a Business Plan is: To highlight resource needs and the means to procure them; to demonstrate the viability of the business proposition and the potential to repay credit realised and to study and anticipate risks. A Business Plan must include the following:

- **Project Profile/Snapshot**

The purpose of the business plan, location, resource requirements, volume of business, a brief note on market/customers-consumers and financial highlights.

- **Promoter/Entrepreneur Profile**

Promoter's qualification, training and experience relevant to the project.

- **Details of the Proposed Project**

Requirement of project cost and working capital and means of finance.

- **Market Potential**

Brief on potential customers, competition and marketing strategy.

- **Manufacturing Process**

Description of the manufacturing process, plant capacity, etc.

- **Income statement**

Plant capacity, capacity utilisation, quantity produced/sold and sales realization.

- **Expenditure statement**

Cost of raw materials, utilities, manpower, repairs and maintenance, selling and distribution expenses, administrative expenses, interest on loans, depreciation and any other expenses.

- **Profitability Projections**

Sales, cost of manufacturing, tax liabilities, repayments, retained profit/loss.

Project Options

A range of projects from primary processing to secondary and tertiary processing may be considered. Following is a tabulation:

Table 10: Category wise commodities and scope of projects

Sr. No.	Category of Commodity	Commodities	Primary processing projects	Secondary / Tertiary processing projects
1	Pulses	Tur, urad, moong, Gram	Cleaning and grading Unit, Mini-Dal Mill	Pulse Flours (Besan), Extruded/Fried/Baked snacks (namkeens)
2	Grain	Wheat	Cleaning and grading Unit	Wheat Flour, Atta, Semolina, Puff/Flakes
3	Millet	Bajra, Sorghum, Maize	Post-harvest Drying Unit	Maize flour, Roasted bajra, Corn grit, corn flakes



4	Grain	Rice	Rice mill	Rice flour, Rice papad, Rice flakes
5	Oilseed	Soybean	Cleaning and grading Unit	Soy milk, tofu, yogurt, flakes, nuggets/granules
6	Oilseed	Groundnut	Decortication, Cleaning and grading unit, Roasted groundnut	Groundnut powder, Spiced and peeled groundnut, paste
7	Oilseed	Safflower	Cleaning, grading and packaging	Oil, Cosmetic, seed
8	Fruit	Pomegranate	Waxing, grading and packaging	Juice, Seed Oil, peel powder, anardana
9	Fruit	Banana	Ripening, grading and packaging	Chips, pulp
10	Dry fruit	Cashew	Grading	Cashew nuts
11	Fruit	Orange	Waxing, grading and packaging	Juice, pulp, syrup
12	Vegetable	Lemon-sweet lime	Waxing, grading and packaging	Juice, pulp, syrup
13	Fruit	Strawberry	Grading and packaging	Jam, jelly, juice, pulp, syrup
14	Fruit	Mango	Ripening, grading and packaging	Jam, jelly, juice, pulp, syrup
15	Vegetable	Onion, Onion seeds	Grading and packaging	Dehydrated, powder, spices
16	Vegetable	Tomato	Grading and packaging	Puree, ketchup, pulp
17	Vegetable	Cabbage, okra, chilli, brinjal	Grading and packaging	Blast Freeze, vacuum frying, chilli powder and chutney
18	Vegetable	Sweet Corn	Grading, shredding and packaging	Conning
19	Vegetable	Potato	Cleaning, grading and packaging	Potato chips, papad,
20	Spice	Turmeric	Turmeric powder	Turmeric- Essential oil

5.2. MARKET ANALYSIS

A sustainable competitive advantage need to be secured by an enterprise vis-à-vis its competitors and a market/business plan has to be prepared in this context. Competitive advantage may be in terms of cost advantage, differentiation advantage (real or rationale), or niche market advantage.

With regard to:

- cost advantage, an enterprise should be able to manufacture and sell products at a lower cost than competitors.
- a differentiation advantage may be real in terms of better quality of products or notional in terms of brand image.



- a niche market advantage may include the ability to cater to low volume or small market segments in terms of customised products.

The following sub-section elaborates on information needs and on its collection for effective market analysis.

5.2.1. Information needs

The information required for studying the market includes geographic and specific segment related information on the target market, estimating demand and its determinants, competition and supply, etc.

Segmentation of Customers and Consumers

- The proposed product has to be scrutinized in the context of target markets. This may also involve identification of target market area, segments, and customer and consumer groups. It is necessary to determine geographical boundaries of the market on the basis of market protection through import duties, transport constraints, perishability –fragmented market (?), financial resources of the entrepreneur, etc.
- Determinants of customer and consumer choice of a product over competing products must be identified.
- Segmentation involves categorizing potential customers and consumers into similar sub-groups in terms of income levels, tastes and preferences, etc.

Estimating Demand and its Determinants

- A market study of demand trends and its determinants needs to be done. Is it seasonal? What are trends and their variations over seasons, etc.?
- Why is a product or service bought/likely to be bought? Some products may be bought for convenience. Some products like fruit drink may be bought on impulse purchase basis as a fun-drink.
- Sector trends in establishment expansion and closure of enterprises have to be also studied as these also affect demand.

Competition and Supply

- It is necessary to study the selling incentives offered by potential competitors. What is the basis of competition: price, brand or quality?
- Information on competitors with regard to product-mix, output and pricing strategies need to be studied.
- Supply constraints may pertain to electricity shortage, transport bottlenecks, raw material scarcity etc. Import trends of competing products, changes in customs duties on raw material and finished products need be studied. Cartels amongst suppliers and competitors have to be studied. Business practices, ethical or otherwise, also have to be studied.

Marketing Channels: Product Promotion Policy

- It is also necessary to scrutinise channels of distribution, extension of credit, dealer discount, etc.
- It is important to analyse trends in government policy with reference to import of raw material inputs or finished products.



5.2.2. Modes for Information Collection

The method of collecting information as part of a market study includes study of secondary information, i.e. published information. These include journals and publications of the concerned Ministry, industry and project reports from financial institutions and industry associations.

It also includes a primary study consisting of interaction with existing and potential entrepreneurs, industry associations, financial and other support institutions.

To elaborate, the sources of information are: Manufacturers of equipments; potential customers ('buyers' or 'middlemen') and consumers; competitors; consulates of foreign embassies in India and Indian embassies abroad; export promotion councils and customs authorities; industry support agencies of the Government and private consultants; industry associations and financial institutions, R&D Institutions, concerned Ministries, etc.

5.2.3. Specific Market Related Aspects to be Studied

- What is the product-mix and market mix of potential competitors? What are the trends over different seasons in a year? Is it possible to categorize competitors into different groups based on such aspects?
- What are the major strengths and weaknesses of important competitors? How does one position an enterprise and its products in this context?
- How do existing enterprises price their products? Is it a uniform method for all marketing channels? How does one convert existing customers and consumers of the competitors' products?

The sub-section below elaborates on the method of primary data collection.

5.2.4. Primary Data Collection: Steps, Questionnaire Design and Analysis

The important steps in primary data collection include:

- Identification of individuals/institutions/enterprises from whom information is to be collected. One may draw a sample, viz. only some items from the population. In the case of smaller enterprises, a judgemental/stratified selection of the sample may be appropriate.
- One may prepare a questionnaire-schedule to collect information.

This personal administration of a questionnaire by an entrepreneur or his representative is ideal, particularly for smaller projects targeting smaller markets in terms of geographical segments.

- Who are the 'customers' and 'consumers'? A customer is one who buys a product (such as a retailer) but may not necessarily use it (unlike a consumer).
- Why, how and from where do they buy products? Is it for taste, is it on the basis of planned purchase, or is it on impulse purchase, etc.?
- What are the product features and marketing strategy of competitors? Is it channel motivation in terms of retailer margins that is the determining factor?
- How are actors in different marketing channels motivated? Discounts or margins? Brand, Quality, etc.?



- Responses collected through a questionnaire or questionnaire-schedule then need to be tabulated. Data analysis can be done by using simple techniques.

The demand determining variables have to be isolated. It is ideal to pursue market segment-wise analysis. Elementary statistical concepts of percentages, average, weighted average, and mode may be used for studying trends in demand and its determinants. An important aspect of primary data analysis is sample identification. A sample is a group of elements selected from a population whose perceptions or characteristics are to be identified. For instance, some sampling method adopted may include: simple random, stratified or judgemental sampling. With regard to size, a minimum sample of 30 may be considered as a thumb-rule. It may be a tiny fraction of the population.

Under the MACP, about a 1000 start-ups have been catalysed by the ABPF. These start-ups are largely into secondary and tertiary processing and are typical micro and small-sized enterprises. Importantly, many of these start-ups have been adopting various marketing strategies.

Marketing Strategies by Start-ups: Learnings

Rujal Production is a proprietary concern into the business of herbal product and health food supplements manufacturing on micro-scale. The lady entrepreneur has established a small unit with own finance in District Pune. The products being manufactured by the enterprise are amla, jamun, bitter gourd, ashwagandha, shatawari and such powders as well as gulkand, shatawari kalp, chyavanprash, sauf (for household purposes), face pack, hair pack, mehendi, shikekai and hair oil. The entrepreneur has adopted a marketing strategy involving tie-ups with the majority of medical stores in and around Pune. Notably, the products are also sold through Patanjali outlets under the Rujal Production brand. Door to door sales is another marketing strategy adopted by the entrepreneur.

Ruchi Food Products in Pune is into processing of pickles and chutneys and papads. The project comprises machinery and equipment like roasters, pulverisers, coating machine, oven, dryers and packaging equipment. The enterprise markets its products through on-line channels such as Amazon as well as through large retail chains like Reliance and More.

Sulabh Industries in Nagpur produces pulses, by-products like chunni, bhusi and khanda. The entrepreneur sells the products through commission agents, wholesalers and retailers. The promoter leveraged on family experience of many years in the pulses processing business and this has enabled strong connection with consumers across Nagpur and other regions of the country.

Bhumata Food Products in Ahmednagar district processes various products such as coriander powder, cumin powder, chilli powder, turmeric powder and 'Nachani Sattva'. The entrepreneur deploys a unique marketing strategy using referrals from doctors to market Nachani Sattva.

Kisan Agro Foods in Aurangabad produces carbonated soft drinks such as mango drink, coconut water, guava juice and mixed fruit drinks etc. The entrepreneur markets through a large number of wholesalers and retailers to market his produce. He offers higher discounts to retailers than other competitors do.



5.2.5. Market Mix Analysis

The objective of this section is to explain important concepts with regard to market and product-mix decisions on the structuring of a market plan in a venture. Concepts such as marginal cost based pricing and contribution analysis are also dealt with in the chapter. These tools facilitate effective market planning and marketing of products/services of a venture. Product-mix and pricing decisions are critical decisions to be made while projecting sales revenues and planning a marketing strategy and while offering sales incentives.

The Product/Market - mix and a Market Plan

A market plan of an enterprise has to decide on aspects such as product positioning, packaging and real time differentiation that products of an enterprise offer vis-à-vis the products of competitors. What do competitors and other players do: The larger players operating in a segment may spend on advertisements to both sell the product concept as well as establish a brand image. Marketing emphasises on encouraging consumer ‘pull’ or demand for products. The smaller players may use the retailer-focused strategy or direct marketing for consumers. They may focus on a customer (retailer) push strategy by giving them higher margins or by setting up “point-of- sale” displays at retail outlets.

Costing and pricing: Marginal Cost Based Pricing

As an illustration on selected costing and pricing tools, consider the case of a small enterprise. The estimates in the table given below are annual cost of production estimates of an enterprise that could manufacture 20,000 bottles of tomato sauce (1 kg bottle) per annum.

Table 11: Break-even level of operation of enterprise

Elements of cost	Variable Cost	Fixed Cost
Inputs and consumables	11,00,000.00	-
Electricity	70,000.00	5,000.00
Labour	6,00,000.00	-
Interest	-	1,80,000.00
Other Expenses	5,000.00	5,000.00
Depreciation	-	10,000.00
Total	15,75,000.00	2,00,000.00

Selling price (SP) of the product per piece is about INR 140. The enterprise could therefore earn a total sales revenue of about INR 28 Lakh per annum.

$\text{Break-even point (BEP) capacity} = \frac{\text{Total Fixed Cost} \times 100}{\text{Total Sales Revenue} - \text{Total Variable Cost}} = 16.32 \%$
--

Beyond breakeven, i.e., production in excess of about 3264 pieces, it is on the basis of marginal costs (per unit) that pricing may be made as all fixed costs are covered at break-even level. Hence, till BEP level of activity the costs work out to INR 88.75 per bottle. Beyond BEP the cost that



need be considered is about INR 78.75 per bottle. The selling price may be assumed at cost per piece plus 20 percent profit margin for instance. In more price competitive markets or for volumes customers, costing may be on the basis of marginal costs and for others on the basis of total cost per piece.

5.2.6. Channel motivation and selling incentives

Two critical aspects in a market plan are channel motivation and selling incentives.

Channel Motivation: The marketing channel motivation involves identifying the right channel, and thereafter, appropriately motivating channels so as to effectively sell one's products/ services. A manufacturer may encourage a distributor by increasing dealer discounts or margins. This is a customer 'push' strategy that one may adopt. One may also invest in advertising or promotion through media and develop brand equity, and thus encourage 'demand' of products by consumers-a consumer pull strategy.

Selling Incentives: Such incentives may be in terms of reduced prices for large offtake, offering 'two products for the price of one' product building and such other options. They serve as an incentive to buy. Selling incentives to promote sales amongst consumers therefore include reduced price packs and bonus packs. Sales incentives for sales personnel may include a commission on sales.

5.3. TECHNICAL ANALYSIS

Critical technical issues in terms of project and product selection, technology assessment, production programme and plant capacity are important.

Critical Technical Issues and Product Selection: Technical coefficients are an important input. There are such questions as input-output relationship between selected products, shelf life of a product and local climatic conditions – answers to which must come from technical experts.

Technology Assessments, Production Programme and Plant Capacity: Technology Choice (often a function of the investment potential): Selecting appropriate technology and supplier is most critical.

Production Programme: The production programme may be described and justified in relation to: Market requirement and marketing strategy; input requirements and supply programme; technology and economy of scale in the sub-sector – low Break-Even Point (BEP); minimum economic size and equipment constraints and resource and input constraints.

Plant Capacity: The following points must be considered in order to determine the plant capacity to be set up: Investment related to various sizes and investible surplus/preference; the minimum economically viable size of the plant; the common plant size in existing small-scale enterprises now functioning; the size of the market and outlook; benefits and concessions/ holidays offered by the Government and the cost of expanding plant capacity at a later date vis-à-vis that of establishing a larger plant.



5.4. ESTIMATION OF MANPOWER REQUIREMENT, SELECTION AND LAYOUT

Manpower Requirement

People are required for the following purposes:

- Production (skilled/semi-skilled workers)
- Supervision (technicians)
- Administration, sales and miscellaneous work (staff)

It is important to analyse and estimate manpower needed.

5.5. SELECTION OF LOCATION LAYOUT, POLLUTION CONTROL

How will one go about location/site selection? Initially, identify two or three sites in different locations. A checklist may be employed: physical infrastructure position (power, water, road etc.); commercial infrastructure position (telecommunication, banking, etc.); social infrastructure position (housing, health, etc.); financial incentive position (investment subsidy, income-tax concession, etc.) and site-specific considerations (land price, etc.) and site development costs, etc.

Sources of Information on Location

Some sources are: Industrial estate officials; revenue department officials; State Electricity Board; public works department; office-bearers/key members of local industry associations; officials in bank/State Financial Corporation; officials in District Industries Centre; Panchayat officials and town and country planning authorities.

Layout Plan

A layout plan must be decided. That is, where exactly each facility – raw material, storage, individual machines, packaging, finished goods storage, quality control unit – will be located. The space for each of these purposes must be worked out. The distance between one facility and another or one machine and another must be fixed. The flow of production process and space requirements for material handling and manpower requirement determine the layout. This will help determine the gross built-up area for the enterprise.

Pollution Control

The State Pollution Control Boards have described norms, policy and procedure to treat pollutants generated by industries. In some cases of non-polluting industries an application form has been prescribed to obtain 'No Objection Certification'.

It is necessary to make sufficient provision in the cost of the project to establish the facilities to treat and dispose of the waste. The location study should consider the extent of effluent discharge and the possible manner of disposal at alternative locations.

5.6. PROJECT ECONOMICS

The economics of a business plan critically considers the cost of establishing a project, means of finance, income and expenditure as well as profitability projections on an annual basis. Income, expenditure and profit projections are typically made till the period of repayment to financial institutions. It is necessary to understand practices and norms regarding working capital assistance and Debt Service Coverage Ratio (DSCR) required by different financial institutions, given the



diversity in this regard. The chapter also presents a detailed case illustration on projecting the financial statements of a business plan.

The following sub- sections introduce major components of financial viability preparation and assessment.^{lix}

Project cost: The cost of a project refers to the investment required for establishing an enterprise. The significant elements of project cost are cost of land, buildings, machinery, and other fixed assets, as well as technical know-how expenses, preliminary and pre-operative expenses including interest during construction period, working capital margin and contingency costs. The project cost also comprises provision for contingency, that is, provision made for escalation in cost of equipment, for instance, in the lag between plan preparation and project implementation or due to currency fluctuations with respect to imported machinery, etc.

Means of finance: The common means of finance are term loan, subsidy or equity. Equity capital is promoters' contribution or cash contribution by others in terms of deposits and unsecured loans. Regardless, the minimum amount of promoter contribution could be specified at a minimum of between 10 to 33 percent of project cost by different lending institutions. In some government schemes, however, such as the PMEGP, women promoters need to bring in only 5 percent as their contribution to project cost.

Working capital, margin and its assessment: The resources required to operate a firm is working capital. The proportion of this working capital permanently invested in business is referred to as the working capital margin, and is included in the project cost. The estimation of this margin involves selecting the year at which an enterprise breaks-even as the reference year. This involves:

Raw material stock: Projecting raw material (and consumables, packing material) input required as well as unit price/s of such inputs to produce slated output. The 'lead' time between order placement and receipt should be accorded due consideration. The procurement function can be optimised by more dynamic entrepreneurs by backward integration into trading activity partly and also availing of services like the eNAM.

Optimising procurement: Backward integration into trading

Backward integration into trading is a feasible option to benefit from scale economies as well as from difference in prices between the harvest and lean seasons. Stocking of inputs for own processing and using the same is also critical as a firm grows as to optimise and minimise procurement costs. For example, onion may be procured by a horticulture processing firm at INR 7 per kg or INR 7000 per tonne during harvest season. With weight loss of 20-30 percent over storage etc., the increased value accruals when sold in November at about INR 16000 per tonne is about 60 percent. Considering cleaning, grading and packaging costs of even 3 percent and cost of storage of 50 MT at rental charges of INR 50,000 for 6 months in storage sheds in rural areas, the ROCE of this procurement and trading operation could be 30 to even 40 percent. About INR 50 Lakh is required to procure about 700 Tonne of onion. In the case of potatoes likewise, one kilogramme may be sourced at INR 9 during Nov-Dec, kept in cold store for a few months and then sold at even INR 18 per kg. Storage in cold stores will involve service charge of about INR 500 per MT. Such initiative will optimise procurement cost for firms as well as serve as an additional revenue stream for such firms.



Procurement option from mandis through e-NAM

Entrepreneurs can also procure through e-NAM. The National Agriculture Market (NAM) is a Pan-India electronic trading portal which networks the existing APMC mandis to create a unified National Market for agricultural commodities. It provides a single window service for all APMC related information and services. The e-NAM is the largest e-trading platform for Indian traders in online trading, assaying, weighment integration, providing mobile app, online payment, warehousing and transportation logistics. By 2018 e-NAM has been introduced in over 585 mandis in 16 States and 2 UTs. The regions include Andhra Pradesh, Chandigarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Madhya Pradesh, Maharashtra, Odisha, Puducherry, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand and West Bengal. The commodities registered on e-NAM are 16 food grains, 13 oil seeds, 21 fruits, 27 vegetables, 6 spices and 7 other miscellaneous commodities. The total number of commodities registered on e-NAM is 90. By June 2018, the total quantity traded on e-NAM was 3712 MT and the contribution in total National quantity traded is 0.02 %. The total traded value is INR 4.89 Crore. The number of commodities traded is 59. The total number of farmers registered on e-NAM is 16,776 and the contribution in total farmers registered on e-NAM is 0.16%. The total number of traders registered on e-NAM is 1434. e-NAM is being developed to include more commodities to be traded to broaden the scope and concentrate on creating assaying facilities for commodities having potential for inter-mandi trade. They are deploying computer literate (trained) manpower in mandis to carry out day to day operations like bid creation, winner list generation, agreement and invoice generation etc. and also has to promote Inter-Mandi Trade to increase competition. Soon e-NAM may encourage the traders to participate in online bidding by providing some incentive in form of rebate in Mandi fee and Unified License, etc. and should promote Inter-Mandi Trade to increase competition. Ideally, there should be 4-5 trained manpower in each mandi; 2 Computer literate manpower deployed in 10 mandis; manpower needs to be strengthened in all mandis. Internet connectivity with 5 MBPS dedicated Internet Leased Line (ILL) is required; 3 mandis (Ramgarth, Ranchi, Jamshedpur) have 6 MBPS dedicated Internet Leased Line (ILL) to be made available in all mandis for efficient operations of e-NAM. Assaying lab, equipped with appropriate equipment and 3-4 trained analysts is also required as those are not available in any mandis. e-NAM is an electronic trading platform or portal networks APMC and other market yards to create a unified national market for agricultural commodities. It is a virtual market but with physical market 'mandi' at the back end. Objective of E-NAM is to remove fragmentation of markets, lower intermediation cost etc. - competitive cost agricultural economy- real time price discovery etc. For this, the state APMC Act must have provision for electronic trading, state APMC Act must provide for issue of licences to anyone to trade through NAM in local mandis, unified single state wide license and single point levy of transaction fee. Common procedure for license issue, levy of fee and movement of produce are expected to develop an integrated value chain and scientific storage and movement of Agri goods; there is need to ensure quality assaying parameters for commodities, direct payment to farmers, weighbridge integration, warehouse based trading, online payment/ assured payment, training farmers, traders, commission agents and officials.



Success in e-NAM

Two mandis have been given excellence awards: Excellence Award to Solan (HP) mandi for excellence in administration and for achieving the unique distinction of submitting maximum trade entries under e-NAM category; Excellence Award to Nizamabad (Telangana) for outstanding performance on e-NAM for enrolling 49,975 farmers and 113 commission agents, for actively trading paddy, maize, turmeric and to an extent pulses on e-NAM and for advanced equipment in place for testing and grading.

Failure in e-NAM

The e-NAM system introduced in Asia's biggest chilli market at Guntur, has been a failure. Reasons for the failure are: traders are showing reluctance to do business under the new online system; traders claim its norms were unacceptable to the traders. Currently, traders are offering payments to the chilli growers in 15-45 days of time. Under e-NAM, traders are directed to clear payments within 10 hours, which they are reluctant; unable to take back the produce, farmers are forced to store in cold storages due to absence of buyers; after a few weeks / months, they were lured back again into the hands of traders for requirement of money to start the next cycle crop.

- Work-in-progress: Projecting value of goods under production at any point of time.
- Finished-goods stock: Projecting the level of stock of finished goods and valuing it at cost. An enterprise producing in anticipation of demand, unlike job-workers or sub-contractors, may carry substantial stock of processed/semi-processed finished goods.
- Credit sales: Projecting total sales on credit in terms of duration. Only production cost of sales is considered.
- Operating expenses for about one month by way of expenditure on components like insurance, salary and wages, power and fuel, other utility related costs, administrative expenses, and selling and maintenance expenses.

Usually, about 60 to 70 percent by way of assistance towards most working capital components may be secured. However, a conservative banker may offer substantial assistance only for purposes of carrying and holding inputs, work-in-progress and stocking finished goods as there is some element of "security" in these components.

Institutional assistance by way of loans

In some cases, development finance institutions may offer term loans and commercial bankers offer working capital for MSEs. Commercial banks in many countries, today, however offer composite loans. An enterprise may also secure deposits or private loans but such private loans remain unsecured in terms of assets of the project as they need to be mortgaged to the lending institution. The extent of term loan that may be availed of depends on norms vis-a-vis Debt Equity ratio, minimum Promoter Contribution, and policy of lending institutions on margins against specific components of project cost. In the context of term loans, a 3:1 or 2:1 debt equity ratio is often acceptable to a lending institution. Land, building, machinery, equipment and other assets may be mortgaged with the term lender as collateral (other personal assets of an entrepreneur) as some of these assets cannot be disposed of to recover dues in case of default.



Alternatively, the term loan is pegged at a rate considerably below the expected resale value of fixed and saleable assets. Capacity utilisation and income projections: Capacity utilization and income estimates need be projected over time, usually, at least till the period corresponding to the repayment of term loans from institutions.

Expenditure estimates: Expenditure estimates may consider elements related to raw material, consumables, power, fuel and utilities, wages and salary, repairs and maintenance expense on fixed and other assets, rent, taxes and insurance, administrative expenses, selling expenses (such as commission to dealers), as well as interest on term loans. The schedule for repayment of loans as well as interest on working capital is fixed by the concerned financial institution. Such expenses involve cash outflow. In addition, there are several non-cash expenses. Income minus such cash expense is cash profit. For “book” or accounting profit, non-cash expenses like depreciation, amortisation of P&P expenses need to be considered.

Income-tax projections: For purposes of income-tax projections, the WDV depreciation amount is subtracted from profit before tax. A percentage of preliminary and know-how related expenditure may also be amortised, that is, deducted every year to correspondingly reduce taxable profit before tax. It is also possible to carry forward losses.

Financial viability and cash flow of an enterprise: Viability of an enterprise may be visualised in different perspectives. Enterprise viability from a banker’s point of view has reference to a firm’s ability to repay term loan as well as interest obligations. A related ratio is the Debt Service Coverage Ratio (DSCR). A DSCR of 1 implies that a firm will generate adequate inflows as to meet such obligations. DSCR of about two is considered adequate. Evidently, the higher the DSCR, the more viable a project is perceived. There are various other ratios such as ROE and ROCE which reflect profitability:

$$\text{Rate on equity} = \frac{\text{net profit X 100}}{\text{promoter' s contribution}}$$

$$\text{Return on capital employed} = \frac{\text{Return on capital employed}}{\text{fixed assets +net working capital}}$$

Case Illustration

This sub-section presents an illustrative schemat for developing the financials of a Business Plan. There are certain basic data requirements.

Basic data requirements

Basic data requirements may be visualised in terms of product/s or services, (line-wise) installed capacity per annum on the basis of working in single/double (that is eight or sixteen hour) shifts for (usually) 300 days a year. Further, operating capacity (expenditure and income) estimates are required for about 3 years at the least. Estimates are also required in terms of outlays on land, site development as well as cost of construction, if applicable. Relationship between core input



and output (in kgs/litres/pieces) will make it convenient to prepare a business plan. Further, price of core and other inputs and output, cost of machinery and equipment (incl. excise, sales tax and freight, insurance and octroi), installation expenses, and Miscellaneous Fixed Assets (such as furniture) are required. For purposes of estimating working capital needs, it is necessary to establish the desirable carrying level/inventory of core raw material/input, consumables and packing material (for instance, in terms of the amount per unit of output), and finished goods stock. Further, provision against possible price escalation and contingencies in fixed/miscellaneous assets need to be made. The rate of interest on working capital and term loans need also be specified. So also are expenses on salary and wages as well as administrative expenses, power consumption and tariffs rates, if relevant- selling commission to be paid, repairs and maintenance expenditure, depreciation and P&P expenses write-off norms as well as term loan repayment schedule. In addition, data vis-a-vis the estimated selling price of finished product per unit as well as income tax rates on taxable profit for different slabs is also required.

To estimate the financial viability of a project, various statements are needed: Project cost, working capital, means of finance, capacity utilisation and income projections, expenditure projections, profit and tax projections, debt service coverage, profitability indicators, cash flow projections and break-even levels. The following sub-sections present relevant statements.

Project cost: In the context of estimation of project cost, where working capital is brought in as loan, the relevant margin alone is considered as a component. However, if working capital is brought in as equity, the whole amount is considered as part of project cost.

Schemat A: Estimate of Project Cost

- (A) Land and site development:
- (B) Building:
- (C) Machinery and Equipment:
(inclusive of freight, insurance, sales tax, and installation related expenditure)
- (D) Other Miscellaneous Assets:
- (E) Escalation & Contingencies:
- (F) Preliminary & Pre-operative Expenses:
(Preparation of a business plan, firm-registration and trial-production, interest during project implementation period)
- (G) Working Capital margin:

The schemat presented above requires calculation of two critical components, that is, interest during implementation as well as working capital margin. The following schemat presents the methodology for estimation of the latter.

Schemat B: Calculation of Working Capital

Capacity utilisation and output

Raw material and inputs

- Value of stock of raw material, packing material and consumables (one or two months):

Goods in process

- Quantity under manufacturing cycle (of say, 2 days):



- Direct cost (raw material, stores and packing material, power, wages) of total output (per annum and thereafter, in terms of per kg/metre of output):

Finished goods

- Period and cost of sale offered on credit

Various indirect costs and expenses for a period of usually one month

- (For normally one month), excluding depreciation.

The sum total of the components presented above will yield the gross working capital estimates. Net working capital is gross working capital minus credit received over procurement. The working capital requirement and margin that may have to be contributed by promoters may be considered in the format presented below.

Schemat C: Component-wise Sources of Working Capital

Requirement	Qty	Norm for bank assistance	Amount of Bank Assistance	Promoter's contribution (margin)
Raw material				
Store, consumables and packing materials				
Goods in process				
Finished goods				
Sundry debtors				
Other expenses (various fixed and variable costs)				
Total				

Means of finance: The Means of Finance estimates are dependent on required minimum promoters' contribution, as well as capital or investment subsidy, if any, reducing equity required, and the balance to reduce debt obligations.

Capacity utilisation and income estimate: A schemat for presenting the capacity utilisation and income estimate statement is presented below.

Schemat D: Capacity utilisation and income estimate

Year	1	2	3	4	5
Capacity Utilisation					
Output					
Income					

Expenditure Estimates: The expenditure estimates need to be in tune with projections on capacity utilisation. The estimates, the entrepreneur needs to incorporate in the case of depreciation is tabulated below. The income and expenditure statements help to arrive at a statement of profit before tax. Under the SL method, depreciation rate is applied to the acquisition value of the asset every year. Under the WDV, depreciation is computed on the



written down or balance value of an asset. While preparing income, expenditure and profit statement, the Straight Line (SL) method is used and for taxation purposes, the WDV method is utilised.

Schemat E: Interest implications on Working Capital as well as Term Loan

Year	1	2	3	4	5
Outstanding term loan					
Term Loan Repayment					
Interest on Term Loan					
Working Capital Loan					
Interest on Working Capital Loan					

Schemat F: Statement of annual expenditure (annual cost of production)

Year/Expenditure	Year 1	Year 2	Year 3	Year 4	Year 5
Raw Material					
Store, consumables and packing materials					
Power and fuel					
Wages and Salaries					
Repairs and Maintenance					
Rent, Taxes and Insurance					
Dt. Admn. Expenses					
Selling Expenses					
Interest on Term Loan					
Interest on Working Capital					
Depreciation					
P&P Amortisation					
Total					

Tax computation of the project: Tax computation for the project is shown in the following table.

Schemat G: Tax Computation

Year	1	2	3	4	5
Profit before tax					
Excess of WDV over SL					
Depreciation carry forward loan					
Taxable profit					
Tax					
Profit after tax					

Profit statement: The difference between income and expenditure would yield estimates on profit before tax. Deducting cash as well as adding non-cash, book expenditures would yield cash profit.



Schemat H: Profit Statement

Year	1	2	3	4	5	Total
Income						
(Less) Expenditure						
Profit before tax						
(Less) Tax						
Profit after tax						
(Add) Non-cash expenditure						
Cash profit						

Debt Service Coverage Ratio: The DSCR considers a firm’s ability to meet long-term obligations. A DSCR of 2 indicates that the firm will generate double the cash required to meet all term-loan-and-interest obligations. A higher DSCR implies greater viability and bankability of a project.

Schemat I: Debt Service Coverage Ratio

Year	1	2	3	4	5	Total
i. Cash accrual						
ii. Interest on term loan (pre-tax)						
iii. Term loan repayment (post-tax)						
Debt-service Coverage Ratio						
(i+ii/ii+iii)						Average DSCR
Average ratio need to be estimated						

Loan Repayment is Post-Tax, but interest is tax deductible. Hence all inflows/outflows need to be presented uniformly on a pre-tax or post-tax basis.

Profitability measures: A schemat for presenting profitability measures is presented below.

Schemat J: Profitability Ratios for the Project

Year	1	2	3	4	5	Total
E.g. ROCE						

Cash Flow Statement: A schemat for projection of cash flows is presented in the table below.

Schemat K: Projected Cash Flow Statement

Year	1	2	3	4	5
CASH INFLOW					
Promoter’s Capital					
Term Loan					
Working Capital Loan					
Profit Before Tax					



Depreciation					
P&P Amortn.					
Others					
Total					
CASH OUTFLOW					
Increase in Working Cap.					
Cap. Exp.					
Tax					
Repmt. of TL					
Dividends					
Total					
Surplus/Deficit					
Cum. Surplus					

Break-even Analysis: The projected cash-flow statement and break-even analysis for the project is presented below:

Schemat L: Break-even estimates

	Particulars	Amount
A	Variable cost per unit of output	
	Raw material consumption	
	Stores and consumables	
	Power	
	Selling expenses	
	Interest on working capital	
	Total	
B	Fixed cost	
	Salaries	
	Repairs and maintenance	
	Rent, tax and insurance	
	Other administrative expense	
	Interest on term loan	
	Depreciation	
	P&P Amortization	
	Total	
C	Selling price per unit (kg) of output	
D	Contribution per unit (kg) of output	
	(Selling price less variable cost)	
E	Break-even point (Unit of output)	
	Fixed cost (INR)	
	Contribution per unit of output	
F	Break-even point (Capacity)	



Sensitivity (to risk) analysis: Sensitivity analysis may consider impact on profit with changes in capacity utilisation or selling prices.

Schemat M: The Sensitivity Analysis

Particulars	Amount
Eventually: Decline of X percent in capacity-utilisation/sale	
(i) Revised profit after tax	
(ii) Revised Debt Service Coverage Ratio	
Eventually: Decline of X percent in selling price	
(iii) Revised profit after tax	
(iv) Revised Debt Service Coverage Ratio	

Indicators of project viability: Summary indicators of project viability are tabulated below.

Schemat N: Summary Indicators of Project Viability

	Particulars	Amount
A	Installed capacity	
B	Project cost	
C	Means of Finance	
	Term Loan	
	Promoters' capital	
	Unsecured loans/deposits (if any)	
D	Capacity utilisation	
	First year	
	Second year	
	Third year and thereafter	
E	Average Annual Turnover	
F	Debt Service Coverage Ratio	
G	Break-even point	
H	ROCE	
I	Pay-back period	
	(a) X percent drop in selling price	
	(b) Capacity utilisation at only X percent	

5.7. BUSINESS PLAN/PROJECT FORMAT FOR A NEW OR EXPANDING MICRO/TINY UNIT

The format presented below incorporates basic requirements in terms of structure of a plan.

5.7.1. General Information:

Name of the Firm:
Project/activity proposed and location:
Type of proposed organisation: Proprietary/Partnership



Address:
Name/age of the Promoter/s:

A. Academic profile:

SSC or below/Degree/Diploma	Institute/subjects	Major Subjects/years of study

B. Professional/skill Training:

Training in	Institute/duration	Duration	Achievement / Remark

C. Work Experience (Past and Present):

Organisation/address	Position	Nature of Work	Duration

**D. Annual Income of promoter/immediate family members
(Last Year): INR. _____**

E. Assets owned by the Promoter/s

Movable INR. _____

Immovable INR. _____

5.7.2. Details of the Proposed Project:

A. Land and building:

Sr. No.	Particulars	Area Required	Total Value	Remarks
1				
2	Land			
	Building			
		Total		

B. Machinery/Equipment:

Sr. No.	Description	Nos. Required	Rate (INR.)	Total value (INR.)
		Total		

C. Misc. Fixed Assets:

Sr. No.	Particulars	Nos. Required	Rate (INR)	Total value (INR.)
		Total		



D. Preliminary and Pre-Operative Expenses:

Sr. No.	Particulars	Amount (INR)	Remarks
1	Interest during implementation		
2	Establishment expenses		
3	Start-up expenses		
4	Misc. expenses		
	Total		

E. Working Capital:

Sr. No.	Item	Duration	Total Value (INR)		
			Year-I	Year-II	Year-III
1	Raw material stock				
2	Semi-finished goods stock				
3	Finished goods stock				
4	Sales on credit				
5	Production expenses				
		Total			

F. Total Cost of the Project:

Particulars	Total Value (INR)
Fixed capital	
(Total of item nos. 2.1, 2.2, 2.3)	
Working capital	
(Total of item no. 2.5)	
Preliminary and pre-operative expenses (Total of item no. 2.4)	
Total	

G. Means of Finance:

Sr. No.	Particulars	Amount (INR)	Remarks
1	Own investment		
2	Term loan		
3	Working capital loan		
4	Any other source		
	Total		

5.7.3. Market Potential:

- Present demand and supply of the product
- Competition
- Target market segment
- Marketing strategy



5.7.4. Manufacturing Process

- Technical know-how availability
- Step by Step description of the manufacturing process
- Attach process flow chart (if applicable)

5.7.5. Production Programme:

- No. of working days per annum _____
- No. of working shifts 8 hrs per day _____
- Installed capacity (annual) _____
- Utilised capacity (%):
 Year-I _____
 Year-II _____
 Year-III _____

A. Products and By-Products:

Sr. No.	Item (s)	Quantity produced per year	Capacity utilisation (%)

B. Sales Revenue:

Year	Item (s)	Quantity sold per year	Rate per unit	Sales Realization (INR)
	Total			

C. Raw Material (Annual Requirements):

Sr. No.	Item (s)	Quantity	Rate (INR)	Total Value (INR)
	Total			

D. Utilities:

Sr. No.	Particulars	Annual Expenditure (INR)	Remarks
1	Power/Electricity		
2	Water		
3	Coal/Oil/Steam		
4	Any other item		
	Total		



E. Manpower (Salaries/Wages):

Sr. No.	Particulars	No.	Wages/Salaries per month (INR)	Annual Expenses (INR)
1	Skilled			
2	Semi-skilled			
3	Unskilled			
4	Office staff			
5	Any other			
	Total			

F. Repairs and Maintenance:

Sr. No.	Particulars	Amount (INR)
	Total	

G. Selling and Distribution Expenses:

Sr. No.	Particulars	Amount (INR)	Remarks
1	Publicity expenses		
2	Travelling		
3	Freight		
4	Commission		
5	Misc.		
	Total		

H. Administrative Expenses:

Sr. No.	Particulars	Amount (INR)	Remarks
1	Stationery and Printing		
2	Post/Telephone etc.		
3	Entertainment expenditure		
4	Misc.		
	Total		

I. Interest:

Year	Outstanding Loan Amount	Interest	Instalment	Balance

J. Depreciation:

Sr. No.	Type of Asset	Cost of Asset	Expected Life	Depreciation



5.7.6. Profitability Projections:

Sr. No.	Particulars	Amount (INR)				
		Year-I	Year-II	Year-III	Year-IV	Year-V
A.	Sales realisation					
B.	Cost of production					
i)	Raw materials					
ii)	Utilities					
iii)	Salaries/wages					
iv)	Repairs and maintenance					
v)	Selling and distribution expenses					
vi)	Administrative expenses					
vii)	Interest					
viii)	Rent					
	Misc. expenses					
	Total					
C.	Less: Depreciation					
D.	Gross profit/loss (A-B)					
E.	Income-tax					
F.	Net profit/loss					
G.	Repayment					
H.	Retained surplus					

* In addition Debt-Equity Ratio, Debt Service Coverage Ratio, ROI, BEP and payback period may be indicated.



CHAPTER 6

REGULATORY COMPLIANCES UDYOG AADHAR, DML, FSSAI, PRIVATE MARKETS

Highlights

This Chapter highlights various regulatory compliances required to be adhered to and the steps involved in registering for the same. Udyog Aadhar is required for running units. There is no need to apply for upcoming units.

FSSAI is another license required to be secured. The various licensing and clearance requirements may be viewed in terms of PCB clearance, building plan sanction, etc.



6.1. REGULATORY COMPLIANCES: UDYOG AADHAR

6.1.1. Registration Site: (udyogaadhar.gov.in)

It is essential to note that Entrepreneur Memorandum - Part (i) has been abolished. Further, Udyog Aadhar is for already running units. There is no need therefore to apply for upcoming units. A feature has been added for search facility of the National Industries Classification Code. Also, a One Time Password on Mobile (linked with Aadhar at the time of registration has been implemented).

6.1.2. Required Documents for Udyog Aadhar EM Part-(i) Registration

The required documents may be viewed in terms of: Aadhar Card Copy (For Aadhar Card number and Name); Bank Pass Book Copy (For Bank); PAN Card

6.1.3. The steps involved may be viewed as

- i. Aadhar Number - 12 digit Aadhar number issued to the applicant should be filled in the appropriate field.
- ii. Name of Owner - The applicant should fill his or her name strictly as mentioned on the Aadhar Card issued by UIDAI. E.g. if Raj Pal Singh has his name as Raj P. Singh, the same should accordingly be entered. If the name does not match with the Aadhar Number, the applicant will not be able to fill the form further.
- iii. To Validate Aadhar
 - Validate Aadhar - The applicant must click on “Validate Aadhar” button for verification of Aadhar, after that only user can fill the form further.
 - Reset- The applicant can click on reset button to clear the field of Aadhar No and Name of the owner for different Aadhar.

OTP will be sent to mobile number registered with UIDAI. After entering the OTP, one will be ready to fill the Applicant details for registration in the sequence described below:
- iv. Social Category - The Applicant may select the Social Category (General, Scheduled Caste, Scheduled Tribe or Other Backward Castes). The proof of belonging to SC, ST or OBC may be asked by appropriate authority, if and when required.
- v. Gender - The Applicant can select gender of promoter.
- vi. Physically Handicapped - The Applicant can select Physically Handicapped status (if relevant) of the promoter.
- vii. Name of the Enterprise - The Applicant must fill the name by which his or her enterprise is known to the customers or public and is a legal entity to conduct business. One applicant can have more than one enterprise into business and each one can be registered for a separate Udyog Aadhar and with the same Aadhar Number as Enterprise 1 and Enterprise 2, etc. Combination of same Aadhar Number and Enterprise Name can be added second time. Only additional details can be added or deleted at the time of editing.
- viii. Type of Organization - The Applicant may select from the given list, the appropriate type of the organisation for his or her enterprise. The Applicant must ensure that he or she is authorized by the legal entity (i.e., enterprise being registered for Udyog Aadhar) to fill his online form. Only one Udyog Aadhar number shall be issued for each enterprise or FPC.



- ix. PAN Number - The Applicant has to enter a PAN Number in case of Co-operative, Private Limited, Public Limited and Limited Liability Partnership. It will be optional in remaining type of organization.
- x. Location of Plant - The Applicant may add multiple plant locations in one registration by clicking 'Add Plant' button.
- xi. Official Address - The Applicant needs to fill in the appropriate field with the complete postal address of the enterprise including State, District, Pin code, Mobile Number and Email.
- xii. Date of Commencement - The date in the past on which the business entity commenced its operations may be filled in the appropriate field.
- xiii. Previous Registration Details (if any) - If the Applicant's enterprise, for which the Udyog Aadhar is being applied, is already issued a valid EM-I or II by the concerned GM (DIC) as per the MSMED Act 2006 or the SSI registration prevailing prior to the said Act, such number may be mentioned in the appropriate place.
- xiv. Bank Details- The Applicant must provide his or her bank account number used for running the Enterprise in the appropriate place. The Applicant must also provide the IFS Code of the bank's branch where his or her mentioned account exists. The IFS code is printed on the Cheque Books issued by the bank. Alternatively, if the Applicant knows the name of the Bank and the branch where his or her account is there, the IFSC code can be found from website of the respective Bank.
- xv. Major Activity - The major activity i.e., either "Manufacturing" or "Service" may be chosen by the enterprise for Udyog Aadhar. If the enterprise involves in both type of activities and if major work involves in Manufacturing and small portion of activity involves in Service sector, then one can select major activity type as "Manufacturing" and if major work involves in Services and small portion of activity involves in Manufacturing, then one can select major activity type as "Services".
- xvi. National Industry Classification Code - The Applicant may choose multiple National Industrial Classification – 2008 Codes to includes all their activities, which means the user can select multiple NIC code of Manufacturing and Service sector by clicking "Add More" button. If one wants to add Manufacturing, then can select "Manufacturing" radio button and keep on adding by clicking "Add More" button otherwise if one wants to add Service then select "Services" radio button and keep on adding by clicking "Add More" button. The NIC codes are prepared by the Central Statistical Organization under the Ministry of Statistics and Program implementation, Government of India.

The Applicant may use National Industrial Classification-2008 Codes searching facility to avoid 3 steps selection process. Example: User has to write matching key word (2 or more characters) in Search text box in Colum No 11. Then all related NIC CODEs will be listed (including Nic 2 Digit, Nic 4 Digit and Nic 5 Digit) with code and description. If user selects NIC 5 Digit code, then automatically all the related fields (like NIC 2 Digit, 4 Digit, 5 Digit and Enterprise Type) at column 11 will be automatically filled. Same way, if user selects NIC 4 digit, then related field of 2 digit NIC Code will be filled, but user has to select NIC 5 digit from drop down (In this case, 2 steps are required).



- xvii. Person employed - The total number of people who are directly being paid salary or wages by the enterprise may be mentioned in the appropriate field.
- xviii. Investment in Plant and Machinery or Equipment - While computing the total investment, the original investment (purchase value of items) is to be taken into account excluding the cost of pollution control, research and development, industrial safety devices, and such other items as may be specified, by notification of RBI. If enterprise started with a set of plant and machinery purchased in 2008, worth INR 70 Lakh, has procured additional plant and machinery in the year 2013, worth INR 65 Lakh, then the total investment in Plant and Machinery may be treated as INR 135 Lakh.
- xix. DIC - The applicant, based on the location of the enterprise, has to fill in location of DIC. This column will be active and show option only when there are more than one DIC in the district. In fact, if there is only one DIC in the district, system will automatically register you in the same DIC.
- xx. Submit - The applicant must click on Submit button to generate OTP which will be sent to email id mentioned for registration. The applicant has to enter OTP received on mobile (linked with Aadhaar) second time. The applicant must enter Captcha before clicking the Final Submit button. One should take the printout of acknowledgement and Udyog Aadhaar Memorandum for record.

General Legalities

Factories Act, 1948: This is applicable to enterprises where the number of employees is ten or more and where power is used; or more and power is not used. The enterprises covered under the Act are required to keep certain records: muster roll; workers register; overtime register; advance register; register for fine; register for deductions; register of wages; register of accidents and dangerous occurrences; bond inspection book; register of cleaning and white washing; record of examination of parts of machinery.

Employees Provident Fund and Miscellaneous Provisions Act, 1952: The Act applies to every factory or establishment employing 20 or more employees. It, however, exempts a factory or establishment for an initial period of 3 years from commencement of business if the number of employees is more than 50 and for an initial period of 5 years if the number of employees is less than 50. The minimum contribution payable by the employer is 12 percent of the basic salary contribution and Dearness Allowance. The employee also makes an equal contribution. The Act, however, does not specify a maximum contribution.

Employees' State Insurance Act: It provides benefits to employees in case of sickness, maternity and employment injury and for certain other matters in relation there to. The Act also provides for payment of contributions by employers and employees at the rates specified in the first schedule of the Act. The existing rates of employee's contribution vary according to wages and the employers' contribution is exactly double the employee's contribution. It shall apply to factories employing 20 or more people.



The Indian Partnership Act, 1932: The Indian Partnership Act, which was amended in 1932, provides for rules relating to foundation of legal partnership.

Payment of Wages Act, 1936: This Act is applicable to factories and establishments, which come under The Factories Act.

Minimum Wages Act, 1948: The employer has to pay minimum wages to employees in certain scheduled industries. At present, the minimum wages act is applicable in 44 scheduled industries.

The Income Tax Act, 1911: The Act governs the levy of income tax in India. It defines various terms and expressions and states the liability of a person to pay income tax.

Pollution Control Act: The State Air and Water Pollution Control Board is the body responsible for implementing this Act. The act is applicable to all kinds of industry

Further, units need to secure GST registration also:

Specific Legalities (Food Processing):

In addition to the general legal requirements, there are a few legal requirements that are specific to Food Processing Industries. A food processing enterprise has to comply with several compulsory legal requirements. Implementation of these norms with regard to Small and Medium Enterprises is relatively stringent while cottage and household level units sometimes tend to compromise on such stipulations. These laws include:

- **Prevention of Food Adulteration (1954):** It is the basic statute to protect consumer against supply of adulterated food. The Central Committee for Food Standards under the Directorate General and Health Services Ministry of Health and Family Welfare has specified the standards.
- **Milk and Milk Products Order (MMPO):** It regulates milk and milk production in the country. The order requires no permission for units handling less than 10,000 litres of liquid milk per day or milk solids up to 500 TPA.
- **Fruit Products Order (1995):** It regulates manufacture and distribution of all fruit and vegetable product, sweetened aerated waters, vinegar and synthetic syrups. The license is issued by Regional Director of MoFPI located at Mumbai, Delhi, Kolkata, Chennai and Guwahati based on the satisfaction of the concerned officer with regard to quality of production, sanitation and hygiene, machinery and equipment and work area standards.
- **Standard of Weights and Measures (Packaged Commodities) Rules (1977):** It lays down certain obligations for all commodities in packed form with respect to their quality declaration. The Directorate of Weights and Measures under the Ministry of Food and Civil Supplies operates these rules.
- **Export (Quality Control and Inspection) Act (1963):** It is operated by the Export Inspection Council and under this act, many exportable commodities have been notified for compulsory pre-shipment inspection unless specifically requested by the importer not to do so.



- **Voluntary Standards:** They are regulated by organizations involved with voluntary standardisation and certificate systems concerning quality parameters in food. They are the Bureau of Indian Standards (BIS) and Directorate of Marketing and Inspection (DMI).
- **Oils, De-oiled Meal and Edible Flour Control Order (1967) and Vegetables Products Control Order (1976):**

6.2. REGULATORY COMPLIANCES: FOOD SAFETY AND STANDARDS ACTIVITY OF INDIA

The Food Safety and Standards Act, 2006 seeks to consolidate the laws relating to food and to establish the Food Safety and Standards Authority of India for laying down science based standards for articles of food and to regulate their manufacture, storage distribution, sale and import, to ensure availability of safe and wholesome food for human consumption and for matters connected there with or incidental there to.

6.2.1. Salient Features of the Act

- Enforcement of legislation by the State Governments
- UTs through the State Commissioner for Food Safety, his officers and Panchayati Raj or Municipal bodies
- Emphasis on gradual shift from regulatory regime to self
- Compliance through food safety management system
- Consistency between domestic and international food policy measures without reducing safeguards to public health and consumer protection
- Adequate information dissemination on food to enable consumer to make informed choices
- Compounding and adjudication of cases- to reduce Court's workload and expedite the disposal of cases
- Graded penalty depending upon the gravity of offences

6.2.2. Scope of The Act

- The Act covers activities throughout the food distribution chain, from primary production through distribution to retail and catering.
- The Act gives the Government powers to make regulations on matters of food safety.
- The Food Safety and Standards Authority of India is the principal Government Authority responsible for preparing specific regulations under the Act.

6.2.3. Process to apply for FSSAI license

- i. Online Process: <https://foodlicensing.fssai.gov.in/index.aspx>.
- ii. Read the instructions given on https://foodlicensing.fssai.gov.in/how_to_apply.html
- iii. Registration online through: https://foodlicensing.fssai.gov.in/registration_fees_structure.html
- iv. Documents for first registration: https://foodlicensing.fssai.gov.in/document_registration_certificate.html



- v. Fees Structure: https://foodlicensing.fssai.gov.in/central_fees_structure.html
- vi. List of documents for new registration/renewal etc. https://foodlicensing.fssai.gov.in/central_document_list.html
- vii. Fees for State level License: https://foodlicensing.fssai.gov.in/fees_structure.html
- viii. List of documents for new registration/renewal etc.: https://foodlicensing.fssai.gov.in/state_document_list.html
- ix. For more detailed information and how to register online please visit: https://foodlicensing.fssai.gov.in/PDF/FBO_User_Manual_Ver3.0.pdf

6.3. UNITED STATES FOOD AND DRUG ADMINISTRATION (USFDA)

The Food and Drug Administration (FDA or USFDA) is a federal agency of the United States Department of Health and Human Services, one of the United States' federal executive departments. The FDA is responsible for protecting and promoting public health through the control and supervision of food safety, tobacco products, dietary supplements, prescription and over-the-counter pharmaceutical drugs (medications), vaccines, biopharmaceuticals, blood transfusions, medical devices, Electromagnetic Radiation Emitting Devices (ERED), cosmetics, animal foods & feed and veterinary products. As of 2017, 3/4th of the FDA budget (approximately USD 700 million) is funded by the pharmaceutical companies due to the Prescription Drug User Fee Act. The FDA was empowered by the United States Congress to enforce the Federal Food, Drug, and Cosmetic Act, which serves as the primary focus for the Agency. The FDA has its headquarters in unincorporated White Oak, Maryland. The agency also has 223 field offices and 13 laboratories located throughout the 50 states, the United States Virgin Islands, and Puerto Rico. In 2008, the FDA began to post employees to foreign countries, including China, India, Costa Rica, Chile, Belgium, and the United Kingdom. While most of the Centres are located in the Washington, D.C. area as part of the Headquarters divisions, two offices – the Office of Regulatory Affairs (ORA) and the Office of Criminal Investigations (OCI) – are primarily field offices with a workforce spread across the country. The Office of Regulatory Affairs is divided into five regions, which are further divided into 20 districts. Districts are based roughly on the geographic divisions of the federal court system. Each district comprises a main district office and a number of Resident Posts, which are FDA remote offices that serve a particular geographic area. ORA also includes the Agency's network of regulatory laboratories, which analyse any physical samples taken. Though samples are usually food-related, some laboratories are equipped to analyse drugs, cosmetics, and radiation-emitting devices.

The Office of Criminal Investigations was established in 1991 to investigate criminal cases. Unlike ORA Investigators, OCI Special Agents are armed, and don't focus on technical aspects of the regulated industries. OCI agents pursue and develop cases where individuals and companies have committed criminal actions, such as fraudulent claims, or knowingly and wilfully shipping known adulterated goods in interstate commerce. The programs for safety regulation vary widely by the type of product, its potential risks, and the regulatory powers granted to the agency. For example, the FDA regulates almost every facet of prescription drugs, including testing, manufacturing, labelling, advertising, marketing, efficacy, and safety, yet FDA regulation of cosmetics focuses primarily on labelling and safety. The FDA regulates most products with a set of published



standards enforced by a modest number of facility inspections. Inspection observations are documented on Form 483. In June 2018, the FDA released a statement regarding new guidelines to help food and drug manufacturers “implement protections against potential attacks on the U.S. food supply”. One of the new guidelines includes the Intentional Adulteration (IA) rule, which requires strategies and procedures by the food industry to reduce the risk of compromise in facilities and processes that are significantly vulnerable.

Contact: U.S. Food and Drug Administration Office of International Programs, India Office, U.S. Embassy, Shantipath, Chanakyapuri, New Delhi - 110021 (www.fda.gov) Phone: 011-24198269

6.4 HAZARD ANALYSIS AND CRITICAL CONTROL POINTS (HACCP)

Hazard Analysis and Critical Control Points, or HACCP, is a systematic preventive approach to food safety from biological, chemical, and physical hazards in production processes that can cause the finished product to be unsafe and designs measures to reduce these risks to a safe level. In this manner, HACCP attempts to avoid hazards rather than attempting to inspect finished products for the effects of those hazards. The HACCP system can be used at all stages of a food chain, from food production and preparation processes including packaging, distribution, etc. The Food and Drug Administration (FDA) and the United States Department of Agriculture (USDA) require mandatory HACCP programs for juice and meat as an effective approach to food safety and protecting public health. Meat HACCP systems are regulated by the USDA, while seafood and juice are regulated by the FDA. All other food companies in the United States that are required to register with the FDA under the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, as well as firms outside the US that export food to the US, are transitioning to mandatory hazard analysis and risk-based preventive controls (HARPC) plans. In 1994, the organization of International HACCP Alliance was established initially for the US meat and poultry industries to assist them with implementing HACCP and now its membership has been spread over other professional/industrial areas. HACCP is focused only on the health safety issues of a product and not the quality of the product, yet HACCP principles are the basis of most food quality and safety assurance systems. Plan to determine the food safety hazards and identify the preventive measures the plan can apply to control these hazards. A food safety hazard is any biological, chemical, or physical property that may cause a food to be unsafe for human consumption. A critical control point (CCP) is a point, step, or procedure in a food manufacturing process at which control can be applied and, as a result, a food safety hazard can be prevented, eliminated, or reduced to an acceptable level.

Contact: National Centre for Haccp Certification, 2, Vidhya Nagar, Opp.Police Ground, Thycaud P.O, Thiruvananthapuram – 695014 (www.haccpindia.org) Phone: 0471-2321882



6.5 REGULATORY COMPLIANCES: DML

6.5.1 Introduction

According to the Maharashtra APMC Act, 1963, section 5 (D) and rule 4 B (1967 amendment), Directorate of Marketing has been authorised to give Direct Marketing License. To opt for the license, one needs to apply to the Directorate of Marketing through online process (website: www.dom.msamb.com).

The means for obtaining DML is given below:

6.5.2. Guidelines for Securing DML

1. **Eligibility for Direct Marketing License:** Any person desiring to purchase agricultural produce directly from farmers in one or more than one market area is eligible for securing Direct Marketing License.
2. Documents required in the application for Direct Marketing License:
 - a) Form “A” in prescribed format
 - b) Form “B” (Collection Centre Information) in prescribed format
 - c) Bank Guarantee (For Maharashtra or more than one division INR 5 Lakh, For One Division Konkan, Pune, Nasik INR 5 Lakh. Nagpur INR 3 Lakh. Amravati and Nagpur INR 2 Lakh). (No Bank Guarantee and Fee exemption; except as is applicable for Farmers Producer Companies only)
 - d) Solvency Certificate- FPCs don't require any solvency certificate. But it is advised to have solvency certificate of INR 10,000 from the bank (Though it is not required)
 - e) Declaration On Stamp paper INR 200 with notarization and with two witnesses
 - f) Declaration on Stamp paper of INR 200 about not being a Director or Partner in Private Market or Farmer- Consumer Market with notarization and with two witnesses
 - g) Operational and Working Guidelines
 - h) For company constitution, Registration Certificate, List of Directors with address, Pan Card Xerox, Resolution regarding Signing Authority
 - i) For Proprietor- Pan Card Xerox, Aadhaar card Xerox, M.S.E.B. Bill, Election Card, Character Certificate
 - j) Income Tax Returns of last 3 years
 - k) Project Report (with photos)
 - l) List of farmers in contact
 - m) License Fee Challan-
 - i. For one Division area of operation INR 500 (Per division INR 500).
 - ii. For all State or more than one division area of operation INR 1000.

3. How to apply for Direct Marketing License:

Any person who desires to apply for Direct Marketing License should submit all the prescribed documents to Director of Marketing office with the prescribed fee.



4. Where to apply:

Application should be submitted to Director of Marketing, Maharashtra State, Pune-1.

Contact: Directorate of Marketing, (Maharashtra State) 3rd Floor, New Central Building, 5, B. J. Road, Near Sassoon Hospital, Pune - 411001 (www.msamb.com) Phone: 020 26126628, 26126785

6.6. Private Market Yards in Maharashtra

In a major move to liberalise agri-markets, the government came out with a law that seeks to end monopoly of traditional APMC mandis and allow private players and others to set up wholesale markets. At present, in many Indian states farmers can sell their produce at regulated APMC (Agriculture Produce Marketing Committee) mandis only. There are 6,746 such mandis and each one is located at a gap of 462 km. They are subjected to different kinds of fees. Since agriculture is a state subject, only states can implement laws related to the farm sector. The government's aim is to set up a wholesale market at every 80 km.

The new APLM Act and law is to end the monopoly of APMC and allow more players to set up markets and create competition so that farmers can discover prices and sell their produce accordingly. APMC will be one of the markets. It will have no regulatory powers. The law promotes multiple market channels like private market yards, direct marketing and even godowns and silos can be notified as markets. The law seeks to set a separate authority to regulate all agri-markets including APMC and provide trading licences.

It caps market fee (including developmental and other charges) at not more than 1 percent for fruit and vegetables, and 2 percent for food grain. It caps commission agents' fee at not more than 2 percent for non-perishables and 4 percent for perishables.

Some private marketing licence holders in Maharashtra are tabulated below:

Sr. No.	Name and Address of Licensee	Type of License
1	Ahemednagar Agro Market Ltd. Ahemednagar, Tal-Ahemednagar, Dist- Ahemednagar, - 95241- 2417131	Provisional
2	NATIONAL SPOT EXCHANGE LIMITED, A-3, Gurukrupa Apartment, Narvir Tanji Wadi, Shivaji Nagar, Pune – 411 005 – Ph.No.020- 25533122	Permanent
3	Jaychandra Agro Industries Pvt. Ltd., Dondaicha, Tal-Sindkheda, District-Dhulia, Ph.no. 02566-244151.	Provisional
4	NCDEX Spot Exchange Ltd. Exchange Plaza, C-1, Block G, BandraKurla Complex, Bandra (E), Mumbai-400051	Permanent
5	Narendra Solvex Pvt.Ltd. At. Post. Dabha Tal. Nandgaon Khandeshwar. Dist. Amravati.-0712-2681593	Provisional



6	Saasta Warehousing Ltd. 101, Pujit Plaza, Sector, 11, Plot No.67, Near to K-Stars Hotel, CBD Belapur, Navi Mumbai-400614.- 022- 27581085	Provisional
7	Shetkari Krishi Utpanna Bazar Rowshan Kheda Road, Dist. Amravati.- 02167-285240	Permanent
8	Kisan Veer Satara Sahakari Sakhar Karkhana Bhuij Tal. Wai,Dist. Satara	Provisional
9	Keshranand Cotex Private Ltd. Keshranand Garden, Nagoanbari, Agra Road Deopur, Dist. Dhule. – 02566-244422	Permanent
10	Govardhan Farm Produce Market Pvt.Ltd. Gujrathhi Lane, Choda Dist.Jalgaon Ph.02586/220015.	Permanent
11	J.S.K. Agro Market Produce Private Limited, Gat No.112/2C/2 At. Bhod Khurd, Jalgoan Road, Dharagaon, Dist.Jalgaon-425105 Ph.No.02588-252583	Permanent
12	Gopal Krishna Agro Products Pvt.Ltd., Shandurni Tal. Jamner Dist. Jalgaon. 9422292819	Permanent
13	Maharashtra Agriculture Farm Produce Private Market Yard. Modha Bu. Tal. Sillod Dist Aurangabad.	Permanent
14	Dand Brothers Agro Products Pvt.Ltd.Khajagi Market Yard S.no77/3, 81/2 At.Malkapur Tal-Malkapur Dist-Buldhana Ph-222032	Permanent
15	Santosh Private Market Ltd.At-Gat no-103-112, Babhulgaon (Dhanore) Tal-Yeola, Dist- Nashik	Permanent
16	Mahavira Agricare Private Ltd, At-Kothari House, Guruvarya Colony,yavatmal Road Wani,Dist-Yavatmal	Permanent
17	Kisan Market Yard, (Prop-Girish.S.Agrwal), Nanded Road, Shelu (Bk), Tal-Pusad, Dist-Yavatmal	Permanent
18	Laxmi Krushi Utapanna Khajgi Bajar, Gut No. 727 + 728, Kanalda Road, Aavane, Taluka - District - Jalgaon.	Permanent



CHAPTER 7

SCHEMES OF THE GOVERNMENT

Highlights

The important schemes of the GoI include that of the MoFPI which include the Mega Food Park, Cold Chain and Kisan Sampada schemes. Mega Food Park Scheme aims at providing a mechanism to link agricultural production to the market by bringing together farmers, processors and retailers so as to ensure maximizing value addition, minimizing wastage and increasing farmers' income. Cold Chain, Value Addition and Preservation Infrastructure is to provide integrated cold chain and preservation infrastructure facilities without any break from the farm gate to the consumer. The Kisan Sampada Backward and Forward Linkages scheme provides effective and seamless backward and forward integration for processed food industry by plugging the gaps in the supply chain in terms of availability of raw material and linkages with the market. The main objective of the scheme for creation /expansion of Food Processing and Preservation Capacities is modernization/ expansion of existing food processing units with a view of increasing the level of processing, value addition leading to reduction of wastage. The Scheme for Agro-processing Cluster aims at development of modern infrastructure and common facilities to encourage group of entrepreneurs to set up food processing units based on a cluster approach.

The other important schemes of the GoI include Prime Minister's Employment Generation Programme, Credit Guarantee Fund Scheme for Micro and Small Enterprises, Mudra Loan Scheme, Agri-Clinics and Agri-Business Centres Scheme, Scheme of Fund for Regeneration of Traditional Industries, Micro and Small Enterprises - Cluster Development Programme, Development of Commercial Horticulture through Production and Post-Harvest Management of Horticulture Crops, Capital Investment subsidy scheme for construction/ expansion/ modernization of cold storage and storages for Horticulture Products, Venture Capital Assistance Scheme for Agribusiness Development (by SFAC).

The state government of Maharashtra has introduced the AIDIP, MACP, Gat-Sheti Scheme, Krishi Gurukul Yojana, Pundit Deen Dayal Upadhyay Unnat Krishi Shiksha Yojana, Anna Saheb Patil Arthik Vikas Mahamandal Maryadit and the Chhatrapati Rajaram Maharaj Entrepreneurship and Skill Development Campaign.



7.1. SCHEMES OF THE MINISTRY OF FOOD PROCESSING INDUSTRY

The important schemes of the MoFPI include the Mega Food Park, Cold Chain and Kisan Sampada.

7.1 1. Mega Food Parks Scheme

The Scheme of Mega Food Park aims at providing a mechanism to link agricultural production to the market by bringing together farmers, processors and retailers so as to ensure maximizing value addition, minimizing wastage, increasing farmers' income and creating employment opportunities particularly in rural sector.

Pattern of Assistance: The Scheme envisages grant-in-aid @ 35 percent of eligible project cost in general areas and @ 50 percent of eligible project cost in hilly / ITDP and difficult areas subject to max. of \$ 1.5 million per project.

Eligibility criteria:

- The combined net worth of the promoters/proposed shareholders of Implementing Agencies (IAs) should not be less than 1.5 times of the grant amount sought.
- The IAs needs to bring in at least 20 percent of the total project cost as equity/contribution in general areas and at least 10 percent of the total project cost in difficult and hilly areas.
- Minimum land area - 5 acres. Minimum of 5 Food Processing units of 25 Crores cumulative to be set up.

Exclusions:

- The eligible project cost will exclude cost of land, pre-operative expenses and margin money for working capital.
- Past Promoters of Mega Food Parks are not eligible.

Eligible Implementing Agencies under the Scheme: All implementing agencies/organizations such as Govt./PSUs/Joint Ventures/NGOs/Cooperatives/SHGs/Private Sector/individuals etc. will be eligible.

7.1 2. Scheme for Cold Chain, Value Addition and Preservation Infrastructure

The objective of the scheme of Cold Chain, Value Addition and Preservation Infrastructure is to provide integrated cold chain and preservation infrastructure facilities without any break from the farm gate to the consumer. It covers pre-cooling facilities at production sites, reefer vans, mobile cooling units as well as value addition centres which include infrastructural facilities like Processing/Multi-line Processing/ Collection Centres etc. for horticulture, organic produce, marine, dairy, meat and poultry etc.

Pattern of Assistance: Financial assistance (grant-in-aid) of 35 percent the total cost of plant and machinery and technical civil works in general areas and 50 percent for NE region and difficult areas (for storage) and financial assistance (grant-in-aid) of 50 percent the total cost of plant and machinery and technical civil works in general areas and 75 percent for NE region and difficult areas (for processing) subject to a maximum of INR 10 Crore.



Eligibility criteria:

- The net worth of the applicant should be at least 1.5 times of the grant applied for.
- Availing term loan from the Bank/Financial Institution for a minimum of 20 percent of the total project cost.
- Date of commercial production should not be prior to the date of submission of application.

Eligible Components:

Minimum of two components as stated below need to be set-up in order to qualify for the scheme. Irradiation Facility is treated on a stand-alone basis.

i. MPC/Farm Level Infra:

- Facility for weighing, sorting, grading, waxing, packing, pre-cooling.
- Controlled Atmosphere (CA)/ Modified Atmosphere (MA) cold storage.
- Normal storage.
- Individual Quick Freezing (IQF).

ii. Reefer Transport

- Mobile Pre-cooling trucks and reefer trucks which are suitable for transportation of perishable agricultural produce/ horticulture/ dairy/ meat/ fish produce.

iii. Distribution Hub

- Hubs with multi products and multi CA/MA chambers/cold storage/Variable Humidity Chambers.
- Packing facility.
- Cleaning in Process (CIP) Fog treatment.
- Individual Quick Freezing (IQF).
- Blast freezing.

Exclusions: Cost of land, preoperative expenses, margin money for working capital and contingency

Eligible Implementing Agencies under the scheme: Organization such as Central and State PSU /Joint Ventures /Farmer Producer Organization /NGO/cooperative /SHG's / Corporate entity/ proprietorship firms engaged or proposed to engage in creation /expansion /modernization of food processing and preservation capacities would be eligible under the scheme.

7.1 3. Scheme for Creation of Backward and Forward Linkages

The objective of the scheme is to provide effective and seamless backward and forward integration for processed food industry by plugging the gaps in supply chain in terms of availability of raw material and linkages with the market. Under the scheme, financial assistance is provided for setting up of primary processing centres/collection centres at farm gate and modern retail outlets at the front end along with connectivity through insulated/refrigerated transport.

Pattern of Assistance: The maximum admissible grant for each project would be 35 percent and 50 percent of the eligible project cost for general areas and for North East States,



Himalayan States, ITDP Areas and Islands respectively subject to maximum of INR 5 Crore per project. Assistance to Farmer Producer Organizations would be provided @ 35 percent and 50 percent for general areas and difficult areas respectively.

Eligible Components:

Following are the eligible components and facilities for which assistance may be availed:

Backward Linkage: -

- Integrated Pack-house(s) (with mechanized sorting and grading line/ packing line/ waxing line/ staging cold rooms, etc.)
- Milk Chilling Centres/ Bulk Milk Coolers
- Pre Cooling Unit(s)
- Mobile pre-cooling Vans
- Reefer boats

Forward Linkage: -

- Ripening Chamber(s)
- Retail chain of outlets for perishables including Meat Shops with facilities such as frozen storage/deep freezers/refrigerated display cabinets/cold room.
- Retail refrigerated carts, temperature controlled solar powered retail carts.

Transport: - Refrigerated/ Insulated transport / Reefer Vans

Eligible Implementing Agencies under the Scheme:

- Promoters of existing food processing units.
- Groups of producers such as Co-operatives, Farmer Producer Organizations (FPOs), Farmer Producer Companies (FPCs), Self Help Groups (SHGs) etc. linked to food processing units.
- Retailers of processed food.
- Logistics Suppliers

*The applicants in the above categories maybe organizations such as Central and State PSUs/ Joint Ventures/Farmer Producers Organization (FPOs)/NGOs/Cooperatives/SHGs/Public and Private Companies/Limited Liability Partnerships, Corporate Entity/Proprietorship Firms /Partnership Firms, etc.

7.1.4. Scheme for Creation /Expansion of Food Processing and Preservation Capacities

The main objective of the scheme is creation of processing and preservation capacities and modernization/ expansion of existing food processing units with a view of increasing the level of processing, value addition leading to reduction of wastage. The setting up of new units and modernization/ expansion of existing units are covered under the scheme. The processing units undertake a wide range of processing activities depending on the processing sectors which results in value addition and/ or enhancing shelf life of the processed products.



Pattern of Assistance:

- 35percent of the eligible project cost which is maximum of INR 5 Crore for general area.
- 50percent of the eligible project cost which is maximum of INR 5 Crore for North East States including Sikkim, Himalayan States, Island area and ITDP Areas.

Eligibility criteria:

- Promoter's capital/equity investment on the project should not be less than 20 percent of total Project Cost (not applicable for Govt. proposals).
- Proposal should have Minimum eligible project cost more than INR 3 Crore.
- Date of commercial production should not be prior to the date of submission of application.
- Only those proposals will be eligible in which sanction of term loan has been accorded by Bank / FI.

Eligible Organizations:

- Organization such as Central and State PSU /Joint Ventures /Farmer Producer Organization /NGO/cooperative /SHG's /Corporate entity/ Proprietorship firms engaged or proposed to engage in creation /expansion /modernization of food processing and preservation capacities would be eligible under the scheme.
- Rice Milling facility is only eligible for Eastern and North Eastern State
- Preference to the proposals:
- Allocation of Food processing unit shall be done on the basis of state-wise allocation.
- The proposals for creation/expansion/ modernization of Food Processing and Preservation unit in Mega Food Parks assisted by the Ministry will be given preference within the state.

Contact: Ministry of Food Processing Industries, Panchsheel Bhawan, August Kranti Marg, Khelgaon, New Delhi-110049, Fax No. 011-26493228, Phone: 011-26492216/26492174/26493227/ 26490933

7.1.5. Scheme for Infrastructure for Agro-processing Cluster

The scheme aims at development of modern infrastructure and common facilities to encourage group of entrepreneurs to set up food processing units based on cluster approach. Under the scheme, effective backward and forward linkages are created by linking groups of producers/ farmers to the processors and markets through well-equipped supply chain consisting of modern infrastructure for food processing closer to production areas and provision of integrated/ complete preservation infrastructure facilities from the farm gate to the consumer.

Pattern of Assistance: The scheme envisages grant-in-aid @ 35 percent of eligible project cost in general areas and @ 50 percent of eligible project cost in hilly / ITDP and difficult areas subject to max. of INR 10 Crore per project.



Eligibility criteria

- The combined net worth of the promoters/proposed shareholders of IAs should not be less than 1.5 times of the grant amount sought.
- The IAs needs to bring in at least 20 percent of the total project cost as equity / contribution in general areas and at least 10 percent of the total project cost in difficult and hilly areas.
- Minimum land area - 10 acres. Minimum of 5 Food Processing units of 25 Crores cumulative to be set up.

Exclusions:

- The eligible project cost will exclude cost of land, pre-operative expenses and margin money for working capital.
- Promoters of Mega Food Parks are not eligible

Eligible Implementing Agencies under the Scheme: All implementing agencies/organizations such as Govt./PSUs/Joint Ventures/NGOs/Cooperatives/SHGs/Private Sector/individuals etc. will be eligible.

Contact: Ministry of Food Processing Industries, Panchsheel Bhawan, August Kranti Marg, Khelgaon, New Delhi-110049, Fax No. 011-26493228, Phone: 011-26492216/26492174/26493227/ 26490933

7.2. OTHER SCHEMES OF THE GOVERNMENT OF INDIA

7.2.1. Prime Minister's Employment Generation Programme (PMEGP)

Introduction

Government of India has approved the introduction of a new credit linked subsidy programme called Prime Minister's Employment Generation Programme (PMEGP) by merging the two schemes that were in operation till 31.03.2008 namely Prime Minister's Rojgar Yojana (PMRY) and Rural Employment Generation Programme (REGP) for generation of employment opportunities through establishment of micro enterprises in rural as well as urban areas. PMEGP will be a central sector scheme to be administered by the Ministry of Micro, Small and Medium Enterprises (MoMSME).

Objectives

- To generate employment opportunities in rural as well as urban areas of the country through setting up of new self-employment ventures/projects/micro enterprises.
- To bring together widely dispersed traditional artisans/rural and urban unemployed youth and give them self-employment opportunities to the extent possible, at their place.
- To provide continuous and sustainable employment to a large segment of traditional and prospective artisans and rural and urban unemployed youth in the country, so as to help arrest migration of rural youth to urban areas.
- To increase the wage earning capacity of artisans and contribute to increase in the growth rate of rural and urban employment.



Quantum and Nature of Financial Assistance

Levels of funding under PMEGP

Table 12: Levels of funding under PMEGP

Categories of beneficiaries under PMEGP	Beneficiary's contribution (of project cost)	Rate of Subsidy (of project cost)	
		Urban	Rural
Area (location of project/unit)			
General Category	10 percent	15 percent	25 percent
Special (including SC/ST/OBC/ Minorities/Women, Ex-servicemen, Physically handicapped, NER, Hill and Border areas, etc.	5 percent	25 percent	35 percent

Note:

1. The maximum cost of the project/unit admissible under manufacturing sector is INR 25 Lakh.
2. The maximum cost of the project/unit admissible under business/service sector is INR 10 Lakh.
3. The balance amount of the total project cost will be provided by Banks as term loan.

Contact: State Director, KVIC, Dy. CEO (PMEGP), KVIC, Mumbai

(www.kviconline.gov.in) Phone : 022-26714370

7.2.2. Credit Guarantee Fund Scheme for Micro and Small Enterprises Introduction

The Credit Guarantee Fund Scheme for Micro and Small Enterprises (CGFS) was launched by the Government of India (GoI) to make available collateral-free credit to the micro and small enterprise sector. Both the existing and new enterprises, including FPCs are eligible to be covered under the scheme. The Ministry of Micro, Small and Medium Enterprises, GoI and Small Industries Development Bank of India (SIDBI), established a Trust named Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) to implement the Credit Guarantee Fund Scheme for Micro and Small Enterprises.

Eligible Lending Institutions

The Banks and Financial Institutions, which are eligible under the scheme, are scheduled commercial banks (Public Sector Banks/Private Sector Banks/Foreign Banks) and select regional rural Banks (which have been classified under 'Sustainable Viable' category by NABARD), Private Sector Banks, 73 Regional Rural Banks (RRBs), 4 Foreign Banks and 9 other institutions i.e. Delhi Financial Corporation, Kerala Financial Corporation, Jammu and Kashmir Development Finance Corporation Ltd, Andhra Pradesh State Financial Corporation, Export Import Bank of India, The Tamil Nadu Industrial Investment Corporation Ltd., National Small Industries Corporation (NSIC), North Eastern Development Finance Corporation (NEDFI) and Small Industries Development Bank of India (SIDBI).



Eligible Credit Facility

The credit facilities which are eligible to be covered under the scheme are both term loans and/or working capital facility up to INR 100 Lakh per borrowing unit, extended without any collateral security and/or third party guarantee, to a new or existing micro and small enterprise. For those units covered under the guarantee scheme, which may become sick owing to factors beyond the control of management, rehabilitation assistance extended by the lender could also be covered under the guarantee scheme. Any credit facility in respect of which risks are additionally covered under the scheme, operated by Government or other agencies, will not be eligible for coverage under the scheme.

Guarantee Cover

The guarantee cover available under the scheme is to the extent of maximum 85 percent of the sanctioned amount of the credit facility. The guarantee cover provided is up to 75 percent of the credit facility up to INR 50 Lakh (85 percent for loans up to INR 5 Lakh provided to micro enterprises, 80 percent for MSEs owned/operated by women and all loans to NER including Sikkim) with a uniform guarantee at 50 percent for the entire amount if the credit exposure is above INR 50 Lakh and up to INR 100 Lakh. In case of default, the Trust settles the claim up to 75 percent (or 85 percent/80 percent/50 percent wherever applicable) of the amount in default of the credit facility extended by the lending institution.

Tenure of Guarantee

The Guarantee cover under the scheme is for the agreed tenure of the term loan/composite credit. In case of working capital, the guarantee cover is of 5 years or block of 5 years

Fee for Guarantee

A composite all-in Annual Guarantee Fee of 1.0 percent p.a. of the credit facility sanctioned (0.75 percent for credit facility up to INR 5 Lakh and 0.85 percent for above INR 5 Lakh and up to 100 Lakh for Women, Micro Enterprises and units in NER including Sikkim) is now being charged.

Contact: Sh. Piyush Srivastava (ADC), Ministry of MSME (www.cgtmse.in) Phone: 23062694

7.2.3. Mudra Loan Scheme

Brief details of the Product

MUDRA loans are extended by banks, NBFCs, MFIs and other eligible financial intermediaries as notified by MUDRA Ltd. The Pradhan Mantri MUDRA Yojana (PMMY) provides MUDRA loan, upto INR 10 Lakh to income generating micro enterprises engaged in manufacturing, trading and services sector.

The overdraft amount of INR 5000 sanctioned under PMJDY has been also classified as MUDRA loans under the Prime Minister MUDRA Yojana (PMMY).



The MUDRA loan is extended under following three categories:

- Loans upto INR 50,000 (Shishu)
- Loans from INR 50,001 to INR 5 Lakh (Kishore)
- Loans from INR 5,00,001 to INR 10 Lakh (Tarun)

Eligible borrowers: Individuals, Proprietary concerns, Partnership Firm, Private Ltd. Company; Public Company and any other legal forms.

Purpose of Assistance/Nature of Assistance

The MUDRA loans are provided for income generating small business activity in manufacturing, processing, service sector or trading. The Project cost is decided based on business plan and the investment proposed. MUDRA loan is not for consumption/personal needs.

For the purpose of working capital limit, MUDRA has launched a new product called “MUDRA Card”, which is a debit card issued on RuPay platform, and provides hassle free credit in a flexible manner.

Amount of assistance

Up to INR 10 Lakh in three categories viz. Shishu, Kishore and Tarun.

Interest rate

Interest rates are to be charged as per the policy decision of the bank.

Upfront fee/Processing charges

Banks may consider charging of upfront fee as per their internal guidelines

Security

First charge on all assets created out of the loan extended to the borrower and the assets which are directly associated with the business/project for which credit has been extended; DPN (wherever applicable); CGTMSE (wherever felt desirable)/MUDRA Guarantee cover.

In terms of RBI guidelines issued vide Master Circular on lending to MSMEs, in respect of loans, banks are mandated not to accept collateral security in the case of loans upto INR 10 Lakh extended to units in the Micro Small Enterprises (MSE) Sector.

Tenure of Assistance

Tenure of assistance based on the economic life of the assets created and also the cash flow generated. However, MUDRA's refinance assistance will be for a maximum tenure of 36 months which will also be aligned to terms of allotment of MUDRA funds by RBI from time to time.

Repayment

Term Loan: - To be repaid in suitable instalments with suitable moratorium period as per cash flow of the business.

OD and CC Limit: Repayable on demand. Renewal and Annual Review as per internal guidelines of the Bank.

Contact: MSME Development Centre, C-11, G-Block, Bandra Kurla Complex, Bandra East, Mumbai – 400 051 (www.mudra.org.in) Phone: 022-67531129



7.2.4. Agri-Clinics and Agri-Business Centres (ACABC) Scheme

Agri-Clinics are envisaged to provide expert advice and services to farmers on various technologies including soil health, cropping practices, plant protection, crop insurance, post harvest technology and clinical services.

Agri-Business Centres are commercial units of agri-ventures established by trained agriculture professionals. Such ventures may include maintenance and custom hiring of farm equipment, sale of inputs and other services in agriculture and allied areas, including post-harvest management and market linkages for income generation and entrepreneurship development.

Revised Training Cost

The revised training cost per trainee is limited to INR 35,000 per trainee. An additional amount of 10percent of approved charges on food, accommodation, honorarium, training expenditure and handholding charges has been provided for North-Eastern States and Hill States (J&K, Uttarakhand and Himachal Pradesh).

Release of Handholding Fund

Half of the handholding amount i.e. INR 2500 per trained candidate shall be released to the NTI on receipt of list of projects submitted to bank (for candidates who intend to establish the venture with bank finance) along with proof of submission. Remaining 50 percent of the handholding amount i.e. INR 2500 per established candidate shall be released to NTI on receipt of proof for Agri-Venture establishment.

Incentives to Candidates and NTIs

NTIs with cumulative and respective batch success rate of more than 50 percent are eligible to get an additional incentive of INR 2000 per candidate for every candidate established after 50percent success rate, reported in respective batch.

Every candidate who establishes his/her venture and submits proof to that effect is eligible to receive an incentive of INR 1000.

Credit Support

Linkage with Credit

Assistance under the scheme would be purely credit linked and subject to sanction of the project by banks based on economic viability and commercial considerations. The eligible financial institutions under the scheme are: Commercial Banks, Regional Rural Banks, State Cooperative Banks, State Cooperative Agriculture and Rural Development Banks and Such other institutions eligible for refinance from NABARD.

Project Cost Ceiling

Ceiling of project cost for subsidy has been enhanced to INR 20 Lakh for an individual project (INR 25 Lakh in case of extremely successful individual projects) and up to INR 100 Lakh for a group project (Established by a group comprising at least 5 trained persons under the scheme, out of which one could be from Management background). The bank may, nevertheless, subject to their own satisfaction, finance groups formed by 2 or more trained persons under the scheme (person with management background can only be included in groups of 5 or more) with in the TFO (Total Financial Outlay) ceiling INR 20 Lakh per trained person and overall ceiling of INR



100 Lakh, whichever is less for the purpose of subsidy. However, the actual credit sanctioned by the bank for a venture established under the scheme could be higher depending on the financial viability and technical feasibility. Thus, for instance, if an individual is granted a loan for TFO of INR 35 Lakh, subsidy shall be reckoned only on TFO of INR 20 Lakh. To encourage exceptionally successful individual agri-preneurs, the project cost limit for subsidy purposes may be extended by INR 5 Lakh in addition to the generally applicable project cost limit of INR 20 Lakh for calculating subsidy. This will serve as an incentive to an agri-preneur to expand his/her already established and successful venture.

Change of Capital and Interest Subsidy to Composite Subsidy

Subsidy pattern has been revised from “Capital and Interest Subsidy” to “Composite Subsidy” which is back-ended in nature. It is 44 percent of project cost for women, SC/ST and all categories of candidates from NE and Hill states and 36 percent of project cost for all others. Interest subsidy scheme is replaced with enhanced quantum of back-ended subsidy.

Contact: Mrs. V. Usha Rani, IAS, Director General – MANAGE (www.agriclinics.net)
Phone: 9951851556

7.2.5. Scheme of Fund for Regeneration of Traditional Industries (SFURTI)

Introduction

The main objective of the SFURTI is to organize the traditional industries and artisans into clusters to make them competitive and provide support for their long term sustainability and economy of scale and to provide sustained employment for traditional industry artisans and rural entrepreneurs.

Soft Interventions

Soft interventions under the project would consist of activities like general awareness, counselling, trust building, skill development and capacity building/for the entire value chain, different skills need to be imparted such as institution development, exposure visits, market promotion initiatives, design and product development, participation in seminars, workshops and training programmes on technology upgradation, etc.

Hard Interventions

Hard interventions will include creation of following facilities like multiple facilities for multiple products and packaging wherever needed; Common Facility Centres (CFCs); Raw material banks (RMBs); Up-gradation of production infrastructure; Tools and technological up-gradation such as charkha up-gradation, toolkit distribution, Warehousing facility; Training centre, Value addition and processing centre/multi-products.

Thematic interventions

Thematic Intervention such as Brand building and promotion campaign, New media marketing, e-Commerce initiatives, Innovation, Research and development initiatives, developing institutional linkages with the existing and proposed clusters is also included.



The financial assistance provided for any specific project shall be subject to a maximum of INR 8 Crore:

Table 13: Types of clusters

Types of Clusters	Per cluster budget limit
Heritage Clusters (1000-2500 artisans)	INR 8.00 Crore
Major Clusters (500-1000 artisans)	INR 3.00 Crore
Mini Clusters (Upto 500 artisans)	INR 1.50 Crore

Table 14: The funding pattern under the Scheme will be as under:

Sr. No.	Project Intervention	Scheme Funding	Financial Limit	IA Share
A	Cluster Interventions	-		-
A1	Soft Interventions including skill trainings, capacity building, design development	100 percent	Subject to a maximum 33 percent of A (Total cost of cluster intervention both hard and soft interventions) or INR 25 Lakh whichever is less.	NIL
A2	Hard intervention including CFCs, RMBs, training centres, etc.	75 percent	-	25 percent of project Cost including Land Cost and own contribution as equity
B	Cost of TA	100 percent	8 percent of A1+A2 (Total cost of Cluster Interventions both hard and soft interventions)	NIL
C	Cost of IA/SPV including CDE	100 percent	Maximum INR 20 Lakh per project	NIL

Contact: Web Information Manager, Ministry of Micro, Small and Medium Enterprises, Room No 123, Udyog Bhawan, Rafi Marg, New Delhi – 110011 (www.msme.gov.in) Phone: 011-23061431

7.2.6. Micro and Small Enterprises - Cluster Development Programme (MSE-CDP)

The Ministry of Micro, Small and Medium Enterprises (MSME), Government of India (GoI) has adopted the Cluster Development approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of Micro and Small Enterprises (MSEs) and their



collectives in the country. A cluster is a group of enterprises located within an identifiable and as far as practicable, contiguous area producing same/similar products/services. The essential characteristics of enterprises in a cluster are (a) Similarity or complementarity in the methods of production, quality control and testing, energy consumption, pollution control etc. (b) Similar level of technology and marketing strategies/practices (c) Similar channels for communication among the members of the cluster (d) Common challenges and opportunities.

Objectives of the Scheme:

- (i) To support the sustainability and growth of MSEs by addressing common issues such as improvement of technology, skills and quality, market access, access to capital etc.
- ii) To build capacity of MSEs for common supportive action through formation of self-help groups, consortia, upgradation of associations etc.
- (iii) To create/upgrade infrastructural facilities in the new/existing industrial areas/ clusters of MSEs including setting up of Flatted Factory Complexes.
- (iv) To set up common facility centres (for testing, training centre, raw material depot, effluent treatment, complementing production processes, etc.)

Components:

- (i) Setting up of CFCs: Creation of tangible “assets” as Common Facility Centres (CFCs) like Common Production/Processing Centre (for balancing/correcting/improving production line that cannot be undertaken by individual units), Design Centres, Testing Facilities, Training Centre, R and D Centres, Effluent Treatment Plant, Marketing Display/Selling Centre, Common Logistics Centre, Common Raw Material Bank/Sales Depot, etc. The GoI grant will be restricted to 70 percent of the cost of project of maximum INR 15.00 Crore. GoI grant will be 90 percent for CFCs in NE and Hill States, Clusters with more than 50 percent (a) micro/ village (b) women owned (c) SC/ST units.
- (ii) Infrastructure Development: Consist of projects for infrastructural facilities like power distribution network, water, telecommunication, drainage and pollution control facilities, roads, banks, raw materials storage and marketing outlets, common service facilities and technological backup services for MSEs in the new/ existing industrial estates/areas. The GoI grant will be restricted to 60 percent of the cost of project of INR 10.00 Crore. GoI grant will be 80 percent for projects in NE and Hill States, industrial areas/ estates with more than 50 percent (a) micro (b) women owned (c) SC/ST units.

Contact: Shri. R.K. Rai (Director), Email Id : rk.rai@nic.in (www.cluster.dcmsme.gov.in)
Phone: 23062561

7.2.7. Development of Commercial Horticulture through Production and Post-Harvest Management of Horticulture Crops by NHB

Credit linked projects relating to establishment of commercial production units in open field as well as under protected conditions and projects on Post Harvest Management and primary processing of products are eligible for assistance under this scheme as per cost norms given in



the detailed scheme. However, release of subsidy need not be credit linked in North Eastern States and for the institutions like Public Sector Units, Panchayats, Cooperatives, Registered Societies/Trust and Public Limited Companies provided they can meet remaining share of the project cost out of their own resources. Such projects will have to be appraised by appraising agency approved by NHB.

Description of components and Pattern of Assistance

- Commercial Horticulture Development in open field conditions on project mode, National Horticulture Board will take up integrated commercial horticulture development projects in open field conditions on project mode, including components viz. planting material, plantation, irrigation, fertigation, mechanization, precision farming, GAP etc. for projects covering area over 2.00 ha. (5 Acres) Integration of production unit with on farm PHM components and primary processing unit shall also be allowed in project mode. Cost of raising new plantation will vary from crop to crop, which will be taken into consideration while providing assistance to the beneficiary. Integrated production unit on Mushroom and tissue culture shall also be eligible for assistance under this component. The components like farm machinery and PHM infrastructure, irrigation and micro irrigation etc. shall be eligible under the scheme for assistance in existing/new orchards/projects to increase productivity.

Eligibility Criteria:

A natural person, a group of individuals or a legal person (Partnership Firm, a Trust, Cooperative Society, a Society registered under Registration of Society Act, a Company, Self-Help Group, Farmer Producers Organization, Co-operative Marketing Federations, Agricultural Produce Marketing Committees, Marketing Boards/Committees, Municipal Corporations/ Committees, Agro-Industries Corporations may apply for assistance.

Pattern of assistance

Credit linked back-ended subsidy @ 40 percent of the total project cost limited to INR 30.00 Lakh per project in general areas and @ 50 percent of project cost limited to INR 37.50 Lakh in NE Region, Hilly and Scheduled areas.

Commercial Horticulture Development in protected cover on project mode the Board will also take up commercial horticulture development projects under protected cover on project mode including components viz. planting material, plantation, irrigation, fertigation, mechanization, etc. for projects having area over 2500 sq. meter. Activities like construction of green houses, shed net house, plastic mulching, and plastic tunnel, anti-bird /hail nets etc. would be promoted. Provision has been made for selecting a variety of construction material for green houses and shed nets houses. Preference will be given to using locally available material to minimize cost of construction of such structures. However, for availing subsidy, all material /technology should confirm to prescribed standards.

Pattern of assistance

Credit linked back-ended subsidy @ 50 percent of the total project cost limited to INR 56.00 Lakh per project as per admissible cost norms for green houses, shed net house, plastic tunnel, anti-bird /hail nets and cost of planting material, etc.



- Integrated Post Harvest Management projects the Board will take up Integrated Post Harvest Management projects relating to Pack House, Ripening Chamber, Refer Van, Retail Outlets, Precooling unit, Primary processing etc. NHB will also take up projects in component mode and for standalone projects of PHM components.

Pattern of assistance

Credit linked back-ended subsidy @ 35 percent of the total project cost limited to INR 50.75 Lakh per project in general area and @ 50 percent of project cost limited to INR 72.50 Lakh per project in NE, Hilly and Scheduled areas.

General conditions

- i. Credit component as means of finance of the project should be term loan from banking or non-banking financial institutions. For credit linked projects under NHB, eligible subsidy amount to be capped at par with term loan sanctioned by the lending Banks/FI.
- ii. Normative cost of various components shall be prescribed by NHB.
- iii. Benefit of exclusive components of cold storage scheme shall also be available to the promoters over and above the assistance that will be provided under Commercial Horticulture Scheme to set up integrated projects for production and PHM components.
- iv. Projects relating to setting up of new units shall be technically and financially appraised to ensure and enable entrepreneur to incorporate latest available technology.
- v. Assistance can also be availed for a combination of PHM infrastructure components by a beneficiary, within the prescribed norms of individual items.
- f. Capital Investment subsidy scheme for construction/expansion/ modernization of cold storage and storages for Horticulture Products – by NHB

7.2.8. Description of components and Pattern of Assistance

Components: Credit linked projects relating to Cold Storages including Controlled Atmosphere (CA) and their modernization are eligible for assistance under this component. Subsidy need not be credit linked for the institutions like Public Sector Units, Panchayats, Cooperatives, Registered Societies/Trust and Public limited companies provided they can meet remaining share of the project cost out of their own resources. Such projects will have to be appraised by appraising agency approved by NHB.

Eligibility Criteria:

A natural person, a group of individuals or a legal person (Partnership Firm, a Trust, Cooperative Society, a Society registered under Registration of Society Act, a Company, Self-Help Group, Farmer Producers Organization, Co-operative Marketing Federations, Agricultural Produce Marketing Committees, Marketing Boards/Committees, Municipal Corporations/ Committees, Agro-Industries Corporations may apply for assistance.

Pattern of Assistance:

The assistance will be given as subsidy @ 35 percent of the capital cost of project in general areas and 50 percent in case of NE, Hilly and scheduled areas for a storage capacity above 5000 MT up to 10000 MT.



Calculation of Capacity for subsidy:

For calculation of capacity, 3.4 cubic meters (cm.) (120 cubic feet (cft.) of chamber volume shall be considered equivalent to 1 MT storage capacity.

Table 15: Description of components and Cost Norms

S.No.	Description	Cost Norms
1	Cold storage units Type 1 – basic mezzanine structure with large chamber (of > 250 MT) type with single temperature zone.	<ul style="list-style-type: none"> • @ INR 8000/ MT for capacity upto 5000 MT • @ INR 7600/ MT for capacity between 5001 to 6500 MT. • @ INR 7200/MT for capacity between 6501 to 8000 MT. • @ INR 6800/MT for capacity between 8001 to 10000 MT.
2	Cold storage units Type 2 – Pre Engineering Building (PEB) Type for multiple temperature and product use , more than 6 chambers of <250 MT) and basic material handling equipment	<ul style="list-style-type: none"> • @ INR10000/ MT for capacity upto 5000 MT. • @ INR 9500/ MT for capacity between 5001 to 6500 MT. • @ INR 9000/MT for capacity between 6501 to 8000 MT. • @ INR 8500/MT for capacity between 8001 to 10000 MT
3	Cold Storage Units Type 2 with add on technology for Controlled Atmosphere	Additional INR 10,000/MT for add on components of controlled atmosphere technology as per component wise cost (As per detailed guidelines)
4	Technology induction and modernization of cold-chain	<ul style="list-style-type: none"> • @ INR 5000/MT for capacity between 5001 to 10000 MT. • Components of modernization includes PLC equipment, packaging lines, dock levelers, advanced graders, alternate technologies, stacking system, modernization of insulation and refrigeration etc. Details are in complete guidelines

General conditions for cold storage projects

For credit linked projects, credit components as means of finance of the project should be term loan from banking or non-banking financial institutions. For credit linked projects under NHB, eligible subsidy amount to be capped at par with term loan sanctioned by the lending Banks/FI.

Contact: National Horticulture Board, MCAER Building 132/B, Bhambhurda Bhosale Nagar, Pune-411007, Phone: 020-25530582-83.



7.2.9. Venture Capital Assistance Scheme for Agribusiness Development- by SFAC

Description and Pattern of Assistance

SFAC would provide venture capital to agribusiness projects by way of soft loan to supplement the financial gap worked out by the sanctioning authority of term loan under means of finance with respect to cost of project subject to the fulfilment of the following conditions:

(a) Qualifying projects under Venture Capital:

- i. Project should be in agriculture or allied sector or related to agricultural services. Poultry and dairy projects will also be covered under the Scheme.
- ii. Project should provide assured market to farmers'/producer groups.
- iii. Project should encourage farmers to diversify into high value crops to increase farm incomes.
- iv. Project should be accepted by Notified Financial Institution for grant of term loan.

(b) The quantum of SFAC Venture Capital Assistance will depend on the project cost and will be the lowest of the following:

- 26 percent of the promoter's equity
- INR 50 Lakh

Provided that for projects located in North-Eastern Region, Hilly States (Uttarakhand, Himachal Pradesh, Jammu and Kashmir) and in all cases in any part of the country where the project is promoted by a registered Farmer Producers Organisation, the quantum of venture capital will be the lowest of the following:

- 40 percent of the promoter's equity
- 50 Lakh

Eligible Persons

Assistance under the scheme will be available to Individuals, Farmers, Producer Groups, Partnership/Proprietary Firms, Self Help Groups, Companies, Agripreneurs, units in agri-export zones, and Agriculture graduates individually or in groups for setting up agribusiness projects. For professional management and accountability, the groups have to preferably form into companies or producer companies under the relevant Act.

Contact: Small Farmers' Agri-Business Consortium, Head Office, NCUI Auditorium Building, 5th Floor, 3, Siri Institutional Area, August Kranti Marg, Hauz Khas, New Delhi – 110016 (www.sfacindia.com) Phone: 011- 41060075, 26966017, 26966037.

7.3. SCHEMES OF THE GOVERNMENT OF MAHARASHTRA

7.3.1. Agri-business Infrastructure Development Investment Program (AIDIP)

The Agribusiness Infrastructure Development Investment Program (AIDIP) is a project of Government of Maharashtra (GoM), implemented under Public-Private- Partnership (PPP) framework. GoM has proposed to avail loans from Asian Development Bank (ADB) to fund the



viability gap under the proposed project. In the total program cost, private partner has to invest 60 percent of cost and remaining 40 percent of cost which will be contributed by ADB and the State Governments in the ratio 80:20 respectively. ADB funds will flow in the form of loan to the State Government to which Government of India (GoI) will act as a guarantor. Department of Cooperation, Marketing and Textiles, Government of Maharashtra is the Executing Agency for the project and Maharashtra State Agricultural Marketing Board (MSAMB) is Implementing Agency. AIDIP is aimed at addressing three main constraints to agriculture growth-outdated technologies; lack of public investment in basic infrastructure and limited diversification. In an Integrated Value Chain (IVC) approach, the program targets improving physical and institutional linkages along agricultural value chains through support of agribusiness market infrastructure, support infrastructure like last mile roads, power, water, systems relating to market intelligence, and capacity building and strengthening/establishing value chain linkages. The intent of the program is to achieve accelerated investment in agriculture and to support related infrastructure in rural areas, along the Integrated Value Chains.

7.3.2. Maharashtra Agricultural Competitiveness Project

The Project Development Objective of the Maharashtra Agricultural Competitiveness Project (MACP) is to increase the Productivity, Profitability and Market Access of the farming community in Maharashtra. This is being achieved by providing farmers with technical knowledge, market intelligence and market networks to support diversification and intensification of agriculture production aimed at responding to market demand. Farmers are also assisted in establishing farmer organisations, developing alternative market channels outside of the regulated markets and in supporting the modernization of promising traditional wholesale markets. The project has the following main components: Intensification and Diversification of Market led Production; and Improving Farmers Access to Markets.

7.3.3. GAT SHETI Scheme

The Maharashtra Government has rolled out “Gat Sheti” or Group Farming Policy as one of its major initiatives. Under the scheme, every year 200 projects would be shortlisted for group farming (and processing) start-ups with financial incentives up to INR 1 Crore to each group. According to the group farming policy, it would be mandatory for at least ten farmers to come together with a cumulative land holding of 100 acres. To make the initiative a success, there would be guidance on the crop pattern and technique of farming. Technology would be adopted. The model is a highly important step towards larger agriculture reforms, which will help make agriculture economically affordable and sustainable specially among the small and marginal farmers. An assistance of INR 1 Crore incentive for group farming (and processing) on 100 acres of land would help bring down investment expenditure and with scientific practices increase the yield. The biggest advantage of group farming (and processing) would be to help individual farmers to collectively more shoulder the investment expenditure. Since farming would be on 100 acres, it would enable them to make maximum use of machines and technology and derive economic of scale. The scheme encompasses investment and assistance in 4 major stages/tranches, which are as under:

First stage: Primarily comprises of Soft Interventions and encompass grant-in-aid assistance of 20percent of the project cost (with ceiling of INR 20 Lakh). These interventions will focus



on result oriented training to farm labour, Group members, Group's BoD, Creation of Bank/ Financial Linkages for members and company, Exposure visits to successful group farming models within and outside the state and appointment of Technical Expert. The activities will help in capacity building of stakeholders while focusing on training to adopt scientific and good agriculture practices to increase yield, explore-understand-and implement mechanization at farm level, explore-understand-and implement allied activities like bee farming and honey processing, explore-understand-and implement market led value addition and joint marketing, etc. The trainings shall also encompass enterprise operation management, etc. A technical expert on board will ensure implementation of all 4 stage activities with adherence to technical standards, to match desired results.

Second stage: Primarily comprise of development and implementation of activities like Aggregated land irrigation infrastructure, Custom Hiring Centres and farm tool banks, Group livestock care and management, poultry farming, fish farming, sericulture, bee farming, Organic farming, Input centres, Seed production and marketing, etc. This stage encompasses grant-in-aid assistance of 30percent of the project cost (with ceiling of INR 30 Lakh).

Third Stage: Primarily comprise of development and implementation of activities like Group warehousing, Cleaning and grading centres, Value addition secondary/Processing/ Packaging centres, Cold storage and reefer transport, Retail outlets, etc. This stage encompasses grant-in-aid assistance of 30percent of the project cost (with ceiling of INR 30 Lakh).

Fourth stage: 20 percent grant-in-aid assistance on review and satisfactory implementation of the project by the group.

7.3.4. Krishi Gurukul Yojana

Krishi Gurukul Yojana is also a pro-farmer Yojana in the state Government of Maharashtra announced in the 2016-17 financial budget. The main purpose of the scheme is to educate more and more farmers about the new techniques in agriculture and floriculture. Nearly 1664 farmers have been honoured with “Adarsh Shetkari Purashkar” by the State Government for their extraordinary works in this field. Government has decided to implement this new scheme for spreading such kind of knowledge to other farmers also. Under the Krishi Gurukul Yojana, 3 farmers per district will be selected so as to share information and guide 25 others with their own experience, adopted advance techniques in agriculture and floriculture. This role model trainer and the trainee farmer will be paid honorarium under this scheme. Every year, an “Agriculture Festival” will also be organized in each district of the state. The main objective behind such kind of event is to motivate farmer's society, create awareness about government's efforts for agribusiness development, mutual sharing of information etc.

Krishi Gurukul Yojana is the scheme by Maharashtra government under which farmers are given information about latest technologies by role model farmers in the field. Basically, the scheme organizes the meetings where the farmer who already applied the techniques are invited for the guidance to the rest of the farmers who all can use the same and get benefitted. The scheme was announced in the 2016-2017 financial budget year and is active. Under the scheme there are many powerful actions which are tracked so intelligently that is helping other farmers without including any third party. Krishi Gurukul Yojana will select 3 farmers from each district to share information among the fellow farmers.



Benefits of Krishi Gurukul Yojana:

- **Introduction to technology:** With this scheme, farmers are educated about the new technologies and its implications.
- **Success stories:** More such practices will bring more success stories and will motivate others to undertake the same practice.
- **Smart work:** farmers will come to know about the smart work rather than doing rigorous work and achieving less.
- **Better results:** With the knowledge shared and implementation of new technology, there will be better results in the form of grain production and earning.

7.3.5. Pandit Deen Dayal Upadhyay Unnat Krishi Shiksha Yojana

“Pandit Deen Dayal Upadhyay Unnat Krishi Shiksha Yojana”, under Ministry of Agriculture and Farmers Welfare, is implemented by Education Division of ICAR. A 100 farmers training centres across the country have been identified on the basis of knowledge, skill, ability and experiences related to Organic Farming, Natural Farming and Cow based Economy and having facilities to conduct training programmes. The scheme has the following objectives:

- To build skilled Human Resource at village level relevant to national needs towards organic farming and sustainable agriculture.
- Provide rural India with professional support in the field of Organic Farming/Natural Farming/Rural Economy/Sustainable Agriculture.
- To extend other activities of Pandit Deen Dayal Upadhyay Unnat Krishi Shiksha Yojana at village level through these established centres.

7.3.6. Annasaheb Patil Arthik Vikas Mahamandal Maryadit

This scheme targets:

- Enabling to reach an economically backward group, especially to the unemployed youth.
- Providing employment and making available opportunities for self-employment.
- Enhance social development of economically backward communities

7.3.7 Chhatrapati Rajaram Maharaj Entrepreneurship and Skill Development Campaign

Individual Interest Reimbursement (IR-I)

Qualifying Beneficiaries -

- Should be a resident of Maharashtra
- Age should be in between 18 to 45 years
- Should be registered on web portal (www.mahaswayam.in)
- Annual income should be in limit(Limit defined as per the certificate issued by competent authority)
- Beneficiary should not be a part of any other scheme under corporation
- Should have disability certificate in case applying under disabled criteria.



- One person can be benefited from this scheme only once
- Should have disability certificate in case applying under disabled criteria

Group Loan Interest Reimbursement Scheme (IR-II)

Qualifying Beneficiaries -

- Should be resident of Maharashtra
- Beneficiary bank account should be Aadhar linked
- Age should be in between 18 to 45 years
- Should be registered on web portal(www.mahaswayam.in)
- Annual income should be within limit(Limit defined as per the certificate issued by competent authority)
- Beneficiary should not be a part of any other scheme under corporation
- Beneficiary should not be liable to any bank/financial institute
- One person can be benefited from this scheme only once
- Should have disability certificate in case applying under disabled criteria

Group Project Interest Free Loan Scheme (GL-I)

Qualifying Beneficiaries -

- Should be resident of Maharashtra
- Beneficiary bank account should be Aadhar linked
- Applicant's age should above 18 years
- Should be registered on web portal(www.mahaswayam.in)
- Annual income should be in limit(Limit defined as per the certificate issued by competent authority)
- Beneficiary should not be a part of any other scheme under corporation
- Beneficiary should not be liable to any bank/financial institute
- One person can be benefited from this scheme only once
- Should have disability certificate in case applying under disabled criteria



PART III

CASE STUDIES AND PROJECT INPUTS



CHAPTER 1

CASE ILLUSTRATION ON START-UPS

Highlights

In this chapter a number of case illustrations on start-ups are considered. The objective is to present a frame of reference on the types of start-up projects typically initiated by agripreneurs.

The cases also highlight the profile of a typical agripreneur, how a business opportunity is typically identified, the typical equipment and technology deployed, manufacturing processes and project USP.

The cases cover a wide spectrum of project options including: Dal milling; manufacture of pickles, chutneys and papads; manufacture of carbonated soft drinks; manufacture of health foods; manufacture of cattle feed from maize; pomogranate oil extraction, essential oil manufacturing; manufacture of tuti-frutti from papaya; manufacture of edible and non-edible oil; wheat flour milling and packaging, amla crush, candy and murabba processing, peeled garlic processing, noodles, ketchup, soy sauce, vinegar, green chilli and garlic paste, etc.; processing of organic jaggery; processing of organic turmeric powder.

Many start-up entrepreneurs have received technical, management and entrepreneurship related training from KVK, KVIC, DIC, R-SETI and other NGOs. This has helped them undertake their business planning and project implementation more professionally. A few entrepreneurs are of family business background while majority are first generation start-ups. Some entrepreneurs are science graduates while others are management graduates.

The presence of fewer processing units vis-à-vis production of a commodities like pulses or horticulture produce (amla) have encouraged start-ups in such areas. Educational background or professional training (for example, in pharmacy) or EDP training by institutions like R-SETI, MCED, MITCON, KVIC/B or NGOs (which include sessions on opportunity identification and market research) may have also help in narrowing down on a particular business opportunity eposure. Visits and technical training in existing enterprises and in the same sector have also benefited start-ups. A few have basically graduated from being employees in a related enterprise for launching their own start-up in the same line. Inconvenient and costly logistics and fragmented market circumstances presented an opportunity to bridge these gaps and enabled competitive advantage to many



MSE processing units in the region. Low per capita consumption in the region and country also reflects potential demand.

Absence of local competition too contributed towards success of some units. Markets may be fragmented due to transport diseconomies, perishability, etc. Strong retail market networks serve as the USP of other units. In some cases, such as in the products of Krushi Amrut Agro Foods, the originality of ingredients used and peoprietary knowledge is the key. Some entrepreneurs have adopted unique marketing strategies, such as selling through SHGs on door-to-door basis. Some have used IT platform such as “Flipkart” and “Amazon” to market their products successfully. Notably, several units have explored processing herbal products. The USP of some products (e.g. cakes) is in terms of being wholly vegetarian. Some products are sold on the basis of being free from use of any synthetic colours, artificial flavours or preservatives.



Introduction

The case illustrations presented in this chapter cover a wide canvas of enterprises. Products manufactured and marketed successfully by the micro or small-sized enterprises vary from rice and pulses, pickles, wheat flour to various edible oils. These enterprises have covered a wide mix of marketing strategies ranging from referrals from doctors to marketing through the internet or through SHGs. Some of these firms are successfully competing in the market using a “consumer push” than “consumer pull” strategy. Some of these cases are also presented as to help understand project contours in a range of sub-sectors.

1.1. CASE STUDIES ON SUCCESSFUL START-UPS

1.1.1 Bhumata Food Products:

Packaged spices for hotels and baby food through doctors

There are many restaurants and hotels in the town of Newasa in Ahmednagar district that require large quantities of spices and atta. At present, these eateries largely procure their inputs from spices processing units located at Ahmednagar and Aurangabad. Hence, the cost of procurement of spices for these hotels is high because of inconvenient logistics. Upon identifying this need from the fragmented local market and to exploit the local opportunity in the spices processing sector, an entrepreneur from Ahmednagar decided to establish an integrated spices processing unit. Being native to the region, he decided to set up of the project. With an experience of more than 10 years in the food and pharma sector, he was keen to set up an enterprise in his home town. He therefore approached the Agriculture Technology Management Agency (ATMA) office in the region and received training from the Krishi Vignan Kendra (KVK) in 2016 on spices processing. With the vision to grow and step into the food processing industry, the promoter set up a plant for manufacturing various food products with the use of modern technology. This unit today, manufactures a range of products such as coriander powder, cumin powder, chilli powder, turmeric powder and “Nachani Sattva” (finger millet as baby food).

The entrepreneur was guided to prepare a bankable business plan with an outlay of INR 50 Lakh in which INR 37.50 Lakh was the loan component from the Bank of Baroda. This plan and project includes machinery like roasters, pulverisers, blenders, dryers and cleaning and packaging equipment. The entrepreneur has to deployed an unique marketing strategy using referrals from doctors to market Nachani Sattva.

In terms of manufacturing process, the enterprise procures raw material from the weekly market as well as wholesale market at Ahmednagar. The raw material is then dried and finely grounded. Subsequently, depending upon the type of spice, blending activity is carried out. After blending, pouches of different sizes are packed. Considering 180 days of operation on single shift basis, the projected turnover of the unit is INR 50 Lakh per annum by 2019 with direct employment generation for 22 workers (skilled and unskilled). The unit requires a large quantity of chilly, turmeric, coriander and finger millets.

The unit has already started and is going on small scale but with the loan approval, rapid growth is expected to be facilitated.



1.1.2 Ruchi Food Products: From SHGs, retail chains and portals to market

Self Help Groups (SHG) in India evolved with the global emergence of micro finance as the means for ensuring poor in developing nations. Presently, over 90 percent of all the SHGs in India consist of women. Such SHGs are also seen as a platform for empowering women through financial inclusion. In this setting, a lady entrepreneur formed a “Mahila Bachat Gat” in Pune with intent to promote entrepreneurship amongst women members, marketing of produce and encouraging their active participation in social welfare campaigns. This initiative led to evolution of her own firm Ruchi Food Products in 2006 at Lohgaon (Pune). She started making pickles, and chutneys on small scale basis and members of the self-help group supported her in operating this enterprise.

The lady used to visit different food fairs and or exhibitions to sell her products which she initially started manufacturing on household or cottage scale without the support of any bank loan. Soon she started receiving large orders for pickles and chutneys. In addition, customers and consumers often enquired on other products like karela, lemon, chilli pickles, flour items like ragi (finger millet) and papad etc. The lady entrepreneur therefore decided to expand and secure professional training on processing of various food products. She approached KVIC and other professional training institutes for technical training on food processing.

Upon receiving technical training, the entrepreneur was assisted to prepare a bankable project report or business plan to set up a unit with project cost outlay of INR 99.67 Lakh for availing a loan from a bank. The entrepreneur approached the Canara Bank with the business plan for realising a loan of INR 74 Lakh (INR 35 Lakh as term loan and INR 39 Lakh as working capital loan). The bank asked her to make several changes in the business plan as per their specific requirement. Team ABPF- Grant Thornton customised and re-casted the business plans three times over as per changes and modification suggested and required by the bank over scrutiny of the proposal prior to sanction.

Basically, the project comprises machinery and equipment like roasters, pulverisers, coating machine, oven, dryers and packaging equipment. The entrepreneur is expanding her enterprise capacity into larger commercial scale of operations using this equipment to exploit the ever growing market demand. Considering 300 days of operation on a single shift basis, the projected turnover of the unit is INR 1.63 Crore by 2019 with direct employment generation for 10-12 women (both skilled and unskilled). With current infrastructure and technology, the unit was able to make an annual turnover of INR 67 Lakh for the year 2015-16. GT-ABPF guided her on the options for raw material procurement from regional FPOs. The enterprise is also into Nachani (finger millet), raw mango and pulses. The USP of the enterprise is also in terms of the marketing channels it uses – large retail chains like “More” and “Reliance” as well as internet marketing platforms like “Flipkart”.

1.1.3 Kisan Agro Foods: Extension of family business into soft drinks

Much of Aurangabad’s population is in the 15–59 years’ age category implying a growing regional market for Fast Moving Consumer Goods (FMCGs) as well as processed food. The promoter of this firm belongs to this city and was occupied as an auto rickshaw driver. He



had the burning desire to start up his own business and be his own boss. He fortunately had the “peer” experience as his family was operating a small coconut water processing plant in Chennai, but marketing the products in Mumbai. He availed guidance from ABPF and prepared a plan which aimed at producing carbonated soft drinks such as mango drinks, coconut water, guava juice and mixed fruit drinks etc. The entrepreneur’s business idea had commonalities with his family’s small coconut water processing project in Tamil Nadu. This is also in terms of distribution channels and aspects such as channel motivation strategies.

Market demand in the soft drink segment is apparently strong and growing. All-India production of aerated soft drinks is about 900 Crore bottles per year, of which the production of carbonated soft drinks is about 70 percent, that is, 630 Crore bottles. Per capita consumption of carbonated drinks is about 4 bottles per year, which is lower compared to other developing countries such as Pakistan -13, Bangladesh – 8, Egypt – 3, and extremely lower compared to the USA where it is 350 bottles. Hence, there is considerable potential for consumption trends to rise. The market is apparently dominated by brands of leading Pan India Multi National companies such as Parle (46 percent), Pure Drinks (23 percent), Mc Dowell (7 percent). Nevertheless, every Indian state has its own small local brands which have their own niche market. Typically, smaller firms and brands use customer push than consumer pull strategies to motivate marketing channels. Also, smaller firms basically offer higher margins to wholesalers and retailers.

The entrepreneur approached Vijaya Bank for realising necessary loan, with support of ABPF GT preparing a bankable plan. The start-up envisaged an outlay of INR 47.75 Lakh of which INR 20 Lakh is offered by the bank as a term loan and INR 15 Lakh is for working capital. This project includes machinery like carbonator, water cleaning RO machine, filling machine, chiller, bottle mould, packaging equipment and printing cylinder. The entrepreneur looks forward to target wholesalers and retailers to market his produce.

In terms of manufacturing process in the facility, the first step is to purify water using an RO plant. Next, preparing mixture of sugar, flavours, essences, and water called syrup formulation is an important step. Thereafter, carbonation (adding carbon dioxide to drink) takes place, followed by bottle filling. Considering 200 days of operation and on conservative single shift basis, the projected turnover with current infrastructure, machinery and technology for the year 2015-16 was INR 12 Lakh on job work basis. The unit targets a turnover of INR 1.72 Crore now (on trading basis) with direct employment generation for 8 workers (skilled and unskilled). The unit requires a large quantity of pomegranate, mango and guava.

1.1.4. Rujal Production: Expanding into commercial scale leveraging on growing demand for herbal and health food supplements

Rujal Production is a proprietary concern involved in the business of manufacturing herbal product and health food supplements on micro-scale. The lady entrepreneur has established a small unit with own finance in Lohegaon, Tal Haveli, Pune, Maharashtra, with built-up area admeasuring 1500 sq.ft. The products being manufactured by the enterprise are amla, jamun, bitter gourd, ashwagandha, shatawari and several such powders as well as gulkand, shatawari kalp, chyavanprash, sauf (for household purposes), face pack, hair pack, mehendi, shikekai and hair oil. The lady promoter is a diploma holder in electrical engineering and also owns an



electronics firm. Importantly, she is trained in the field of manufacturing herbal products. She secured training inputs from the Khadi and Village Industries Commission.

The lady entrepreneur has always had a fascination towards herbal and health food supplement products and likes to experiment with various herbal ingredients. As a matter of fact, she first started making products for personal use. Upon discovering positive results, she approached her relatives and neighbours with her products. These were highly appreciated by her relatives and friends, whereafter she started cottage or micro-scale production of such products. By 2016, the entrepreneur decided to undertake production on larger commercial scale. She undertook a market survey by distributing samples of products and checked its acceptance. She also conducted a competitor analysis focussing on differentiating her products from competition. She has also secured an FSSAI license. The USP of Rujal Production is purity; and self-concocted formulas of ingredients required to make various herbal and health food supplement products.

Today, people around the globe are giving preference to alternative medicines such as Ayurveda, naturopathy, homeopathy and herbal medicine. Also, demand for health food supplements is on the rise. Growing awareness about medicinal benefits as well as therapeutic effect of herbal products is pushing up demand for herbal extracts, dietary supplements and herbal-based beauty aids worldwide. The demand scenario is therefore very positive.

The entrepreneur has adopted an intensive marketing strategy. She has fostered tie-ups with the majority of medical stores in and around Pune, especially medical stores in Lohegaon where the unit is established. Notably, the products are sold through Patanjali outlets under the Rujal Production brand. Door to door sales is another marketing strategy adopted by the entrepreneur and many sales personnel market products from door to door. Wholesale orders are also catered to by Rujal Productions. The products are marketed in various packet sizes such as 10 gms, 50 gms and 100 gms.

The total cost of the proposed project works out to be INR 18.47. Lakh Out of this, the outlay on land and building is to the tune of INR 2.45 Lakh. The necessary machinery and equipment component accounts for INR 8.20 Lakh. Some of the other components of project cost include Preliminary and Pre-operative (P&P) expenses at about INR 1.5 Lakh and expense on furniture and fixtures to the tune of INR 50,000. The promoter also requires a working capital of INR 6.67 Lakh for the smooth functioning of the project. The project is established with a mix of equity and debt. Of the total project cost, promoter's contribution is about INR 4.62 Lakh which constitutes about 25 percent of the total project cost and term loan of INR 13.85 Lakh which amounts to 75 percent of the project cost. The project has received final sanction from the Canara bank.

The machinery that the promoter is deploying for quality production is an Automatic 15 kg capacity Roasting/Mixing cum Coating Machine, Single Phase Pulveriser Machine, Semi-automatic Pouch Packing Machine - laminated Paper and Packaging Machine. The manufacturing process of herbal products involves purchasing of raw material that is herbs, vegetables and fruits. These ingredients are then dried so as to achieve appropriate moisture content for processing. Once this raw material is dried properly, same is mixed with other essential ingredients and processed through a pulveriser to make a fine powder. This powder is then packed into different packet sizes with proper labelling and is sold in the market.



1.1.5. Shrinath Food Products: A case of convenience food in wheat processing

Convenience food products are growing in demand. In today's era of women-folk working to eke out a living coupled with their ever growing emancipation, there is ever increasing demand for such foods. An enterprise in Ahmednagar caters to this need in a changing society and seeks to manufacture wheat flour. The enterprise is to manufacture readymade wheat flour in various packet sizes for easy consumption. The firm Shrinath Food Products is a proprietary concern. The proprietorship firm has successfully commenced operations in 2016 out of a factory space of 2400 sqft.

Before commencing operations initially in cottage or micro-scale sans institutional credit, the promoter undertook trial production and processed wheat flour in small quantities. Initially, the entrepreneur checked the quality of flour as well as its physical appearance and tested its acceptability in the market. Prior to commencing operations, the entrepreneur also visited existing wheat flour mills for gaining practical knowledge. The raw material required for processing that is, wheat is procured from farmers in catchment area. Thereafter, he observed that his own funds alone were not sufficient for setting up the business unit and hence he opted for financial assistance from the Central Bank. In this regard, the promoter was guided on related equipment and technology, input sourcing and on packaging. The entrepreneur was guided on aspects such as FSSAI, lab testing reports and securing NOC from the Gram Panchayat. Importantly, the entrepreneur believes in purity and in maintaining the quality of the product which is already fetching him good business. Notably, his product is free of any adulteration and impurities. The entrepreneur uses a special Marshal Atta Chakki which helps in retaining the originality and maintaining quality of wheat flour. The demand for branded cereal flour products is now increasing. Even big giants like Hindustan Unilever, NEPC Agro and Nirma have jumped into this lucrative industry. Wheat Flour or Atta is predominantly used in food items in India, such as chapatti, roti, naan and puri and in sweet items too like in halwa and pakoda. Owing to the public distribution system providing whole wheat which has to be grounded and also purchasing wheat from the open market and grinding it, it will be cheaper than flour available in the market and one has the option to grind it to the consistency required. These advantages generate a huge market potential for a Mini Wheat Flour Mill. A simple low cost mini wheat mill is of great relevance especially in rural regions. It can produce common of milled wheat products in small quantities at a low investment.

In terms of manufacturing process, the enterprise procures raw material, that is, wheat from traders from Madhya Pradesh and also from the local market. After procuring wheat, it is cleaned through use of pre-cleaner and destoner so as to remove the foreign material content. This cleaned wheat is then processed through a flour mill until fine powder of desired quality is obtained. This flour is now packed into various packet-sizes. The enterprise caters to both retail and the wholesale market. Major buyers of wheat flour are households, retail units, hotels, hospitals and catering businesses. Considering 180 days of operation and on single shift basis, the projected turnover of the unit is INR 58.80 Lakh with employment generation for 6 workers (skilled and unskilled), initially. The total project cost for this enterprise is INR 8.98 Lakh which is a mix of both equity and bank loan. The entrepreneur's contribution has been in the range of INR 2.24 Lakh, that is, 25 percent and the balance is bank loan. Today, the entrepreneur is also



exploring option of procuring input wheat from FPCs in the region. The enterprise is going to also manufacture protein rich flour which has been gaining demand.

1.1.6. Dayanand Agro Foods: Evolving from primary cleaning and grading of wheat to flour milling

Indian producers are unable to realize optimal value from their produce mostly due to fragmented land holdings and inability to reap economies of scale enjoyed by large farms. India has over 12.5 Crore farmer households of which over 85 percent are small and marginal farmers with land holdings of less than 2 hectares each and at barely 1.33 hectare per farmer household. Typical small and marginal farmers cannot gain efficiencies from quantity procurement of inputs, or deploy costly farm and post-harvest technologies. Such had been the situation of the farmers in Phulambri taluka of Aurangabad district. Around 50 percent of farmers in this region go in for distress sale of their produce in order to service credit availed for agro-input purchase and domestic requirements. They sell their produce to traders in the local mandis only. They have limited exposure to other markets or sales channels. They submit to the dictates of local traders due to the inability to scout and link with other potential buyers and suffer from unfavourable trading terms. A Farmer Producer Company (FPC), as an institution, evolved as a silver lining for such farmers, as it has helped them utilize scale to procure inputs at a lower price and achieve more bargaining power when marketing their produce. It has also helped them in accessing timely and adequate finance, build capacity and gain direct linkages to markets. In view of this, and as per the mandate of the Maharashtra Agricultural Competitiveness Project (MACP), farmers from 9 villages came together and formed the Dayanand Agro Producer Company which has successfully implemented a common facility centre for primary processing of agri-inputs with assistance under the MACP.

Alongside, one of the Directors of Dayanand Agro Producer Company decided to pursue an independent wheat (mini roller) flour milling and packaging unit in order to cater to the needs and demands of local farmers associated with the FPC. This flour unit is supposed to support the demand and supply from around 2360 Households (HHs) and 5801 hectares of cultivable land in the region. The unit is to be set up in an area measuring 1500 sq. ft., at Jalgaon mete located in the taluka Phulambri of district Aurangabad, Maharashtra. The related processing plant shall have capacity to process 20 quintals of wheat per hour. The enterprise is to operate for 8 hours a day and would process around 14.4 tonnes of produce at 90 percent efficiency per day. This capacity shall allow the processing unit to mill only a small proportion of total grain production in the region. The promoter was offered guidance for the preparation of a bankable plan by ABPF-GT for start-up of a project with outlay of INR 121.95 Lakh in which INR 30.48 Lakh was the term loan component from the Canara bank. This plan and project includes machinery like wheat cleaning machine, gravity separator, wheat crusher, flour mill, packing machine and other accessories. The project is expecting sanction in a matter of days but operation has already been initiated in smaller cottage scale by the promoter.

In terms of manufacturing process, the enterprise procures raw wheat grains directly from the FPC as well as from other farmers. This is then cleaned and milled. Subsequently, depending upon the type of output, refined wheat flour, rawa, maida (75 percent) and mill feed (25 percent) is obtained. Considering 240 days of operation on single shift basis, the projected turnover



of the unit is INR 780 Lakh with direct employment generation for 8 workers (skilled and unskilled).

The promoter has extensively researched the challenges and opportunities in marketing of agro-produce in the district and other major markets. In fact, the packaged wheat flour market in India started breaking the age-old tradition of grinding wheat at local Chakki mills by growing at a whopping compound annual growth rate (CAGR) of 19 percent. The wheat flour market is largely dominated by local chakki mills in India. However, the branded packaged wheat flour segment is emerging rapidly in the country by offering better quality, nutrition and convenience. As indicated, Dayanand Agro Foods has started selling its branded packaged wheat atta in small scale in the local market of Ahmednagar. The promoter looks forward to expand the processing capacity of the four mill to larger commercial scale in the near future with debt finance and thereafter even extend the product line as the business grows.

1.1.7. Pundlik Baba Rice Mill: “Whole family” involved rice milling start-up within the rice-bowl of the State

Bhandara is a rather small district of the state of Maharashtra and the fifth-least populated. About 80 percent of the populace live in rural areas and agriculture occupies an important place in the rural economy of the district. In the light of soil composition and rain fall, paddy is the major crop grown in the district along with other crops such as wheat, tur, gram, turmeric and linseed. Out of the total 389 thousand hectares of geographical area, total area under cultivation is 264 thousand hectares. The total area under food crop paddy is about 174 thousand hectares. Hence, paddy is the major crop in Kharif season and over 2,00,000 farmers in the district are directly involved in paddy cultivation. As a matter of fact, Bhandara is also popularly referred to as the “Rice Bowl of Maharashtra”. Substantial (export quality) rice is being regularly exported from Bhandara and nearby regions to the quantum of over 29,000 TEUs (Twenty foot Equivalent Units) annually via the road route of NH-6 through CONCOR’s Inland Container Depot at Ajani, Nagpur to countries like South Africa and parts of Russia. There are over 243 registered rice mills (mostly micro scale) and many rice brokers and agents in the district. The district basically enjoys convenient availability of raw material paddy, good connectivity logistically and a large number of related and supporting service providers.

The lady entrepreneur and her family have extensive experience of paddy farming and years of experience in rice milling (through their micro-sized enterprise - Harde Rice Mill). As a matter of fact, the Harde Family is a farmer family turned ‘first generation entrepreneurs’, who have continued their occupation of paddy farming as well as ventured into rice milling. Upon understanding the services of ABPF-GT Team, the promoter and her son approached the Team for assistance. Her ward, thereon worked closely with ABPF-GT. Though the promoters sought to establish a modern integrated rice mill, machines like whiteners and silky polishers are rather capital intensive. The promoters decided on a simple (khauti type) rice mill where job work could be pursued. In a khauti type mill basic custom milling of paddy to rice conversion is facilitated. Such mill, however, does not include machines like whiteners and silky polishers. In the absence of such machines, the finished product is not marketable and is generally further processed by upgraded or modern mills for final marketable finished products. The ABPF Team guided the promoters on schemes like CLCSS, SFAC Venture Capital Assistance Scheme, MAIDC’s NMFP



scheme and PSI 2013. After having understood on how the combination of some of these schemes would considerably lower their liability in future the promoters decided to go in for a modern integrated project. The plan envisages production of polished rice and by-products like bran and husk.

The promoters were offered support for the preparation of a bankable business plan by ABPF-Grant Thornton for the project with project cost of INR 76.19 Lakh in which INR 30 Lakh is offered by the bank as term loan, INR 9.53 Lakh is envisaged under SFAC venture capital assistance and the balance being contributed by the promoters. The promoters are bringing in the amount equivalent to subsidy till the time the amount is received from Government Agencies. Further, about INR 25 Lakh is required from the bank as working capital. This project includes machinery and equipment like pre-cleaner, de-stoner, de-husker, paddy separator, whiteners and silky polisher. The promoters target sale of products through commission agents, wholesalers and retailers. The promoter family has experience of many years in the food grain business and has an established network across Bhandara and other regions of the country.

The manufacturing process in the upcoming facility basically involves warehousing (storage), pre-cleaning and de-stoning, de-husking, paddy separation, thickness grading, whitening, polishing, length grading and packaging. Considering average (over) 200 days of operation and on single shift basis, the projected turnover of the unit is INR 4.29 Crore with direct employment generation for 28 workers (skilled and unskilled). The unit is expected to also partly source its paddy requirements from FPCs in Bhandara, Gondia, Chandrapur and Gadchiroli districts. The promoters request for loan has been recently sanctioned by the Bank of Maharashtra.

1.1.8. Sulabh Industries: Dal milling by second generation entrepreneurs

Nagpur is the winter capital and the third largest city of the Indian state of Maharashtra and the largest city of Central India. The city has many features in its favour. The city has been adjudged as the 20th cleanest city in India and the top mover in the western zone as per Swachh Sarvekshan 2016. Nagpur is reputed as the “Tiger Capital of India” as it connects many tiger reserves in India to the world. It is among the important cities for the information technology sector in Maharashtra. The city is located in the centre of the country with the Zero Mile marker indicating the geographical centre of India. In terms of the agri-business sector, Nagpur is famous for the “Nagpur Orange” and is reputed as the “Orange City” for being a major trade centre of oranges cultivated in the region. Nagpur is also home to ice-cream manufacturer Dinshaws, Indian dry food manufacturer Haldiram’s, Indian ready-to-cook food manufacturer Actchawa and Ayurvedic products companies Vicco and Baidyanath. Owing to the large production of pulses in the region (in Nagpur, Amravati and Yavatmal), dal milling has been one of the important sectors for investment for many entrepreneurs. As a matter of fact, the Dall Mill Cluster of Nagpur is a large cluster and is in the process of commissioning a large modern Common Facility Centre with assistance under the MSECDP scheme of Ministry of MSME.

The entrepreneur and her family members are part of the dal milling fraternity and been in the dal mill business for many years now and have vast experience in the industry. The promoter is one of the leading and reputed manufacturers of pulses in Nagpur. Huge demand for its processed pulses and need for automation prompted the promoters to expand and upgrade



the existing plant. The promoters understood the gamut of services provided under the ABPF including backward linkages with the region's FPCs and Farmer groups. Being in industry for years, they understood the importance of such activity to ensure effective procurement of raw material. The promoter's ward availed of guidance of Team ABPF-Grant Thornton and prepared a plan which aims at production of pulses, by-products like chunni, bhusi and khanda. He approached the Union Bank with a bankable plan prepared by ABPF-Grant Thornton for a project outlay of INR 62.50 Lakh in which INR 15 Lakh is offered by the bank as a term loan, INR 6.50 Lakh is interest free loan envisaged under the SFAC Venture Capital Fund, INR 15.50 Lakh envisaged as grant from MoFPI and INR 25.50 Lakh contributed by the promoter. This project includes machinery like de-stoner, classifier (with aspirator), dryers, rolls and electric panels. The entrepreneur targets sale of products through commission agents, wholesalers and retailers to sell his produce. The promoter family has experience of many years in the food grain business and hence has established a strong connection with consumers across Nagpur and other regions of the country.

The manufacturing process in a related enterprise involves: cleaning, grading, de-stoning and then drying, grading, de-husking, splitting, colour sorting, polishing and packaging. Considering 300 days of operation and on double shift basis, the projected turnover of the unit is INR 24.29 Crore with direct employment generation for 12 workers (skilled and unskilled). The unit requires large quantity of pulses as inputs and hopes to procure raw material from FPCs in Amravati, Yavatmal and other districts. The promoters request for loan has now been sanctioned and project is being implemented in right earnest.

1.1.9. Five Elements (Aurangabad)

Five Elements (Aurangabad) was established in the year 2017. The enterprise is located at Devalali Chowk, Aurangabad. The entrepreneur, who holds an MBA (marketing), operates this garlic processing unit. The promoter identified the demand for the product in the market and decided to start the unit. The processing capacity of the unit is 60 kg per hour. The total cost of the project is INR 6.50 Lakh. The promoter has acquired land on rental basis and constructed a shed which costs about INR 25,000. The machinery in the unit are garlic bulb beakers, air compressing peeler and packaging machine. The cost of the machinery is about INR 5 Lakh. Major products of the firm are peeled garlic cloves which have huge demand in the local market of Aurangabad and Jalna as there are many hotels and hostels with mess for students and working bachelors.

Garlic processing includes selection of garlic, washing in bulb beakers, peeling in compressing peeler and lastly packaging of peeled garlic in different sizes of packets.

The total investment on machinery is INR 5 Lakh. The total manpower employed in the unit is 5. The USP of the products is its extended shelf life. Generally, peeled garlic becomes yellowish after second day of peeling, but due to standard processing practices, the shelf life of garlic is increased. The hygienic product of Five Elements is popular in hotels in Aurangabad and Jalna. The annual turnover of the company in the year 2017-18 was INR 15 Lakh.

1.1.10. Kulkarni Bakers (Aurangabad)

Kulkarni Bakers is a bakery unit established at Aurangabad. The promoter had earlier worked with Trimurti Foods Co. as a CWA intern from where he secured the idea to start his own bakery



business. The total cost of the project is INR 9.50 Lakh. The machinery in the unit are oven, cake mixer, slicer, defreezer, etc. The cost of these machinery is about INR 5.50 Lakh. Major products of the company are cake, cookies, khari, toasts and breads.

The manufacturing process in this enterprise comprises flour sifting, dough preparation, fermentation, adding of other ingredients, baking in oven, cooling and packaging. The products being hygienic, pure veg and being prepared with pure butter have gained popularity in the regional market. The total investment on machinery is INR 5.50 Lakh while that on land and building is INR 1.50 Lakh. The total manpower deployed in the company is 7.

The USP of the products is that they are prepared in pure butter. Cakes are prepared by the cream method and are 100 percent veg. The unit also provide free home delivery within 30 minutes all over Aurangabad and also provides online facility through third party vendor. Grant Thornton has assisted the unit through counselling, machinery identification and procurement, preparation of the project report, capacity building of the promoters and handholding support. The annual turnover of the company in the year 2017-18 was INR 40 Lakh and the net profit was INR 6.40 Lakh.

1.1.11. NNG Vegetables Dehydration Unit, Osmanabad

NNG Vegetables Dehydration Unit was established in 2016 in Osmanabad. The plant is located at a reputed vegetable belt, i.e., Kanegaon in Osmanabad.

The firm owns solar based dehydration machinery costing INR 21.85 Lakh. This includes dryers, cutting machines, packaging machines, weighing machine, etc. These machineries work on solar energy and hence, they are cost effective. The major vegetables processed through this unit are onion, ginger, methi, coriander and tomato. With a capacity of 3 Tonne Per Day, this dehydration unit is providing employment to 5 persons. The vegetables are cleaned, sorted, chopped, dried and ground, after which they are packaged. The total project cost is to the tune of INR 28.85 Lakh with an investment of INR 7 Lakh on land and building and INR 21.85 Lakh on machinery. The net profit of the firm was INR 1.5 Lakh in its first year of establishment (2016-17) and the total turnover was INR 32 Lakh. The entrepreneur is now planning to diversify the business and undertake seed production activity. Today, the unit has a well known name in vegetable dehydration in the Marathwada region of Maharashtra. The unit procures various types of commodities such as fruits, vegetables and leafy vegetables directly from the farmers in Osmanabad district. It has a strong network with farmers which helps us in sourcing raw materials easily and ensuring continuous supply.

The target markets are hotels, weekly mandi, mess, masala processors, and wholesalers as well as retailers in Osmanabad and neighboring districts. Solar technology is one of the key strengths of the firm as it saves the cost of electricity. The processed vegetables have huge demand as they prove to be better products with extra shelf life. The unit is using social media effectively for the promotion of its products. ABPF-GT has played a significant role in assisting NNG Vegetables Dehydration Unit by preparing a bankable proposal and securing a grant of INR 10 Lakh for the project.



1.1.12. Ravi Enterprises, Nagpur

Ravi Enterprises, an enterprise at Nagpur mainly focuses on processing extruded food products like noodles and is targeting to diversify the product line to tomato ketchup, red chilli, soya sauce, vinegar, green chilli sauce, jam, ginger – garlic paste and other masalas. Major raw materials are being procured directly from the farmer groups at Nagpur itself. The total cost of the project is around INR 15 Lakh which includes investment on machinery and land and building. A strong procurement network is one of the key assets of the firm which helps the promoter to keep a strong bond with the farmers for backward linkages. The plant, equipped with ISI standard machinery with capacity of 1 Tonne Per Day gives employment to 8 persons.

In terms of the manufacturing process, raw material is procured from nearby farmers and the local market place. First of all, one must blend the three ingredients maida, starch, and soda bicarbonate in a vertical mixer. Additionally, one will need to mix edible colours. A satisfactory dough is made with the above blend using boiled water. One will get a gelatine form of starch in this stage. Then, ingredients are mixed in the dough mixer for about 12 to 15 minutes. The kneaded dough is subsequently transferred to the noodles making machine. From here one can produce extruded material of desired shape and length, using an appropriate type of die. The moisture content of the product at this stage is about 33 percent. Noodles from the cutting machine fall on wooden trays. The product undergoes surface drying and becomes sufficiently hard enough to handle without sticking or being crushed. The moisture content of the predried product is about 29.5 percent. After drying, moisture content of the product is about 17 percent. The final stage is steaming ensuring a quality product with long shelf-life. The steamed and subsequently dried product has a moisture content of about 10 percent. Noodle is basically a consumer durable processed food product. The product is sold throughout the restaurants and to hawkers. The total turnover of the enterprise stands at about INR 15 Lakh.

1.1.13. Samruddhi Enterprises (Kolhapur)

Samruddhi Enterprises (Kolhapur), established in the year 2016, is into baby-food products. The unit is located in Gangapur. Major products of the company are cashew, nacchani atta, etc. The major markets are Pune, Surat, Indore and Kolhapur. Ragi is a medicinal food product which is healthy to babies as well as adults. The total number of staff in the unit are 20 males and 10 females. The total investment on machinery is INR 70 Lakh and include separator, polisher, elevator, hopper, grinder and BVT system.

The manufacturing process of ragi is: Ragi procured from farmers is cleaned, polished, grinded and then separated using a separator. Finally, it is packed in various sizes. The industry uses fully automated machines in order to secure the best results. The unique selling proposition of the project is to develop healthy and nutritious food products (ragi) which contains calcium which is suitable as baby food. The annual turnover of the unit was INR 60 Lakh in 2017-18.

1.1.14. Krushi Amrut Agro Food: Amla Processing: NIAEM Alumni moves from job-seeking to job-creating in Amla processing after detailed study

Krushi Amrut Agro Food is an agri-business enterprise established in 2017 and is located at Deolgaon Raja block of Buldhana district. It manufactures various Amla and other products with modern equipment. This enterprise is well-equipped with machinery and equipment, and aims



at production of various processed food such as amla candy, amla powder and amla juice, etc. The enterprise is a proprietorship concern. The entrepreneur has acquired land for the project admeasuring 1000 sq.ft. Notably, the promoter is well qualified. He is a Post Graduate Diploma holder in Agricultural Extension Management from the National Institute of Agricultural Extension Management and is a B.Sc. (Agriculture Biotech). The entrepreneur, along with other family members have considerable exposure to the food processing industry and has experience of more than 5 years in this segment. As a matter of fact, the entrepreneur had also worked in the Agricultural Technology Management Agency (ATMA), Mahabaleshwar as Subject Matter Expert (SME) for about three years. The enterprise plans to manufacture value added products from amla, mango, jamun and tomato and penetrate new market areas in the Vidarbha region (including districts like Nagpur and Amravati).

Amla, being available in sufficient quantity in the region and upon studying the increasing demand for amla products (also) in the light of its medicinal values, the entrepreneur decided to take up Amla processing as an agri-business option. As a matter of fact, the promoter undertook detailed study for about 2 years which covered aspects like raw material availability, machinery requirements, demand analysis and innovative product line options. The entrepreneur also visited existing amla processing units in and around Buldhana to gain better understanding. After such detailed study the entrepreneur decided to take up entrepreneurship. After, a few months of running the business, the need for realising financial assistance arose. This is where ABPF-Grant Thornton played an important role. Experts from Grant Thornton prepared a techno commercial feasibility report taking into consideration the findings of detailed study. The ABPF-GT team guided the entrepreneur on technical aspects such as innovative machinery, sources of raw material and packaging details. The entrepreneur was also made aware about licences such as FSSAI, NOC (No Objection Certificate) from Nagarpalika, Land NOC and Udyog Aadhar essential for the smooth functioning of business.

In terms of manufacturing process, raw material required is procured from nearby farmers and the local market place. Once the raw material, that is, amla, mango and plum is procured, they are vigorously washed so that the raw material is free of dirt and germs. After washing, the raw material is then boiled so that amla can easily be flaked or shredded. This amla is then dipped in concentrated sugar syrup to make amla candy. For amla juice, amla flakes are passed through a juice extractor and fresh amla concentrate is extracted. For making amla powder, amla flakes are completely dehydrated and then crushed to make fine powder. These products are then packed into various sizes with attractive labels. Important machinery and equipment necessary for the proposed project is tray dryer, juice filling machine, bottle cap packing machine and an automatic packing machine. To consider the envisaged operations of the enterprise in detail, considering 252 days of operation on single shift basis, enterprise operations will daily require 100 kgs of sugar, 500 gms. of preservatives (Sodium Benzoate), 1 LPG gas (fuel) cylinder (19 kg), 250 grams of flavour and colours, 1 kg salt and 1 kg chat masala. The firm will also require packaging material like pet bottles and caps, packing wrappers, packing paper rolls, corrugated boxes, punch boxes (Paper Boxes), tape and large sized jars.

The total cost of the project amounts to about INR 31.46 Lakh which is a mix of equity, NHM grant from the NHM and bank loan to the tune of about INR 20 Lakh from the Bank of India. The entrepreneur has required grant from National Horticulture Mission to the tune of



INR 10.34 Lakh. The unit requires large quantity of amla, mango and plum and therefore the entrepreneur was guided on how he may procure this raw material from FPOs in and around Buldhana and other parts of Maharashtra. The projected turnover of the unit is about INR 3 Crore per annum with direct employment generation to the tune of 10 workers (both skilled and unskilled).

The USP of Krushi Amrut Agro Foods is vis-à-vis originality of the ingredients maintained by avoiding use of preservatives. The products are to be free of synthetic colour and artificial flavour. Preservatives in minimum quantities are to be used only for amla juices. Critical success factors in this business are uniqueness of products, and there is almost no competition in similar products across the Vidarbha region. Furthermore, there is excellent availability of raw material and the cost of labour is also competitive in the region. The products manufactured by this entrepreneur are natural, healthy and are free of chemicals. Only basic preservatives are used in Amla juice, Mango juice and Jamun juice. The promoter is confident of successfully exploiting market potential and sustainably growing his enterprise.

1.1.15. Samruddhi Agro Food Industries: Husband and wife team leveraging debt finance to diversify from fertilizers and into commercial operations in edible and non-edible oil production

Samruddhi Agro Food Industries is an agri-business enterprise established in 2017 is located at District Ahmednagar, Maharashtra. It is a project moving to larger commercial scale of operations leveraging on debt finance. The entrepreneur has acquired 1000 sq. metres land on a long term lease basis for 95 years from the MIDC in Shirampur Industrial Area. The entrepreneur envisages investment in larger scale commercial production with modern equipment. The entrepreneur has envisaged a plant for manufacturing edible and non-edible oil from various types of oil seeds. To be well-equipped with machinery and equipment, this unit also exploits regional resource potential. The raw material (that is, groundnut, cotton, sunflower, castor, neem) used for preparation of various products will be used to produce edible as well as non-edible oil. This oil mill is to produce products like oil (ghani) and oil cake of flax seeds, cotton oil seeds and kardi seeds. Besides quality, another important factor to be laid emphasis on in this trade is packaging. This is in order to retain taste and nutritional value of produce. Apparently, quality of products has helped to garner trust of clients of this proprietorship concern which has been in operation on micro or cottage scale for the last few months and has been involved in the extraction of edible and non-edible oil from oil seeds.

The lady entrepreneur along with other family members have successful experience in entrepreneurship in another field of organic fertilizers and pesticides. Notably, her spouse has 10 years of experience of working in unit manufacturing non-edible oil in Kolhar. The entrepreneur has a mission to process value added products from Groundnut, Kardi, Cotton Seed, Sunflower, Castor and Neem in the light of absence of competition from other non-edible oil units in nearby areas, even while providing gainful employment to the local poor and providing forward linkages to local oil seeds and vegetable growers in the catchment area for inputs.

As a matter of fact, edible oil is one of the essential commodities used daily by the Indian populace for cooking purposes. Basically, edible oil is extracted from oil seeds like groundnut, Kardi, Cotton, Sesame, Linseed, Mustard, Rape seed and sun flower. Non-Edible oil is being



used for medicinal purposes, soaps and lubricants and can be extracted from commodities like Castor and Neem. For the extraction of the oil, oil “ghanis” are typically used. For greater commercial production in larger units, expellers are deployed. Traditionally, oil ghanis were manned by bullocks. However, today they are operated by power (electricity). Power ghanis may be found in both rural and urban areas. Oilseeds and edible oils are two of the most sensitive agricultural commodities in the country. Moreover, India contributes to about 9 percent of the world oilseeds production, to about 7 percent of the global production of protein meal and is the 4th largest edible oil economy in the world. The supply and demand base are both strong. Within the country, Madhya Pradesh is the leading oilseed producing state in the country and accounts for about 21 percent of total oilseed production of the country. The other leading oilseed producing states are Gujarat, Rajasthan, Maharashtra and Andhra Pradesh. Groundnut, rapeseed and mustard, soybean, sunflower, sesame, niger seed, castor and linseed are the nine major oilseed sources for obtaining edible and non-edible grade oils. In this regard, the secondary sources comprise coconut, cottonseed and rice bran solvent extracted oils from tree and forest origin.

The lady entrepreneur’s spouse who is partly supporting her entrepreneurial venture has a farming background. Being aware of the demand potential for neem he decided to establish facilities to process neem into neem oil. Apparently, the idea of processing neem to produce neem oil struck in his mind even when he was pursuing his graduation studies. The husband and wife team undertook extensive market research for a couple of years. They deeply studied manufacturing process, raw material requirement, as well as machinery requirement for running the business. The entrepreneur also carried out a SWOT analysis which highlighted that own funds alone were not sufficient for setting up a related enterprise and hence decided to seek financial assistance from their bankers, Canara Bank. Upon approaching the bank with a rough business plan they were advised to prepare a detailed project report or business plan with projected balance sheets, P& L statement, cash flows as well as indicators of financial viability. The entrepreneur was guided on technical aspects such as on necessary machinery, sources of raw material and packaging options. The entrepreneur was also made aware about various state and central government schemes of assistance and on the regulatory compliances vis-à-vis FSSAI, pollution control and Udyog Aadhar. A NOC from the MIDC has been already acquired. In terms of manufacturing process, the promoter is to procure raw material from farmers in the nearby locality. Upon procurement of oil seeds they are crushed finely and oil is extracted from seeds with the help of extraction equipment. The produce is then filtered. Upon filtration, oil and fat based residue is produced. The oil which is extracted is then packed into various package sizes, the fat based residue is used in soap industry as raw material. Apart from fat residue, residue of crushed seeds is also obtained. This seed residue is passed through a pulveriser and moulded into fine cakes which is an excellent cattle feed. The oil cakes are in great demand as consumption of these cakes by cattle increases milking capacity. Therefore, the various products that may be manufactured from oil seeds including oil, fat based residue and oil cakes all have considerable demand. The machinery and equipment being deployed for the project comprise oil expeller, boiler, pulveriser filter press, conveyors, weighing machine and stitching machines. In terms of project revenues, considering 300 days of operation and on single shift basis, the projected turnover of the unit is INR 4.6 Crore with direct employment generation for 8 workers



(skilled and unskilled) initially. Notably, this business activity requires edible and non-edible oil seeds such as sunflower, safflower, castor, kardi, neem etc. in large quantities which was also advised in terms of direct procurement from Farmer Producer Companies based in and around Ahmednagar district. The enterprise has realised assistance by way of debt capital to the tune of INR 22 Lakh from the Canara Bank and is well into project implementation.

1.1.16. Active Amla Products, Jalna

Active Amla Products established in Jalna, is an amla products processing unit. The lady entrepreneur wanted to set-up agri-business activity and provide nutritional, medicinal as well as tasty products to customers. In consultation with experts, she decided to set-up a project on amla processing. In Jalna and in the neighbouring taluka there is ample production of amla. Then promoter took training for amla processing from Krushi Vidyana Jalna for 8 to 10 days from where she received the primary information regarding the set-up of unit. The promoter's spouse owned a land in Jalna and hence the unit was established in that district. The machinery and major equipment deployed in the project are boiler, cutter, slicers, drier, pulverizer, sealing machines etc. The cost of machinery is INR 4 Lakh and the amount spent on building construction is INR 5 Lakh. Thus, the total project cost is INR 9 Lakh. The production capacity of the unit is 0.5 tons per day.

The manufacturing process for amla candy involves procurement of raw material directly from farmers, followed by cleaning and washing, boiling of amla, breaking/slicing, dipping in sugar syrup for 21 days and finally drying of candy. The major products are amla crush, amla candy, amla powder and amla murabba. The products are well known and popular in Marathwada and Vidarbha region due to the quality and services offered by the entrepreneur. The products are sold in the Marathwada and Vidarbha region and have huge demand by virtue of quality. Strong market network is believed to be the key to success. Last year the turnover of the unit was INR 18 Lakh and net profit was INR 1.60 Lakh. The unique selling point (USP) is that these products are free of preservatives and chemicals. The promoter is today targeting further expansion of activity. Last year, she was honoured with an award "SAMAJBHUSHAN AWARD" by the SC or ST Commission of Jalna.

1.1.17. Indu dal mill, Anjangaon Surji

Indu dal mill, commenced operations in 2017 at Anjangaon Surji, Amaravati. Amaravati is well known as the pulses hub of Maharashtra. There is ample production of tur, gram, moong, black gram and other pulses in the State. However, there were only few dal mills in Anjangaon Surji Taluka. Hence, keeping in mind the processing gap in view, the entrepreneur perceived this opportunity. The entrepreneur has his own land where the unit has been set up. The total cost of project is INR 40 Lakh Rupees. The machinery used by the firm are grading, destoner, dal mill, polisher and packaging. The total cost of machinery is INR 18 Lakh. The promoter has taken loan of INR 15 Lakh and has realized grant of INR 10 Lakh under the MACP-EDP project. The firm directly procures required raw material like tur and chana from producer groups and farmer producer companies in Anjangaon Surji taluka. The firm has secured FSSAI license. The capacity of the mill is 3 Tonne per day. The firm's turnover has reached INR 2.5 Crore and profit of INR 15 Lakh in its first year. The firm markets its products to wholesalers and retailers based in Amravati, Nagpur and other neighboring districts. As part of its marketing strategy the firm offers its products in various pack sizes.



1.1.18. Ajinkya Herbals, Ahmednagar

Ajinkya Herbals is a herbal products manufacturing unit based in Ahmednagar district. The promoter, after graduation in Pharmacy wanted to initiate a business which can provide solutions to nutritional deficiencies. She is very health conscious and always wanted to contribute towards a healthy populace. Hence, after her education in the pharmaceutical field, with the help of her husband she launched her own herbal manufacturing plant in her home town. She wanted to do something unique and keeping the medicinal value of spirulina in view she came up with a very innovative idea and started commercial production of spirulina and manufacturing of various kinds of spirulina based products like spirulina powder and tablets. Before initiating the venture, she had undertaken training on commercial production of spirulina from Krishi Vigyan Kendra, Babhaleshwar.

She had her own land in the village where she set up a production plant. All the required machinery like drier, pulverizer, capsule filling machine, tablet making, sealing, weighing balance machines are present in the plant. The total cost of machinery in the project is INR 6.50 Lakh. All machineries are of ISI standard. The capacity of machines is 10 Kg of spirulina powder and 6 Kg of Spirulina tablets per day. The products are natural and organic as well as highly protein rich. Various required licenses like FSSAI have been secured. The entrepreneur is a pharmacist and is keen on Research and Development activity. The total project cost is INR 31.50 Lakh. The ABPF-GT helped her secure a grant of INR 5.50 Lakh from the KVIC and also in availing a term loan of INR 18.50 Lakh from the Bank of Maharashtra. The manufacturing process is simple. Initially, the spirulina is ground, then packed into various sizes like 10 gm, 50 gm, 100 gm, 250 gm and 500 gm. Capsules are also manufactured following standard procedures. Tablets too are available in various pack sizes. The products of the unit are being sold all over Maharashtra. The firm has appointed agencies for marketing in all major cities of Maharashtra. The strong marketing channels developed by the firm are the key to its success. The products are being marketed through points of sale like medical shops, ayurvedic shops, hospitals, health consultants and gyms. They have started two outlets in Ahmednagar city, that is, Mahesh Agency and Tripathi Ayurvedic. The enterprise enjoyed a turnover of INR 10 Lakh last year.

1.1.19. Bhupesh Agro industries, Walmazari

Bhupesh Agro Industries at Walmazari is a Jaggery processing unit based in Bhandara district. The promoter of the enterprise wanted to pursue something innovative in an interior area with fragmented market advantage like Vidarbha. Hence, he chose to start a jaggery production unit. He had prior experience of production of jaggery deploying traditional technology, but he wanted to explore modern processing technology. The entrepreneur observed that Sakoli Taluka of Bhandara district is a sugarcane rich area and decided to venture into production of organic jaggery which had high demand in the regional market of Vidarbha region of Maharashtra. He is today both a successful farmer as well as micro-sized entrepreneur. The investment outlay in the project was INR 6 Lakh. The machinery and equipment deployed by the enterprise comprise pressure vessels, generator set, weighing balance and boiler amounting to INR 3 Lakh and the cost of building is INR 3 Lakh. The entrepreneur had taken term loan of INR 2.85 Lakh from the Bank of India. His own investment is INR 15000 only. The processing capacity of the unit is 0.5 Tonne per day. The firm is registered with the DIC and has a FSSAI license. The unit has



also realized grant of INR 3 Lakh from the MACP under its EDP initiatives. Employment to about 7 people is being directly provided by the unit. The enterprise touched a turnover of INR 25 Lakh last year.

1.1.20. Bonica Farm LLP India, Wardha

Bonica Farm LLP India, a turmeric powder processing unit, is established in Wardha Taluka of Wardha district. The promoter, after completion of his Diploma in Electronic Engg. wanted to be an agripreneur. Wardha and its neighbouring districts are major producers of turmeric, and there are only few processing plants available. The promoter saw this as an opportunity and decided to set up a turmeric powder processing plant. He commenced turmeric processing with total project cost INR 11 Lakh. The cost of land and building is INR 7 Lakh and machinery of INR 4 Lakh. The main machinery is pulveriser, grading and sieving machine and automatic packaging machine. Fully automated machineries are installed in the plant. The capacity of the unit is 1 quintal per hour and the unit is a prominent supplier of turmeric powder. The enterprise is also supplying organic turmeric powder to customers and agencies appointed in major cities of Vidarbha. Organic turmeric powder with high curcumin percentage is the Unique Selling Proposition of the product. The product has huge demand as it is organic and has higher percentage of curcumin. The product is being sold in the local market and all over Maharashtra. The firm enjoyed an all-time high turnover last year of INR 17 Lakh.

1.1.21. Dombe Patil Foods, Pune

Dombe Patil Foods, Pune was established in the year 2016 and is a successful jam processing unit. Jam is processed and packed in different sizes and sold to super markets like, Star Bazaar, Big Bazaar, Reliance, Big Basket and other local market outlets in Pune, Mumbai and Bangalore. The total investment on machinery is INR 50 Lakh. Major machinery used by the enterprise are pulper, kettle, filler, capping and labelling machine, boiler and cooling tower. The manufacturing process may be viewed as pulp making, heating, filling in glass bottle, lug capping, cooling, inspection and labelling. The enterprise has its own land and building. A total of 15 staff members are employed in the unit. The uniqueness of the project is - focus on high quality products with various flavours, packed in different sizes. The annual turnover of the company is INR 60 Lakh.

1.1.22. Adarsh Soya Products, Amravati

Adarsh Soya Products, Amravati was established in 2015. Vidarbha is well known for ample production of soybean and pulses. There is a large production of soybean in Vidarbha, but there is a dearth of soya processing industries. The promoter, a B. tech (Chemical Engg), saw this as an opportunity and started a soya processing unit. The project cost is INR 15 Lakh. The unit has own land at Amravati. The machinery and major equipment used by the firm are grinder, boiler, autoclave, paneer press machine, etc. costing of INR 7 Lakh. The capacity of the unit is 100 Ltr. Milk per hour and 10 Kg tofu per batch. The means of finance is loan from bank and own contribution of INR 1 Lakh. The major products are flavored milk, soya, paneer and curd. The products are prepared from soybean grains. Products are having nutritional value with high demand from the health conscious consumers. The products are being sold in all the districts of Vidarbha region. Due to high quality and services provided by the manufacturer, products sale has been rising continuously. The raw material required, that is soybean is directly procured



from farmer producer groups and producer companies in the district. Strong backward linkage is the one of key reasons for the firm's success. Innovativeness is the USP of the products. The turnover of the firm was INR 18 Lakh with the net profit INR 4 Lakh in the last year.

1.1.23. Shri Guruseva Agro Food Industries, Aurangabad

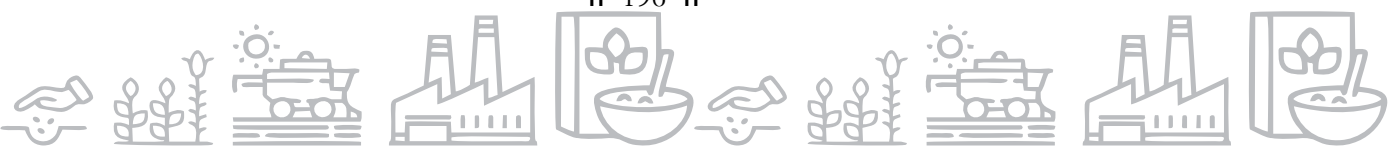
Shri Guruseva Agro Food Industries, Aurangabad was established in the year 2016 as a sole proprietary unit, with an objective to make various agro food products available to the customers and to generate employment for women. The firm is located in Swapna Nagari, Aurangabad. The firm has an area of 1400 sq. ft. for manufacturing and operation. The various machineries used are mango or lemon cutting machine, grinder, packaging and weighing machine with the capacity of 25-50 Kg per day. The firm provides employment to 6 women. Aurangabad is one of the major cities in Maharashtra for production of various fruit crops such as mango, sweet lime, pomegranate, custard apple, banana and sapota. Aurangabad has 29 market yards out of which 10 are APMC markets and 19 are secondary markets or sub yards. In addition, there are 42 rural mandis that account for about 2-3 percent of total trade in the district. It is also a major hub for onion and maize trade within and outside the district for domestic as well as industrial use.

The firm started with an investment of INR 500 and now the turnover is INR 3 Lakh. The total production of the firm last year was 5 tonnes and the target for the next year is 10 tonnes. The firm manufactures a variety of products which include flour, pickle, spices, chutney, laddu, festive sweets, snacks etc. The raw material for these products is directly procured from the farmers in Kannad Taluka of Aurangabad District. The manufacturing process of flour involves cleaning, milling, blending and packaging and for pickle the manufacturing process involves washing and cleaning of mango/lemon, chopping, adding masala, mixing, packaging and storing. There has been a tremendous growth in the activities of the firm. The firm now offers more than 16 types of products including chutney, spices, etc. which are available in various pack sizes in the market. The various marketing channels being used by the firm are direct marketing, wholesaling and retailing. Marketing is also done through various agencies appointed in Pune, Aurangabad, Jalna and Ahmednagar, as well as through social media and door to door distribution. The demand for these products has increased due to high quality and timely delivery of products.

1.1.24. Brief profile of caselets presented

The table below presents a compilation of highlights of some of the caselets discussed in this section.

Name of the Promoter	Name of the unit	Business Activity	Project Cost (in Lakh)
Mr. Ganesh S. Shinde	Bhumata Food Products	Spices Manufacturing Unit	50.00
Ms. Sangeeta Vijay Bagul	Ruchi Food Products	Food Processing	56.28
Mr. Saiyed Ansani	Kisan Agro Foods	Carbonated Soft Drinks	47.76
Ms. Deepali Dinesh Gaikwad	Rujul Herbal Product	Herbal product	62.51
Mr. Srikant Devikar	Shrikant Foods	Flour Mill	8.98



Mr. Ashok Mete	Dayanand Flour Mill	Flour Mill	12.19
Mr. Kunda Harde	Pundlik Baba Rice Mill	Rice Mill	76.19
Ms. Madhuri Gupta	M/S Sulabh Industries	Dall Mill Industry	62.50
	Five Elements	Garlic Processing	6.50
Mr. Anilrao Kulkarni	Kulkarni Bakers	Bakery	15.10
Ms. Pushplata Suhas Dussal	Kaamdheni Shetkari Gat.	Vegetable Dehydration Unit	24.55
Mr. Ravi Bhojar	Ravi Enterprises	Ketchup/Sauce Manufacturing	15.00
Ms. Varsha Bhosale	Samruddhi Enterprises	Baby Food Manufacturing/ Cashew Processing	45.00
Mr. Bhalchandra Shivaji Munde	Krushi Amrut Agro Foods	Amla, Mango, Jamun, Tomato Processing	31.46
Ms. Kavita Santosh Kshirsagar	Samruddhi Agro Food Industries	Edible and non edible oil manufacturing	44.69
Ms. Sanjeevini Ashok Jadhav	Active Amla Udyogya	Amla Processing Unit	5.43
Mr. Amol Ghogre	Hightech Mini Dal Mill	Mini Dal Mill	30.50
Ms. Anjali Khilari	Aspire Spirulina	Spirulina Powder	19.21
Mr. Vilas Lanjewar	Bhupesh Agro Industries	Jaggery Unit	6.00
Mr. Rahul supare	Bonica Farm LLP	Turmeric processing	11.00
Mr. Sameer Dombale	Dombe Patil Foods	Jam Manufacturing	38.11
Mr. Madhukar Nagose	Adarsh Soya Products	soybean Processing	15.00
Mr. Shaikh Shafik Shaik Hakim	Welcome Bakers Point	Bakery	16.00
Ms. Kalpana Dhanraj Patil	A K Dal Mill	Dal Processing unit	6.00
Ms. Lalita Jangale	GLD Industries Bhusawal	Cashew Processing	15.00
Ms. Minakshi Mohad	BBM Industries	Dairy and Dairy Products	20.00
Mr. Amaya Gokhale	Devgiri Agri-Venture	Fruits & Vegetables	25.00
Mr. Dadabhau Dayaghan Sawant	Sawant Multifood Pvt. Ltd.	Dairy Unit	25.00
Ms. Jaya Sabde	(Vermi) Extruded Food	Noodles Making	22.00
Ms. Anjusha Arvind Kulkarni	Shree Guruseva Agro Food Industries	Pickle Unit	31.74

1.2. CASE STUDIES – INDICATIVE PROJECT PARAMETERS

The case studies in this sub-section are to present indicative project parameters in a range of different project and not as success stories.



1. Alpha Natural Extracts, Pune

Alpha Natural Extracts, Pune is a proprietorship concern located in Pune. The firm plans to establish a turmeric essential oil extraction unit. The total cost of the project is about INR 18.40 Lakh out of which cost of machinery is about INR 10.9 Lakh. The equipment in the project include extractor, reboiler and condenser which are used for extraction of turmeric oil. Working capital is required in order to meet the daily expenses like labour, transportation, electricity and packaging. The promoter has rented land where the unit may be set up. The promoter will contribute INR 10.75 Lakh and a grant of INR 7.63 Lakh under MACP-EDP is expected. The capacity of the processing unit is 500 kg per day. The promoter will supply the turmeric oil to cosmetic companies. The required raw material is turmeric and will be procured directly from producer groups and their farmer members. The projected total operational expense for the first year is INR 112.26 Lakh. The estimated turnover in first year is INR 122.40 Lakh.

2. Chavhan Dal Mill, Udgir Dist-Latur

Chavhan Dal Mill, Udgir is a proprietorship concern. The firm is to carry out dal mill business. The proprietor is hoping to set up the unit at Udgir, Dist. Latur. The promoter has his own land in Udgir, where he constructed dal mill unit on area of 950 Sqft. The total cost of project is about INR 24.50 Lakh in which the cost of machinery is about INR 12.60 and the cost of building is INR 7.75 Lakh. The constructed area is 950 Sqft. The project has secured grant of INR 10 Lakh, and the proprietors contribution is INR 14.52 Lakh. Generally, dal Mill (grader), grader, dal splitter and separator, polisher, elevators, de-stoner, dryers, screens for all crops etc. are used for the pulses processing. Working capital is required in order to meet the daily expenses like labour, transportation, electricity and packaging. The capacity of the unit is 2 TPD. The total annual production of tur dal, chana dal and moong dal is 64 MT, 72 MT and 31 MT respectively. The promoter will sell the processed dal in the local market of Latur. The required raw material is Chana, tur, moong and udid etc. to be procured directly from producer's groups. The total operational expense for the first year is INR 114.01 Lakh. In the first year, the operating income is INR 12.43 Lakh. The estimated turnover in first year is INR 124.79 Lakh.

3. Dhawade Food Processing, Ahmednagar

Dhawade Food Processing, Ahmednagar is being setup for manufacturing Soy Milk and Soya paneer (Tofu). The unit will be set up at Gundegaon, Ahmednagar. Increasing awareness among people about lactose intolerance is the main reasons the entrepreneur wanted to start the Soy milk and paneer processing unit. The total cost of project is INR 21.78 Lakh. Out of the total project cost, INR 10 Lakh is the EDP grant given by MACP and INR 11.17 Lakh is the promoters contribution. The promoter has his own land in Gundegaon, where he constructed a Soy milk product unit on area of 950 sqft. The cost of machinery in the project is INR 13.55 Lakh and the cost of building is INR 8 Lakh. The constructed area is 1000 Sq. ft. The project has got the grant of INR 10 Lakh. The production capacity of unit is 500 Kg per hour. The major products are flavoured soya milk and soya paneer. The machinery and main equipment used by the firm are Soy Mixer Grinder, Milk Chilling System, Pasteurizer, and Generator (25 KV). The production capacity of the unit is 500 kg per hour. The promoter hopes to sell Soy milk products in the local market of Ahmednagar, Aurangabad and Pune districts. The required raw material (5 Tonnes per day) is soybean which is procured directly from the producers' groups.



The projected total operational expenses for the first three years are INR 62.31 Lakh, INR 69.76 Lakh, and INR 76.85 Lakh respectively. In first three years, the operating income INR 10.87 Lakh, INR 11.99 Lakh, and INR 14.15 Lakh respectively. The total turnover in the first year will be INR 71.43 Lakh.

4. Phoenix Agro Producer Company Ltd. Osmanabad

Phoenix Agro Producer Company Ltd., Osmanabad is a producer company. The FPC has set up a flour mill at Osmanabad. The flour mill commenced in the month of June 2018. The flour mill is set up at MIDC, Osmanabad. The total cost of the project is about INR 24.59 Lakh, out of which INR 10 Lakh is the grant in aid offered by MACP. The total cost of machinery is about INR 21.52 Lakh comprising of Flour Grinding Machine with three replaceable sieves, central blower aspirator, Sheller with 18 stones, cleaner machine for jowar, bajra, gram and wheat cleaning, etc. The wheat is first cleaned, destoned and then milled into fine flour. The flour is then packed in desired package sizes as 1 kg, 5 kg, 10 kg according to the demand. The cost of wheat flour varies from INR 22-25/kg. The capacity processing unit is 500 kg per hour. The flour will be sold in the local market of Osmanabad and majorly to the member farmers of the FPC. The required raw material is wheat and will be procured directly from the producer groups and the farmer members of the FPC. The turnover of the enterprise in the month of June was INR 1.25 Lakh.

5. Shetkari Shetmal Utpadak Gat, Akola

Shetkari Shetmal Utpadak Gat, Akola is being established as a spices processing unit. The unit is to be set up at Murtizapur, Akola. The total cost of the project is about INR 25.05 Lakh. Generally, Turmeric Boiler Cooker with capacity of 200 kg, Turmeric Polisher with capacity of 200 kg, Turmeric Pulveriser with capacity of 100 kg, Chilly and Masala Grinding Unit with capacity of 50 kg/hr, Weighing Scales of 30 kg and 150 kg capacity, Induction Scaling Machine, 1 Band Sealing Machine and 2 Packaging Machines and Die (Cylinder Development & Manufacturing) are used in spices (turmeric and chilly) processing. The total cost of the machinery and equipment is about INR 19.63 Lakh.

Working Capital is required in order to meet the daily expenses like labour, transportation, electricity and packaging. The promoter will contribute INR 15.05 Lakh. The grant of INR 10 Lakh under MACP-EDP will be given to the FCSC. The Gat has acquired land on rent. The cost of the land and building is INR 3.25 Lakh. The unit's processing capacity is 100 kg of turmeric per day and 50kg of Chilly per day. The promoter will sell the processed Chili Powder & Turmeric powder in local market of Akola district and nearby areas. The required raw material is turmeric and chilly that will be procured directly from the producer groups and the farmer members of the FPC. The total operational expense for the first year is INR 128.11 Lakh. The total turnover in the first year may be INR 137.50 Lakh.

6. Shri Ram Agro Industries, Ahmednagar

Shri Ram Agro Industry proposes to manufacture cattle feed. The promoter wants to set up the unit at Moriwade taluka of Ahmednagar district. The total cost of the project is about INR 24 Lakh. The promoter will contribute INR 13.96 Lakh. A grant in aid of INR 10 Lakh under MACP-EDP to be received. The machinery involved is a Pulverizer (with motor), Pipeline, Cyclone, Electricals, 40 HP + 5 HP motor, Switch base plate, v- pulley and v-belt, Horizontal Mixer 50 ft



(with main drive 2 pacts of blade with main shift and gear base machine), etc. The promoter has his own land and the cost of building is about INR 8.50 Lakh. Area to be constructed is 1200 Sqft. The total cost of the machinery and equipment is about INR 12.30 Lakh. The capacity of the processing unit is 1 TPH. The required raw material is maize and wheat which will be procured directly from producer groups and farmers of Ahmednagar and Aurangabad districts. The promoter will supply the cattle feed in the local market of Ahmednagar.

7. Supravijay Agro Industry, Satara

Supravijay Agro Industry, Satara is to establish a unit for Geranium oil extraction. The promoter wants to set up the unit at Nagthane, Satara. The entrepreneur has hands on experience working with such unit in the past. So he decided to start Geranium oil extraction unit. The demand for Geranium oil is very high and approximately 90 percent is imported hence the entrepreneur saw an opportunity in this business. The total cost of the project is about INR 23.10 Lakh. The promoter will contribute INR 3.34 Lakh. The grant of INR 10 Lakh under MACP-EDP will be given to the FCSC. The term loan of INR 8.75 Lakh will be availed from the bank. The promoter has his own land and the cost of building is about 7 Lakh. The area to be constructed is 500 Sqft. The total cost of the machinery and equipment is about INR 9.60 Lakh. The capacity of processing unit is 1.5 TPD. The machinery comprising Steam Boiler (IBR Design), Shell and Tube Heat Exchanger, Pressure Vessel, Oil Separator, Cooling Tower, piping etc. are used for manufacturing of essential oils from leaves of Germanium. The required raw material is Germanium leaves and will be procured directly from farmers in the vicinity. The herb geranium is a 4-months crop. After the geranium herb is procured directly from farmers, it is to be immersed in the vessel and steam passed through the vessel. Once the steam is passed, the water and oil from the plant is extracted. On condensation, the oil is separated from water. This oil is then packed and sold. About 1 tonne of geranium herb when processed gives 800-900 ml of oil. The entrepreneur already has a tie up with Petricore India. Pvt. Ltd. The minimum market rate for geranium oil is INR 7,500/litre and the maximum market rate is INR 0.12 - 1.30 Lakh/litre.

8. S.I. Foods, Nandurbar

S. I. Foods is being started for the purpose of making Tutti-frutti from papaya. The unit will be set up at Shahade, Nandurbar. The raw material required for making tutti frutti is papaya which is available in ample quantity in the vicinity hence the entrepreneur decided to start this papaya processing unit. The total cost of the project is about INR 25.71 Lakh. The promoter will contribute INR 15.71 Lakh. The grant of INR 10 Lakh under MACP-EDP will be given to set up the unit.

The promoter has his own land and the cost of building is about INR 15 Lakh. The total cost of the machineries and equipment is about INR 9.60 Lakh. The capacity processing unit is 300 Kg per Hour. The machinery required is vegetable dicing and cubing machine, steam jacketed kettle, Steam Boiler, Band Sealer, Soaking Trays are used for making tutti-frutti from papaya. The papaya is peeled and cleaned then it is dehydrated using salted water. After dehydration process, the papaya is cut into desired size on which the pieces are dipped into sugar solution for flavouring. The flavoured pieces are then dipped into various colours. These pieces are steamed, then cooled down and then packed. The raw material papaya will be procured from the farmers in the vicinity. The tutti- frutti will be sold to the bakeries and ice- cream manufacturers in the district.



9. Shri Sai silage, Ahmednagar

Shree Sai Silage proposes manufacturing silage. The promoter wants to establish the unit in Sangamner, Ahmednagar. The total cost of the project is about INR 28.08 Lakh. Generally, Square Auto Bailer Machine, Silage Tube Press Mechanical, arrangement for engine/Motor Vacuum Pump bar shaft with tractor up to shaft, with 5 Hp Top Land Engine, with 400 Litres. Vacuum Pump, Base Frame, Belts with stability tank etc. machineries are used for Silage Manufacturing. The promoter has his own land and the area to be constructed is 1000 sqft. which costs about INR 9.40 Lakh. The total cost of the machineries and equipment is about INR 15.60 Lakh. The capacity processing unit is 2 TPH.

The promoter will contribute INR 18.70 Lakh. The grant of INR 10 Lakh under MACP-EDP will be given to the unit. Working capital is required in order to meet the daily expenses like labour, transportation, electricity and packaging. The promoter will sell the silage in Panvel, Mumbai, Kolhapur, Sangli and Nashik. The required raw material is Maize that will be procured directly from the producer groups and farmer producer companies in Ahmednagar district. The total operational expense for the first year is INR 80.99 Lakh. In first year, the operating income is projected to be INR 15.11 Lakh. The total turnover in first year may be INR 94.08 Lakh.

1.3. LEARNINGS

- Many start-up entrepreneurs have received technical, management and entrepreneurship related training from KVK, KVIC, DIC, R-SETI and other NGOs. This has helped them undertake their business planning and project implementation more professionally. A few entrepreneurs are of family business background while majority are first generation start-ups. Some entrepreneurs are science graduates and others are management graduates.

1.3.1. What type of projects do start-ups in agri-business typically undertake?

A range of projects with investment in machinery of INR 10-30 Lakh may be undertaken such as:

- Dal milling
- Manufacture of pickles, chutneys and papads.
- Manufacture of carbonated soft drinks
- Manufacture of health foods.
- Manufacture of cattle feed from maize
- Pomogranate oil extraction unit
- Essential oil manufacturing
- Manufacture of tuti-frutti from papaya
- Manufacture of edible and non-edible oil
- Wheat flour milling and packaging unit
- Amla crush, candy and murabba processing unit
- Peeled garlic processing unit
- Noodles, ketchup, soya sauce, vinegar, green chilli and garlic paste, etc.



- Processing of organic jaggery
- Processing of organic turmeric powder

1.3.2. Identifying the business opportunity

The presence of few processing units vis-à-vis production of a commodity like pulses or horticulture produce (amla) have encouraged start-ups in some areas. Educational background or professional training (for example, in pharmacy) or EDP training by institutions like R-SETI, MCED, MITCON, KVIC/B or NGOs (which include sessions on opportunity identification and market research) may have also helped in narrowing down on a particular business opportunity. Visits and technical training in existing enterprises and in the same sector have also benefited start-ups. A few have basically graduated from being employees in a related enterprise to launching one's their start-up in the same line. Inconvenient and costly logistics and fragmented market circumstances have ensured the competitive advantage to many MSE processing units in the region. Low per capita consumption in the region and country also reflects potential demand.

1.3.3. Typical equipment and technologies

Typical machinery deployed by units may be viewed as:

- Dal milling unit with grinder, destoner, roll, polisher and packaging facility.
- Drying, grinding, blending and packaging of spices.
- Roasters, pulverizers, coating machine, oven, dryers, packaging equipment for pickles, chutneys and papads.
- Manufacture of carbonated soft drinks such as mango drink, coconut water, guava juice and mixed fruit drinks: RO equipment, carbonator, liquid filling machine, chiller and packaging equipment.
- Manufacture of health foods.
- Manufacture of cattle feed from maize using pulverizers and supporting equipment.
- Pomogranate oil extraction unit with seed cleaner, press, bucket elevators and screw conveyors.
- Essential oil manufacturing from leaves of germanium using steam boiler, pressure vessel, heat exchanger, oil separator, etc.
- Manufacture of tuti-frutti from papaya using a vegetable dicer and cubing equipment, steam kettle and boiler and soaking trays.
- Manufacture of edible and non-edible oil from oil seeds like groundnut, cotton, mustard, rapeseed, etc.
- Wheat flour milling and packaging unit with equipment like wheat cleaning machine, gravity separator, flour mill, crusher and packing machine.
- Amla crush, candy and murabba processing unit with boiler, cutter, slicer, drier and pulverizer
- Peeled garlic processing unit with equipment in terms of garlic bulb breakers, air compressing peeler and packaging machine.
- Noodles, ketchup, soya sauce, vinegar, green chilli and garlic paste, etc. with noodle making machine.



- Processing of organic jaggery.
- Processing of organic turmeric powder using soya milk and paneer processing using soya mixer and grinder, milk chilling systems, etc.

A range of financial institutions from Canara Bank, Bank of Baroda, Vijaya Bank, Bank of Maharashtra and even NBFCs are involved in financing start-ups.

1.3.4 Unique Selling Proposition (USP) of firms

Absence of local competition contributed to some successful units. They enjoy fragmented markets. Markets may be fragmented due to transport diseconomies, perishability, etc. Strong market networks in terms of retail networks serve as the USP of other units. In some cases, such as in the products of Krushi Amrut Agro Foods, the originality of ingredients used and peoprietary knowledge is the key. Some entrepreneurs have adopted unique marketing strategies such as selling through SHGs on door-to-door basis. Some have used IT platform such as “Flipkart” and “Amazon” to market their products successfully. Notably, several units, have explored processing herbal products. The USP of some products (e.g. cakes) in terms of it being wholly vegetarian. Some products are sold on the basis of free from use of any synthetic colour, artificial flavours or preservatives.

Contribution of ABPF – GT

ABPF – GTs and its experts’ initiatives have been in terms of capacity building training on entrepreneurship/management, preparation of business plan/PPT, providing inputs on legal and statutory clearances, forward and backward linkages, and on government schemes of assistance.

Key Learnings

- Many units start-off in micro or house-hold scale initially before being successfully supported by ABPF-GT to secure bank loans. Bankers are also apparently more inclined and comfortable to support such cases.
- 7 to 10 days’ expert professional inputs required for any start-up from identification, nurturing, providing guidance, technical inputs till assisting in business financing.
- Bank Sanction or Subsidy sanction takes 1 month to 6 months; subject to meeting compliances, documents or collateral requirements.
- It is observed that the conversion ratio in terms of credit linkage facilitation is highest (around 20 percent to 25 percent) when a potential entrepreneur is trained under various EDP, KVK or R-Seti program or has demonstrated similar experience or inclination towards agri-business.
- Minimum engagement ranges between 6 to 9 months for new or inexperienced potential entrepreneurs and conversion ratio is not more than 5 percent.
- Both categories of entrepreneurs require assistance for technology selection, capacity building and training, business planning and leveraging govt. subsidy or debt capital.
- In terms of many typical micro units they create capital asset from their own contribution because of lack of access to finance due to stringent banking norms. However, these units post capital expenditure look forward for support in terms of Working Capital/CC limits to upscale activity.



Constraints

- Delay in sanction (Lack of Agri-loan waivers and Bank Manager Individual liability).
- Delay or constraints from entrepreneur – lack of collateral, Agri/HUF land, diferring of plans, etc.
- Delay in sanction of Government subsidies like NHM, PMEGP, DICs schemes, etc.
- Engagement time being on the higher side with several business plans being re-cast 2-3 times at insistence of different bankers or promoters.
- Readiness of entrepreneur.
- Availability of resources (capital, land and collateral) on the part of potential entrepreneurs.



PART IV

REFERENCES



REFERENCES

- Anderson, G (2000), The Hidden MSE service sector: Research into commercial BDS provision to micro and small enterprises in Vietnam and Thailand (SEED Working Paper No. 5). Geneva: ILO
- Asian Productivity Organization (2007). Entrepreneurship Development for Competitive Small and Medium Enterprises: Resort of the APO Survey on Entrepreneur Development for Competitive SMEs. Tokyo, Japan.
- Awasthi, D., Jaggi R., and Padmanand, V. (2005). A manual for Entrepreneurs Food Processing Industry. New Delhi: Tata McGraw- Hill Publishing Company Limited.
- Awasthi A, Jaggi R and Padmanand V (2004). A manual for entrepreneurs: Food Processing Industry. Tata McGraw Hill, New Delhi.
- Barro, Robert J (1991). “Economic Growth in a Cross-Section of Countries.” Quarterly Journal of Economics, 106 (2) May, pp. 407—43.
- Barro, Robert. J and Xavier Sala-i-Martin (1995). Economic Growth. New York: McGraw-Hill.
- Baumol, W.J. (1993). “Formal Entrepreneurship theory in Economics, Existence and Bounds.” Journal of business venturing 8.
- Bull, I. & Willard, G.E. (1993). “Towards a Theory of Entrepreneurship”. Journal of Business Venturing, 8.
- Bygrave, W.D. (1993). “Theory Building in the Entrepreneurship Paradigm”. Journal of Business Venturing, 8, 255-280.
- Cantillon, R. (1931). Essai sur la nature du commerce on general (tr) by H. Higgs. London.
- Carlberg, J G, C E Ward, and R B Holocomb (2006): Success factors for new generation co-operatives, International food and agribusiness management review, 9(1), 33-52.
- Chand Ramesh (2012). “Development Policies and Agricultural Markets”, Economic and Political Weekly, Vol. 47, No. 52:53-63.
- Chand Ramesh and Singh J. (2016). Agriculture Marketing and Farmer Friendly Reforms Across Indian States and UTs. National Institution for Transforming India. NITI Ayog, New Delhi.
- Davidsson, P (1989). Continued Entrepreneurship and Small firm growth. Stockholm school of economics, The economic Research Institute.



- DCMSME, <http://www.smallindustryindia.com>
- Dean, A.S. and Mark, S (2000). *New Venture Strategy: Timing, Environment, Uncertainty, and Performance*. New Delhi: Sage Publications.
- Department of Agriculture and co-operation, Ministry of Agriculture, government of India
- DFI Report by the Committee for Doubling Farmers' Income (2018) Department of Agriculture, Cooperation and Farmers' Welfare, Government of India.
- Department of Economic and Social Affairs — DESA (2007). *Industrial Development for the 21st century: Sustainable Development Perspectives*. New York: United Nations.
- Kuratko D.F. and Hodgelt R.M. (1989). *Entrepreneurship: A contemporary approach*. New York: Dryden Press.
- Drucker, P (1985). *Innovation and Entrepreneurship: Practice and Principles*. London: Heinemann.
- Government of India. 2017B. Report of the Committee on Doubling Farmers' Income. Volume II "Status of Farmer's Income: Strategies for Accelerated Growth", Inter-linkages between Input Costs, Diversification, Capital Formation and income.
- Gulati A. (2009). "Emerging Trends in Indian Agriculture: What Can We Learn from These?" *Agricultural Economics Research Review*, Vol. 22. Jul-December pp 171-84.
- <http://sfacindia.com/Krishidoot.html>
- <http://sfacindia.com/PDFs/Statewise-FPC-registered-in-Country07-05-2015.pdf>
- <http://www.financialexpress.com/market/commodities/maharashtra-govt-apmc-move-shows-results-paves-way-for-private-markets/333315/>.
- <http://www.financialexpress.com/market/30-maharashtra-apmcs-join-enam/1082271>.
- International Finance Corporation (IFC) (www.ifc.org).
- International Trade Centre (ITC), (www.intracen.org).
- Jha S.N., Vishwakarma R.K., Ahmed T., Rai A. and Dixit A. (2015). "Report on Assessment of Quantitative Harvest and Post-Harvest Losses of Major Crops and Commodities in India". Ludhiana: ICAR – All India Coordinated Research Project on Post-Harvest Technology, ICAR-CIPHET.
- Johnson, B.R (1990). "Toward a Multidimensional Model of Entrepreneur - the case of Achievement Motivation and the Entrepreneur". *Entrepreneurship theory and practice*, vol. 16, No. 2, 93.
- Kirchhoff, B.A. (1991). "Entrepreneurship's Contribution to Economics". *Entrepreneurship, Theory and Practice*. Vol. 14:3, pp.39-54.
- Marshal, A (1980). *Principles of Economics* (8yh edition-1986). London: Macmillan.
- Mc Lelland, D (1961). *The Achieving Society*. New York: D. Van Nostrand & Co.
- Mc Lelland, D.C. and Winter, D.G. (1971). *Motivating Economic Achievement*. New York: The free press.
- Mishra, D.N. (1990). *Entrepreneur and Entrepreneurship Development and Planning in India*. Allahbad: Chugh publications,



- Murphy, A.E (1986). Richard Cantillon, Entrepreneur and Economist. New York: oxford University Press.
- Padmanand V and Patel V.G. (2004). Managing India's Small Industrial Economy. Sage Publications, New Delhi.
- Padmanand V. and Gulati. M. (2006). Interventionary instruments for cluster development. Allied Publishers, Hyderabad.
- Padmanand V. and Kurian P.H. (2009). Entrepreneurship in Developing Countries', Kerala Bureau for Industrial Promotion, Govt. of Kerala, Thiruvananthapuram.
- Padmanand V. and Kurian P.H. (2014). Rise of Indian Industry. Kerala Bureau for Industrial Promotion, Govt. of Kerala, Thiruvananthapuram.
- Padmanand V. and Vinanchiarachi J. (2008). Intervene to industrialise: A holistic approach to enabling business environment, entrepreneurship and cluster value chain development. Kerala Bureau for Industrial Promotion, Govt. of Kerala, Thiruvananthapuram. Singh Sonal.
- Padmanand V., Reddy Chandrasekhar M., Satyaprakash T.L. and Sood K. (2014). Rise of the Third World: In the enabling policy and regulatory environment. Small Enterprises Development, Management and Extension Journal, Volume 41 Number 3 September.
- Padmanand V, Kalsi N.S., Sood Kunal, Reddy Chandrasekhar M and Singh Sonal, "Capacity Building of Farmer Producer Organisations in fast track mode as to double farmer incomes – Case illustrations from on-going interventions in Punjab". Small Enterprise Development Management and Extension Journal, Vol. 44, No. 3, September 2017, Hyderabad.
- Padmanand V, Kunal Sood and Reddy Chandrasekhar M, "Commodity Value Chain Diagnostics and intervention with a Humane face for FPC start-ups". Small Enterprise Development Management and Extension- Journal, Vol.43, No.1, March 2016, Hyderabad.
- Padmanand V, Kunal Sood and Reddy Chandrasekhar M, "Promoting Agri Business start-ups through Integrated Entrepreneurship Development approach in Maharashtra: "Mantra" for 1000 start-ups every year in each Indian State", Small Enterprise Development Management and Extension- Journal, Vol.49, No.4, September 2016, Hyderabad.
- Padmanand V., Khodwekar and Sood (2017) "Doubling Farmer Income" through Farmer Producer Organisations, submitted.
- Padmanand V., Khodwekar and Sood (2017). Manual for promotion of Farmer Producer Companies. Maharashtra Agricultural Competitiveness Project, Govt. of Maharashtra, Pune.
- Padmanand V., Khodwekar S., and Sood K. (2018). Manual on Entrepreneurship and Management for Farmer Producer Companies. World Bank Assisted Maharashtra Agricultural Competitiveness Project, Govt. of Maharashtra, Pune.
- Pickle, H.B and Abrahamson, R.L (1990). Small Business Management. John Wiley and Sons, Inc.
- Rasiah R. J. Vinanchiarachi, and V. Padmanand (2014). "Catching-Up from Way Behind: How Timor-Leste Can Avoid the Dutch Disease?" Institutions and Economies. 6.1pp. 119-48 April.
- Shah. T (1995): Making farmer co-operatives work- design, governance and management,



Sage, New Delhi.

- Sharma. E K (2010): Farmers in the Boardroom, Business Today, October 17, 92-94.
- Trebbin A and M Hassler 2012. “Farmers Producer Companies in India: a new concept for collective action” Environment and Planning 44(2): 411-427.
- UNDO (1978). UNDO guide to practical project appraisal, New York.
- UNDO (1978). UNIDO Manual for preparation of industrial feasibility studies, New York.
- Vesper, K (1982). Encyclopaedia of Entrepreneurship, Prentice Hall.
- World Bank “Doing Business” site, <http://www.doingbusiness.org>
- World Bank. (2000). World Development Report 2000, New York: Oxford University Press.
- World Bank. (2006). World Development Indicators, <http://devdata.worldbank.org>
- World Bank (2006), “Global Monitoring Report 2006”, Washington D.C.
- WTO home page: www.wto.org



Glossary

- Collateral (Loan) - Something pledged as security for repayment of a loan, to be forfeited in the event of a default.
- Memorandum of Association - A Memorandum of Association (MOA) is a legal document prepared in the formation and registration process of a limited liability company to define its relationship with shareholders.
- Schemat -An underlying organizational pattern or structure; conceptual framework.
- Usurious - Practicing usury (usury is as defined the practice of making unethical or immoral monetary loans that unfairly enrich the lender); charging illegal or exorbitant rates of interest for the use of money.



End Notes

- i. GT Research and Analysis.
- ii. Also see Awasthi et al, 2005, Padmanand and Patel, 2004, Padmanand and Jain. 1999, Padmanand and Kurian 2009.
- iii. For purpose of convenience, as well as to remain in “sync” with global practices, the terminology “SME” is adopted across much of the book.
- iv. Awashi, 2009 elaborates: SMEs constitute a major segment of the industrial structure in most countries. The proportion of SMEs was 99.6 percent in China, 99.8 percent in Korea, 98.8 percent in Malaysia, 99.8 per-cent in Thailand, 99 percent Cambodia, and 99.7 per-cent in Japan. SMEs contribution toward 58.5 per-cent of GDP and 68.2 per-cent of total export revenues of China (2005). In Japan, SMEs contribute towards 70.2 per-cent of employment and 56.8 per-cent of value addition.
- v. There have been several initiatives ad opting varying methodologies. For examples ILOs programmes related to business start –ups and growth are pursued worldwide. Similarly, the Bharatiya Yuva Shakti Trust (BYST), in India, partners with the Indian corporate sector to provide unemployed youth with training, collateral – free financing, and structure mentoring opportunities. This dynamic institution has an impressive track- record in terms of facilitating sustainable start-ups. In a more global perspective, the youth Business International, UK, operates in 35 countries.
- vi. Further, they generate over 50 per-cent of value added in several Organisation for Economic Co-operation and Development (OECD) countries. While in some countries, the SME sector merits strengthening, in others and even in some regions within many rapidly developing countries, there is an inadequate MSME base and a virtual dearth of entrepreneurship (also see Padmanand and Kurian, 2006).
- vii. See Padmanand and Patel, 2004 and Padmanand and Kurian,2014.
- viii. Padmanand and Kurian, 2009.
- ix. Though, in contrast, Adam Smith considered an entrepreneur as one who provides capital without taking the leading role in an entreprisse.
- x. McLelland and Winter, 1971.
- xi. Poly-house or greenhouse based floriculture in controlled conditions with thrust on value added flowers targeting Developed Country markets.
- xii. See Padmanand, 2006.



- xiii. The innovation centre and internet incubator, Cranfield Creates, for instance, shares premises in the Technology Park at Cranfield in the UK. Both facilities offer advice, expertise and resources to help entrepreneurs. The incubator offers a range of services in terms of premises, business angel investment networks and close ties with university departments. Incubates also have access to the programs offered by the co-located Cranfield school of management. Counselling services are also provided by Cranfield faculty (Padmanand and Kurian, 2006, 2009).
- xiv. Padmanand and Vinanchiarachi, 2008.
- xv. While standard schemes are available for start-ups by banks and leading institutions, customized products may also be evolved.
- xvi. The duration of four weeks represents about 26 days.
- xvii. This could also involve interactions with officials from various support agencies/ institutions (such as, Banks, R&D institutions, market assistance providing agencies), also procedures and formalities involved in the setting up of an enterprise are introduced.
- xviii. The inputs could encompass that related o joint-action, namely those related to establishment of common raw material banks, formation of Marketing Consortia, establishing purchase consortia, and network for establishment of Common Facility Centre (CFCs) under PPP Schemes.
- xix. Also see Padmanand and Kurian, 2009.
- xx. Also see Padmanand and Jadeja, 2007.
- xxi. Padmanand and Patil, 2004; Padmanand and Kurian, 2009.
- xxii. The business information services network (www.ficci.bisnet.com) offers a data base of Indian companies.
- xxiii. Also see Padmanand and Jadeja, 2007, Padmanand, et, al, 2003 and Padmanand and Gulati, 2006.
- xxiv. Council for Scientific and Industrial Research.
- xxv. Many other developing countries in the region are not far behind. For instance, Pakistan, has a credit Information Bureau incorporating data on SME BORROWERS Commercial banks have been directed to set up independent SME departments and an SME Bank and SME Leasing addresses needs of SMEs.
- xxvi. Export market related BDS to SMEs is also provided by the YANSTIA-FNF- located at Chennai.
- xxvii. Trade desks of concerned counties in India such as Korean Trade Authority are likely to be very pro-active on this front.
- xxviii. Advisory bodies under the Department also include the Export Promotion Board, Directorate General of anti-dumping and Allied Duties and various Public Sector Undertakings such as the State Trading Corporation of India Limited, Metals and Minerals Trading Corporation Limited, the Export Credit Guarantee Corporation of India as well as the Indian Trade Promotion Organization.



- xxix. Other than specialized export development authorities for Marine Products and Agriculture and processed food, there are 12 sector specific Export Promotion Councils under the ambit of the Department of Commerce.
- xxx. It comprises the Central Minister for SSI State, Industries Ministries, Secretaries of various Department of the Central Govt., heads of financial Institutions, representatives of industry associations and eminent experts.
- xxxi. www.doingbusiness.org
- xxxii. In India the RBI has advised commercial banks to open more MSE branches and provide concessionary finance to SMEs. The dedicated MSE bank, SIDBI provides direct/indirect financial assistance in terms of Direct discounting of bills, operates a Technology Development and Modernization Fund and schemes to support marketing initiatives technology transfer and Joint Ventures. Other countries in the region are not far behind. As an illustration, in addition to State owned a private sector bank catering to SMEs, in Bangladesh, the South Asia Enterprise development Facility a project funded by a consortium of donors including the International Finance Corporation and CIDA is contributing towards capacity building of financial institutions.
- xxxiii. Also see Awasthi et al, 2005, Padmanand and Patel, 2004, Padmanand and Jain. 1999, Padmanand and Kurian 2009.
- xxxiv. For purpose of convenience, as well as to remain in “sync” with global practices, the terminology “SME” is adopted across much of the book.
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- xxxvi. There have been several initiatives for opting varying methodologies. For examples ILOs programmes related to business start –ups and growth are pursued worldwide. Similarly, the Bharatiya Yuva Shakti Trust (BYST), in India, partners with the Indian corporate sector to provide unemployed youth with training, collateral – free financing, and structure mentoring opportunities. This dynamic institution has an impressive track-record in terms of facilitating sustainable start-ups. In a more global perspective, the youth Business International, UK, operates in 35 countries. The Philippines Emerging Start up Open (PESO) set up at the Massachusetts Institute of Technology involves venture capitalists, academics, and industry professionals to support aspiring young potential entrepreneurs (Awasthi, 2009).
- xxxvii. Further, they generate over 50 per-cent of value added in several Organisation for Economic Co-operation and Development (OECD) countries. While in some countries, the SME sector merits strengthening, in others and even in some regions within many rapidly developing countries, there is an inadequate MSME base and a virtual dearth of entrepreneurship (also see Padmanand and Kurian, 2006).



- xxxviii. Padmanand and Kurian, 2009.
- xxxix. Padmanand and Vinanchiarachi, 2008 and Padmanand and Kurian 2009.
- xl. In Korea, initially, The Korean Small Business Corporation extended loans to incubation centre. Since 1999 the government promoted incubation facilitates in large numbers to address employment issues. By 2003, there were 333 facilities in Korea, largely government sponsored. The government is, today, emphasizing on self-sustainable facilities. The proactive incubation policies of the government have led to over 4000 start-ups by 2006 (Awasthi, 2008).
- xli. Some institutions such as the dynamic BYST have, however recently tied up with commercial bankers such as the Indian Bank and substantially up-scaled their interventions.
- xlii. Also see Padmanand and Kurian, 2009.
- xliii. Incorporating inputs vis-à-vis appropriate business opportunity guidance into sectors and product categories that a country has comparative and competitive advantages in, or alternatively into relatively non-tradable products and services that do not compete with more competitive manufactures from other countries.
- xliv. GT Research and Analysis.
- xlv. GT Research and Analysis.
- xlvi. All India Data from NHB; Maharashtra data from Ministry of Agri and Farmers' Welfare.
- xlvii. <http://www.whfoods.com/genpage.php?tname=foodspice&dbid=13>.
- xlviii. <https://top5ofanything.com/list/206fba36/Eggplant-Producing-Countries>.
- xlix. Bull and Willard, 1993; Padmanand, Khodwekar and Sood, 2018.
- l. Also see Padmanand and Kurian, 2006.
- li. Also see Padmanand and Kurian, 2006. Other useful reads are Kuratko and Hodgets, 1989 and Taneja and Gupta, 2001.
- lii. See Padmanand and Kurian, 2006 for detailed elaboration.
- liii. Typically, errors in the selection of opportunities occur due to dissonance of the project with entrepreneur skill and competencies, absence of any uniqueness or innovativeness in the project, as well as lacunae in information on the basis of which the project idea was short-listed from amongst options.
- liv. See Padmanand and Gulati, 2006.
- lv. Also see Padmanand and Kurian, 2009.
- lvi. The contents of a partnership deed as envisaged in the Indian Partnership Act, 1932 includes: details of the firm, nature of business, names of partners, place of business, amount of capital to be contributed by each partner, profit sharing ratio amongst partners, withdrawals allowed to partners, salary and commission payable to partners, maintenance of accounts and arrangement of audit, loans and advances from partners



and relevant rate of interest, mode of valuation of goodwill in the event of admission, retirement and death of a partner, settlement of accounts in case of dissolution of a firm, arbitration in case of disputes, and arrangements in the event of insolvency of a partner.

- lvii. Padmanand and Jadeja, 2007 elaborates.
- lviii. Padmanand and Gulati, 2006.
- lix. Padmanand and Kurian, 2006, 2009.
- lx. Also see Padmanand et al, 2016, Sep.





"The book furnishes evidence-based articulation of the key determinants of success in agripreneur start-ups, drawing on operational lessons learned from the implementation of pertinent projects in Maharashtra. The operational guidelines contained in the book could serve as dynamic sources of fostering agripreneurship on the path to the frontiers of best practice to survive in an internationally competitive environment."



Jebamalai Vinanchiarachi, Former Principal Adviser to the Director General of United Nations Industrial Development Organization (UNIDO), Vienna, Austria. Principal Adviser, Knowledge Management Associates, Austria

"The Country needs start-ups in the MSE Sector employing labour-intensive technologies. These alone could provide gainful employment to the masses. My heartfelt appreciation to the authors for documenting related model interventions."



Devinder Pal Singh Kharbanda, IAS, Director, Industries and Commerce cum Managing Director PSIEC

"This manual comprising of Agripreneurship ecosystem, agri-business opportunities and success stories will be very useful for prospective Agripreneur as well as to groom trainers. The work done by the authors, GT and MACP team is highly commendable and certainly worth emulating in other states."



M. Chandrasekhar Reddy, Former Director General, National Institute for Micro, Small and Medium Enterprises (NI-MSME) and Former Senior Technical Expert, GIZ.

"Enterprise and business in the agricultural sector is the key to unlocking the huge potential for meaningful employment generation and wealth creation in rural India. This Manual, replete with case-studies and practical guidelines for agripreneur start-ups, delineates an integrated approach that is at once evidence-based and result-oriented."

Anthony de Sa, IAS, MPA (Harvard), Chairman, Real Estate Regulatory Authority, and Former Chief Secretary, Madhya Pradesh



"The country needs more and more start-ups in the MSE space to deploy skill and manpower intensive technologies. This could be biggest contributor to the educated and skilled youth, which will go a long way in helping the youth and also contribute significantly to the economy of the country. My heartfelt appreciation to the authors for documenting model interventions of this genre."

Dr. N.S. Kalsi, IAS, Ph.D. (Alumnus of Cambridge University, U.K), Additional Chief Secretary, Govt. of Punjab



"It gives me great pleasure to endorse this Manual for Agri – business and agri Start-ups, which supplements the earlier one on Management of FPCs. India's agricultural and agri- business sector contributes significantly to our vision of helping shape a more Vibrant Economy, and I hope that the guidelines in this document help other states and agri units easily replicate the success in state like Maharashtra. My heartiest congratulations to our GT and MACP team for their effort to make this happen."

Vishesh. C. Chandiok, National Managing Partner, Grant Thornton India LLP



"India is one of the leading producers of horticulture produce in the world. Besides being a leading producer, India is also the largest consumption hub. However, there is wastage of 25 to 30% due to post harvest losses. There is a requirement of post-harvest care, processing and value addition. Developing agri business start-ups in secondary and tertiary processing is the need of the hour. This publication will be a useful read for all concerned stakeholders. I congratulate GT and MACP team for the commendable work."

Chiranjiv Choudhary, IFS, Commissioner of Horticulture and Ex-Officio Secretary (Horticulture and Sericulture) Govt. Of A.P.



"This book fills a void and provides a comprehensive overview of the agri-business sector, its ecosystem, major stakeholders and promoters. It is a 'must read' book for policy makers, planners, practitioners and entrepreneurs, alike. It will also be of immense use for potential agri-entrepreneurs."

Prof. Dinesh Awasthi, Former Director, Entrepreneurship Development Institute of India (EDI), Ahmedabad and Prof. IIM, Lucknow



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