A STUDY ON CAUSES FOR FAILURE OF THE SMALL SCALE INDUSTRIAL UNITS IN ANDAMAN AND NICOBAR ISLANDS - AN EMPIRICAL ANALYSIS

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Abstract

The Industrial Sector particularly the Small Scale Industrial Units (SSI Units) plays as an important role in the economy of any country and so the case of Andaman and Nicobar Islands also.. Now the SSI Units is the only scope of this Study Area for its economic development. Surprisingly, such important sector of the Andaman Islands has been given little attention. The Small Scale Industrial Entrepreneurs (SSIE) are handicapped by the lack of knowledge. The sick units and even closed units have been identified and discussion were being made on the various issues like the style of workings, labour issues, capital structure, source of capital, reasons for the location, sales, cash management, stock management, style of planning, decision making, expansion of the Industrial, controls, communication, accounting practices, auditing, usages of funds, nature of customers, credit facilities offered and obtained, market for the product, competition, management of funds, management of fixed assets, causes for the closure of the Industrial units etc., The whole causes of failure has been grouped into four categories namely, Absence Activities, Lacking Activities, Poor Activities, Failure of Activities, and Over Activities. Knowledge on accounting, advertisement, innovation, planning, performance monitoring, auditing, Industrial education, cash management, communication, debtor management, stock management, feasibility analysis, market analysis, delegation, customer relations, and knowledge in understanding the causes of absence activities, lacking activities, poor activities, failure activities etc., are to be given to the existing entrepreneurs. The suitable suggestions are offered to prevent the sick and the failure.

1. INTRODUCTION

In any country, the growth of trade, commerce and industry determine the economic development since they are the base of all activities and all developments. When industry produces the goods and services, the Trade facilitates the buying and selling activities whereas the commerce removes the hindrances of person, time, exchange and knowledge in connection with the distribution of goods till they reach the consumers and by doing so, it ensures a free and smooth flow of goods and services from producers to consumers. When such activity-cycle is repeated, growth and development occurs, national income increases, the employment opportunities are increased, the backward areas are developed by removing disparity, poverty is reduced, the factors of productions are fully employed and exploited and hence a tangible growth and development is clearly visible and seen. Moreover, the small is always beautiful, controllable and manageable. So the Small Industry is best way of developing a growing economy.

2. SMALL INDUSTRIAL SECTOR (SIS)

Small Industrial Sector (SIS) plays as an important role in the economy of any country. Growth of SIS is the parameter to measure the economic development in a country particularly developing country like that of The SIS plays a positive role in the field of both Inter-state and international relationships. SIS brings and joins the people of different cultures, religions, languages, etc. Direct employment in SIS and the indirect was much more. The employment opportunities tend to increase in SI Sector. This SIS particularly at the retail level is mainly being a labour intensive sector, providing employment to the semi-skilled and the unskilled.

3. THE STUDY AREA

The Study Area chosen for the present research work is the Andaman and Nicobar Islands. These islands are historically important and economically resourceful. These islands are situated in the Bay of Bengal and are surrounded by Burma, Thailand, Malaysia and Indonesia. The Islands constitute the most isolated part of the Indian Union, stretching in North-South direction, separated from Indian mainland by vast stretches of sea. The Andaman group of islands are separated from the Nicobar group of islands by the boisterous 10° channel which is about 155 Kms. Wide and 400 fathoms deep. This territory, comprising an area of 8,293 Sq. Kms., is a group of picturesque islands.

4. NEED FOR THE STUDY

The Study Area i.e Andaman & Nicobar Islands as one group is one of the union territories of India. The resources are plenty. Majority of the resources are un-utilized and whatever so far utilized is also under utilized in the Andaman and Nicobar Islands. As far as the resources are concerned, Natural Resource is the only richest resource of this territory. In the interior place, less number of people comes forward to start any As a branch of Commerce Education and as one of the types of Sector, the Small Industry (SI) has a high level potential and prospects in this Study Area. Moreover, now the SI sector is the only scope of this Study Area for its economic development. With the growing population, the SI sector has much more to play in the Study Area to solve many problems. But the Management of the Small Industrial Sector is very poor. Though not all, few units have failed, few others are sick and some are unable to stand and are nearing the coma stage. Surprisingly, such important sectors of the A&N Islands particularly Andaman Islands have been given little attention. The Small Industrial Entrepreneurs are handicapped by the lack of knowledge. The problems of Small Industrial Sector have to be approached, recognized and treated as a separate discipline, because, the analytical models applicable to big Industry are of limited use in these areas. But, so far no study has been undertaken to find out the causes for the failure and sick and to evolve the solution for the failure. Hence, there is a dire necessity for a study on the Small Industrial Units in the study area with special reference to bring out the causes of the failure and sick based on an in-depth research and hence this study.

5. METHODOLOGY

The methodology used in the full research study is only interview method. First, the sick units and even closed units have been identified. They were approached and interviewed only with few questions to know the causes for the failure. Discussion were being made on the various issues like the style of workings, labour issues, capital structure, source of capital, reasons for the location, sales, cash management, stock management, style of planning, decision making, expansion of the units, controls, communication, accounting practices, auditing, usages of funds, nature of customers, credit facilities offered and obtained, market for the product, competition, management of funds, management of fixed assets, causes for the closure of the Industrial units etc., . 30 units are identified which were failed long back and they were contacted. 03 units totally rejected to talk with the researcher and hence facts have been collected only from the remaining 27 units. In spite of the best efforts at convincing the small units that the information collected was to be used secretly without disclosing their identify, they were not very co-operative in supplying the information. The researcher had to visit many units two or three times in order to elicit the information.

6 WHAT IS FAILURE?

In the present study area many entrepreneurs do not know about what is going in their unit. They don't follow and maintain systematic accounting practices. Even if they maintain accounting practice, they don't go for proper analysation and interpretation since they have less knowledge about the interpretation of data, usage of the result of interpretation in the process of decision making. When there is failure in the decision making, the Industrial unit starts its move constantly towards the last stage of its life cycle. The productivity will gradually come down, labour unrest will start, quality of the product will be deteriorating, cost of

capital will be increasing, amount of intangible and fictitious assets will increase in the asset side of the balance sheet, techniques of window dressing will be increasing, current ratio will be always less, customers dissatisfaction will start, number of customers will start to decrease, the voice of the competitors will increase, and the magnitude of the profit will be in negative and so on. These symptoms will take the unit to a last stage of the life of the unit. This situation is called Industrial failure.

7 CAUSES OF FAILURE

The main reason for such failure is the inefficiency on the part of the management, and weakness on the part of the managers. All managers in the name of managers can not be a Successful Managers. There are many reasons for the failure of the units namely non availability of transport, insufficient infrastructural facilities, non cooperation of the government officials, inefficient management of the government officials due lack of concerned knowledge etc. For all these entrepreneurs can not be blamed, the local government and the related officers are fully responsible. Keeping other things remains correct this study aims at only the causes for the failure on the part of the entrepreneurs. From the discussion carried out at the time of interview, the following reasons and causes are elicited for their Industrial Failure. The whole causes of failure have been grouped into four categories namely, Absence Activities, Lacking Activities, Poor Activities, Failure of Activities, and Over Activities.

Absence Activities: this includes absence of advertisement, absence of innovation, absence of planning, absence of accounting practices, absence of performance monitoring and absence of auditing

Lacking Activities: this includes lack of Industrial education, lack of experience, lack of financial skill, lack of guidance, lack of office management, lack of information,

Poor Activities: this includes poor cash management, poor communication, poor debtor management, poor stock management

Failure Activities: this includes failure to avail opportunities, failure to conduct the feasibility analysis, failure to conduct the market analysis, failure to delegate, failure to develop relations, failure to recognize the self strength & weakness

Over Activities: this includes over borrowings, over dependency of a particular person, over investment in fixed assets

Other Activities: this includes competition, insufficient capital, personal use of funds The result is shown in the following table

Table Causes of Industrial Failure

Sl.	Causes of Failure	Respondents (27)	
No.		Number	%
1.	Absence Activities (AA)	24	88.8
2.	Poor Activities (PA)	18	66.7
3.	Lacking Activities (LA)	17	62.9
4.	Failure Activities (FA)	13	48.1
5.	Over Activities (OvrA)	11	40.7

6.	Other Activities (Otr A)	08	29.6

Source: Primary data - 2018

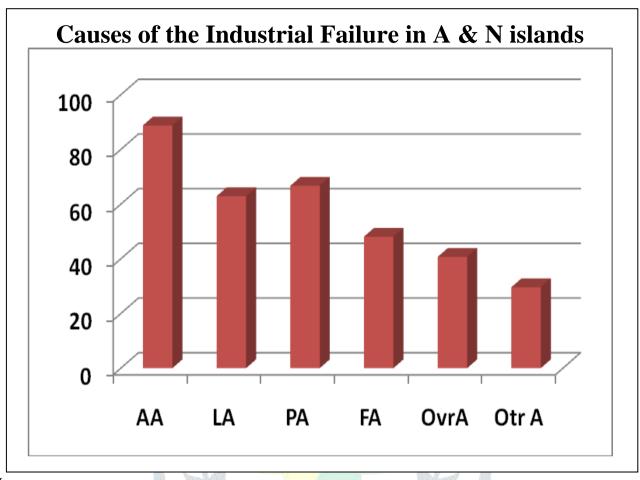


Fig I

The above table and graph shows the causes of failure of the Industrial units in the study area. The above table is being analysed and outcome of the analysation is given below.

7.1 ABSENCE ACTIVITIES

It is clear from that table that majority of the units failed only because of the Absence Activities. 88.8% of the total units reported that absence of advertisement, planning, innovation etc. was their drawbacks.

7.1.1 Absence of Accounting Practices

Good Accounting Practice to the Industrial Units is very important. Good Accounting System will ensure the financial statements like Trading Account, Profit & Loss Account, and Balance Sheet are readily available as and when required. A Good Account Practice and System will be highly useful for Decision Making, to practice better Management of Cash, Bank Balance, Receivable and Payable, Management of Expenses, Assets, Liabilities and the whole unit as well as per the requirement of different laws. But from the study it is understood that the majority of the units did not maintain a good accounting system

7.1.2 Absence of Advertisement

Advertisement is the only means wherefrom the units can inform the availability of goods ands services to the customers and consumers. In Andaman and Nicobar islands, there are different types of Medias through

which the advertisement can be given. Newspaper and All India Radio and TV – both government and Private channels are available. But the units have never gone for any type of advertisement which was also a reason for the failure.

7.1.3 Absence of Innovation

Innovation is an important matured function of an healthy Industrial unit. Innovation function of the Industrial unit only can take the unit to a long life in the Industrial galaxy. This is the very important function that gives strength to the unit to live with the competitors. Innovation helps to attract the customers, to introduce new products, new usages etc. But the study reveals no unit in the study area has gone for such important function.

7.1.4 Absence of Performance Monitoring

Performance is the end result of the individual employee's workings and contributions to the unit. Some times the contribution of the employees are more than the units expectation and some times the it is less or even it will be zero. But it actual the employee whose contribution is zero will be acting too much as if his contribution is more. Majority of manages and heads commit mistake at this point only. They fall under the cunning net of these categorized employees and create problems to the employees whose contributions are more. Once if the contributing employees leave, the unit will go to dust bin. So a monitoring mechanism is absolutely necessary to oversee the performance. Majority of the units face this problem.

7.1.5 Absence of Planning

Planning is the primary function of deciding in advance what activities are to be carried out and what activities should not be carried out. Without planning nothing is possible. That planning should be done systematically. But it is very clear from the study that all the failed units did not plan for anything. The carried out all the works and activities as and when they feel so. Even at the time of interaction with the entrepreneurs, it is elicited that they do not want to go for planning.

7.1.6 Absence of Auditing

Auditing is the systematic examination of the books, records; vouchers etc., in such a way that the entrepreneurs should come to know that the activities are going on the right track. But the failed entrepreneurs did not go for such systematic examination. They approach the independent auditor once in a year to make their profit and loss account and the balance sheet just for record purpose and for income tax purpose.

7.2. POOR ACTIVITES

Next to the absence activities, poor activities are the reasons for the failure of the Industrial Units . above table shows that 66.7% of the sample expressed that the main reason for their failure is the poor activities as mentioned below

7.2.1 Poor Cash management

Cash is a liquid asset. Cash is the life blood of the Industrial unit. The ultimate seriousness in the Industrial units is to manage the cash. Every day the sources and application of the funds (cash), receipts and payments of the cash, income and expenditure in connection with the cash, opening balance of the cash, transactions, closing balance of the cash etc. is to be properly managed with the systematic verification. The research work clearly pictures, the entrepreneurs did not take that much serious in managing cash. their conversation it is understood that they believe more the person who is in charge of the cash.

7.2.2 Poor Communication

Another important reason for the Industrial failure in the study area is the poor communication since it is the nervous system of the Industrial unit. Unable to provide information to the suppliers, customers, bankers, and to their employees created unexplainable issues in the Industrial units. The Industrial units failed did not have any good communication system.

7.2.3 Poor Debtor management

Consumers and customers are our everyday guest and they are to be invited and satisfied by supplying good quality goods and services. Cash Consumers (consumers generally purchase by paying cash and who does not like to have credit purchase) or Cash customers will always have some sort of intangible good relationship with the unit. But the credit consumers or credit customers named as debtors are to be taken care of. They are to be managed to their fullest satisfaction. The possible discounted sales, possible indirect helps such as free delivery till their shop or unit, acceptable terms and conditions etc. are to be extended to them. They should never feel that the units are treating more better the cash consumers than them. This point is verified from the entrepreneurs that they treated cash consumers better than the credit consumers. Hence the units lost their credit customers.

7.2.4 Poor Stock management

Stock is another very important current asset basing the success of the Industrial unit. The inventory management is to be done very carefully in such a way that the unit should have regular flow of the sales. At the same time the unit should not have over stock or under stock. The units should have the knowledge about the minimum level, maximum level; re-order level, danger level of the stocks. They should have full knowledge about the Economic Order Quantity. The units did not maintain any such system in the management of stock.

7.3 LACKING ACTIVITIES

Next to the absence activities and poor activities, lacking activities are also becoming the reasons for the failure of the Industrial Units. The above table shows that 62.9% of the sample expressed that the main reason for their failure is the lacking activities as mentioned below

7.3.1 Lack of Industrial Education

Without having systematic body of knowledge one can not perfectly practice the art of the Industrial . All activities can not be successful always on trial and error methods. But in Andaman and Nicobar islands, majority of the Industrial units are going on only on the basis of trial and error method and only limited number of entrepreneurs is having Industrial Education. If there is no Industrial Education, the entrepreneur should depend and forced to depend on others for all his needs like, book keeping, accounts, decision making, etc. Lack of Industrial education is also one of the reasons for the Industrial failure.

7.3.2 Lack of Experience

Experience is the mother of innovation. An industrial unit has to grow slow and steady. The entrepreneur must have the necessary experience in the process of taking the Industrial unit in the next stage of the growth and development. For that he has to gain necessary experience from the day to day transactions carried on by the unit. Industrial units often fail when the entrepreneurs fail to acquire the experience and due to that lack of experience, the Industrial units are forced to go for the closure.

7.3.3 Lack of Financial Skill

As is already discussed that the finance is the life blood of the Industrial activities estimating the requirements of finance, finding source of finance, calculation of the cost of finance, and optimum usage of the finance etc., are absolutely essential. The whole activities fully depend on the skill of the entrepreneurs in the area of finance. Lack of such skill on the part of the entrepreneurs, it is inferred from the interaction, causes for the failure.

7.3.4 Lack of Guidance

Guidance is the light house to the entrepreneurs to show the right way on the path of growth and development. Majority of the units failed due to the lack of right guidance from the private side and government side.

7.3.5 Lack of Information

Information are the daily vitamins and minerals required for the body of Industrial Units and based upon the vitamins and minerals the units will grow healthy. The units located at very far away places like inter islands do not get the information about the prices, availability of ships, arrival and departure of the transports, customers needs, suppliers communication etc. This is another biggest problem for the failure of the units.

7.4 FAILURE ACTIVITIES

Failure activities occupy the fourth position in the rank of causes of Industrial failure. The study shows that **48.1**% of the sample units reported that failure activities are their reasons for the failure. This cause includes failure to avail opportunities, failure to conduct the feasibility analysis, failure to conduct the market analysis, failure to delegate, failure to develop relations, failure to recognize the self strength & weakness

7.4.1 Failure to avail opportunities

Opportunities are the occasional luck that come and knocks the door of the unit. The prudent Industrial entrepreneur should avail such luck when it comes to our door. If the entrepreneurs fail to avail the opportunity and fail to recognize at that moment, then he has to spend a lot of amount to bring the same situation. Opportunities are the growing cells of the Industrial unit. Every entrepreneur must wait for the opportunity to grow. But in the present research it is clear about 15% of the entrepreneurs failed to avail opportunities.

7.4.2 Failure to conduct the Feasibility Analysis

Feasibility analysis is very important analysis to be undertaken before the venture starts. It is nothing but the possibility of the running the units without difficulties and without any hindrances. This analysis will give the entrepreneurs of any type a hope in and scope about the Units. But the end result of the analysis shows that none of the units have done this analysis and that's why the units failed and such units don't know from where it started and to where it reached.

7.4.3 Failure to conduct the market Analysis

The ultimate purpose of the production is consumption. It is the duty of the Industrial unit to bring the particulars about the goods and services produced by the entrepreneurs into the knowledge of the consumers. For that the market analysis is to be done by the entrepreneurs. Without knowing the pulse of the of the market, it is very difficult to produce and attract the consumers and convert the consumers into customers. It is understood from the study and analysis that no entrepreneurs have committed for market analysis.

7.4.4 Failure to Delegate

Maximum number of managers makes the company to the level of closure just only because they want to do everything himself with out using and practice the tools of delegation. The managers and entrepreneurs fear to delegate and hence they fail themselves and they are taking the units to the closure level. Normally they don't take external help.

7.4.5 Failure to develop Relations

Relationship is absolutely necessary in any and every economic activity. We can not do any work as far as the economic activities are concerned without developing relationships. Employee relationships, consumer relationships, suppliers' relationships, government officers' relationship, consumers' relationships, financial institutions relationships are absolutely essential to a successful unit. Good relationships means the units is healthy units traveling towards a wealthy situation. But from the interactions it is understood, the Units have more problems with the relational persons rather than having relationships.

7.4.6 Failure to recognize the Self Strength & Weakness

Identifying self strength and self weakness is very important before starting the unit and during the period of running. Without knowing these strength and weakness, the units can not march towards the progress due to the many type of unexpected hindrances. But in the survey it is understood and inferred that many units do not know its strength and they have no idea about their weakness

7.5 OVER ACTIVITIES

This includes over borrowings, over dependency of a particular person, over investment in fixed assets. Over activities occupy the fifth position in the rank of the causes of Industrial failure. The study shows that 40.7% of the sample units reported that over activities are their reasons for the failure.

7.5.1 Over Borrowings

The level of borrowings depends on the extent of requirements, the rate of cost of capital and the repaying capacity of the unit. But without considering these facts the units borrowed more than their requirements and as a result they had to make heavy amount of interest. The net result was that the Industrial units had to put a top to the units' activities.

7.5.2 Over Dependency of a Particular Person

Another important point for the failure of the units is office politics inside the Industrial unit. The office politics generally makes the entrepreneurs or the managers to depend on the particular group or a particular person. The person who is playing office politics inside the organisation can never be a good person. For his own benefits he may change his colour and culture at any moment. In the present research also it is clear that the entrepreneurs have failed just due to this reason.

7.5.3 Over Investment in Fixed Assets

Fixed Assets are very important to continue the production process. But that a prudent decision is to be taken about how much is to be invested to tap the optimum capacity from the fixed assets. Excess Investment in Fixed Assets will be resulted in over payment of interest on capital, excess depreciation, excess maintenance charges, unnecessary lock up of the capital etc., In the survey it is felt the units have

unnecessarily invested more money in the purchase of fixed assets for no reason resulted in the closure of the unit.

7.6 OTHER ACTIVITIES

The activities like competition, insufficient capital, and personal use of funds etc. do not have much impact on the failure of the Industrial units in the study area. These activities occupy the sixth position in the rank of causes of Industrial failure. The study shows that 29.6% of the sample units reported that failure activities are their reasons for the failure.

7.6.1 Competition

Competition is another reason for the failure of the units. The successful units by adopting all the required formalities, systematic activities including auditing bring the cost per unit down with high quality and the other units could not compete such successful units as for as price and quality are concerned. This is also one of the reasons for such Industrial failure.

7.6.2 Insufficient Capital

Insufficient capital is another very important reason for the Industrial failure. This particular cause is fully related to the units situated in inter-islands. The inter-island units depend upon the private and indigenous funds due to the reason that the y do not have the banking facilities in their localities. Though the opportunities knock the door of the units, due to the insufficient funds, the Industrial Units could not survive.

7.6.3 Personal Use of Funds

Funds creation by finding the right source is really a very difficult task. After arranging the funds, the proprietor must use the fund to the optimum level only for the economic reasons in the Industrial matters of the unit. But it is understood from the research a majority of the entrepreneurs utilized the Industrial funds for their personal purpose that also one of the reasons for the Industrial failure.

8. SUGGESTIONS

The followings are few suggestions given in order to create the entrepreneurial awareness among the educated unemployed youths.

- The important problem is that the young unemployed youths do not have enough guidance. Table study techniques are to be totally avoided. The officers of the District Industries Centre, Directorate of Industries, Small Industries and Service Institutes, Khadhi and Village industries Commission/Board including the head of office, Director of industries, General Manager of DIC, different functional Managers, Investigators, etc. are to be given training in the line of "How to create awareness to the Educated Unemployed Youths" and to the existing entrepreneurs.
- At present our country faces innumerable problems of different types. The government must direct the institutions of higher learning namely Jawaharlal Nehru Rajkeeya Mahavidhyalaya, Polytechnic, College, Mahatma Gandhi College, Mayabunder, all Higher Secondary Schools Standard and 12 th Standard Students) to give counseling and guidance and to provide information about the entrepreneurial activities in these resourceful islands.
- A one hour duration documentary film is to be produced covering the resource availability, scope of opening the industrial ventures, available concessions, subsidies, bounties etc., government support, provisions for the space in the industrial estate, loan facilities, to whom one should go and approach etc., and the same film is to be screened in the important places like colleges and universities.

- A extensive training is to be organized on regular basis to the existing entrepreneurs. In the training, the need and importance of accounting, advertisement, innovation, planning, accounting practices, performance monitoring, auditing, Industrial education, experience, financial skill, guidance, information, cash management, communication, debtor management, stock management, to avail opportunities, to conduct the feasibility analysis, to conduct the market analysis, to delegate, to develop relations, to recognize the self strength & weakness, understanding the causes of absence activities, lacking activities, poor activities, failure activities etc. are to be given to the existence entrepreneurs regularly. The local government should take the responsibility of such training.
- The existing entrepreneurs must be given awareness and training in the following matters in the name of development of entrepreneurs.
 - ✓ Ability to Choose the Line of Manufacture/Production
 - ✓ Ability to Communicate
 - ✓ Ability to Delegate and Coordinate
 - ✓ Age of Entrepreneur
 - ✓ Availability of Raw materials
 - ✓ Availability of Technology
 - ✓ Capacity to Plan and Organise
 - ✓ Command over the Language
 - ✓ Cultural Environment
 - ✓ Eagerness towards the Innovativeness
 - ✓ Economic Environment
 - ✓ Education
 - ✓ Extent of Independency
 - ✓ Family he belongs
 - ✓ Infrastructural Facilities
 - ✓ Managerial Ability
 - ✓ Political Environment
 - ✓ Religious Environment
 - ✓ Risk bearing Capacity
 - ✓ Self Confidence
 - ✓ Social Environment
 - ✓ Training and Previous Experience
- The college students are to be given guidance, depending upon their studies, regarding what type of industrial venture is suitable, to whom they have to approach, formalities etc., Accounting procedures to be adopted, Managerial Decision Making Process, Organizational Behaviours etc.,

9. CONCLUSION

To organize an establishment or a unit is really a very difficult task. It can not be done by a single person alone. The socio economic and government environment should favour such process. Once the project is launched, it is the sincere duty of the related persons to make it successful. Knowledge on accounting, advertisement, innovation, planning, performance monitoring, auditing, Industrial education, financial skill, guidance, information, cash management, communication, debtor management, stock management, and practical techniques to avail opportunities, to conduct the feasibility analysis, to conduct the market analysis, to delegate, to develop relations, to recognize the self strength & weakness, and knowledge in understanding the causes of absence activities, lacking activities, poor activities, failure activities etc., are to be given to the existing entrepreneurs. Once the strategy is adopted in the light of the suggestions given above and the same is implemented through the dedicated workaholic personalities under the sensible head of the office, it is highly hoped that no Industrial unit will fail. They will definitely discharge their social responsibilities and thereby they will also contribute to the national income which will increase the economic development of the region.

REFERENCES:

- BONNINGTON, M. C. C., 1932. Census of India-1931 Andaman and Nicobar Islands. Calcutta: Superintendent Government Printing: A & N islands
- 2. BROWN RADCLIFF, A.R., 1922. The Andaman Islanders. Weidenfeld & Nicolson: London:
- 3. CHAK, B.L., 1967. *Andaman and Nicobar Islands*, Ministry of Information and Broadcasting, .: Government of India: New Delhi
- 4. DAVIS KEITH, 1977. Human Behaviour at Work, , Tat-McGraw Hill Pulications. Bombay
- 5. DAS, S.T., 1982. *The Andaman and Nicobar Islands* .: Sagar Publishers: New Delhi
- 6. MAN, E. H., 1883. *The Aboriginal Inhabitants of Andaman Islands*. London: Indian reprint Delhi, Sanskaran Prakasan: p11
- 7. MATHUR, L.P., 1968. History of The Andaman and Nicobar Islands. Sterling Publishers (P) Ltd: Delhi:
- 8. RAJAVEL, N., 1998. Tourism in Andaman and Nicobar Islands.: Manas publication: Delhi.
- 9. RAJAVEL, N., 2007. Andaman and Nicobar Islands, Green Paradise on the Blue Surface, Manas publication: Delhi:
- 10. RAJAVEL, N., 2006. Planning for Growth and Development: Kalpaz Publication: Delhi