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AGRO PROCESSING INDUSTRIES---A CHALLENGEING ENTREPRENEURSHIP FOR RURAL DEVELOPMENT

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ABSTRACT

Entrepreneurs are encountering a number of constraints pertaining to finance, marketing, technological and export for smooth running of their entrepreneurial units. There is urgent need to provide the facilities which facilitate them setting up of economically viable units and they should be equipped with latest technologies and skills by organizing different entrepreneurial motivational and skill oriented programs frequently. The present study was undertaken in the four industrially leading districts of Haryana state to determine the correlates; the specific training needs of entrepreneurs; to make an assessment of problems encountered by

entrepreneurs to facilitate setting up of sustainable units. A total number of 120 entrepreneurs were interviewed for the study.

The study indicated that 'suitable location of entrepreneurial units', 'adequate supply of power', 'adoption of quality control measures', 'good quality of raw material', 'timely supervision and guidance', 'sound managerial ability of entrepreneurs', 'provision of technical guidance counseling,' 'proper training of workers,' 'easy availability of finance', 'identification and use of mega markets', 'attractive packaging', 'quality products', 'good contact with marketing personnel,' 'commitment towards enterprises', 'high risk taking capacity', 'innovative behavior,' 'high degree of motivation' were found as very much effective correlates for economically viable units.

The study found that important areas of training preferred by entrepreneurs were quality management, marketing management, packaging techniques, marketing techniques, technology up gradation, financial management, brand promotion, export promotion technique, advertising the products and personnel management.

The study further revealed that 'lack of physical facilities', 'lack of sufficient stock of raw material', 'lack of managerial competence', 'poor attention on advertisement and publicity of the products', 'poor working of various industrial agencies,' 'lack of cooperation and coordination among different developmental agencies,' 'technological gap', 'lack of sufficient working capital', 'problems in procuring finance from different financial institutions,' 'cheaper/ superior competitive substitute,' 'inadequate supply of export information', 'power supply inadequate, uncertain and costly', 'preparation, identification and implementation of the project', 'licensing and registration', 'poor linkage with marketing structure', and 'lack of govt. support and incentives' constituted very serious problems encountered by entrepreneurs for a sustainable unit.

INTRODUCTION

As a rapidly growing third world Country, India has been taking careful steps and measured steps in its diverse development efforts over the years, the small scale industrial sectors has been accorded adequate importance and constitutes an importance and crucial segment of the industry sector. The contribution of Small scale Industrial sector to employment is next only to agriculture.

After independence, several entrepreneurship development programs have been started to develop the skill, knowledge, and competence among the entrepreneur. In spite of various entrepreneurship development programmes launched by the Govt. and non-government agencies, the entrepreneurs are encountering a number of problems for establishing economically viable small-scale agro-processing units like lack of physical facilities like, communication, transport and storage, lack of quality control measures, selection of products, non-availability of right type of raw material, lack of managerial competence, poor linkage with marketing bodies, lack of trained workers, low scale of production, improper communication with other developmental agencies. Long and complicated procedures to avail institutional help, lack of Govt. support and incentives, lack of sufficient finance and working capital and problems in procuring finance as well as loan from different agencies.

These problems decreased the productivity of the entrepreneurial units. Therefore, effective entrepreneurship development programmes should be organized for entrepreneurs to develop and strengthen their entrepreneurial quality, select the project, select product, formulate projects, acquire the basic management skills etc. The entrepreneurs should make aware about the modern technology, latest packaging techniques, better marketing opportunities, selection of raw material and proper utilization of available funds then they are bound to increase their present level of operations.

Hence, the study was conducted; (1) To study the factors responsible for sustainable small scale agro-processing units; (2) To assess the problems encountered by entrepreneurs to establish their small agro-processing economically viable; (3) To identify the training needs of entrepreneurs for economically viable units.

METHODOLOGY

The study was conducted in the state of Haryana (India). A list of small-scale agro-processing entrepreneurs was prepared for each of four districts in consultation with officials of department of industry of the concerned districts. A total number of 120 entrepreneurs constituted the sample for the study.

For measurement the intensity of factors affecting the sustainability of the units, the responses of all the entrepreneurs against each of the 55 factors were measured on a 4 point continuum rating scale ranging from very much relevant somewhat relevant, and least relevant and scores were given 4,3,2,1 respectively. A total choice score for each factor was worked out after knowing the responses of all the entrepreneurs based on their degree of relevance, then the total choice scores so obtained for each factors was converted into weighted mean score. At last, rank orders were given for each factors based on their weighted mean scores.

The seriousness of the problems encountered by entrepreneurs was measured on a three-point continuum rating scale ranging from very serious, serious and not so serious and a weightage of 3,2,1 were assigned, respectively. Based on the responses obtained from entrepreneurs a total choice score for each problem was worked out and this total score was converted into weighted mean score. Finally, 'Z' score was worked out to assess degree of seriousness of these problems and rank orders were given based on the 'Z' values.

A problem was considered very serous with 'Z' score values of more than 1, serious with 'Z' score values 1 to -1 and not so serious with 'Z' score values less than -1.

A schedule was developed consisting of 19 important areas of training. The responses of all the respondents for each training areas was rated on a five-point continuum scale.

RESULTS AND DISCUSSION

Marketing and financial factors perceived by entrepreneurs for economically viable Agro-processing units

The marketing and financial factors along with their mean scores and the rank orders of all these parameters in descending pattern are illustrated in Table 1.

An analysis of data presented in the Table 1 highlights that several important marketing and financial factors perceived by entrepreneurs in descending order were easy availability finance (3.3), identification and use of mega markets (3.28), attractive packaging of products (3.27), quality products to compete the market (3.25), efficient marketing and selection of

products on market demand (3.23), and good contacts with marketing personnel (3.20).

Easy availability of finance has been ranked at the top position. Credit should be affordable, adequate, and in time. However, SIDBI (Small Industries Development Bank of India) has given guidelines for easy procedural way of providing the credit facilities to entrepreneurs.

Identification of mega market coupled with attractive packaging of products also largely affected the sustainability of entrepreneurial units, because attractive packaging helps in raising the price sale value of the finished products. Knowledge about mega market is equally important because consumption of products is directly correlated with production of that product. Hence, Govt. and non–govt. institutes should provide the marketing assistance and information regarding the mega market where the entrepreneurs can sale their products. Further quality of products has its own place in development of entrepreneurship programs. Latest technology along with required inputs should be provided to export oriented units to improve the quality because quality products can compete the market.

Table 1 further reveals that there were some other important marketing and financial factors perceived by entrepreneurs were easy access to export information (3.17), proper advertising and publicity of product (3.15), good demand of product (3.08), availability of finance in time (3.06). These findings indicated that entrepreneurs should be exposed to import information from time to time through some magazine, or bulletin, so that they can plan their target of production for export purposes.

Effective communication with marketing bodies, reasonable rates of interest on institutional finance, availability of self finance, better finishing of products, remunerative price of product were some other marketing and financials factors perceived by entrepreneurs that help in establishing the agro-based units more economic viable.

Table 1.Marketing and financial correlates perceived by entrepreneurs for economically viable scale agro-processing units

N=120

Sr. No	Correlates	VMR (4)	R (3)	SWR (2)	LR (1)	TCS	Weighted Mean score	Rank Order

1	Easy availability of finance	62	38	15	5	397	3.30	I
2	Identification and use of mega markets	60	42	10	8	394	3.28	II
3	Attractive packaging of products	59	41	14	6	393	3.27	III
4	Quality products to compete the market	57	41	18	4	391	3.25	IV
5	Selection of products based on market demand	56	40	20	4	388	3.23	V
6	Efficient marketing	55	42	19	4	388	3.23	V
7	Good contacts with marketing personnel	56	38	21	5	385	3.20	VI
8	Easy access to export information	52	41	23	4	381	3.17	VII
9	Proper advertising and publicity of the product	54	38	19	9	378	3.15	VIII
10	Proper packaging of products in different form by weight and volume	52	34	26	8	370	3.08	IX
11	Good demand of products	51	34	29	6	370	3.08	IX
12	Availability of finance in time	54	29	28	9	368	3.06	X
13	Reasonable rates of interest on institutional finance	50	35	27	8	361	3.05	XI
14	Effective communication with marketing bodies	48	30	32	10	356	2.96	XII
15	Marketing of products at appropriate time	47	29	37	7	356	2.96	XII
16	Sufficient finance	48	29	33	10	355	2.95	XIII
17	Better finishing of products	44	36	31	9	355	2.95	XIII
18	Remunerative prices of products	43	39	26	12	353	2.94	XIV
19	Owned finance/family finance	40	31	37	12	339	2.82	XV
20	Proper designing and shape of the products	40	19	47	14	325	2.70	XVI

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Areas of training need preferred by entrepreneurs

An examination of the Table 2 highlighted that quality management was the most important area of the entrepreneurs' training need with a mean score of 3.21 and was ranked at first. It implies that quality may proved very helpful in increasing the demand of the product in the competitive market and also help in getting the higher sale price of the product as compared to poor quality product. Superior quality of the product also provide the stability to units in the market, hence quality management training is most needed. Marketing management, packaging techniques for

exports and marketing technique were the other important areas and were ranked second, third and fourth with a mean score of 3.17, 3.15 and 3.09, respectively.

Problem of marketing and packaging techniques are of very serious nature in small-scale units as also confirmed by Bandarla (1992), Jairath (1996), and Malliswari (1996). Therefore, entrepreneurial training programmes related marketing management, marketing techniques, packaging techniques for the products should be organized for small entrepreneurs so that they can gain the skill and knowledge about these aspects.

There were some other important areas of training which were needed by entrepreneurs were technology up gradation (3.08), financial management (3.08), material management (3.03), manufacturing techniques of agro-based products (2.94), administration and supervision techniques (2.90), export promotion techniques and brand promotion (2.82), advertising the products (2.80), and organization management (2.79). These findings predicted that sophisticated technology is mostly needed to entrepreneurs, which help them in manufacturing quality products at low cost of different designs.

It is also argued that training of entrepreneurs regarding these areas can enable them how to better manage the finance, technology, materials and manpower available to them for maximum outcomes with minimum input. Training can equip the entrepreneurs with skills and managerial techniques used for production of quality finished product and therefore, they can stable the market.

The Table 2 further indicated that there were some other areas of training, which were needed by entrepreneurs. There were environmental management and pollution control (2.78), personnel management (2.75), entrepreneurial motivation, business opportunities and guidance (2.72), processing of agro-products (2.71), labour management (2.67), and procurement of raw materials (2.59).

It is concluded that training institutes, like, SISIs, NIESBUD, DICs, NISIET, KVICs should organize skill oriented and entrepreneurial awareness training programmes frequently comprising the areas of quality management, marketing management, sophisticating packaging techniques, marketing techniques, financial management, resource and manpower management for economically viable small scale agro-processing units.

Table 2. Areas of Training Need Preferred by Entrepreneurs.

(N=120)

Sr. No.	*Areas of trainings*	*Total choice* Score	*Weighted* mean score	*Rank* order
1.	**Quality management**	**386**	**3.21**	**I**
2.	Marketing management	381	3.17	II
3.	Packaging techniques for exports	379	3.15	III
4.	Marketing techniques	371	3.09	IV
5.	Technology up gradation	370	3.08	V
6.	Financial management	370	3.08	V
7.	Material management	364	3.03	VI
8.	Manufacturing techniques of different agro-based products	353	2.94	VII
9.	Administration and supervision techniques	349	2.90	VIII
10.	Export promotion techniques	339	2.82	IX
11.	Brand promotion	339	2.82	IX
12.	Advertising the products	337	2.80	X
13.	Organization management	335	2.79	XI
14.	Environmental management and pollution control	334	2.78	XII
15.	Personnel management	331	2.75	XIII
16.	Entrepreneurial motivation, opportunities and guidance	327	2.72	XIV
17.	Processing of agro-products	326	2.71	XV
18.	Labour management	321	2.67	XVI
19.	Procurement of raw materials	311	2.59	XVII

Table 3. Training Institutional Network for Promotion of Small Scale Industries.

Sr. No.	Institutes	Nature of assistance

1.	Small Industries Service Institutes (SISIs) 28 SISIs and 30 branches	Technical support service, development efforts for SSIs, entrepreneurship development programmes, skill oriented and motivational awareness programmes
2.	National Institute for Entrepreneurship and Small Business Development Programmes Delhi (NIESBUD)	Training in entrepreneurship Counseling for SSIs, specialized training for Trainers, developed course contact for trainings
3.	National Institute for Small Industries Extension and Training Hyderabad (NISIET)	Management development raining for SSIs and variety of consultancy
4.	Khadi and Village Industries Corporation (KVIC)	Training, guidance, counseling for for SSIs.
5.	Entrepreneurship Development Institutes (EDIs)	Training for entrepreneurship development, managerial skills, development of entrepreneurial culture and environment
6.	Indian Institute of Entrepreneurship, Guwahati	advanced training for resource persons, skill oriented programmes
7.	Institutes of Entrepreneurship Development (IEDs)	Development of entrepreneurial competence, development of trainers, motivators, managers, expert services, for enterprise setting.

Problems encountered by entrepreneurs in establishing viable agro-processing industries

Here we discuss the technological Problems, Institutional problems and financial problems encountered by entrepreneurs in establishing their sustainable entrepreneurial units.

Technological Problems encountered by entrepreneurs

A study of the Table 4 revealed that the technological gap between different institutions and entrepreneurs (Z=1.41) was found to be very serious technological problem encountered by entrepreneurs. Perhaps, this technological gap is due to poor functioning of field functionaries, lack of communication means, insufficient finance to use latest technology, and lack of specialized skills to use innovations on their units.

Therefore, it is needed to strength the field functionaries making their receiving system more adaptive for communicating the technical know-how to the users, specially, for the export oriented units for their sustainability. Providing latest technology can improve quality and helps in getting higher price of the products. Therefore, it is necessary for one to keep him abreast with latest technical know-how to survive in the competitive market and to decrease the cost of production and earning the higher profit. The technology should be so simple so that small-scale entrepreneurs can use it at their units. The latest technology developed by the research institutions should be effectively communicated to fill up gap through organizing seminars and conferences of the potential entrepreneurs. Recent developed technologies can be exposed to the entrepreneurs through organizing exhibition and mini technological fair.

The Table 4 further reveals that lack of specialized skill to the entrepreneurs (Z score=0.64), non-availability of improved technology (Z score=0.41), outdated technology (Z score=0.29), non-availability of technology in time (Z score=-1.00), were perceived as serious technological problems by entrepreneurs. These findings predicted that untrained workers and unskilled entrepreneurs in developing countries cannot use the available technologies effectively and if they were trained and induced skill into them, that outdated technology can create bottlenecks for economic growth of the units.

A latest technology is of no use if does not communicate to the entrepreneurs in time. The transfer of improved technology can be done through a network of institutions concerned with the entrepreneurship development programme. Hence, diffusion of technology in time to the skilled entrepreneurs can play a vital role, specially, for the food processing industries for a developing state like Haryana, where raw material for agro-based industries are available in abundant.

The study also resulted that facilities for maintenance and repair of the machinery are not lacking and this problems was considered as not so serious. These findings also got support from Jairath (1996).

Hence, it is realized that latest technology developed at the research labs should be diffused effectively in time to the entrepreneurs and by doing so, it is prerequisite to train the entrepreneurs by equipping them skills and managerial competence so that they can successfully use the available improved technology. Once the improved technologies are adopted by the entrepreneurs then, they can use it for developing different designs of the products, improved the quality, lower the cost, and speed to market and can get stability in the existing market.

e 4. Technological problems encountered by entrepreneurs for establishment of sustainable units

N=120

lems	hed score	re usness oblems	r
nological gap between different utions and entrepreneurs		'S	I
of specialized skill to the preneurs		3	II
availability of improved technology		3	III
ated technology		3	IV
of technical know-how		3	V
availability of technologies in time		3	VI
of facilities for maintenance and r of the machinery		ISS	VII

X (Mean) = 2.17 VS = Very serious

S.D. = 0.17 S = Serious

NSS = Not so serious

Institutional problems encountered by the entrepreneurs

A perusal of the Table 5 shows that lack of cooperation and coordination among different developmental agencies (Z score=1.33) and poor working of various institutions related to entrepreneurship such as SISIs, KVICs, EDIs and DICs (Z score=1.16) were encountered as very serious institutional problems, specially, in developing countries like India. Lack of coordination between developmental departments weakens the developmental industrial activities, particularly, in the case of agro industries. There should be coordination between research labs, agro research institutions, enterprises and marketing bodies like Developed European Countries. Improved research based technologies should be transferred rapidly to the entrepreneurs. Further entrepreneurial institutions should work effectively for providing the needful scientific techniques to entrepreneurs frequently. It has been also seen that many of the entrepreneurial institutions have failed to provide the support and counseling to entrepreneurs and these institutions are not interested in dealing with small entrepreneurs. These results got support from Chatterjee (1992).

Lack of Govt. support and incentives (Z score=0.66), long and complicated procedures to avail institutional help (Z score=0.17), lack of training to workers (Z score= -0.25), insufficient publicity for impairing the training (Z score= -0.33), training institute give less attention to the objectives, identification and selection of entrepreneurs (Z score= -0.58), and trainers do not belong to the relevant field thus lack competence (Z score= -0.66) were encountered as very serious institutional problems (Table 5).

These findings indicate that Government in developing countries are not providing sufficient support and incentives regarding finance, management, marketing and export related to entrepreneurs which badly affect the economic viability of their units, further if there are provision for support and incentives then the procedures are so complicated and time consuming, and ultimately entrepreneurs failed to avail these facilities. Again, no more publicity is given about organizing the entrepreneurial training programmes and entrepreneurs remain unknown about the scheduling of these training programme organized by different institutes.

It was also found that most of the training institutes are not concerned about the objective identification, selection of entrepreneurs and they just only fulfill their formalities for training. Hence, before imparting training, the objectives, contents, should be highlighted to the participants and suitable entrepreneurs should be selected for the trainings after reviewing their

project, objectives properly. It was also reported that resource persons for imparting the training must be experienced and must have enough orientation to entrepreneurship development programmes.

In addition to training, post training follows up for support and sustaining services to individual entrepreneur is equally necessary as entrepreneurial development is a cycle of stimulating support and sustained activities. Such type of follow up action is taken in developed European countries

Table 5. Institutional problems encountered by entrepreneurs for establishment of sustainable units

N=120

Sr.No.	Problems	Total score	Weighed Mean score	Z score	Seriousness of problems	Rank Order
1	Lack of cooperation and coordination among different developmental agencies	292	2.43	1.33	VS	I
2	Poor working of various industrial agencies such as directorate of small industries, SISIs, DICs, etc.	290	2.41	1.16	VS	II
3	Lack of Govt. support and incentives	283	2.35	0.66	S	III
4	Long and complicated procedures to avail institutional help	275	2.29	0.17	S	IV
5	Lack of training to workers	269	2.24	-0.25	S	V
6	Insufficient publicity for imparting trainings	268	2.23	-0.33	S	VI
7	Training institutes give less attention to the objectives, identification and proper selection of entrepreneur	265	2.20	-0.58	S	VII
8	Trainers do not belong to the relevant field, thus lack competence	263	2.19	-0.66	S	VIII
9	Lack of communication between field functionaries and entrepreneurs	246	2.05	-1.83	NSS	IX

X (mean) = 2.27
S.D. = 0.12

VS = Very serious
S =Serious
NSS = Not so serious

Financial problems encountered by entrepreneurs

It is evident from the Table 6 that problem in procuring finance as well as working capital from different agencies (Z score= 1.12) and lack of sufficient working capital (Z score= 1.06) constituted the entrepreneurs very serious financial problems, whereas, inadequate amount advanced through financial institutions (Z score= 0.18), lack of funds for publicity and advertisement of the products (Z score= 0.12), and high rate of interest on procured finance (Z score= -0.62) were found serious financial problems perceived by entrepreneurs. Difficulty in getting money from buyers after sales (Z score= -1.62) was found not so serious. The researcher found that many of entrepreneurs were failed in getting the required assistance from different financial institutes because of their cumbersome procedures. On the other hand, entrepreneurs had no sufficient capital, for day-to-day requirement so as to purchase raw material, transportation and communication liabilities. Further, if loan is sanctioned then amount is too low to meet the necessary requirement and therefore, entrepreneurs have to take the money from the moneylender and private financial agencies on high rate of interest and hence cost of production is increased. Due to lack of sufficient finance they cannot adopt the proper advertisement for the product and so cannot increase their sales turn over. Some guarantees have also to be given for drawing the credit facilities, which is not possible for small entrepreneurs.

Singh and Partap (1987) and Jairath (1996) also reported that main constraints encountered by entrepreneurs in agro-processing industries were lack of finance and sufficient working capital and high rate of interest on procured credit facilities.

NABRD (National Agricultural Bank for Rural Development), a national bank was set up in 1982 to provide credit facilities for promotion of small cottage and rural industries. Also to meet the financial requirement of entrepreneurs, a separate bank SIDBI was also been set up whose main function is to refinance to the different financial network institutes sat as State Financial Corporations (SFCs), National Small Industries Corporation (NSIC), State Small Industries Corporation (SSICs), commercial bank etc. There is need to strengthen the network of these financial institutions to provide the credit facilities in time and in sufficient amount with out any delay to the entrepreneurs.

Table 6. Financial problems encountered by entrepreneurs for establishment of sustainable units

N=1

Sr. No.	Problems	Total Score	Weighed Mean score	Z score	Seriousness of problems
1	Problems in procuring finance loans as well as working capital from different agencies	304	2.53	1.12	VS
2	Lack of sufficient working capital	303	2.52	1.06	VS
3	Inadequate amount advanced through financing agencies	286	2.38	0.18	S
4	Lack of funds for publicity and advertisement of the product	285	2.37	0.12	S
5	High rate of interest	271	2.25	-0.62	S
6	Difficulty in getting money from buyers after sales	251	2.09	-1.62	NSS

VS = Very seri

X (Mean) = 2.35

S = Serious

S.D.=O.16

NSS = Not so

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