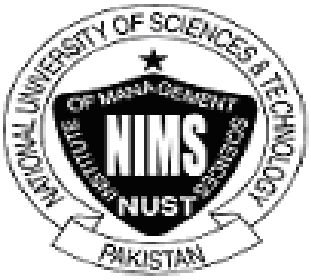

(NIMS)

NUST Institute of Management Sciences

REVIVAL OF PAKISTAN'S INDUTRIES THROUGH CONTINUOUS QUALITY AND PRODUCTIVITY IMPROVEMENT/ KAIZEN

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ABBREVIATIONS

ACL	Askari Cement Limited
APCMA	All Pakistan Cement Manufacturing Association
AWT	Army Welfare Trust
BMR	Balancing, Modernization and Replacement
BOI	Board of Investment
CCR	Central Control Room
CQC	Companywide Quality Control
CQC	Companywide Quality Control
EBS	Export Bonus Scheme
EPR	Effective Protection Rate
ERP	Effective Rates of Protection
FDI	Foreign Direct Investment
GPER	Gross Primary Enrollment Rate
HDI	Human Development Index
HMC	Heavy Mechanical Complex
HRM	Human Resource Management
IIRC	Industrial Incentives Reform Cell
IPP	Independent Power Producers
MBO	Management by Objective
MDG	Millennium Development Goal
NBC	National Broadcasting Corporation
NCB	Non Commercial Banks
OEEC	Organization European Economic Co- operation
OGL	Open General License
OPC	Ordinary Portland Cement
PICIC	Pakistan Industrial Credit and Investment Corporation
PIDC	Pakistan Industrial Development Corporation
PIFCO	Pakistan Industrial Finance Corporation

PLC	Programmable Logic Control
QA	Quality Assurance
QMS	Quality Management System
SECP	Securities and Exchange Commission of Pakistan
SOE	State-Owned Enterprises
SOP	Standard Operating Procedures
SPC	Statistical Process Control
SPC	Statistical process control
TFPG	Total Factor Productivity Growth
TPM	Total Productive Maintenance
TQ	Total Quality
TQC	Total Quality Control
TQM	Total quality management
TQM	Total quality management
WTO	World Trade Organization

WITH THE NAME OF ALLAH ALMIGHTY THE MOST BENIFICIAL AND MOST MERCIFUL

I AM VERY MUCH THANKFUL TO MY MOST RESPECTED ADVISOR, MR. M. RAZA AHMAD KHAN FOR ASSISTING, PROVIDING GUIDANCE AND CHANNELIZING MY THOUGHT PROCESS TOWARDS COMPLETION OF THIS THESIS. HIS COOPERATION AND SUGGESTIONS WERE NOT ONLY EXTREMELY HELPFUL BUT HE ALSO SPARED AMPLE TIME FOR DETAILED DISCUSSION FROM HIS BUSY SCHEDULE, WHICH ENABLED COMPLETION OF MY WORK.

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EXECUTIVE SUMMARY

Pakistan adopted a conscious growth strategy of rapid industrialization at the cost of agriculture sector, which signifies typical syndrome of a post-colonial state. The period of rapid industrial growth in first two decades demonstrated that despite the lack of infrastructure, policy makers succeeded in converting the merchant capital into progressive entrepreneurs through a package of incentives. This import substituting industrialization was promoted by a policy of heavy protection, over valued currency and fiscal concession. This led to market bias in favour of capital intensive large-scale industries and inadequate participation of small-scale labour intensive industries. The major policy issues of this period were inefficiency of the industrial structure and concentration of industrial power.

The period of seventies witnessed, the reversal of the policies led by nationalization and the rise in the public sector investment. A critical evaluation of public sector enterprises reveals that although their financial programme was fair but suffered from over employment and declining productivity / quality.

Historically, Pakistan has primarily concentrated on low-tech to intermediate types of industries like textiles, food & beverages, wool, ghee and oil etc. Heavy industries, the locomotive of industrial development has by and large been neglected except for a few mega projects in areas of steel, fabrication of plants, fertilizer etc. which are mostly in the public sector. The capital-intensive industries in the chemical sector are in the stage of infancy. The biotechnology sector is yet to materialise in Pakistan.

Pakistan is going through a stage of industrial stagnation and low productivity / quality products and services. Due largely to a deep recession in the economy caused by multifarious mix factors, both external and internal, the industrial sector is on the decline since long. This blight has touched our large and medium scale organized industrial sector as well as small and micro level industries in the formal sector. Due to a steep fall in fresh investment in the last decade as well as credit squeeze from banking sector, rejuvenation of the existing industrial productivity / quality as well as introduction / installation of new industries has been adversely affected.

In view of stagnation in industrial growth, a major policy shift was made to export led growth with de-regulation, import liberalization and tariff reform and flexible exchange rate.

The thesis comprise of nine chapters, initially, efforts have been devoted to review the concept of continuous improvement, productivity, quality and the "Gurus" of continuous improvement philosophy who brought revolution in the Japanese industries. Then an effort has been made to enlist major factors of Japanese success. In light of the principles of continuous improvement, productivity, quality and teachings of different industrial gurus, an analysis has been carried out in chapter eight from the following:

- Japanese Success Factors
- Industrialization Process of Pakistan
- Investment Climate In Pakistan
- Manufacturing / Engineering Industry of Pakistan
- From the Success Factors of ACL

It is now generally recognised that an export led development strategy with the private sector playing key role in economic activity can lead to rapid industrial development. At the present scenario, Pakistan requires an industrial sector, which is globally competitive with the capability of utilizing vast reservoir of human capital and raw materials.

A framework has been chalked-out to address the problems of Pakistan's industrial sector. This framework will be fruitful if a well-coordinated and integrated approach is adopted to harness the potentials of all three major players i.e. government, academia and industrialists.
Academia should assist the government and corporate sector to improve the human capital:

- Redesigning the education syllabi in accordance with modern teaching of business & technical training needs
- Teachers should change their teaching style, their conduct should be as facilitators rather than lecturers
- Improving the education system of Pakistan in order to have skilled and disciplined manpower.
- Assist the corporate sector to provide literate environment to absorb the new technology and to change the mindset of the stakeholders.

- Case studies should be developed on local enterprises operating in local business and regulatory environment.
- Efforts should made to inculcate the habit of conducting research among faculty and students by providing reasonable incentive i.e. rewards, recognition etc
- Carryout critical analysis of prevailing environment of Pakistan's industries and entrepreneurs in order to suggest measures in the peculiar environment of Pakistan

Following steps taken by the industrialists will pave the way for continuous productivity/quality improvement:

- Adequate budget earmarked for the training of the employees
- A variety of different skills associated with effective managerial performance i.e. technical, interpersonal, conceptual and diagnostic skills will enhance the performance of the organization
- Managers should spent 60 % of their time on continuous improvement of the systems and little time on commanding and controlling the people
- People are the key to the success of firms hence their involvement and satisfaction is vital to enhance quality and productivity
- Recognition of excellent performer influence others and creates a healthy competitive environment
- Quality begins with education and ends with education hence institute continuous training. Encourage education and self improvement of everyone in the organization
- Quality strategy must permeate an organization throughout its business activities
- Good corporate governance and regular evaluation of business performance in term of processes improvements and cost of quality reduction instead of annually pays rich dividends
- To continuously increase value to customers by designing and continuously improving organizational processes and systems to provide improved value to customers
- Processes must evolve by gradual improvement rather than radical changes
- Flexible and quick response to the environmental changes is essence of continuous improvement

Planning establishes coordinated effort and gives direction to managers and non-managers alike. Without planning, departments could be working at cross purposes and prevent an

organization from moving efficiently toward its objectives, hence following actions are suggested:

- Carry out SWOT analysis
- Set a benchmark to start with
- Re-defining the organization's vision or mission statement and goals or objectives in the light of changing environment and future challenges
- With a view to provide quality products/services to the customers following steps are recommended:
  - All management activities should eventually lead to increased customer satisfaction. People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit
  - Carry out BMR
  - Acquire adequate technology to add value to the products and services
  - Higher product quality with lower cost
  - HR practices to be updated in accordance with the redefined goals/objectives
  - Evolved the standing operating procedures and monitoring system
  - Shift the ownership at process level
  - Devote adequate budget for training of employees
  - Develop employees mind set to adopt new changes and develop team's spirit
  - Management labour relation should be improved

To achieve the desire results more efficiently, all related resources and activities should be managed as a process. Execute the new processes/ practices and ensure discipline at the workplace encourage suggestion System. Carryout regular monitoring compares actual performance against the defined objectives/standards and identifies deviation because regular evaluation of business performance pays rich dividends. Evaluate the industrial entity whether it is progressing as learning organization or otherwise

Continuous improvement is the constant refinement and improvement of products, services and organizational systems to yield improved value to customers. Real improvement depends on learning that understands why changes are successful through feedback between practices and results, which leads to new goals and approaches.

Appendix -1

MAIN FEATURES OF THE PRIVATISATION COMMISSION
(As outlined in the Ordinance 2000)

Status: The Privatisation Commission is a body corporate having perpetual succession and a common seal, with power, subject to the provisions of the Ordinance, to enter agreements, contracts, acquire and hold property, both moveable and immovable and to sue and be sued in its name.

Structure: A Chairman appointed by the federal Government heads the Commission. The affairs of the Commission are vested in the Board consisting of the Chairman, the Secretary of the Commission, and six other members, (or such other higher number as may be determined by the Federal Government.)

Function and powers: The Commission:

- Recommend privatisation policy guidelines to Cabinet
- Prepare for the approval of the Cabinet, a comprehensive privatisation programme
- Plane, manage, implement and control the privatisation programme approved by the Cabinet
- Prepare and submit report to the Cabinet on all aspects of the privatisation programme
- Facilitate and initiate legislation as approved by the cabinet by or on behalf of concerned Ministry in connection with the privatisation programme
- Provide overall directions for the implementation of privatisation related activities including,restructuring, deregulation and post-privatisation matters in sectors designated by the Cabinet
- Take operational decisions on matters pertaining to privatisation, restructuring, deregulation, regulatory issues including approval of licensing and tariff rules and other related issues pertaining to the privatisation programme approved by cabinet

- Issue directions and instructions to the management of a business undertaking falling within the purview of the privatisation programme approved by the Cabinet on all major important administrative, financial, reporting and policy matters
- Publicise the activities of the Privatisation Commission
- Propose a regulatory framework, including the establishment and strengthening of regulatory authorities, to the Cabinet for independent and fair regulation of each industry sector falling within the purview of the privatisation programme
- Advise the Federal Government in selection and appointment of the head and a member of regulatory authorities
- Advise the Federal Government that the monopolies are not created in the process of privatisation
- Appoint, advisor, consultant, valuers, lawyers and such other staff, both local and foreign, on such terms as it may determine to charge its functions under this Ordinance
- Approve and take decisions and perform all acts to implement per-privatisation restructuring, labour rehabilitation and severance schemes, and all other matters as approved by the Cabinet
- Invite applications for the privatisation and ensure wider possible participation
- Evaluate bids received according to criteria determined by the Commission from time and formulate recommendations for consideration by the cabinet
- Recommend to the Federal Government such labour and manpower rehabilitation programmes as may be necessary during privatisation and to develop a roster of such employees who may need rehabilitation
- Advise measures to the Federal Government for improvement of public sector units till their privatisation
- Assist in the implementation of Federal Government policies on deregulation and privatisation and advise the Federal Government on deregulating the economy to the maximum possible extent
- Perform such other functions that are incidental or ancillary to carry out the privatisation programme approved by the Cabinet

Management and Administration

- The general management and administration of the affairs of the Commission are vested in the board.
- The Chairman of the Commission shall also be the Chairman of the Board.
- The Secretary of the Commission shall also be the Secretary of the Board.
- No act or proceeding of the Board shall be invalid by reason only of the existence of a vacancy in, or defect in, the constitution of the Board

Funds of the Commission

- Commission Account to be administered and controlled by the Commission. The operations of the Commission shall be funded from the Commission Account. The funds of the Commission shall consist of:
  - Grants from the Federal Government
  - Supplementary contributions from the Privatisation Fund
  - Income from investments
  - Fees and charges
  - Grants of money and sums borrowed or raised by the Commission for the purposes of meeting any of its obligations or discharging any of its duties
  - All other sums or property which may in any manner become payable to or vested in the Commission in respect of any matter incidental to the exercise of its functions and powers
- The Commission shall in respect of each financial year prepare its budget and submit it to the Federal Government for approval
- It shall be the duty of the Commission to conserve the Commission Account and the Privatisation Fund while performing its functions and exercising its powers under this Ordinance

Expenditure to be charged on the Commission Account: The Commission account shall be expended for the purpose of:

(a) Paying any expenditure lawfully incurred by the Commission, including the remuneration and allowances of the Chairman, members, staff, employees, advisers, and

consultants, accountants, lawyers, valuers and other experts appointed and employed by the Commission, including provident fund contributions, superannuating allowances or gratuities and legal fees and costs and other fees and costs, if any

(b) Paying for expenditure incurred on:

(i) Public offering and placement of shares

(ii) Marketing and publicity

(iii) Seminars and conferences

(iv) Labour rehabilitation and severance schemes

(v) Restructuring

(c) Purchasing or hiring equipment, machinery and any other materials, acquiring land and erecting buildings, and carrying out any other work and undertakings in the performing of its functions or the exercise of its powers under this Ordinance

(d) Repaying' any financial 'accommodation received or moneys borrowed under this Ordinance -arid- the profit, mark-up or return due thereon

(e) Paying any other expenses, costs or expenditure properly incurred or accepted by the Commission in the performance of its functions or the exercise of its powers under, this Ordinance- Provided that all the above expenditures shall be met from other resources before utilization of supplementary contributions from the Privatisation Fund.

Privatisation Fund

(1) The Commission shall establish and maintain a distinct and separate Privatisation Fund in which all privatisation proceeds shall be deposited. The Commission shall, out of the moneys so deposited, withdraw and contribute to the Commission's Account such amount or amounts as may be needed by it from time to time but only to supplement the other resources therein if and to the extent necessary. The remaining privatisation proceeds shall be kept in trust for and distributed to the Federal Government or the enterprise owned or controlled by the Federal Government entitled to such proceeds.

(2) The privatisation proceeds distributed to the **Federal Government** shall be utilised by the Federal Government as follows:

(a) Ten percent shall be used for poverty alleviation programmes

(b) The remaining ninety percent for retirement of the Federal Government debt

Power to obtain finance and receive grants

(1) The Commission may, from time to time and with the approval of the Federal Government, obtain finance in respect of any sums required by the Commission for meeting any of its obligations or performing any of its functions.

(2) The Commission may, with the approval of the Federal Government, also accept grants from entities both domestic and international, including multilateral agencies.

Privatisation Program: The Commission shall, after approval by the Cabinet, carry out the privatisation program in the prescribed manner.

Advertisement of Privatisation: The Commission shall, in consultation with the Federal Government and any concerned enterprise owned or controlled wholly or partially, directly or indirectly by the Federal Government, give notice of its intent to privatise. The Commission shall for each proposed privatisation publish, in at least two English newspapers and two Urdu newspapers with a national circulation on at least two occasions not less than seven days apart, notice of the availability of the subject-matter of the privatisation and of the salient terms and conditions thereof. Advertisements for privatisation, where necessary, will also be placed in newspapers with an international circulation.

Valuation of Property: The valuation of the property shall be performed, in the prescribed manner, by independent valuers who shall issue a valuation report to the Commission.

Modes of Privatisation: The Commission shall carry out privatisation, in accordance with the prescribed procedure, through any of the following modes:

(a) Sale of assets and business

(b) Sale of shares through public auction or tender

(c) Public offering of shares through a stock exchange

(d) Management or employee buyouts by management or employees of a slate owned enterprise

(e) Lease, management or concession contracts

(f) Any other method as may be prescribed

Publication of privatisation transaction: The Commission shall, within thirty days of the completion of each privatisation transaction, publish by notice in the official Gazette.

Investigations: The Federal Government or any of its agencies authorised by it, may of its own or on a complaint oversee, scrutinise or investigate any privatisation transaction within one year of the completion of the privatisation. After the expiry of the period, the Federal Government or any of its agencies shall not be empowered to carry out any such scrutiny or investigation.

Jurisdiction of High Courts: Notwithstanding anything contained in any other law for the time being in force, the High Court shall exercise exclusive civil and criminal jurisdiction:

(a) To adjudicate and settle all matters related to, arising from or under or in connection with this Ordinance

(b) To adjudicate and settle all matters transferred pursuant to section'31

(c) To try offences punishable under this Ordinance

Appeal

(1) Any person, Commission and the Federal Government aggrieved by a final order, judgement, decree or sentence, passed by a single Judge of a High Court may, within thirty days of such order, judgement, decree or sentence prefer an appeal which shall be heard by a larger Bench of a High Court, within whose jurisdiction the order, judgement, decree or sentence is passed.

(2) Any person. Commission and the Federal Government aggrieved by a final order, judgement, decree or sentence, passed by a larger Bench of a High Court may, within thirty days of such order, judgement, decree or sentence prefer an appeal to the Supreme Court of Pakistan.

(3) No appeal, review, or revision shall lie from any interlocutory order of the High Court

Regulatory and other Provisions

Extent of Transfer of Property: Notwithstanding anything contained in this Ordinance, the Federal Government shall not privatise any property except to the extent of its title, right, interest or share in such property.

Directions by Commission:

(1) Any enterprise or management which is approved by the Cabinet as eligible for privatisation, shall:

(a) Carry out any directions issued by the Commission in writing
(b) Keep up-to-date business records and books of account
(c) Not perform any action that would result in the assets of the company or business undertaking or property being lost or wasted
(d) Not incur any liability other than in the ordinary course of business without the prior written approval of the Commission
(e) Not give any person information other than in the ordinary course of business, which might confer any advantage on that person or a potential buyer
(f) Refrain from taking any action, which may cause industrial unrest

(2) The Commission shall after approval take all steps, including as to change of management necessary for initiating and completing the privatisation in accordance with sound commercial principles and practices conducive to efficiency and economy.

(a) Such periodical reports and summaries as may be required by the Federal Government
(b) Such periodical returns, accounts, statements and statistics as may be required by the Federal Government
(c) Information and comments asked for by the Federal Government on any specific point
(d) Copies of the documents or original documents required by the Federal Government for examination or any other purpose

Information to public

(1) The Commission shall publicise its reports and shall keep them open for

information of the public during reasonable business hours. .

(2) Subject to regulations regarding confidentiality, the Commission's reports shall include all relevant documents to be maintained and indexed, as the Commission deems fit.

Rules: The Commission may, with the approval of the Federal Government, by notification in the official Gazette, make rules, not inconsistent with the provisions of this Ordinance, for exercising its powers and carrying out of its functions under this Ordinance.

Regulation

(1) The Commission may, by notification in the official Gazette, make regulations, not inconsistent with the provisions of this Ordinance or the rules, for exercising its powers and carrying out of its functions under this Ordinance.

(2) Without prejudice to the foregoing power, such regulations may provide for appointment of its officers, members of staff and such other persons and the terms and conditions of their service.

Appendix -2

Position of Units Privatised

S.No	Name of units privatised	Month of privatisati on	Method of Privatisation	Sale Proceeds (Rs. min)	Purchaser	Working/ Closed	Trade union Presence
	Banking and Finance						
1	Allied Bank (51%)	Feb-91	Auction	971.60	Employees	Working	Yes
2 (a)	Muslim Commercial Bank (75 %)	Apr-91	Auction	2420.00	National Group	Working	Yes
2(b)	Muslim Commercial Bank (6.8 %)	Nov-00	Auction	563.20	National Group	Working	Yes
3	Bankers Equity (26 %)	Jun-96	Auction	618.70	Local Investor	Closed	No
4	Habib Credit & Exchange bank (70 %)	Jul-97	Auction	1633.90		Working	Yes
	Energy						
5 (a)	Kot Addu Power Company (26 %)	Jun-96	Auction	7302.60	Foreign Investor	Working	No
5(b)	Kot addu Power Company (10 %)	Aug-97	Auction	2808.70	Foreign Investor	Working	No
6	Man Gas	Apr-94	Public Offer	102.40	Foreign/Local	Working	Yes
7	SSGC LPG business	Oct-00	Public Offer	369.00	Various Investors	Working	Yes
8 (a)	PTCL (2 %)	Aug-94	Public Offer Local & International	3032:50	Foreign/Local Investors	Working	No
8(b)	PTCL(10%)	Sep-94	Public Offer Local & International	27525.70		Working	No
9	PIA(10%)	1990	Public Issue	$11,00	Local Investor	Working	Suspended

Industry

Automobile

10	AII-Ghazi Tractors Ltd Dera Ghazi Khan	Nov-91	Joint Venture	105.60	AI-Futaim UAE	Working	Yes
11	National Motors Ltd. Karachi	Jan-92	Auction	150.20	Bibojee Services Karachi	Closed	No
12	Millat Tractors Ltd. Lahore	Jan-92	Auction	306.00	Management Buyout	Working	Yes
13	Balochistan Wheel Ltd.Lasbela	May-92	Auction	276.40	Abdul Qadir & M.Sallem Karachi	Closed	No
14	Pak-Suzuki Motors Company Karachi	Sep-92	Auction	172.00	Suzuki Motor Corporation Japan	Working	Yes
15	Naya Daur Motors Ltd.	Jan-93	Auction	22.30	Farid Tawakal & Saleem	Closed	No
16	Bolan Casting Ltd. Karachi	Jan-00	Auction	69.20	Employee Group	Closed	No

Cement

17	General refractories	Feb-92	Auction	18.80	Local Investor		
18	White Cement Ltd. Daudkhel Mianwali	Jan-92	Auction	137.50	Jehangir Ellahi & Associates Lahore		
19	Pak Cement Ltd. Iskanderabad	Jan-92	Auction	189.00	Jehangir Ellahi & Associates Lahore		
20	Maple Leaf Cement Ltd Iskanderabad	Jan-92	Auction	485.70	Nishat Mills Ltd. & Associates Lahore	Working	Yes

21	D.G Khan Cement Ltd. Dera Ghazi Khan	May-92		1972.80	Tariq Saigol & Associates Lahore.		
22	Dandot Cement Company Ltd. Dandot	May-92		636.70			Yes
23	Dondot Works - National Cement	Jan-95	Auction	110.00	Employee- Group		
24	Gharibwal Cement Ltd. Jhelum	Sep-92	Auction	836.30	Haji Saifullah & Group Islamabad		
25	Zeal Pak Cement Ltd Hyderabad	Oct-92		239.90	Sardar M. Ashraf D. Bauch		Yes
26	Wah Cement	Feb-96		2635.50			No
27	Kohat Cement Ltd. Kohat	Oct-92		527.90	Palace Enterprises Ltd.	Working	No

Chemicals

28	National Petrocarbon	Jul-96	Auction	21.20	Local Investor	Working	Yes
29	Ittehad Pesticides & chemicals	Jul-95	Auction	399.50	Local Investor		
30	Antibiotic (Pvt) Ltd. Karachi	Oct-92	Auction	24.00	Tesco Pvt Ltd. Karachi		
31	Nowshera PVC Co. Ltd	Feb-95	Auction	20.70	Local Investor		
32	Ravi Engineering	Jan-96	Auction	15.10	Local Investor		
33	Nowshera Chemicals	Apr-96	Auction	21.20	Local Investor		
34	Pak Hye Oils	Jul-95	Auction	53.60	Local Investor		
35	Pak PVC Ltd. Gharo	Feb-92	Auction	63.60	Riaz Shafi	Closed	No
36	NatioanI Fiber Ltd. Karachi	Feb-92	Auction	756.60	Schon Group Karachi	Working	Yes
37	Kurram Chemicals Ltd. Islamabad	Feb-92	Auction	33.90	Upjon, USA		
38	Sindh Alkalis Ltd. Karachi	Oct-92	Auction	152.30	Employee Group	Working	Yes
39	Swat Ceramics	May-95	Auction	40.30	Local Investor	Working	Yes

40	Swat Elutriation	Dec-94	Auction	16.70			

Engineering							
41	Karachi Pipe Ltd	Jan-92	Auction	18.90	Jamal Pipe Industries, Lahore	Working	Yes
42	Quality Steel Karachi	Apr-92	Auction	13.20	Local Investor		
43	Pakistan Switchgear Ltd. Lahore	Jun-92	Auction	8.90	Employee Group		
44	Metropolitan Steel Corporation Ltd. Karachi	May-92	Auction	66.70	Sardar M. Ashraf D. Bauch, Karachi	Working	Yes
45	Pioneer Steel Mill Ltd. Muridke	Feb-92	Auction	4.40	Monammad Usman		
46	Indus Steel pipe	Jul-97	Auction	47.40	Local Investor	Working	Yes
47	Textile Machinery Co.	Oct-92	Auction	27. 90	Local Investor	Working	Yes
48	Pak-China fertiliser Ltd Haripur	May-92	Auction	435.40	Schon Group Karachi	Closed	No

Ghee Mills

49	A & B Oil Industries	Mar-93	Auction	28. 50	Local Investor	Closed	No
50	Asaf Industries Ltd	Jan-93	Auction	23. 90	Isani		
51	Associated Industires	Feb-92	Auction	152.00		Working	Yes
52	Bara Ghee Mills	Jul-92	Auction	30.50	Dawood Khan Hyderabad		
53	Bengal Vegetable	Mar-93	Auction	18.60	Employee Group	Working	*Yes*

54	Burma Oil	Jan-00	Auction	20.10		Working	Yes
55	Chilian Ghee Mills	Sep-92	Auction	47. 50	Local Investor	Working	Yes
56	Crescent Factories Vegetable Ghee Mills	Jan-93	Auction	46. 00	SJ. Industries, Lahore		
58	Fazal Vegetable Ghee mills Islamabad	Sep-91	Auction	21. 20	Mian Mohammad Shah, Islamabad	Working	
59	Haripur Vegetable Oil Processing industries	Jul-92	Auction	30.10	Local Investor	Closed	No
60	Hedry Industries	Aug-92	Auction		Employee Group	Closed	No
61	Kakakhel Industries	May-92	Auction	55.30	Mohammad Abdu-r-Rab & Associates Qatar		
62	Khyber Vegetable	Jan-93	Auction	8.00	Haji Abdul Majeed & Co. Burewala		
63	Punjab Veg. Ghee	May-99	Auction	18.70	Local Investor		
64	Sh Fazal Rehman	Apr-92	Auction	64. 30	Local Investor	Working	Yes
65	Suraj Vegetable Ghee Industries	Jan-92	Auction	11. 60			
66	United Industries	May-92	Auction	15. 50	Mian Akbar Muggo & Associates		
67	Wazir Ali Industries	Dec-92	Auction	31. 90	Treet Corporation	Working	Yes
68	Makerwal collieries	Jul-95	Auction	6.10	Local Investor	Working	No
			Rice	Mills			
69	Doaba Rice Mills	May-92	Auction	28.00	Sardar M. Ashraf D. Bauch, Karachi		
70	Faizabad Rice Mills	May-92	Auction	21.20	Packages Ltd.		

					Lahore		
71	Sirnwali Rice Mills	Jul-92	Auction	16.10	Enkay Enterprises. Lahore		
72	Hahzabad Rice Mills	Sep-92	Auction	20. 00	Pak Pearl Rice Mills, Gujranwala		
73	Eminabad Rice Mills	Nov-92	Auction	24.10	Pak Arab Industries Gujranwala		
74	Dhaunkal Rice Mills	Jun-93	Auction	79. 20	Dhoda, PakistanLtd. Lahore		
75	Sheikhupura Rice Mills	Mar-96	Auction	28. 00	Sardar M. Ashraf D. Bauch, Karachi		
76	Mubarakpur Rice Mills	Nov-93	Auction	16. 20			
Roti Plants							
77	Bahawalpur	Feb-92	Auction	1.60	Utility Store Corporation	Closed	No
78	Faisalabad	Jan-92	Auction	11.50	Ahmed Faisalabad	Closed	No
79	Gulberg, Lahore	Jan-92	Auction	8.70	Packages Ltd. Lahore	Closed	No
80	Gushan-e-lqbal, Karachi	Mar-98	Auction	20.20	Ambeen Industries	Closed	No
81	Head Office, Lahore	Jan-92	Auction	10.20	Hajim Textile, Lahore	Closed	No
83	Islamabad	Mar-92	Auction	3.60	Utility Store Corporation	Closed	No
84	Korangi, Karachi	Apr-93	Auction	4.10		Closed	No
85	Mughalpura, Lahore	Jan-96	Auction			Closed	No
86	Multan	Feb-92	Auction	2.50	Utility Store Corporation	Closed	No

87	Multan Road, Lahore	Dec-92	Auction	10.20	Utility Store Corporation	Closed	No
88	Peshawar .	Jan-92	Auction	2.60	Saleem Group. Mardan	Closed	No
89	Quetta	Feb-92	Auction	4.80	Utility Store Corporation	Closed	No
90	SITE, Karachi	Sep-92	Auction	5.10	Speciality Printer Ltd. Karachi	Closed	No
91	Taimuri, Karachi	Jan-92	Auction	9.20	M. Bilal Sheikf	Closed	No
			Textiles				
92	Cotton Ginning Factory	Jun-95	Auction	1.80	Foreign Investor		
93	Quaidabad Woollen Mills	Jan-93	Auction	85.50	Jahangir Anwar & Associates	Closed	No
			Tourism				
94	Cecil's Hotel	Jan-98	Auction	191.00	Imperial Builders		No
95	Dean's Hotel	Nov-99	Auction	364.00	Sharif Gul and Partners		No
96	Federal Lodges (1-4)	Jul-99	Auction	39.20	Hussain Global Associates (Pvt). Ltd		No
			Media				
97	Mashriq-Karachi	Aug-96	Auction	6.50	Local Investor	Closed	No
98	Mashriq-Peshawar	Nov-95	Auction	26.60	Local Investor	Working	
99	Mashriq-Quetta	Jan-96	Auction	6.20	Local Investor		
100	NPT Building	Oct-93	Auction	185.00	Local Investor		
101	Progressive Papers	May-93	Auction	46.10	Local Investor		
			Miscellaneous				
102	Duty Free Shop	Nov-99	Auction	12 . 50		Closed	No

103	Republic Motors (Plot)	Oct-99	Direct Sale	18. 50	Local Investor		
104	National Tubewell Construction Corporation	Sep-99	Auction	6. 50			

REVIVAL OF PAKISTAN'S INDUSTRIES THROUGH

CONTINUOUS QUALITY AND PRODUCTIVITY

IMPROVEMENT/ KAIZEN

Introduction: Globalization is taking place at a very rapid pace, which demand high performance in all spheres of life. However, economy plays a very vital role in the survival of any nation. The nation, which pays equal importance to economy along with other "national potential", tackle challenges with dignity and honor do prosper. As we are aware international environment has changed manifolds after 9/11 incident and it has glaring impact on Pakistan's economy as well.

It is quite evident from historical facts that, since independence, Pakistan's economic performance has seen many ups and down, at times quite spectacular and some times nothing but dismal. It failed to maintain the high growth rate, which it experienced in the 1960s. The 1970s events were for many reasons most beyond the control of incumbent government. Toward the end of 1970s and much of the 1980s until at least 1988, the high growth patterns re-emerged, though being qualitatively different from the growth performance of the 1960s.

Ayub and Zia's eras show that both the decades achieved high growth. This growth performance unraveled because the existing political settlement came into conflict and contradiction with the very structure and system that it had created. The result was the emergence of popular movement and opposition to the military regimes and the foundation of a kind of democratic order. The democratic regime of Z.A.Bhutto ended with Zia's martial law rule. The nation came back to democratic rule in 1988. This period was the rule of middle class, which showed some signs of development. It was unfortunate that civilian government was again taken over by the military in October 1999.

Why Pakistan could not keep pace with the rest of the world and remained a under-developed country in-spite of good growth rate in1960s, and in late 1980s. One of the

cause seems to be the lack of continuous quality and productivity improvement in addition to many other allied factors.

In the wake of "Globalization" nations are coming very close to each other in all walks of life. Economic is the major field in this new scenario along with political, technology and military muscles. This globalization has given birth to "World Trade Organization" (WTO). According to its rules many sectors of our economy particularly industry, trade and agriculture will be exposed to the globalization challenges.

Pakistani nation has the tenacity and ingenuity to successfully face all such challenges. However, for that they have to plan and improve their weak areas to international standards. Industrial sector, Pakistan government and its various agencies should undertake a collective effort to create conducive environment to meet these challenges at international level.

The major task of continuous improvement has to be implemented by the industrial sector as well as government. The industrial sector would largely be removing weaknesses on the cost of poor quality. However, the government has to implement the main improvement in areas that are beyond the control of industrial sector, which are vital for continuous quality and productivity improvement.

Objective: To critically analyze the factors which are essential for continuous quality and productivity improvement and to suggest measures for government, academia and business entities to initiate the Kaizen philosophy in Pakistan's industrial sector.

Methodology: The philosophy of Kaizen has been studied in detail with a view to make use of its benefits for continuous progress of Pakistan's industries. To gather adequate knowledge / information, newspapers, journals, books, internet and official data has been taken into account. Research papers have also been consulted.

CHAPTER-1

LITERATURE REVIEWED

Kaizen is a Japanese word, which means improvement. It is a long-respected Japanese belief in never ending improvement. Kaizen is a philosophy that promotes improvement throughout all levels of an organization. The goal is to achieve gradual, unending improvement and higher standards of excellence by building quality into all aspects of an organization. Much has been written on Kaizen concept however, we have to see this concept with respect to Pakistan, where growth rate in 1960s was excellent but could not be maintained.

Philosophy of Continuous Improvement

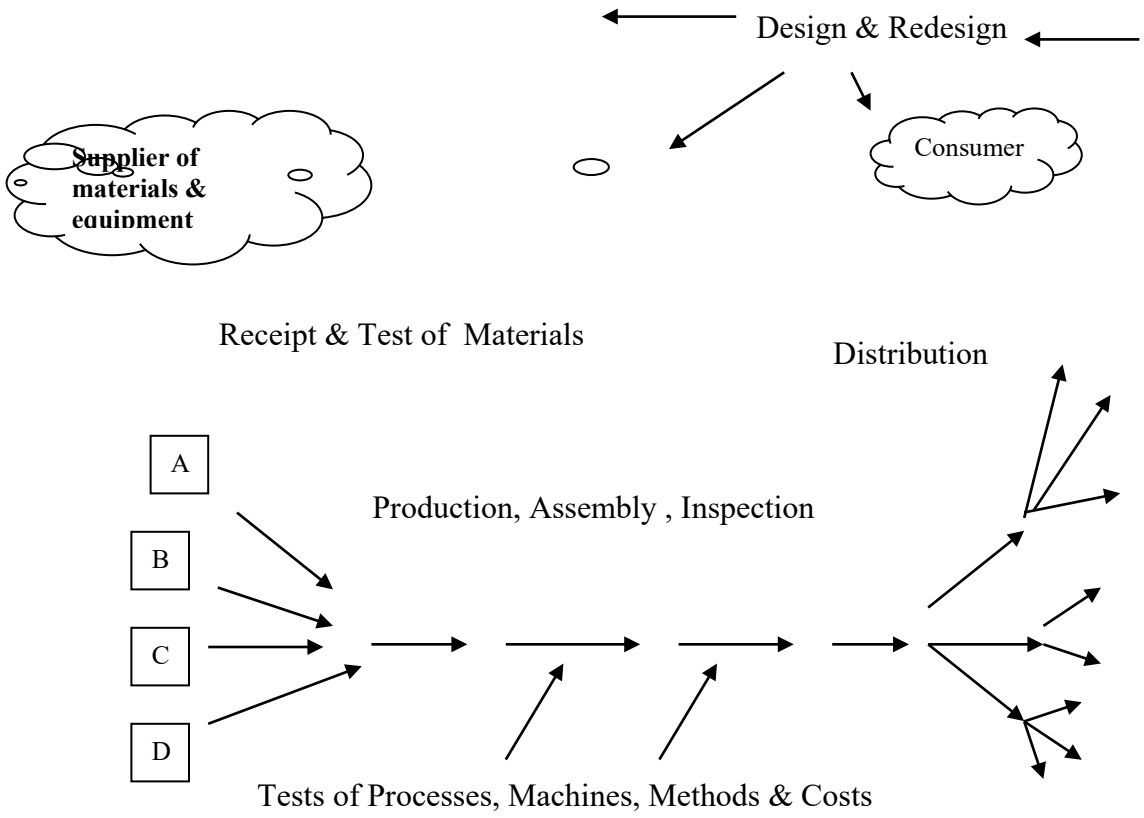
Philosophy of Continuous Improvement, refer to both incremental improvement that is small and gradual and breakthrough, or large and rapid, improvement. Improvements may take any one of several forms:

- Enhancing value to the customer through new and improved products and services
- Reducing errors, defects, waste, and their related costs
- Increasing productivity and effectiveness in the use of all resources
- Improving responsiveness and cycle time performance for such processes as resolving customer complaints or new product introduction

Major improvements in response time may require significant simplification of work processes and often drive simultaneous improvements in quality and productivity. Thus, response time, quality, and productivity objectives should be considered together. A process focus supports continuous improvement efforts by helping to understand these synergies and to recognize the true sources of problems.

In 1950, when W. Edwards Deming was helping Japan with its postwar rebuilding effort, he emphasized the importance of continuous improvement. While presenting to a group of Japanese industrialists (collectively representing about 80 % of the nation' capital) he drew the diagram shown in Figure-1.1

Figure-1.1 Deming's View of a Production System



This diagram depicts not only the relationship among inputs, processes, and outputs, but also the roles of consumers and suppliers, the interdependency of organizational processes, the usefulness of consumer research and importance of continuous improvement of all elements of the production system. Deming told the Japanese that understanding customers and suppliers was crucial to planning for quality. He advised them that continuous improvement of both product and production and production process through better understanding of customer requirements is the key to capturing world markets. Deming predicted that within five years Japanese manufacturers would be making products of highest quality in the world and would have gained a large share of the world market. He was wrong! By applying these ideas, the Japanese penetrated several global markets in less than four years. Real improvement depends on learning,

that is, understanding why changes are successful through feedback between practices and results, which leads to new goals and approaches. A learning cycle has four stages:

- Planning
- Execution of plans
- Assessment of progress
- Revision of plans based upon assessment findings.

Infrastructure, Practices and Tools

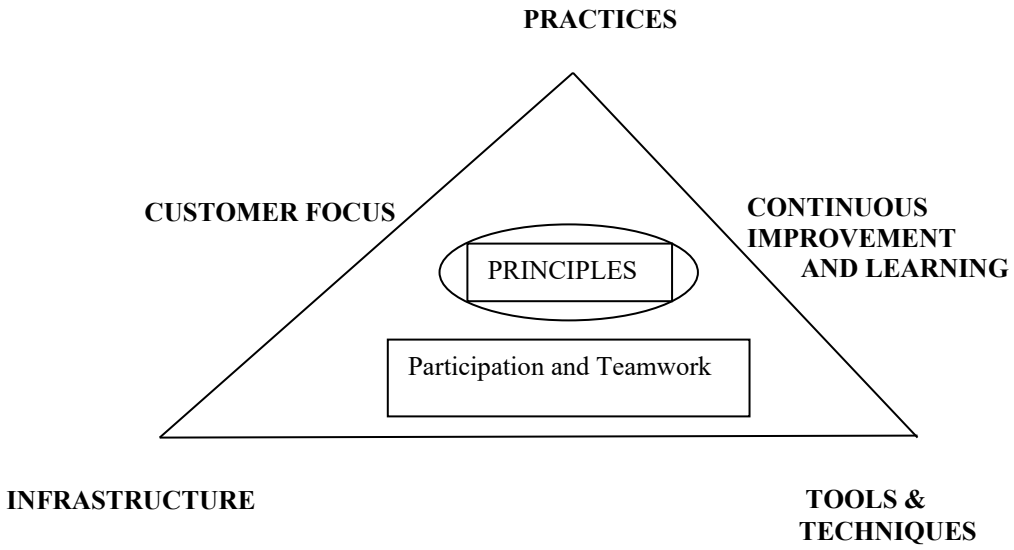
The three principles of total quality (TQ) need to be supported by an integrated organizational infrastructure, a set of management practices and a set of tools and techniques, which all must work together as given in figure –1.2

Infrastructure refers to the basic management system necessary to function effectively and carry out the principles of TQ. It includes the following elements:

- Customer relationship management
- Leadership and strategic planning
- Human resources management
- Process management
- Data and information management

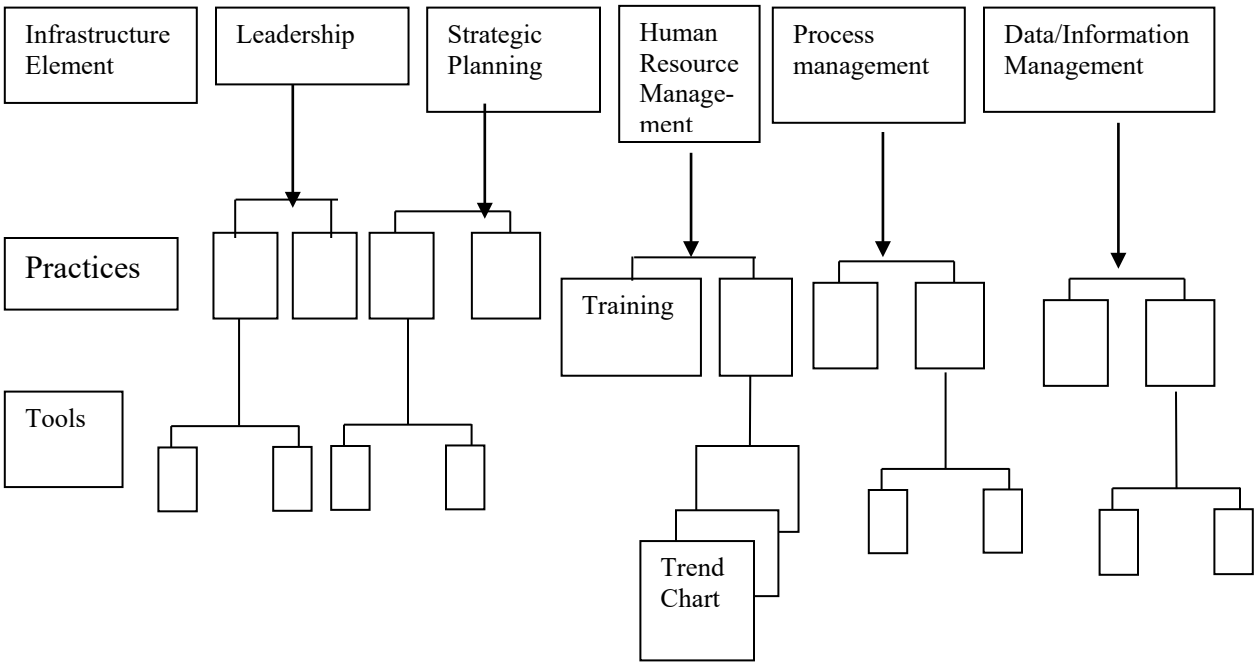
Practices are those activities that occur within each element of the infrastructure to achieve high performance objectives.

Figure –1.2 The Scope of Total Quality



Tools include a wide variety of graphical and statistical problems. For instance a chart showing trends in manufacturing defects, as workers progress through a training program is a simple tool to monitor the effectiveness of the training, the statistical technique of experimental design is often used in product development activities. The relationships among infrastructure, practices and tools are illustrated in Figure-1.3

Figure-1.3 Relationships Among Infrastructure, Practices and Tools



There are two other "quality gurus" in the United States: Joseph. M. Juran and Philip B. Crosby. All three proponents of the total quality management philosophy contend that it is important to involve the whole organization every department, every activity, every single person at every level to participate in the pursuance of quality.

Kaizen

Japanese term that means continuous improvement, taken from words 'Kai' means continuous and 'Zen' means improvement. Some translate 'Kai' to mean change and 'Zen' to mean good, or for the better. It is also described as " continuous search for better ways or continuous search for improvement"

The same Japanese words Kaizen that pronounce as 'Gai San' in Chinese mean:
Gai = The action to correct.
San = This word is more related to the Taoism or Buddhism Philosophy which gives the definition as the action that 'benefit' the society but not to one particular individual. The quality of benefit that involves here should be sustained forever, in other words the 'San' is an act that truly benefit the others.

Actually, Japan has been under economic recession for nearly 10 years. But the Japanese enterprises can still survive, and some enterprises are in the list of Fortune 500. There must be some secret behind it. The major reasons are due to their modification rather than innovation.

Moreover, you also understand the history of management development. Most of the management concepts used in foreign countries are based on Japanese firms experiences. Like the TQM, process oriented management and strategies in R&D. So after reading the literature you will learn the difference between western working culture and Japanese one.

Figure 1.4 Kaizen and Deming Cycle

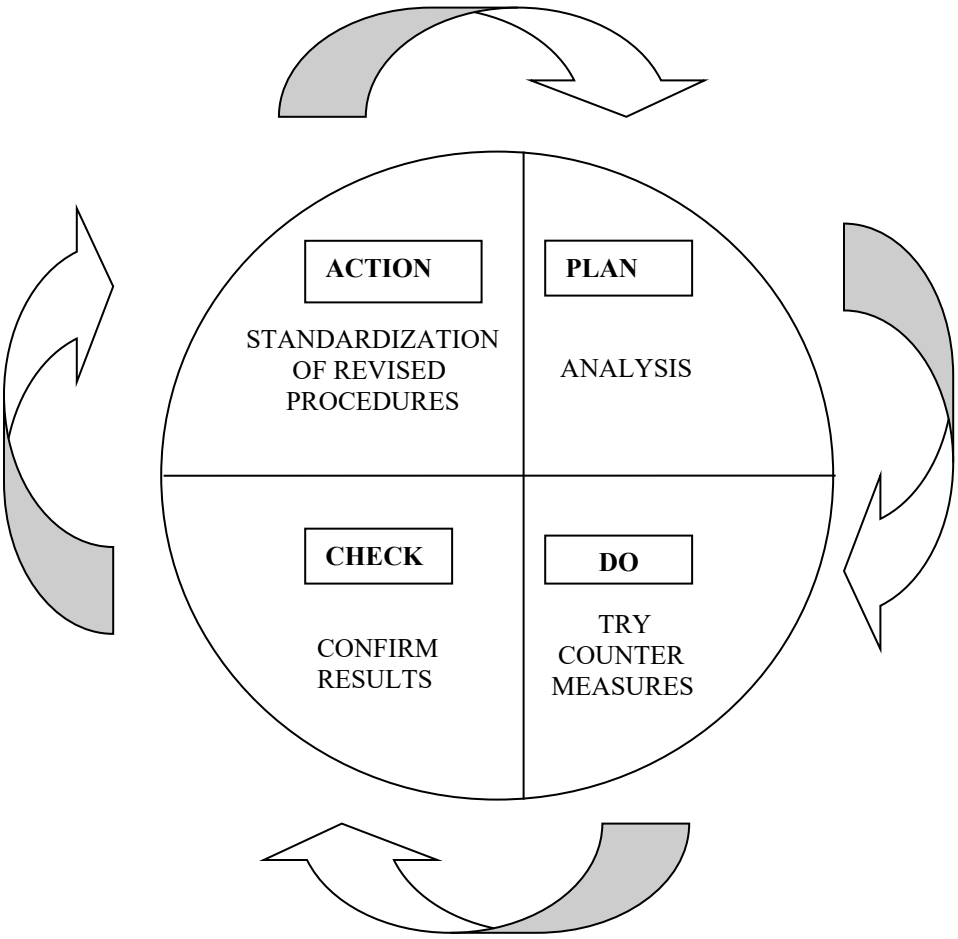
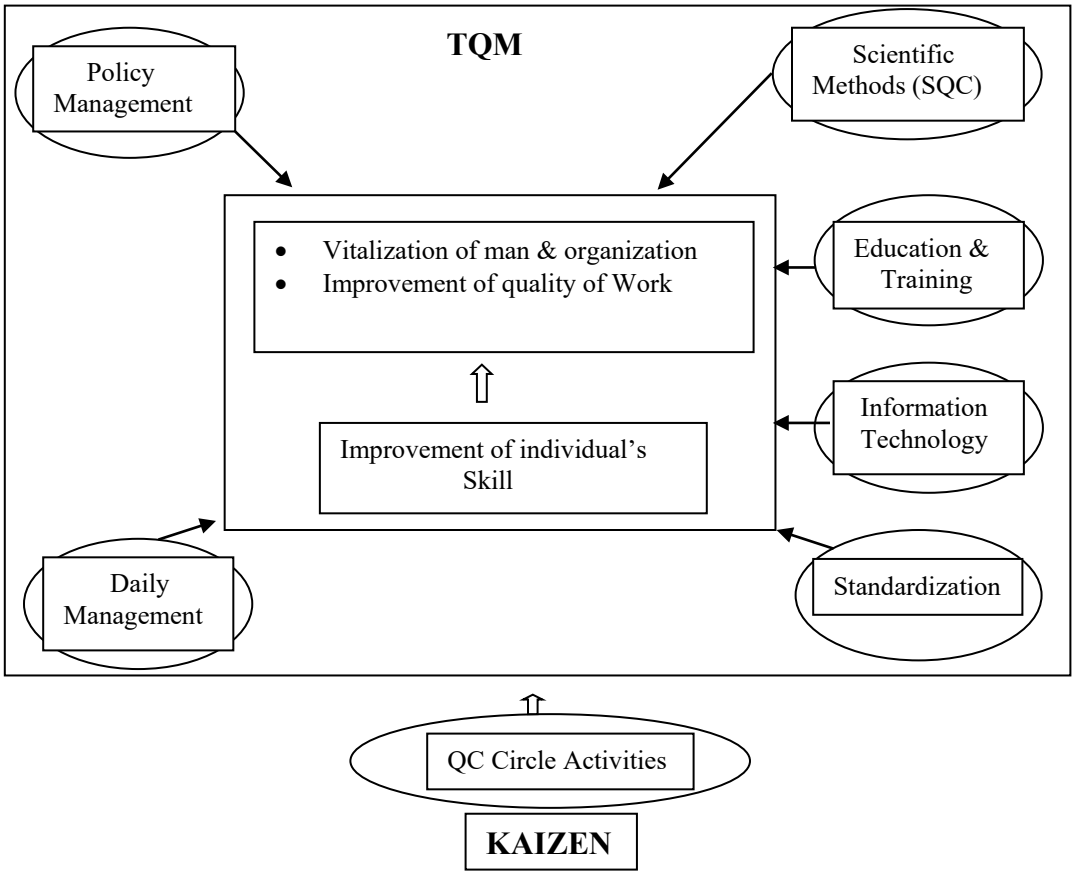


Figure- 1.5 **Kaizen and TQM**



Kaizen and Seven Quality Circle (QC) Tools

- By Categories
- Pareto's Curve Graph
- Cause and Effect Diagram
- Check Sheet
- Histogram
- Control Chart
- Scatter Diagram

Benefits of Kaizen

- It Promotes change
- It promotes creativity and participation
- It develops team work
- It improves the work environment
- It breaks the iceberg of ignorance

Productivity Lean: Kaizen

Lean: Kaizen is a two to five days process of teaching teams of company members to identify and eliminate non-value adding (waste) activities. Kaizen (the term means "continuous improvement") teams also the prefer method for implementing any of the lean manufacturing tools (e.g., setup reduction, 5-S/visual, kanban /pull). Teams develop lists of ideas for improvement and action plans to ensure the ideas are implemented. At the conclusion of the workshop, the teams present their reports and plans to management.

What are the benefits of Lean: Kaizen?

- Kaizen will help increase employee involvement through team participation.
- Implement improvements in quality, cost, and delivery
- The three key drivers of customer satisfaction
  - Obtain a faster return on investment
  - Improve process documentation
  - Communication, and training

"Japanese management practices succeeded simply because they are good management practitioners. This success has little to do with cultural factors. And the lack of cultural bias means that these practices can be and are just as successfully employed elsewhere" - Masaaki Imai. Kaizen means "improvement". Kaizen strategy calls for never ending efforts for improvement involving everyone in the organization, managers and workers alike.

Kaizen and Management Management has two major components:

- **Maintenance.** The objective of the maintenance function is to maintain current technological, managerial, and operating standards. Under the maintenance function, the management must first establish policies, rules, directives and standard operating procedures (SOPs) and then work towards ensuring that everybody follows SOP. The latter is achieved through a combination of discipline and human resource development measures.

- **Improvement.** Under the improvement function, management works continuously towards revising the current standards, once they have been mastered, and then establishes higher ones. Improvement can be broken down between innovation and Kaizen. Innovation involves a drastic improvement in the existing process and requires large investments. Kaizen signifies small improvements as a result of coordinated continuous efforts by all employees.

Kaizen's Starting Point

- Setting the right mindset & business environment not a single day should go by without some kind of improvement being made somewhere in the company customer-driven strategy for improvement. All management activities should eventually lead to increased customer satisfaction
- Quality first, not profit first an enterprise can prosper only if customers who purchase its products or services are satisfied
- Recognizing that a corporation has problems and establishing a corporate culture where everyone can freely admit these problems and suggest improvement

- Problem solving is seen as cross-functional systemic and collaborative approach. Emphasis on process that establishes a way of thinking, oriented at improving processes and a management system that support and acknowledges people's process-oriented efforts for improvement

The Key Kaizen Practices

- Mindset & Culture
- Customer Orientation
- Quality Control
- QC Circles
- Suggestion System
- Discipline in the Workplace
- Small Group Activities
- Cooperative Labor-Management relations
- Total Quality
- Quality Improvement
- Production Process
- Automation & Robotics
- Automation
- Zero Defects
- Total Productive Maintenance (TPM)
- Just-in-Time
- Productivity Improvement
- New Product Development

Employee Empowerment: (Suggestion System & Quality Control (QC) Circles)

The suggestion system is an integral part of an established management system that aims at involving employees in Kaizen. The worker's suggestions are regarded as important criteria in reviewing the performance of the worker's supervisors and the managers of the supervisors.

The Japanese management encourages employees to generate a great number of

suggestions and works hard to consider and implement these suggestions, often incorporating them into the overall Kaizen strategy. Management also gives due recognition to employee's efforts for improvement. An important aspect of the suggestion system is that each suggestion, once implemented, leads to an upgraded standard.
Quality Control (QC) Circles can be viewed as a group-oriented suggestion system for making improvements. "Kaizen & Total Quality Control (TQC)" QC Circle is a small group that voluntarily performs quality-control activities in the workplace. "Kaizen & Total Quality Control (TQC)" involves everyone in the organization and is aimed at improvement of managerial performance at all levels.

Process-Oriented Thinking is opposite to result-oriented thinking where as the concept Kaizen concentrates at improving the process rather than at achieving certain results. Such managerial attitudes make a major difference in how an organization master changes and achieves improvements.

Kaizen Blitz: Kaizen definition has been Americanized to mean "Continual Improvement."

- A closer definition of the Japanese meaning of Kaizen is "to take apart and put back together in a better way."

- According to Webster - blitz is short for blitzkrieg. And blitzkrieg is "Any sudden overpowering attack." Therefore, a Kaizen Blitz could be defined as “a sudden overpowering effort to take something apart and put it back together in a better way." What is taken apart is usually a process, system, product, or service.

Kaizen Event: Any action whose output is intended to be an improvement to an existing process. Kaizen Events are commonly referred to as a tool that:

1) Gathers operators, managers, and owners of a process in one place
2) Maps the existing process (using a deployment flowchart, in most cases)
3) Improves on the existing process
4) Solicits buy-in from all parties related to the process

Kaizen events are extremely efficient to quickly improve a process with a low sigma score. Kaizen events are also useful for convincing organizations new to “Six Sigma” of the methodology's value. The true intent of a Kaizen event is to hold small events attended by the owners and operators of a process to make improvements to that process which are within the scope of the process participants.

Kaizen

How Kaizen philosophy is revolutionizing schools. The story is now well known how E. Edwards Deming developed the principles of "total quality management" in America. The Japanese endorse it wholeheartedly to improve their industrial efficiency.
Basically, built in quality as part of a total process and the Japanese have given the concept their own name of "Kaizen". As Masaaki Imai puts it as the key to Japan's Competitive Success "Kaizen strategy is the single most important concept in Japanese management which is the key to Japanese competitive success"

Now some aspects of Kaizen are being used to revolutionizing schooling

In their top-selling book “The Learning Revolution”, co-authors Jeannette Vos and Gordon Dryden outline the key principles of both. In particular, they outline how Mt. Edgecumbe High School, in Sitka, Alaska, has pioneered TQM or Kaizen methods to dramatically improve schooling. Among the major results:

- Students have set up four pilot companies and in running them they learn foreign languages, quality control, statistical analysis, mathematics, science, exporting, marketing, accounting and much, much more.
- Teachers and students are regarded as co-managers. They set their own targets and goals, individually and collectively. The first week or each school year is used for building self-esteem and quality training.
- Teachers have completely changed their teaching styles, with most now being "95 per cent facilitators" rather than lecturers.
- All students learn Japanese, Chinese or Russian, as part of their vision to be key participants in the Pacific Rim.

- All students set very high improvement goals.

The results are spectacular. Almost 50 percent of all graduates have entered college and are still there or have graduated much higher than America's national average.

Principles of Japanese strategy for continuous improvement

- Human resources are the most important company assets
- Processes must evolve by gradual improvement rather than radical changes
- Improvement must be based on statistical/quantitative evaluation of process performance

Gurus of Continuous Improvement Philosophy

Dr. W. Edwards Deming

No individual has had more influence on quality management than Dr.W.Edwards Deming. Deming received a Ph.D. in physics and was trained as a statistician, so much of philosophy can be traced to these roots. He worked for Western Electric during its pioneering era of statistical quality control in the 1920s and 1930s. Deming recognized the importance if viewing management processes statistically. During World War II he taught quality courses as part of the U.S national defense effort, but he realized that teaching statistics only to engineers and factory workers would never solve the fundamental quality problems that manufacturing needed to address. Despite numerous efforts, his attempts to convey the message of quality to upper-level managers in the United States were ignored.

Shortly after World War II, Deming was invited to Japan to help the country tale a census. The Japanese had heard about his theories and their usefulness to U.S. companies during the war. Consequently, he soon began to teach them statistical quality control. His thinking went beyond mere statistics. However Deming preached the importance of top-leadership, management, customer/supplier partnerships, and continuous improvement in product development and manufacturing processes. Japanese managers embraced these

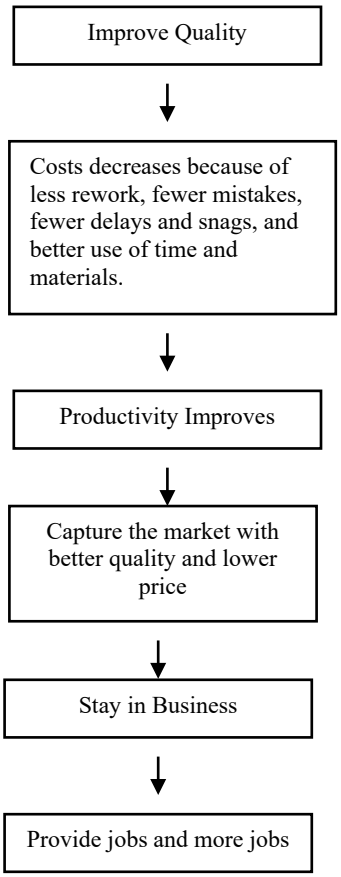
ideas, and the rest as they say, is history. Deming's influence in Japanese industry was so great that the Union of Japanese Scientists and Engineers established the "Deming Application Prize" in 1951 to recognize companies that show a high level of achievement in quality practices. Deming also received Japan's highest honor, the Royal Order for the Sacred Treasure, from the Emperor. The former chairman of NEC electronics once said, "There is not a day I don't think about what the Dr. Deming meant to us."

Although Deming lived in Washington, D.C., he remained virtual unknown in the United States until 1980, when National Broadcasting Corporation (NBC) telecast a program entitled "If Japan can… why can't we?" The documentary highlighted Deming's contributions in Japan and his later work with Nashua Corporation. Shortly afterward, his name was frequently on the lips of U.S. corporate executives. Companies such as Ford, GM, and Procter & Gamble invited him to work with them to improve their quality. To their initial surprise, Deming did not lay out " a quality improvement program" for them. His goal was to change entire perspectives in management, and often radically. Deming worked with passion until his death in December 1993 at the age of 93, knowing that he had little left to make a difference in his home country. When asked how he would like to be remembered, Deming replied, "I probably won't be remembered." Then after a long pause, he added, "Well, maybe…as someone who spent his life trying to keep America from committing suicide."

Foundation of the Deming Philosophy

Unlike other management gurus and consultants, Deming never defined or described quality precisely. In his last book, he stated, "A product or a service possesses quality if it helps somebody and enjoys a good and sustainable market." The Deming philosophy focuses on bringing about improvements in product and service quality by reducing uncertainty and variability in the design and manufacturing process. In Deming's view, variation is the chief culprit of poor quality in mechanical assemblies, for example, variation from specifications for part dimensions lead to inconsistent performance and premature wear and failure. Likewise, in consistencies in service frustrate customer and hurt companies' reputations. To accomplish reductions in variation, Deming advocated a never-ending cycle of product design, manufacture, test, and sales, followed market

survey and then redesign and so forth. He claimed that the higher quality lead to higher productivity which in turns leads to long-term competitive strength. The Deming "Chain reaction" theory summarises this view as under.



The theory is that improvements in quality lead to lower costs because they result in less rework, few mistakes, few delays and snags, and better use of time and material. Lower costs, in turn, lead to productivity improvement. With better quality and lower prices, a firm can achieve a higher market share and thus stay in business, providing more and more jobs. Deming stressed that top management has the overriding responsibility for quality improvement.

Deming's philosophy under went many changes as he continued to learn. In his early work in United States, he preached his "14 points."

- Create and publish to all employees a statement of the aims and purposes of the company and other organization
- The management must demonstrate constantly their commitment to this statement
- Top management should learn the new philosophy everybody
- Understand the purpose of inspection, for improvement of processes and reduction of cost
- End practice of awarding business on the basis of price tag alone
- Improve constantly and forever the system of production and service
- Institute training
- Teach and institute leadership
- Drive out fear, create climate of innovation and trust
- Optimize toward the aims and purposes of the company the efforts of teams, groups and staff as well
- Eliminate exhortations for the workforce
- Eliminate numerical quotes for production. Instead, learn and institute method for improvement
- Eliminate Management by Objective (MBO). Instead learn the capabilities of processes and how to improve them
- Remove barriers that rob people of pride of workmanship
- Encourage education and self-improvement for everyone
- Take action to accomplish the transformation

The "14 points" caused some confusion and mis-understanding among business people, because Deming did not provide a clear rationale for them. Near the end of his life, however, he synthesized the underlying the foundation of 14 points in what he called "A System Profound knowledge." Understanding the element of this "system" provides critical insights needed for understanding and appreciating the 14 points. Deming's Profound Knowledge System consist of four interrelated parts:

- Appreciation of a system
- Understanding of variation
- Theory of knowledge
- Psychology

System: The components of any system must work together if the system is to be effective. Traditional organizations typically manage according to the functions of a system, managers can not manage the system well by simply managing the parts. They must understand the horizontal, cross-functional processes and optimize the system. Sub-optimization results in losses to every body in the system. According to Deming, it is poor management for example, to purchase materials or service at the lowest price or to minimize the cost of manufacture if it is at the expense of the system. For instance, inexpensive materials may be of such inferior quality that they will cause excessive costs in adjustment and repair during manufacture and assembly. Minimizing the cost of manufacturing alone might result in products that do not meet designers' specifications and customer's needs. Such situations result in a win-lose effect. Purchasing wins, manufacturing loses; manufacturing wins, customers lose, and so on. To manage any system managers must understand the interrelationship among the systems' components and the people that work in it.

Management must have an aim, a purpose toward which the system continually strives. Deming believes that the aim of any system should be for everybody, stakeholders, employees, customers, community and the environment to gain over the long term. Stakeholders can realize financial benefits, employees can receive opportunities for training and education, and customers can receive products and services that meet their needs and create satisfaction, the community can benefit from business leadership, and the environment can be benefit from responsible management. The theory applies to managing people also. All the people who work within a system can contribute to improvement, which will enhance their joy in work. Many factors within the system affect an individual employee's performance:

- Training received
- The information and resources provided
- Disruption on the job
- Management policies and practices

Variation: The second part of profound knowledge is a basic understanding of statistical

theory and variation. We see variation everywhere, from hitting golf balls to the meals and service in a restaurant. The same kinds of variation exist in any production and service process. Generally due to factors inherent in the design of the system, which cannot easily be controlled. Excessive variation results in products that fail or perform erratically and inconsistent service that does not meet customers expectations. Deming suggests that management first understand, and then work to reduce variation through improvement in technology, process design and training. With less variation, both the producer and consumer benefit. The producer benefit by needing less inspection, experiencing less scrap and rework, and having higher productivity and customer satisfaction. The consumer has the advantage of knowing that all products have similar quality characteristics and will perform consistently. This advantage can be especially critical when the consumer is another firm using large quantities of the products in its manufacturing or service operations. Statistical methods are the primary tool used to identify and quantify variation. Deming proposes that every employee in the firm be familiar with statistical techniques and other problem-solving tools. Statistics can then become the common language that every employee from top executive to line workers uses to communicate with one another. Its value lies in its objectivity statistics leaves little room for ambiguity or misunderstanding.

Theory of Knowledge: The branch of philosophy concerned with the nature and scope of knowledge, its presupposition and basis and the general reliability of claims to knowledge. Deming's system was influenced greatly by Clarence Irving Lewis, author of "**Mind and the World".** Lewis stated "there is no knowledge without interpretation. If interpretation, which represents an activity of the mind, is always subject to the check of further experience how is knowledge possible at all? …An argument from past to future at best is probable only and even this probability must rest upon principles which are themselves more than probable." Deming emphasized that knowledge is not possible without theory and experience alone doesn't establish a theory. Any rational plan however simple requires prediction concerning conditions, behavior and comparison of performance. A statement devoid of prediction or explanation of past events conveys no knowledge. Experience only describes it cannot be tested or validated and alone is no help in management. Theory on the other hand shows a cause and effect relationship that can be used for prediction. Coping an example of success without understanding it with

theory may lead to disaster. Many companies have jumped on the latest popular approach advocated by business consultants only to see the approach fail. Methods that have sustained success are grounded in theory. This notion implies that management decisions must be based on facts not instincts. Objective data and a systematic problem solving process provide a rational basis for making decisions. They allow us to distinguish between improvement and change and plan for learning and improvement.

Psychology: It helps us to understand people, interactions between people and circumstances, interactions between leaders and employees and any system of management. Much of Deming's philosophy is based on understanding human behaviour and treating people fairly. People differ from one another. A leader must be aware of these differences and work toward optimizing everybody's abilities and preferences. Most managers operate under the assumption that all people are alike. However, a true leader understands that people learn in different ways at different speeds and manages the system accordingly.

People are motivated intrinsically and extrinsically. Fear does not motivate people; instead, it prevents the system from reaching its full potential. People are born with a need for love and esteem in their relationships with other people. Some circumstances provide people with dignity and self-esteem. Conversely circumstances that deny people these advantages will smother intrinsic motivation. If people cannot enjoy their work, they will not be productive and focused on quality principles. Psychology helps us to nurture and preserve these positive innate attributes of people; otherwise, we resort to carrots and sticks that have no long-term values.

One of Deming's more controversial beliefs is that pay is not a motivator, which industrial psychologists have been saying for decades. The monetary rewards are a way out for managers who do not understand how to manage intrinsic motivation. When joy in work becomes secondary to getting good ratings, external forces rule employees and must act to protect what that have and avoid punishment.

Juran Philosphy

Juran did not propose a major cultural in the organization, but rather sought to improve quality by working within the system familiar to the managers. He stated that the top management speaks in the language of dollars, workers speak in the language of things and middle management must be able to speak both languages and translate between dollars and things. Juran's prescriptions focus on three major quality processes, called the quality Trilogy:

Quality Planning: The process or preparing to meet quality goals. Quality planning begins with identifying customers, both internal and external, determining their needs translating into specification, developing product features that respond to those needs.

Quality Control: The process of meeting quality goals during operations. Quality control involves identifying and reducing the cost, determining what to control, establishing units of measurements to evaluate data objectivity, establishing standards of performance, measuring actual performance, interpreting the difference between them, and taking action on the difference.

Quality Improvement: The process of breaking through to unprecedented levels of performance.

A.V.Feigenbaun Philosophy

His first book "Total Quality Control" was published in 1951. He viewed quality as a strategic tool that requires involvement from everyone in the organization and promoted the use of quality cost as a measurement and evaluation tool. His philosophy is summarized in his three steps of quality:

Quality Leadership: A continuous management emphasis is grounded on sound planning rather reaction to failures. Management must maintain a constant focus and lead the quality efforts.

Modern Quality Technology: The traditional quality departments cannot resolve 80 to 90 percent quality problems. This task requires the integration of management staff, the engineering staff and the technicians in the process who continually evaluate and implement new techniques to satisfy the customer in future.

Organizational Commitment: Continuous training and motivation of the entire workforce as well as integration of quality management in planning indicates the importance of quality and provides the means for including it in all aspects of the organizational activities.

Kaoru Ishikawa

A Japanese quality philosopher, who followed the concept of total quality control and promoted greater involvement by all the employees, from the top management to the front line staff and reducing reliance on quality professionals and quality departments. He advocated collecting and analyzing factual data using simple visual tools, using statistical techniques and teamwork as foundation for the implementing total quality. Some of the key elements of Kaoru's philosophy are:

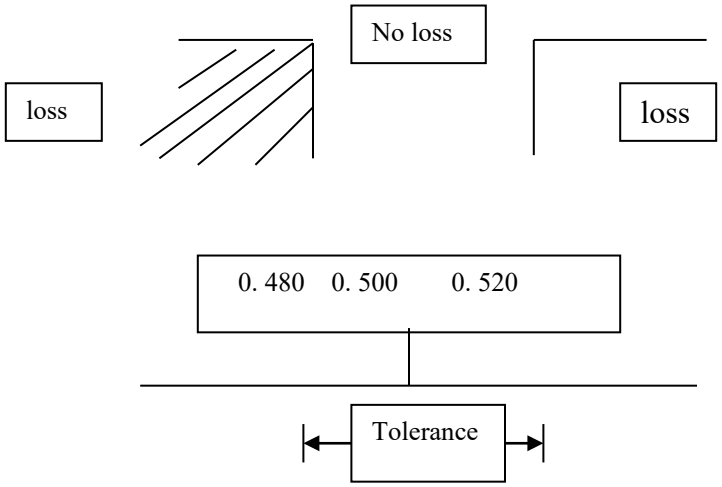
- Quality begins with education and ends with education.
- The first thing in the quality is to know its requirement
- The ideal state of quality control occurs when inspection is no longer required
- Remove the root cause and not the symptoms
- Quality control is responsibility of all employees
- Do not confuse the means with objectives
- Top management must not show anger when facts are presented by subordinates

Genichi Taguchi

A Japanese engineer, whose philosophy was strongly advocated by Deming explained the economic value of reducing variation. Taguchi maintained that the manufacturing based definition of quality as conformance to specification limits is inherently flawed, for example, suppose that a specification for some quality characteristic is 0.500 (+) or (–) 0.020. Using this definition, the actual value of the quality characteristic can fall

anywhere in a range from 0.480 to 0.520. This approach assumes that the customer, either the consumer or the next department in the production process would be accepting any value within the 0.480 to 0.520 range, but not be satisfied with a value outside this tolerance range. Also this approach assumes that costs do not depend upon the actual value of the quality characteristic as long as it falls within the tolerance specified.(see figure 1.6)

Figure 1.6 Traditional Economic View of Conformance to Specifications



But what is the real difference between 0.479and 0.481? The former would be considered as “out of specification” and either reworked or scrapped while the latter would be acceptable. Actually the impact of either value on the performance characteristic of the product would be about the same. Neither value is close to the nominal specification 0.500. The nominal specifications the ideal target values for the critical quality characteristic. Taguchi’s approach assumes that the smaller the variation about the nominal specification, the better is the quality. In turn products are more consistent and total costs are less. The following example supports this notion.

The Japanese newspaper Ashai published an example comparing the cost and quality of Sony television at two plants in Japan and San Diego. The colour density of all units produced at San Diego plant were within specification, while some of those shipped from Japanese plant were not however, the average loss per unit of the San Diego plant was $0.89 greater than of the Japanese plant. The increased cost occurred because workers adjusted units that were out of specification at the San Diego plant, adding cost to the process. Furthermore a unit adjusted minimally meet specification was more likely to

generate customer complaints than a unit close to the original target value, therefore incurring higher field service costs. Figure shows that fewer U.S. produced sets, met the target value specification for colour density. The distribution of quality in the Japanese plant was more uniform around the target value and though some units were out of specification, the total cost was less. Taguchi measured quality as the variation from the target value of a design specification and then translated that variation into an economic" loss function" that expenses the cost of variation in monetary terms.

Taguchi also contributed to improving engineering approach to product design. By designing a product that is insensitive to variation in manufacture, specification limits become meaningless. He advocated certain techniques of experimental design to identify the most important design variables in order to minimize the effects of uncontrollable factors on product variation. Thus, his approaches attached quality problems early in the design stage rather than react to problems that might arise later in production.

CHAPTER – 2

QUALITY

Quality is not a new concept in modern business. In Oct 1887, William Cooper Procter grandson of the founder of P&G, told his employees, "The first job we have is to turnout quality merchandise that consumer will buy and keep on buying. If we produce it efficiently and economically, we will earn a profit in which you will share."

Mr. Procter's statement addresses three issues that are critical to managers of manufacturing and service organizations; productivity, cost and quality. All these factors which create customer satisfaction contribute to profitability. Of these three detriments of profitability the most significant factor in determining long-run success or failure of an organization is quality.

- Good quality reduces cost due to returns, rework and scrap
- Good quality increases productivity, profit and other measures of success
- Most importantly, good quality generates satisfied customers who reward the organization with continued patronage and favourable word of mouth advertising

Definition: Quality is "both absolute and universally recognizable, a mark of uncompromising standards and high achievement." Or

Quality is "the totally of features and characteristics of a product or service that bears on its ability to satisfy given needs." Or "Meeting or exceeding customer expectations"

History and importance of quality

- The age of craftsmanship
- The early Twentieth Century
- Post-World War II
- The US quality revolution

Current and Future Challenges: The real challenge today is to ensure that managers do not lose sight of the basic principles on which quality management and performance excellence are based. The global marketplace and domestic and international competition have made organizations around the world realized that their survival depends upon high quality. Many countries such as like Korea and India are mounting national efforts to increase quality awareness, including conferences, seminars, radio shows, school essay contests and phamlets distribution. Spain and Brazil are encouraging the publication of quality books in their native language to make them more accessible. These trends will only increase the level of competition in the future. Even the tools used to achieve quality a decade ago is no longer sufficient to achieve the performance levels necessary to compete in today's world. Many organizations are embracing highly sophisticated, statistically based tools as a part of popular "Six Sigma" initiative. These require increased levels of training and education for managers and front-line employees alike as well as the development of technical staff.

Concept of TQ: The concept of TQ has been around for some time. A. V. Feignbaum recognized the importance of a comprehensive approach to quality in 1950s and coined the term "**total quality control".** Feignbaum observed that the quality of products and services is directly influenced by what he terms the 9Ms: markets, money, management, men and women, motivation, materials machines and mechanization, modern information methods and mounting product requirements. Although he developed his ideas from an engineering perspective, his concept applies more broadly to general management.

The Japanese adopted Feignbaum's concept and renamed it "**Companywide Quality Control" (CQC)** Wayne S. Reiker listed five aspects of total quality control practiced in Japan:

- Quality emphasis extends through market analysis, design and customer service rather than only the production stage of making a product.
- Quality emphasis is directed toward operations in every department from executives to clerical personnel.
- Quality is the responsibility of the individual and the work group, not some other

group, such as inspection.

- The two types of quality characteristics as viewed by customers are those that satisfy and those that motivate. Only the latter are strongly related to repeat sale and a "quality" image.
- The first customer for a part or piece of information is usually the next department in the production process.

Quality Management Principles

- **Customer Focus:** Organizations depend on their customers and therefore should understand current and future customers needs, should meet customer requirements and strive to exceed their expectations.
- **Leadership:** Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives.
- **Involvement of People:** People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit.
- **Process Approach:** Desired result is achieved more efficiently when activities and related resources are managed as a process.
- **System Approach to Management:** Identifying, understanding, and managing interrelated processes as a system contribute to the organization's effectiveness and efficiency in achieving its objectives.
- **Continual Improvement:** Continual improvement of the organization's overall performance should be a permanent objective of the organization.
- **Factual Approach to Decision-Making:** Effective decisions are based on the analysis of data and information.
- **Mutually Beneficial Supplier Relationship:** An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value.

- **Principles of TQ**

- A focus on customers and stakeholders
- Participation and teamwork by everyone in the organization
- A process focus supported by continuous improvement and learning

TQ and Global Competition: The growth of Japanese industry after the WW II and the loosening of international trade barriers have opened up a new form of competition. Previously many U. S. firms concentrated on domestic competition and paid little attention to quality. Some large Japanese forms found that they could compete with U.S. firms on the basis of quality. Those Japanese firms virtually rewrote the rules of international competition and forced U.S. firms to focus on quality.

Firms consistently producing affordable high-quality products and services will be the international business survivors and growth engines of the 1990s. In competitive, worldwide, open markets where customers have alternatives to shoddy products and services, the low-quality products will go bankrupt.

Even those firms that today operate without international competition in their market risk international competitors entering in the future. Since the best defence is a good offense, maintaining customer loyalty through high-quality products is a way to prevent international competitive inroads.

A system Model of Quality

- The cost of quality
- Quality and low cost
- Management system and Behaviour

Total quality management (TQM) is a cooperative team approach to doing business. It relies on the talents and capabilities of both employees and employers to continually improve quality and productivity. Participatory management is one of the key

ingredients of a total quality management strategy. It is a commitment on the part of management to involve all employees within the organization, even those at the lowest level, in the decision-making process. Benefits of these two processes include:

- Improved profitability
- Increased customer retention
- Reduced customer complaints and warranty claims
- Reduced costs through less waste and rework
- A greater market share
- Increased employee involvement and satisfaction
- An increased ability to attract new customers

Phases of Quality Improvement

- Conformance Quality
- Customer-Driven Quality
- Market-Driven Quality
- Strategically Quality

Statistical Process Control: Based on statistical thinking and recognition of common and special causes of variation, statistical process control (SPC) is used in many organizations to improve Processes. Statistical process control (SPC) is the application of statistical thinking and statistical analysis of data to control and improve processes. SPC uses control charts to understand stable and unstable processes, to reduce variation and to improve system.

Total Quality as a Business Strategy: It is a business strategy which shows managers how to operate within a business by focusing on customers. Once managers focus on customers, then different managerial systems are needed to deliver value to customers. It cater following:

- **Customers:** As a business strategy, Total Quality focuses first and foremost on consistently satisfying customers and their needs. The primary focus is the customer,

not the competitor, as in competitive strategy. This is major mind-set difference between customer value strategy and competitive strategy.

- **Total Customer Satisfaction:** Meeting customer requirements is one level of customer commitment. That level may imply a reactive system to provide to customers what they request of the firm. Such a reactive mode is different from an expression of striving for "total customer satisfaction," "customer delight," or "exceeding customer expectations." The latter three-expression show that the firm may go beyond what customer demands today to keep the customer as a customer tomorrow.

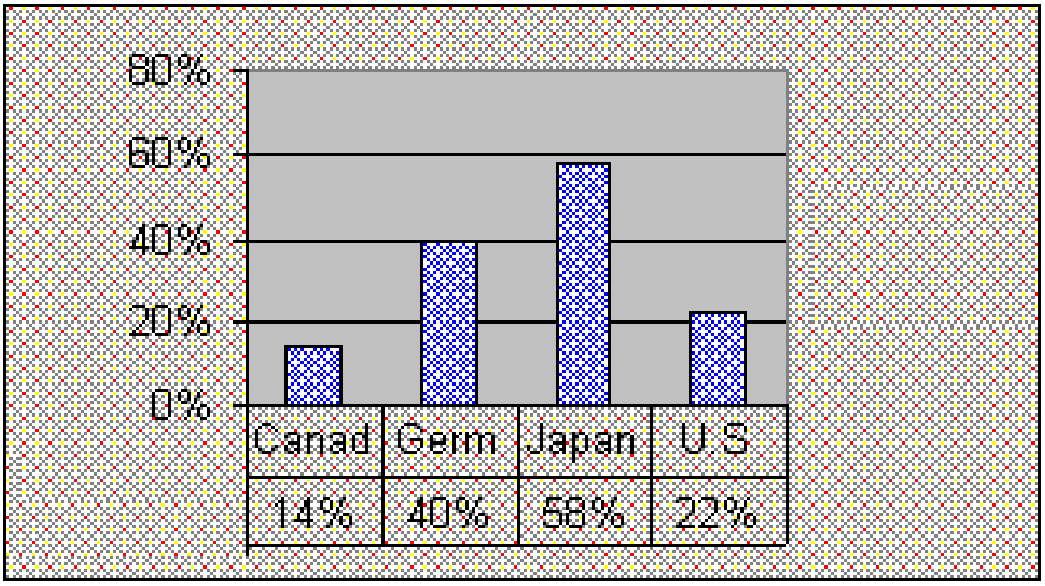
- **Shareholders and Owners:** A growing body of evidence shows that TQM with its focus on the customer, is the way in a globally competitive marketplace to produce superior long-term financial value for owners. A comparative study shows the relationship between quality and profit. Higher the quality higher the profit. This positive relationship between quality and profitability held for both measures of profitability tested-return on sales and return on investment.

- **Competitors:** The formulation and implementation of business strategy has certain disadvantages by focusing on competitors. Principally by concentrating on competitors, it is easy to lose sight of customer. By following its competitors, the firm is destine to pursue a follower strategy hence it will never be the first to market with a new product, it is destined to realised below average financial return.

- **Benchmarking**
  - **Functional Benchmarking**: Is studying and possibly even emulating the best processes and systems in the world, whether in the firm's own industry or in another industry.
  - **Competitive Benchmarking**: Is analysing what the best competitor or leading companies in the industry are doing in order to discover the products, processes and practices that satisfy customers needs.

- **New-Product Development System and Quality Function Deployment:** New-product development systems in TQM firms are good examples of the use of cross-functional system to create and deliver value to customers. Japanese and German firms understand the importance of including customer expectations in the design of new products and services. Figure 3.1 Shows the customer and new-product design across countries.

Figure 2.1 **The Customer and New-Product Design across Countries**



Source: Management (Total Quality in global environment) by Michael J. Stahl P-192

- **High Quality:** The quality gap is the gap relative to many international competitors that has been most noticeably closed by U .S. firms that have embraced TQM.

- **Low Cost:** As Deming predicted, when quality goes up due to systemic and process changes, then costs come down. Many firms have reported lower costs associated with such quality efforts. Affordable quality has thus become the reality in many markets.

- **Short Cycle Times:** One advantage of simplifying processes and working in cross-functional teams is reduced cycle time. It is the length of time required to complete an operation. For a new product or service, this includes the time to design and deliver it to the customer.

CHAPTER-3

PRODUCTIVITY

Historical Perspective of Productivity: Concept of productivity has been examined in various dimensions by various authors. It has been visualised to represent production function; some others have seen it as labour effectiveness. There is a recent trend to interpret productivity in its broader perspective as representing the performance in totality of an organization considered to work as a system.

Industrial revolution made a major departure for society from total dependence on agricultural economy. Man machine formed the other balancing pivot. Initially production from man became a major concern in an organization effort of an industrial set up. The foundations of Industrial Engineering came to be laid on the concept of how to increase output from a workman. F. W. Taylor brought in philosophy of work design in terms of division of labour and specialization. The concept implied that production from labour constituted the largest task in any industrial endeavour. Measurement of production in term of standard hours produced with reference to hours of labour put in, became the landmark and yardstick of efforts, effectiveness, performance and efficiency and came to be referred as productivity. Taylor's work continued to be furthered by many others in the same direction. Behavioural scientists have also followed similar paths, only the techniques have differed. Their focus shifted to the working conditions, psycho-sociology and satisfaction of a workman in order to increase output.

Thus it is seen that labour becomes the focal point of all work in industry. Production and productivity of a plant virtually meant production and productivity of labour. Improvements desired in production/productivity meant attention of industrial engineers towards further division of work and specialization or of behavioural scientists in order to create motivation and better human relations. The twentieth century and the world war years brought in technological advances in rapid succession. Machine tools with higher

work parameters brought an increase in production and rate of production. Shortage of man-power during the war years also directed efforts towards one man multi-machine concept besides machine tools getting with multi-work stations and incorporated with advanced technology to increase output. The emphasis therefore, also shifted to production and productivity from machine along with man. Production per man-hour alone was not sufficient; production per machine hour also became significant. Capital became a factor of increasing importance in a production function, as the machines became advanced in technology and hence costlier. As a percentage of cost of production, materials also formed an important factor. It was therefore, expenditure by installing automatic/semi-automatic machines. Production came to be considered as function of capital, labour and materials. These concepts are well documented in the theory of Production Function. Production and hence, Productivity thus have centered around Labour, Capital and Machines. Only small variations have been further added.

Concept of Productivity: Such a large number of definitions have been provided by various authors, professional bodies and productivity organizations that it is not possible to cover all of them. Here, only some selected definitions relating to conceptual perception have been included. One of the earliest formal definitions date back to 1950, when the organization for European Economic Co- operation (OEEC) proposed. Productivity is the quotient obtained by dividing output by one of the factors of production. In this way, it is possible to speak of the productivity of capital, investment or raw materials according to whether output is being considered in relation to capital, investment or raw-materials.

Definition: It is the ratio between output of wealth produced and input resources used up in process of production.

Productivity = Outputs/Inputs

- In Ramsay's opinion productivity is optimization for maximization of economic resources and generation of new resources through creative thinking, R&D and by

use of all possible improvement techniques and methods.

- Smith defines productivity as “Ratio of outputs to inputs but has expanded inputs to include technology, beside labour, materials and machine utilization.”
- Siegel consider productivity as, “Class conceivable measure depicting output per unit of associated input in sequence of compared period.”
- Mali defines productivity as measure of how well resources are brought together in organization and utilized for accomplishing set of results. Productivity is reaching higher level of performance with least expenditure of resources, further elaborates as; “It is combination of effectiveness and efficiency and effectiveness related to performance, efficiency to resource utilization.”

Critical Barriers to Productivity Improvement

- Too many Hierarchical Levels
- Poor Utilization of factory and Machinery
- Skilled workers shortage, over loaded design and engineer groups
- Lack of time for development work
- Trade union adversity to productivity
- Inadequate human resource development
- Poor industrial relation
- High absenteeism
- Inefficient materials handling facilities
- Rigid and Authoritarian management style
- Excessive diversification
- Poor documentation of technical problems

Ways to Improve Productivity

- Cost reduction
- Management Growth
- Working Smarter
- Paring down
- Working Effectively

Major Categories of Productivity Factors

- **Internal Factors of Enterprise**

➢ Soft Factors

- Labour Force, Organization System
- Procedures
- Management Style
- Work Methods

➢ Hard Factors

- Products
- Technology
- Equipment
- Raw Material

- **External Factors affecting Enterprise**

➢ **Government and Infrastructure**

- Institutional Mechanism
- Policies and Strategies
- Infrastructure
- Public Enterprise

➢ **Natural Resources**

- Manpower
- Land
- Energy
- Raw Material

➢ **Structural Adjustment**

- Economic
- Demographic and Social

Miscellaneous Factors Affecting Productivity

- Investment
- Capital/Labour Relation
- R & D
- Government Regulations
- Capacity Utilization
- Age of Plant and Equipment
- Energy Cost
- Works ethics
- Union Influences
- Management

Productivity Improvement Techniques

- **Material-Based productivity improvement**
  - Inventory control
  - Types of inventory control system
  - Material required planning (MRP) inventory system
  - Material management
  - Quality control

- **Employees-Based Productivity Improvement**
  - Financial Incentives (individual & Group)
  - Fringe Benefits
  - Employees Promotion
  - Job enrichment
  - Job enlargement
  - Job rotation
  - Worker participation
  - Skill enhancement

- Communication
- Working condition improvement
- Training
- Education
- Role perception
- Zero defects
- Flex time
- Services

- **Product-Based productivity improvement**
  - Value analysis/value engineering
  - Product diversification
  - Product simplification
  - Product standardization
  - Research & Development
  - Reliability improvement
  - Emulation
  - Advertising & Promotion

- **Tasked Based**
  - Method Engineering/Work Simplification
  - Work Measurement
  - Job Design
  - Job Evaluation
  - Job Safety Design
  - Human Factor Engineering (ergonomics)
  - Production Scheduling

- **Technological Based**
  - CAD
  - CAM

- CIM
- Robotics
- Laser Technology
- Energy Technology
- Group Technology
- Computer Graphics
- Maintenance Management
- Rebuilding Old Machinery
- Energy Conservation Technology

- **Industrial Engineering Techniques and Economics Analysis**
  - Work Study
  - Pareto Analysis
  - Just in Time Method
  - Management through Value Analysis
  - Cost Benefits Analysis
  - Zero Based Budgeting
  - Cost Productivity Allocation

- **Behavioral Techniques**
  - Organizational Development
  - Brain Storming
  - Forced Field Analysis
  - Normal Group Technique

CHAPTER-4

SALIENT ASPECTS WHICH HELPED JAPANESE INDUSTRIAL PROGRESS

Influence of Different Scholars

Dr. W. Edwards Deming shortly after World War II, Deming was invited to Japan to help the country tale a census. The Japanese had heard about his theories and their usefulness to U.S. companies during the war. Consequently, he soon began to teach them statistical quality control. His thinking went beyond mere statistics, however. Deming preached the importance of top-management leadership, customer/supplier partnerships, and continuous improvement in product development and manufacturing processes. Japanese managers embraced these ideas, and the rest, as they say, is history. Deming's influence in Japanese industry was so great that the Union of Japanese Scientists and Engineers established the Deming Application Prize in 1951 to recognize companies that show a high level of achievement in quality practices. Deming also received Japan's highest honor, the Royal Order for the Sacred Treasure, from the Emperor. The former chairman of NEC electronics once said, "There is not a day I don't think about what the Dr. Deming meant to us." In addition to Deming's teachings Japanese also took advantages of the teachings of other Philosophers as well.

Joseph Juran a Romanian born stated his career from America. Like Deming, Juran taught quality principles to the Japanese in the 1950,and was the principle force in their quality organization.

A. V. Feigenbaum is best known for coining the phrase "**Total Quality Control." W**hich he defined as " an effective system for integrating the quality development, quality maintenance, and quality improvement efforts of the various groups in an organization so as

to enable production and service at the most economical levels which allow full customer satisfaction." The Japanese latched on to his concept of total quality control as the foundation for their practice called **company wide quality control (CWQC)**, which began in the 1960.

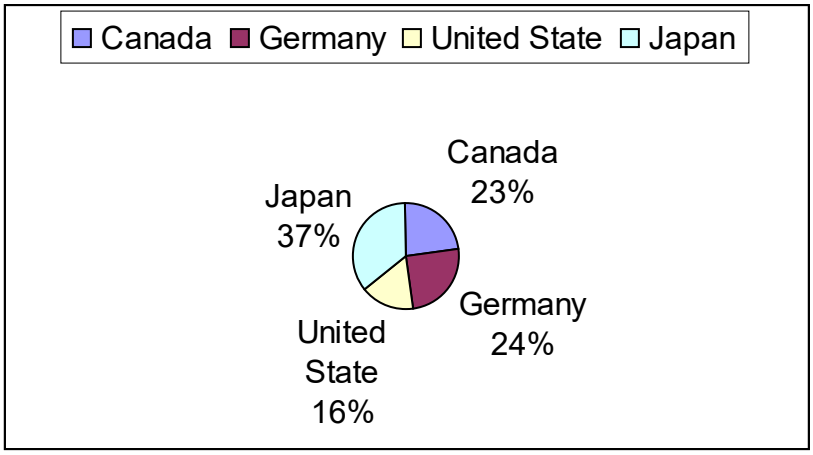
Kaoru Ishikawa is an early pioneer in the quality revolution in Japan. He was the foremost figure in Japanese quality until his death in 1989. He was instrumental in the development of broad outlines of Japanese quality strategy and without his leadership the Japanese quality movement would not enjoy the worldwide acclaim and success that it has today.

Genichi Taguchi A Japanese engineer, - Whose philosophy was strongly advocated by Deming explained the economic value of reducing variation. Taguchi maintained that the manufacturing –based definition of quality as conformance to specification limits is inherently flawed, for example, suppose that a specification for some quality characteristic is 0.500+ or – 0.020. Using this definition, the actual value of the quality characteristic can fall anywhere in a range from 0.480 to 0.520. This approach assumes that the customer, either the consumer or the next department in the production process would be accept any value within the 0.480 to 0.520 range, but not be satisfied with a value outside this tolerance range.

Acquisition of latest Technology (as an International Customer Strategy)

Japanese used technology as a way to provide customer value. The data in figure- shows that Japanese firms were more than twice as likely as U.S. firms to use technology to provide value to customers. "Japanese manufacturers place much more importance on flexibility by targeting variety, innovation and technological superiority."

Figure-4.1 Percentage of technology used for meeting the customer's expectation

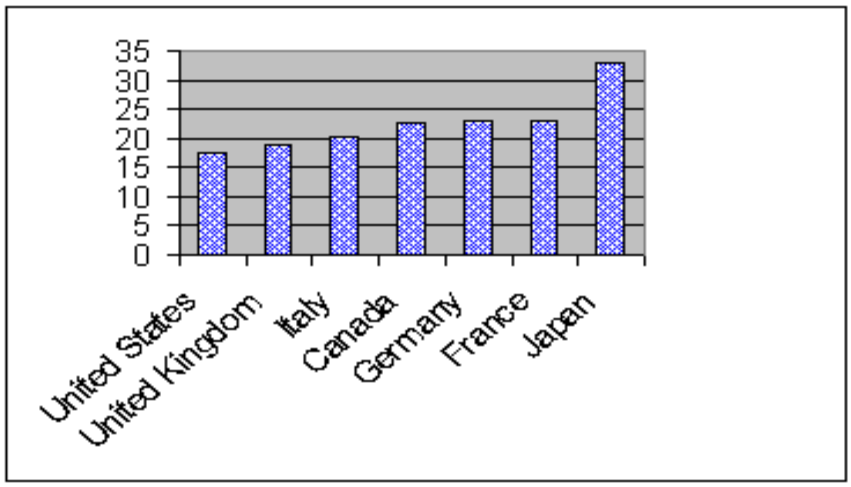


Source: Page-493 of Management Book written by Michael J. Stahl

Strategy: Japanese management has credit for recognizing the strength of the emergent strategy and for pursuing it with vigour. The best example is of Honda Motorcycle strategy pursued by Japanese in U. S. The critical point that emerges from the Honda example is that in contrast to the view that strategies are planned, successful strategy can emerge within an organization without prior planning. As Mintzberg has noted, strategies can take root in all kind of strange places. Virtually whenever people have the capacity to learn and the resources to support that capacity.

Investment: There appear to be a strong correlation between investment and productivity improvement rate. Increased capital investment results in increased productivity, which in turn creates further increases in capital when a company's business is characterised by high market share, low product introduction rate, high-capacity utilization etc. Figure shows how keen were Japanese in investing in the technology and equipment as compare to other nations to improve their productivity.

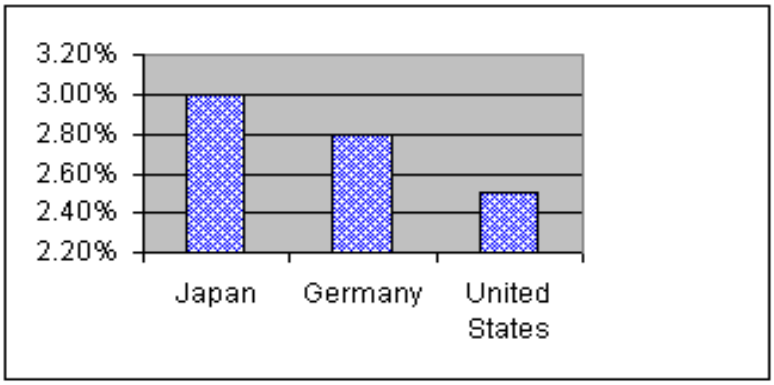
Figure-4.2 Investment rate in selected countries 1970 to 1979



Source; R.W. Rahnet , productivity, people and public policy U. S. Chamber of Commerce, Washington D. C. 1981.

Investment in R & D: Consistent with the strategy of using technology as an international competitive weapon, Japan and Germany continue to invest in technology at a faster rate of growth than does the United State. The data in figure-show that both Japan and Germany dramatically increased the rate of investment in R&D during 1970s and 1980s.

Figure-4.3 R&D Spending Percentage of GDP



Source: Total Quality in a Global Environment by Michael J. Stahl Page-494

Management Role: Japanese are basically follower of Deming's philosophy, who commented on the potential for pay off from managerial improvement activities. He estimated the percentage of problem associated with the system: "I should estimate that in my experience most troubles and most possibilities for improvement add up to the proportion something like this; 94 % belong to the system (responsibility of management) 6 % special (emphasis added)

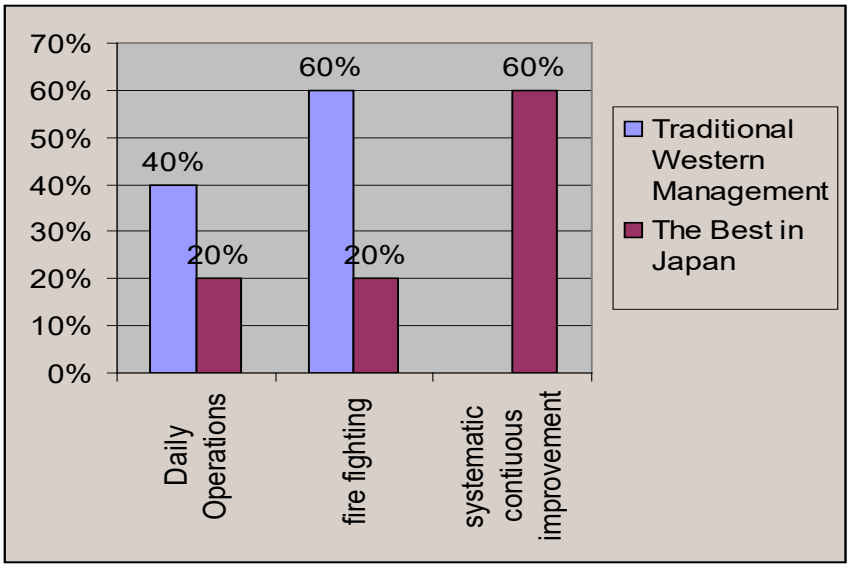
Operations Management: is process of managing the production of goods and services. Thus operation is a broad term that encompasses both hard-goods manufacturing management and service management. **Manufacturing Management,** is the process of managing the production of tangible goods but not of services. Whether automobiles, motorcycles, soft drinks, apparel or chemicals, there is tangible output in manufacturing.

Management Skills: There are a variety of different skills associated with effective managerial performance to have continuous improvement. Many successful managers have strong combination of technical, interpersonal, conceptual and diagnostic skills.

- Technical Skills
- Interpersonal Skills
- Conceptual Skills
- Diagnostic Skills
- Continuous Learning and Improvement

Management System and Behavior: Managers in well run Japanese companies spent 60% of their time on continuous improvement system and little time on command and controlling people. He also indicated that those Japanese managers spent little time on command and controlling people. Figure 4.4 shows some of dramatic differences between traditional Western management and the best Japanese management.

Figure- 4.4 Difference between Western and Japanese Management

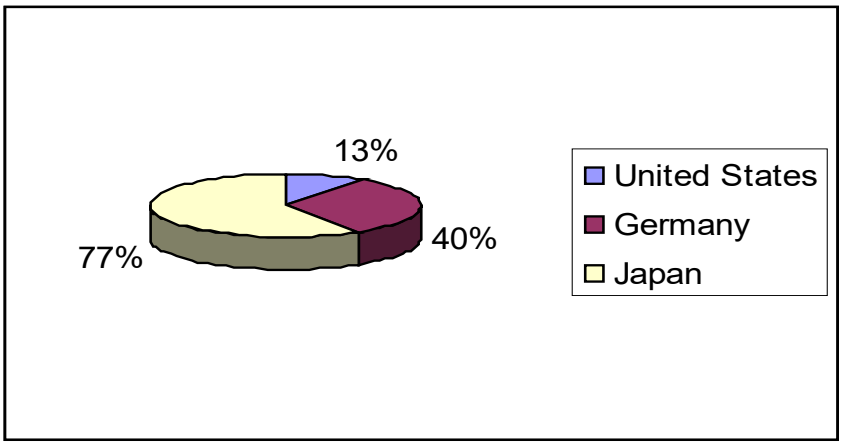


Source: Total Quality in a Global Environment by Michael J. Stahl Page-7

International Human Resource Management: As many firms have decide to pursue opportunities in international operations, marketing ,and finance, international human resource management (HRM) activities take on anew urgency. Extensive research in recent years has been devoted to the cultural differences that must be addressed in international HRM activities.

An example of a cultural difference affecting management is presented in figure4.5, which illustrates the national differences in managerial assumptions about supervision. Such dramatic differences in the perceived role of management might explain different international HRM practices relating to participation in corporate governance.

Figure- 4.5 Natural Differences in Managerial Assumptions



Source: Total Quality in a Global Environment by Michael J. Stahl Page-81

Design for Manufacturability and Quality (Poka Yoka)

Japan's many firms used the term **Poka Yoka** to mean design for quality in manufacturing. Under Poka Yoka a product is designed to reduce the number of parts so that the parts can be assembled in only one way. Parts are made so that they do not fit together if they are not assembled correctly. Rather than inspecting for a defect after it has occurred, this fail-safe approach prevents a defect from happening.

Total Quality: After WW II many Japanese manufacturing industries, influenced by Deming and Juran, incorporated Total Quality into their organizations. The Japanese dedication to high quality and low cost is associated with its focus on customer requirements. Figure 4.5 A, B, and C presents some of lessons to be learned from Japanese industry. The Japanese focus on quality, customer satisfaction, time based competition and process simplification yield an external focus, in contrast to the internal focus inherent with some of the schools of management thoughts. Some changes are needed in management thoughts to reconcile the Japanese advances in a competitive world with the demands of today's customers.

Figure 4.6.A; Frequency of use of Quality Information to Evaluate Business Performance

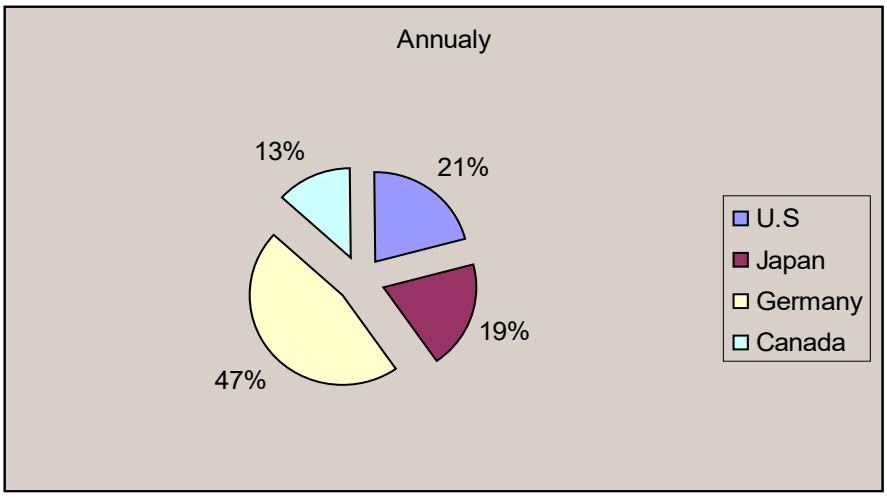


Figure 4.6 B; Frequency of use of Quality Information to Evaluate Business Performance

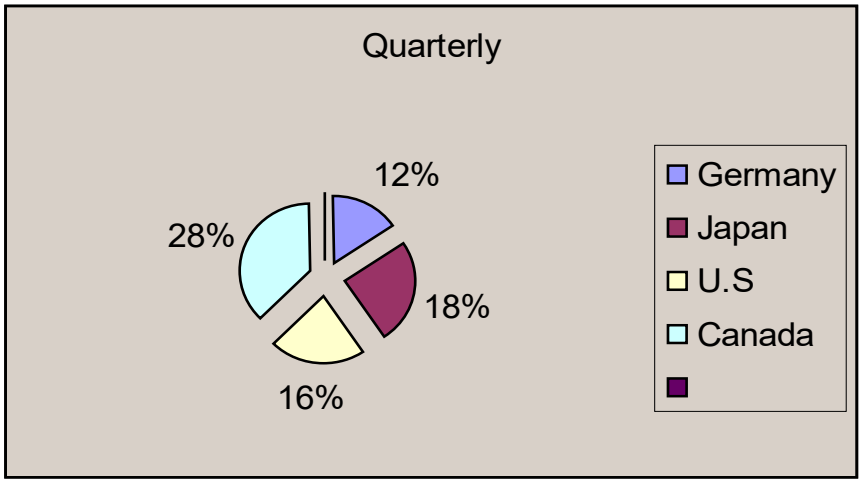
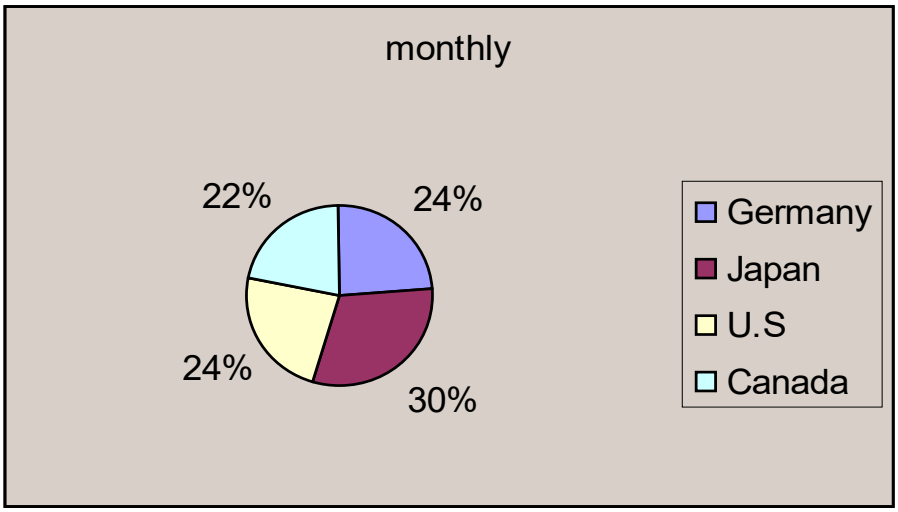


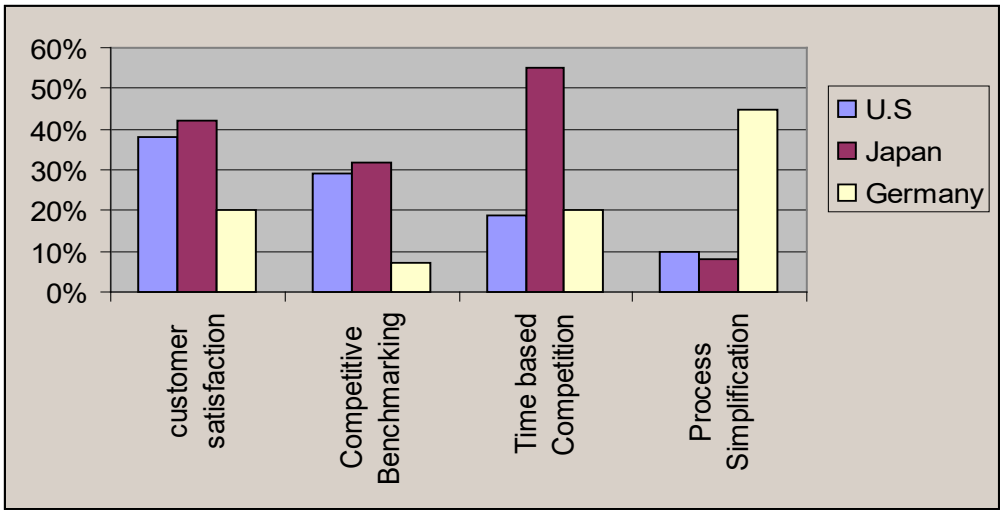
Figure 4.6 C; Frequency of use of Quality Information to Evaluate Business performance



Source: Total Quality in a Global Environment by Michael J. Stahl Page-43

Quality Themes: In contrast to U. S. and Germany Japanese firms were more committed to the four major quality themes of customer satisfaction, competitive benchmarking, time-based competition and process simplification.

Figure 4.7 Comparing the Quality Cultures of Three Leading Trading Nations



Source: Total Quality in a Global Environment by Michael J. Stahl Page-64

TQM: Is a system approach to management that aims to continuously increase value to customers by designing and continuously improving organizational processes and systems to provide improved value to customers.

Use of Quality Tools

- **Operations Scheduling and Inventory Control**
  - Gantt Charts
  - PERT
  - Inventory and Total Quality
  - Just-in-Time and Production
  - MRP

- **Purchasing and Supplier Relationship for Total Quality**
  - Low-Bid contracting versus Partnering
  - Large number of suppliers versus Single supplier
  - Acceptance Sampling versus no Incoming Inspection

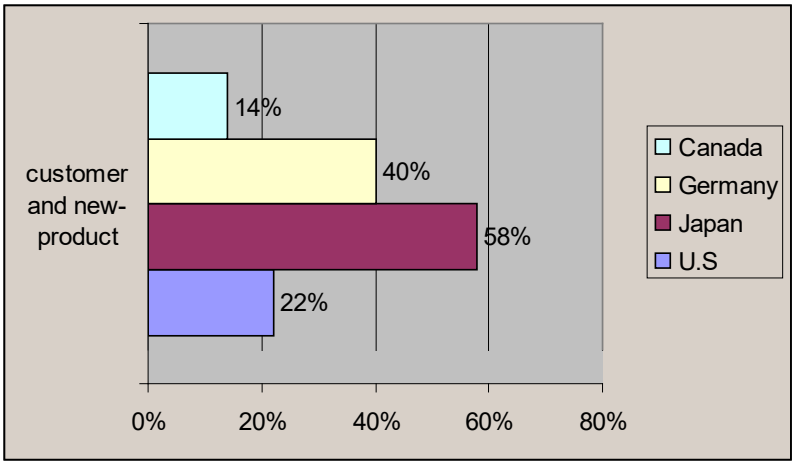
- **Other Quality Tools**
  - Check Sheets
  - Pareto Analysis and Charts
  - Histograms
  - Scatter Plots
  - Cause –and-Effect Diagram
  - Flowcharts

TQ as a Business Strategy: Total Quality is a business strategy in that it shows managers how to operate within a business by focusing on customers. As managers focus on customers then different managerial systems are needed to deliver value to customers.

- **Customer.** As a business strategy ,TQ focuses first and foremost on consistently satisfying customers and their needs. The primary focus is the customer and not the competitor, as in competitive strategy. This is major mind- set difference between customer-value strategy and competitive strategy.

- **Customer Value.** Meeting customer requirements is one level of customer commitment. That level may imply a reactive system to provide to customers what they request of the firm. Such a reactive model is different from an expression of striving for "total customer satisfaction" "customer delight" or "exceeding customer expectations" The latter three expressions show that the firm may go beyond what the customer demands today to keep the customer tomorrow.
- **Competitors.** Principally, by concentrating on competitors, it is easy to lose sight of customers. This conflicts with the purpose of business strategy, which is to serve customers needs.
- **New Production Development.** New-product development system in TQM firms are good example of the use of cross-functional system to create and deliver value to customers. The new-product development systems frequently utilize personnel from most of the functional areas in the company to work together on the design of the new product. As per one of the survey it appears that many U.S. firms had not adopted this business practice in their companies.

Figure 4.8 Percentage of Businesses Whose Departments Always or almost Always Translate Customer Expectations into the Design of New Product and Services.

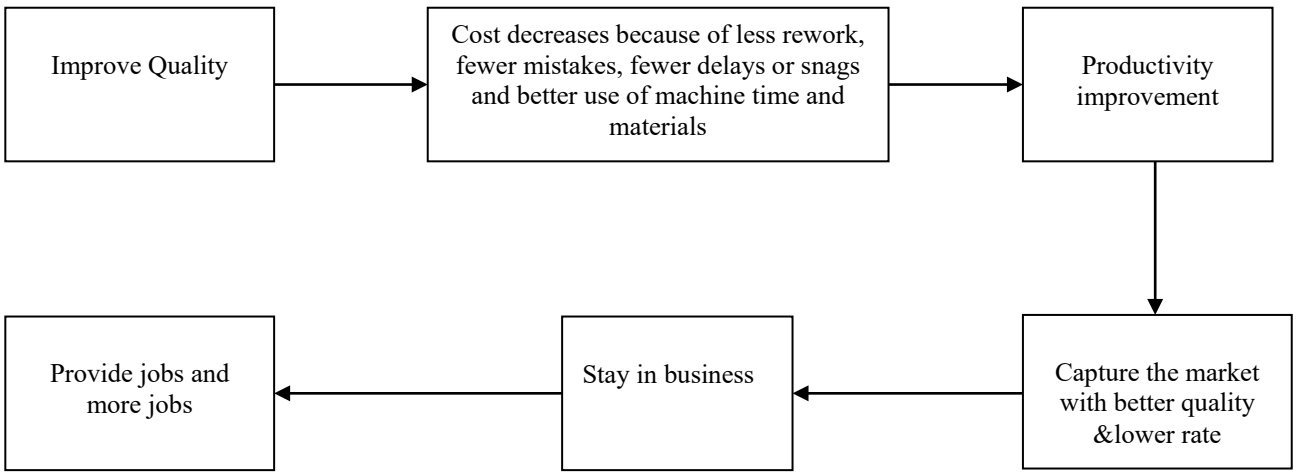


Source: Total Quality in a Global Environment by Michael J. Stahl Page-192

Quality and Low Cost. W.Edwards Deming is sometimes called the father of Japanese and American quality movement. He made a seminal contribution to business strategy and practice when he showed how high quality and low cost can hand in hand. Joseph Juran, Kaoru Ishikawa, Philip Crosby and others have also taught the new logic of higher quality and lower costs. Deming showed how high quality can lead to lower costs. For this logic to hold , quality cannot be inspected in at the end of the product process. Deming argued that quality is a strategy that must permeate an organization throughout its business activities. Cease dependence on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place.

The idea that high quality can be achieved at low cost was a watershed in business operations. Today firms pay attention to designing the product to eliminate recurring defects in production. Firms' also design-manufacturing processes so that operations are performed without errors and firms manage systems to eliminate the cause of defects. Then they continuously improve the products or services and the processes to yield even greater value to customers. Organizations pay attention to the cost of quality-or to the cost of poor quality.

Figure 4.9 The Pervasive Role of Quality



Source: Total Quality in a Global Environment by Michael J. Stahl Page-181

The Cost of Quality: The cost of quality is the cost incurred in producing poor-quality products and services. Included in the cost of quality are the costs of scrap, rework, Warranty repair, inspection and quality-related maintenance. In an earlier era many firms experienced a cost of quality of from 15 percent to 30 percent. Firms that implemented Total Quality usually experienced dramatic declines in the cost of quality of 90 percent or more. Through continuous improvement of the products or services and the processes some firms relentlessly drive the cost of quality toward zero. With lower costs and higher quality, the firms can provide more value to customers.

Deming, Juran, Ishikawa, Crosby and others taught the business world that it could deliver high quality and low price to the customers simultaneously. That finding introduced an era of paying attention to the multiple dimensions of customer value. Quality no longer means just numeration of defects or adherence to an internal engineering specification. Quality means delivering value to customer in accordance with their expectations. A total of 12 dimensions of customer value are presented in the Table 4. 1, these dimensions clearly indicate that quality is more than the presence or absence of defects.

Table 4.1 Multiple Dimensions of quality

1.	Conformance to specification	7.	Durability
2.	Performance	8.	Serviceability
3.	Quick response	9.	Aesthetics
4.	Quick-change expertise	10.	Perceived quality
5.	Features	11.	Humanity
6.	Reliability	12.	Value

Quality Award: Japanese followed Deming's philosophy religiously and made a quality award at national level for companies which continuously improved their products and quality.

- **New Manufacturing Plants and Equipment:** Since the devastation of the U. S. bombing

Compaign was so complete, the Japanese had to start from the scratch with all new manufacturing plants and equipment. Although it was a slow start, two decades after the war Japan had a new, large ultramodern industrial base with plants containing latest equipment, technology and manufacturing processes.

Restrictive Trade Barriers: While rebuilding its industrial base, Japan maintained restrictive trade barriers to protect its industries. Government trade barriers served to officially keep out imports. Cultural trade barriers, including a definite bias in favor of doing business with other Japanese, also helped to protect Japanese industries.

Total Quality Control (TQC): After WW II, the economy of Japan was decimated. The leadership of Japan paid adequate attention to TQC philosophy to gain edge in world market.

Miscellaneous Points

- Japanese manufacturing firms always striving for survival are, “agile to change and Making full use of entrepreneurship”
- Morale of people is key to increase productivity.
- A holonic management system is one of the tools of tomorrow.
- Human oriented thinking
- Open mindedness
- Finding and achieving customers needs in cooperation with them.
- Flexible and quick response to the environmental changes
- Kaizen strategy calls for never-ending efforts for improvement involving everyone in the organization - managers and workers alike.
- The “Japanese’s success has little to do with cultural factors. And the lack of cultural bias means that these practices can be - and are - just as successfully employed elsewhere" - Masaaki Imai
- "Kaizen & Total Quality Control (TQC)" involves everyone in the organization and is aimed at improvement of managerial performance at all levels
- The true intent of a kaizen event is to hold small events attended by the owners and operators of a process to make improvements to that process which are within the scope of the process participants
- "Kaizen strategy is the single most important concept in Japanese management – the key to Japanese competitive success"

CHAPTER-5

THE PROCESS OF INDUSTRIALIZATION IN PAKISTAN

The Process of Industrialization 1947-1958: Very soon after independence, Pakistan's government acknowledged the precarious nature of the base of Pakistan's industry and identified areas and strategies that would need to be given urgent consideration. In its Statement of Industrial Policy of April 1948, it stated.

The most striking feature of Pakistan's present industry is the marked contrast between its vast natural resources and its extreme industrial backwardness. A country producing nearly 75 percent of the world's production of jute did not posses a single jute mill. There was an annual production of over 15 lacs [1.5million] bales of good quality cotton, but very few textile mills to utilize it. There was abundant production of hides and skins, wool, sugarcane and tobacco- to name a few of the important products- but Pakistan's considerable resources in minerals, petroleum and power remain as yet untapped. In laying down any policy of industrialization, note had to be taken of these deficiencies and handicaps, and a concerted effort made to overcome them. On the basis of this assessment, the government felt that Pakistan would need to seek, in the first place, to manufacture in its own country, the products of its raw materials in particular jute, cotton, hides and skins, etc. For which there was an assured market whether at home or abroad. At the same time, to meet the requirements of the home market, efforts would be made to consumer-goods industries for which Pakistan is at present dependent on outside sources.

The result of these objectives was that between 1949 and 1958 the growth rate of industry in Pakistan was amongst the most rapid for any country in the world. In United Pakistan, large-scale manufacturing grew at a phenomenal 23.6 percent between 1949 and 1954, and afterwards, by the still very impressive 9.3 per cent up to 1960. The investment rate more than doubled during the 1950s even though there was no increase in per capita income in that decade- in United Pakistan, GNP per capita grew on average by only 0.2

per cent between 1949 and 1954, and at zero percent in the next five years. In West Pakistan the growth rates were even more impressive, with large-scale manufacturing growing at 19.1 percent between 1949 and 1958 and per capita income increasing by 6.97 per cent in the same period. The main feature of the 1950s was the establishment and expansion of the large-scale manufacturing sector, which ranged from a high annual growth rate of 28.7 per cent in 1953/4 to as low (still high) of 4.9 per cent in 1957/8. Although starting from anon-existing base, and against all odds, Pakistan achieved very impressive rates of growth in its first decade (see Table 5.1).

With industry growing at high rates, there was reverse picture in the agricultural sector, which only once in this period achieved double-digit growth rates. This is also the period when agriculture suffered negative growth rates in some years. Agriculture stagnated to the extent that its growth was not even enough to cope with the growth in population, resulting in a fall in per capita consumption of food grain and the need to import food as well. In the mid 1950s as much as 65 percent of the civilian labour force was employed in agriculture and more than 75per cent of the population lived in rural areas. Hence, a low growth rate in agriculture meant that the potential market for the growing manufacturing sector was also stagnant, restricting further growth in the manufacturing sector. Agriculture was the sick man of economic development in Pakistan during the 1950s. A stagnant agriculture in a predominantly

Table5.1 Annual growth rate, 1950-1958 factor cost (% per annum)

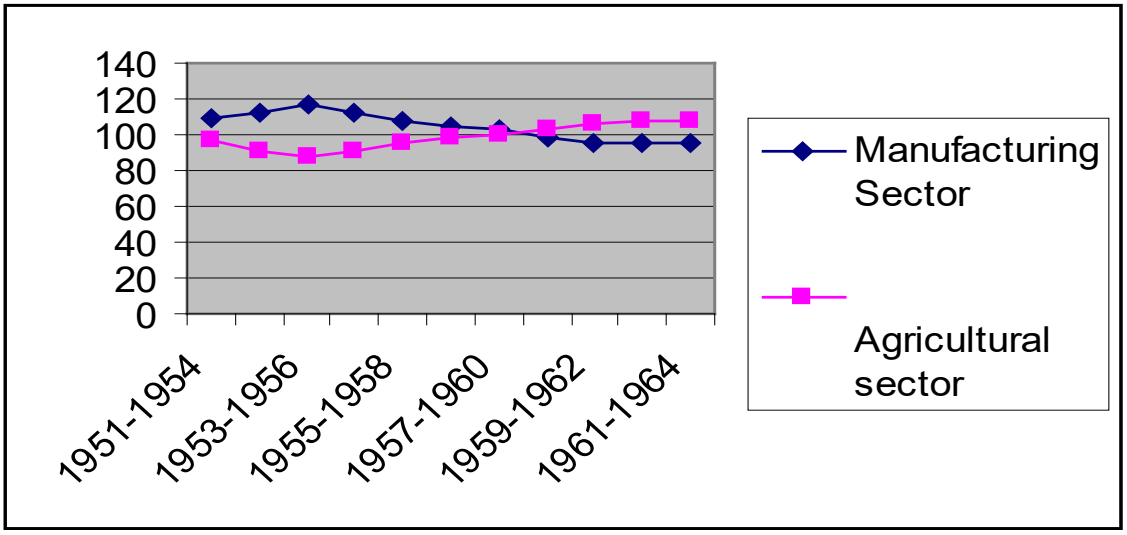
Year	Agriculture	Large scale	Small scale	Whole sale& retail trade	Banking and insurance	GDP
1950/1	2.6	23.5	2.3	6.1	9.1	3.9
1951/2	-9.1	18.7	2.4	0.5	10	-1.8
1952/3	0.2	23.6	2.2	0.6	7.6	1.7
1953/4	13.6	28.7	2.3	6.3	8.5	9.4
1954/5	-0.8	24.1	2.3	5.5	2.6	3.4

1955/6	2.1	17.5	2.3	2.3	21.5	3.4
1956/7	2.3	8.1	2.3	3.2	22.9	3
1957/8	1.9	4.9	2.2	3.4	-1.7	2.6

Source: Government of Pakistan, Pakistan Economic Survey, 1984-85, Islamabad, 1985.

A stagnant agriculture in a predominantly agricultural economy meant a slowly growing economy. As we will show, the policies that were adopted in this period had a marked anti agricultural bias and the terms of trade between agriculture and industry were heavily biased against the former (see Figure-5.1) In fact, economic policy in the 1950s was to transfer income away from agriculture and from urban consumers, and to the new and rapidly growing manufacturing sector. Let us now turn to some of the tools and mechanisms which influenced investment and economic development in the first decade.

Figure-5.1 Domestic terms of trade for West Pakistan (Three years moving averages) 1951-1964



Source: Government of Pakistan, Pakistan Economic Survey, 1984-85, Islamabad, 1985.

The Impact of the Exchange Rates: Before the partition of subcontinent, the area constituting Pakistan was the breadbasket of India. The areas that became Pakistan were net importers of industrial goods from India and produces agricultural commodities, such as cotton, wheat, and jute. After independence, a customs union between India and Pakistan existed through the use of a common currency, but this was broken up in 1949. The same year government of Pakistan took one of its most important decisions, which had a vital impact on industrial development in the country.

In September 1949, the pound sterling was devalued, as were the currencies of numerous countries including that of India, Pakistan's main trading partner. Announced to the world that Pakistan was an independent country and did not mimic Indian economic policy. Other reasons were to continue to well raw jute to India (since Pakistan had no jute mills) at a now higher price, and to be able to import machinery and capital goods at a cheaper price. However, India punished the newly-born Pakistan by suspending trade between the two countries and refusing to accept Pakistan's independent stand. The Pakistani government imposed some controls on imports and exports in order to manage trade with countries that had devalued, as their imports were now cheaper. By not devaluing, the interests of Pakistan's exportable raw materials remained protected.

Pakistan was a monopoly exporter of jute, mainly to India and hence gambled on the presumption that by not devaluing it would reap additional profits from the higher price of jute. In 1948/9, India imported 55.8 per cent of Pakistan's exports, but all such exports were suspended in September 1949. The consequences of the Indian retaliation could have been quite catastrophic for Pakistan's economy: either Pakistan would have been forced to devalue, as was the motive for India's trade suspension, or Pakistan would need to hurriedly find alternative markets for its exports. Neither decision was easy. However Pakistan's luck changed for the better, as it has done on so many occasions, with positive effects for the economy.

The Korean War broke out in June 1950, and there was a fear that it might trigger off World War Three. Countries began stockpiling and storing raw materials and as demand

for them increased, so did their price. Jute and cotton were both in heavy demand, and Pakistan was able to make spectacular profits on its exports. Not only that , but demand was worldwide- Pakistan's traditional markets, India and Britain, now no longer reigned supreme as Pakistan was able to diversify in to new areas. Import controls that had been imposed only a few months before were again liberalized after the Korean War began. India also recognized Pakistan's new exchange rate, and trade was resumed after a suspension of eighteen months, but on a smaller scale than earlier. The decision not to devalue had paid off.

The Korean boom lasted from 1950 to 1952, but by mid-1951 world prices of raw materials began to decline and export earnings also saw a decrease. There were clear signs that the market was heading for a recession, but Pakistan was too slow to react, and policies continued as if nothing had changed. Since Pakistan's exchange rate was still high compared to its trading partners which had devalued in 1949. In 1952 jute cotton prices fell, as did export earnings and Pakistan was facing a serious balance of payments crisis and sharply falling of reserves. As it did in 1949, the government decided not to devalue and instead imposed very strict exchange controls and a set of physical controls on imports and exports. Tariffs were maintained, but they were not the major determinant of prices of import composition. Export taxes on jute and cotton were raised during the Korean War, and were lowered somewhat following the fall in prices. Exporters of such commodities received low rupee prices for goods both because the currency was devalued and because of the export taxes'. The probable reason for not devaluing in 1952, despite deterioration in the balance of payments was that capital goods were now needed to start the process of industrialization and devaluation would have raised their prices. Hence, the government resorted to the imposition of controls instead.

The decision not to devalue may, with hindsight, have been the critical decision that started Pakistan on the road to industrial and economic development. Since industry was non–existent in the earlier years, international trade was the main sector where large profits could have been made? The Korean War export boom resulted in traders and merchants amassing considerable amounts of wealth. Trading was much more profitable

that industry during the Korean boom. The favourable condition for the conversion of merchant capital was the result of another important economic event related to the Korean War: the collapsed of prices of raw materials after the end of the war. With controls imposed on imports, especially on consumer goods, 'the prices of these goods increased sharply in the domestic market which changed the terms of trade in favour of industry and against agriculture. This led to a sharp increase in the profitability of the industrial sector, and in comparison with the other sectors including trading; industry now became the most attractive sector.' Hence, traders with their amassed wealth converted merchant capital into industrial capital and so began the process of industrialization in Pakistan. Although one study has argued that it was practical agencies rather than conscious policy provided the initial diversion of investible resources towards industry though government policy was not neutral, however, but decidedly favoured industrialization, particularly the decision not to devalue.

The Trade Policy Regime: Once the industrialization process had begun after merchant capital moved into industry, after the collapse of the Korean boom in 1952, when falling export prices caused the balance of payments position to deteriorate, controls and restrictions were imposed on trade. Having a substantial impact on the ensuing industrialization process. From 1953-64 virtually all imports into Pakistan were regulated by some form of quantitative controls. The trade policy adopted by Pakistan had three major aspects:

- Overvaluation of the rupee relative to other countries,
- Use of quantitative controls on imports to regulate the level and composition of imported goods and
- A highly differentiated structure of tariffs on imports, and export taxes on the two principal agricultural exports: jute and cotton.

The government began to favour tariff protection as a means to promote industrialization. It wanted a cascaded tariff structure, with lower tariffs on intermediate and capital goods, tight controls over the import of luxuries, controls on other consumer goods, and easier access to capital goods and industrial raw materials. Table 5.2 shows the cascading nature

of tariff imposed in the late 1950s. However, despite the high prevalence of tariff, the structure played some role in directing resources in Pakistan. The principal determinant of the structure of imports and the set of domestic relative prices was the import licensing system. Licensing was used explicitly as a protective or exchange –saving device.

Import substitution progressed easily and very rapidly in those industries that had the highest protection, i.e. consumption goods, and those that had cheap and ready access to domestically produce, primarily agricultural, raw materials, such as cotton, jute, and leather. Another reason why consumer goods grew is that 'the size of the domestic market at partition and well into the 1950s was decidedly larger for consumer goods than for most intermediate and investment related goods. These were also those industries in which Indian imports made a significant contribution to Pakistan's domestic market. There is a tendency for some observers to suggest that much of what happened in the industrial and economic sphere in Pakistan in the 1950s was erratic and not thought through. However, as we have shown above, even the decision not to devalue seems to have had a clear logic behind it, although good luck did endorse that decision further. Similarly, the import licensing scheme also seemed to be a thought-out policy measure which affected relative prices and hence patterns of industrialization The pattern of investment and import substitution influenced the decisions of the licensing authorities about what sorts of imports and, hence, what sort of industrial development should take place. The licensing system was largely a mirror of the decisions to invest in different industries.

Table 5.2: Average rate of duty on imported goods by types of commodity, 1955-1964

Description	1955/6	1956/7	1957/8	1958/9	159/60	1960/1	1961/1	1962/3	1963/4
Consumption Goods									
Essentials	35	35	35	35	35	55	55	55	56
Semi luxuries	54	99	99	99	99	111	111	111	116
Luxuries	99	99	99	99	99	140	140	140	142

Raw Material for Consumption Goods									
Un-Processed	26	26	26	26	26	27	27	27	30
Processed	43	43	43	43	43	50	50	48	51
Un processed	23	23	23	23	23	28	28	28	31
Processed	38	38	38	38	38	40	40	39	42
Consumer Durable	71	71	71	71	81	85	85	85	89

Source: Lewis, Stephen, Economic policy and Industrial growth in Pakistan, George Allen & Unwin Ltd London, 1969.

The End Result: Since almost all capital goods and most non-agricultural industrial goods were imported, the state played a major role in determining the nature and structure of industry through the licensing system and tariff structure, and through the incentives it provided. The impacts of these measures on trade are as follows:

- The exceedingly rapid growth of modern manufacturing during the 1950s, amid a relatively stagnant economy, particularly in agriculture, was reflected in the decline of imports of some manufactured goods. The rise of those imports related to investment activity, the emergence of certain manufactured exports, the conversion from an export surplus to an import surplus in food grains, and the decline of agricultural exports, that were used as raw materials by domestic industries. In the 1960s the changes in the structure of production were somewhat smaller, and in different directions due to the increased flows of aid-financed imports and the more rapid growth of such sectors as agriculture.

- The significant increase in exports was from the newly established manufacturing industries, mainly jute and cotton textiles, which replaced competing imports by the mid-1950s. Towards the end of the 1950s, Pakistan was in a position to produce export surpluses as well. In many ways, these results indicate the success of the first

phase of the import substituting industrialization policy of the 1950s, where the emphasis was on consumer goods rather than on intermediate or capital goods. This strategy also rested on the government's preference for investment in those areas where foreign exchange could be saved regardless of cost, and its desire to produce domestically almost anything that technologically could be produced there.

- The success of the import substituting strategy can be gauged by the fact that almost all the growth that took place in manufacturing between 1951 and 1955, and hence in overall growth, was due to import substitution. The increase in domestic demand was not a cause of growth up to 1954/5 and was only of consequence after 1960. The complete dominance of import substitution in the first half of the decade was reduced a little in the second half, but still accounted for over 20 per cent of growth of manufacturing output, with the newly established manufactured exports responsible for about 25 per cent. Moreover, the trend in the first phase of import substituting industrialization was also showing a shift, as consumer goods industries, which accounted for about 70 per cent of manufacturing value added in 1954/5, contributed less than half of the growth after that period (Table 5.3).

Table 5.3: Sources of growth in manufacturing value added, 1951-1964 (% distribution in three periods)

Percentage of total growth	Domestic demand (1)	Export growth (2)	Import substitution (3)	Value added coefficient (4)	Total change (5)	Annual rate of growth of value added
1951/2-1954/5						
Consumptions goods	-6.2	0.2	85.0	-	78.9	43.0
Intermediate goods	0.8	0.7	12.6	-	14.1	28.0
Investment and related	0.1	0.0	6.8		7.0	16.8
All industries	-5.3	0.9	104.4		100.0	38.8
1954/5-1959/60						
Consumption goods	31.2	10.8	16.5	-5.8	52.6	15.6
Intermediate goods	8.7	15.3	2.2	0.5	26.7	27.0
Investment and related goods	12.5	0.2	5.6	2.4	20.7	28.0
All industries	52.4	26.3	24.3	-2.9	100.0	38.8
1959/60-1963/4						
Consumption goods	45.1	-	-1.1	3.4	47.4	12.8
Intermediate goods	10.8	6.1	6.0	-3.7	19.2	13.7
Investment and related	30.6	0.4	-2.7	5.2	33.5	26.0
All industries	86.5	6.5	2.2	4.9	100.1	38.8

Source: Lewis, Stephen, *Economic Policy and Industrial Growth in Pakistan,* George Alien & Unwin Ltd, London, 1969, p.49.

While Pakistan's impressive growth rate in the 1950s was due to the fact that the country started with a low base in the first place, the other important factor was that, due to the restrictive measures enforced on the economy, profit rates in industry were very high. The government had very openly encouraged private sector initiative in economic growth, an encouragement to which the private sector responded enthusiastically. The

annual returns on investment ranged from 50 to 100 per cent in the early 1950s, but dropped to between 20 and 50 per cent in the latter part of the decade. There were strong economic incentives to becoming an industrial entrepreneur, but while 'high profits were strongly conducive to industrial investment perhaps even more important were the strong disincentives to alternative activities. With the end of the Korean boom, international trade, and especially importing, suddenly became unattractive. Therefore industrial development became a natural choice. Thus it was the lure of extraordinary profits and a lack of good alternatives that induced the process of industrialization.

The pattern of industrial development resulted, inevitably in a high degree of concentration. Most of the nascent industrialists were traders who had made money in the Korean boom and were already well established and well-off. However, they had better possibilities for making more money and amassing further wealth given the high-profit, near-monopoly markets that were developing. In 1950 there were 3,000 individual firms in Pakistan, but the concentration of wealth was so high that only seven individuals, families, or foreign corporations constituted 25 per cent of all private industrial assets in United Pakistan. Twenty-four units constituted nearly 50 per cent of all private industrial assets. While the development of the economy and of industry was private sector oriented, the institutions of the state did play an important role too. In the field of credit, the government was particularly significant. The Pakistan Industrial Credit and Investment Corporation (PICIC) and the Pakistan Industrial Finance Corporation (PIFCO) provided funds to the larger, more established firms which had adequate security and a high profit rate. PICIC provided nearly half of all its loans to a tiny group of leading industrialists. However, the role of both institutions was more important after the 1960s, and the links they made with industry show, how the network of industry and finance in the private and public sector interacted. The institution that played a more important role at this time was the Pakistan Industrial Development Corporation (PIDC), which, pioneered in industries and areas which were neglected by private investors during the early period of industrialization and fulfilled an extremely useful function in supplementing private enterprise.

Although East Pakistan seceded from United Pakistan in 1971, the seeds for this process were sown long before. While Ayub Khan's decade is held responsible for fostering the economic decay and underdevelopment of East Pakistan, leading to the formation of Bangladesh, this is only part of the picture. In fact, it would be very unfair to hold the policies of Ayub's regime solely responsible for Pakistan's break-up, as many observers do. Even in the 1950s, strong biases in economic development had emerged, which were blatantly tilted against the eastern wing. For example, state institutions in the 1950s, such as PICIC and PIFCO, concentrated on industries in West Pakistan, while in 1958 about 66 per cent of the government's investment through PIDC was based in West Pakistan, which also received 62 per cent of foreign loans compared to the eastern wing's 38 per cent. The cessation of trade between India and Pakistan in 1949 also had greater negative consequences for East Pakistan, as about 50 per cent of West Pakistan's trade and 80 per cent of East Pakistan's was with India. Table 5.4 shows that, in fact, West Pakistan had a continuous deficit in trade throughout the 1950s, while East Pakistan had a consistent surplus. The overall trade figures for United Pakistan were in surplus due to East Pakistan's contribution, mainly by exporting jute. This evidence shows very clearly that East Pakistan was instrumental in supporting the process of industrialization in (West) Pakistan. West Pakistan's development was built on a transfer of resources from the eastern wing, which got very little in return, and this process was initiated as early as the late 1940s and early 1950s.

Table 5.4: Balance of Payments in Trade, 1949-1958

Balance of payments of trade (Rs m)	1949/50 to 1950/1	1950/1 to 1951/2	1951/2 to 1952/3	1952/3 to 1953/4	1953/4 to 1954/5	1954/5 to 1955/6	1955/6 to 1956/7	1956/7 1957/8
East Pakistan								
Exports	683	1,211	1,087	643	645	732	1,042	910
Imports	372	453	764	367	294	320	360	819
Balance of Payments	311	758	323	276	351	412	682	91
West Pakistan								
Exports	535	1,343	922	867	641	491	742	698
Imports	912	1,167	1,473	1,017	824	783	965	1,516
Balance of Payments	-377	176	-551	-150	-183	-292	-223	-818
Pakistan								
Exports	1,218	2,554	2,009	1,510	1,286	1,223	1,784	1,608
Imports	1,284	1,620	2,237	1,384	1,118	1,103	1,325	2,335
Balance of Payments	-66	934	-228	126	168	120	459	-727

Source: Ahmed, Viqar and Rashid Amjad, *the Management of Pakistan's Economy, 1947-82,* Oxford University Press, Karachi, 1984, p. 65.

Just as East Pakistan was neglected, so was the agricultural sector: Table 6.2 shows how the terms of trade developed against agriculture and in favour of industry in the 1950s.The initial accumulation of industrial capital had taken place as a result of the large tribute paid by the agricultural sector to the industrial sector and by the urban consumers. The former had supplied agricultural raw materials at cheap prices and had paid high prices for manufactured consumer goods in return. The devaluation in 1955 was meant to

redress the balance against agricultural exports and occurred simultaneously with a shift in giving some priority to agriculture.

Despite some negative consequences of the economic policies pursued by the governments in Pakistan in the first decade, it would be fair to say that they initiated an era of industrial growth and development which laid the foundation for the “Decade of Development” between 1958 and 1968. On the basis of the criteria that were considered important at that time. In the 1950s, when import substituting industrialization was the received wisdom - Pakistan did very well for itself.

The Decade of Development 1958-1968: There is little disagreement over the fact that the growth rates in agriculture, large-scale manufacturing, and GDP showed quite astonishing trends over the ten years between 1958 and 1968. The disagreements exist over the nature and consequences of those growth rates and over an interpretation of the economic policies that formed what the government of the time called the 'Decade of Development' and what its critics have very mildly termed the 'Controversial Sixties**.**
We will examine the nature of these developments in the course of this section after looking at the facts regarding growth rates, the policies pursued, and the consequences of those policies. The impressive performance of the main sectors of the economy can best be gauged from Table 5.5. The high growth rates in large-scale manufacturing continued in the first few years of the Ayub regime to a phenomenal 16.9 per cent. Even after 1965, growth rates in manufacturing remained above to 10 per cent. In industry, it seems that the previous trends maintained during the 1950s continued well into the 1960s. Agriculture presents a marked improvement in the 1960s compared with the dismal situation in the 1950s. The reasons for this growth were the recognition in the late 1950s that the excessive pro-industrial bias was affecting agriculture very negatively and that a redress was necessary. Some steps were taken, but it was the Green Revolution that was responsible for the very high growth rates of the late 1960s. The spurt in agricultural production of 1950s and 1960s was the main difference between Pakistan and other countries. In the first half of the 1960s, overall investment had risen to over 18 per cent of the GNP, and savings had doubled between 1949 and 1965.

Table 5.5 Annual growth rates, 1958-1970, at 1959/60 factor cost (% per annum)

Year"	Agriculture	Manufacturing		Banking and insurance	Public Administration & defence	Services	GDP
		Large scale	Small scale				
1958/9	4.0	5.6	2.3	1-2.9	9.8	4.0	5.5
1959/60	0.3	2.7	2.3	22.1	-2.7	3.8	0.9
1960/1	-0.2	20.3	2.9	10.0	1.3	4.7	4.9
1961/2	6.2	19.9	2.9	8.5	3.9	4.0	6.0
1962/3	5.2	15.7	2.9	11.5	2.8	4.2	7.2
1963/4	2.5	15.5	2.9	8.9	9.7	4.0	6.5
1964/5	5.2	13.0	2:9	37.9	17.8	7.0	9.4
1965/6	0.5	10.8	2.9	10.9	56.5	1.1	7.6
1966/7	5.5	6.7	2.9	12.7	-14.4	4.3	3.1
1967/8	11.7	7.6	2.9	11.8	-2.5	4.0	6.8
1968/9	4.5	10.6	2.9	8.5	5.0	3.9	6.5
4969/70	9.5 '	13.9	3.0	19.4	3.6	6.8	9.8
1958-1964	(ave.) 3.0	13.3	2.7	12.3	4.1	4.1	5.2
1965-1970	(ave.) 6.2	10.4	2.9	16.9	11.0	4.5	7.2

Source: Government of Pakistan, *Pakistan Economic Survey, 1984-85,* Islamabad, 1985.

Trade Policy Directing Industrialization: Although there was a great deal of continuity between the 1950s and 1960s, hence the similar levels of growth and development, some critical steps were taken, especially in the trade and exchange rate policies that were the prime movers of the 1950s. The new regime of Ayub Khan disbanded many of the controls that had been imposed following the post-Korean War recession in 1952. In 1959 there was a fundamental reordering and change in the method of directing industrialization through trade policy, and a series of liberal policies were introduced which remained in effect till 1965.

The main emphasis of the new trade policy in 1959 shifted away from direct controls and towards indirect controls on imports and on domestic prices of other goods. A number of

measures were taken in import licensing that made market forces more important in determining the commodity composition of imports and the distribution of ownerships of import licenses. It was the Export Bonus Scheme (EBS) or the Bonus Voucher Scheme, launched in 1959, that was considered to be the key to the import liberalization process in Pakistan. The scheme allowed a free market in the bonus vouchers for certain commodities. In addition, the earlier, closed and selective import licensing scheme of the 1950s, which was based on the importer's ability to import during the Korean boom of 1950-2, was replaced in 1961 by the Open General License (OGL), which allowed newcomers to enter the trading sector. A large amount of foreign exchange was allocated to the OGL, and given the buoyant nature of trade and of the economy, the new traders made substantial profits and gains from possessing import licenses. The most 'market friendly' change was the introduction of the 'Free List', which permitted the import of certain goods without any license. The free list was extended over time from four items to fifty in 1964. The tariff structure continued to be used as a signaling device, as it had been in the 1950s, but as Table 5.2 shows the differentials in the tariff rate structure with the rates for consumer goods rising much more than for other goods. The bias against producing machinery and equipment locally continued, as the import duty on these items was still the lowest, thus making it easier to import these goods rather than produce them at home.

The main reason why the government could be so generous in its import policy in the first half of the 1960s was critically linked to the availability of foreign aid, which increased from 2.5 per cent of GNP in the mid-1950s to 7 per cent of GNP in the mid-1960s. In fact, according to an important Asian Development Bank study, the import liberalization which took place during the first half of the 1960s would have been impossible without this large increase in aid. In 1965 the Free List suffered serious setbacks as foreign aid was curtailed, and due to the resulting foreign exchange squeeze, the import liberalization policies were abandoned and many new import controls were introduced. As long as foreign exchange resources were available, largely through aid, the government was eager to follow a liberal import regime.

The government's import licensing scheme was supposed to encourage the private sector to invest, just as the EBS was a means for exporters to acquire additional foreign exchange by exporting more. The exchange rate had been overvalued in the 1950s (and later as well), but the EBS compensated for that and boosted exports, especially of manufactured goods. The scheme transferred a subsidy to exports, and the exports of raw jute fell from 60 per cent of total exports in 1958 to 20 per cent in 1968/9, while the exports of cotton and jute textiles increased from 8.3 to 35 per cent in this period, and the exports of other manufactures increased tenfold from 2 to 20 per cent. The BBS also had a positive impact on imports, making raw materials and machinery imports easier and cheaper. The Export Bonus Scheme was considered to be an innovative device helping both import substituting and export growth. In 1965 Pakistan's manufactured exports were greater than those of South Korea, Turkey, Thailand, and Indonesia combined. The main feature of the foreign exchange regime in the 1960s was that, with an overvalued exchange rate, it became cheaper to import industrial machinery, which resulted in low prices for agricultural inputs, while the EBS transferred subsidies to manufactured exports.

The impact of the EBS and the import licensing and liberalization strategy on industrial development was considered to be 'dramatic' by some observers. The Asian Development Bank study shows that large-scale manufacturing growth increased from 8 per cent per annum between 1955 and 1960, to 17 per cent between 1960 and 1965 in the Second Five-Year Plan. The controls re-imposed following the foreign exchange and aid curtailment caused this growth to fall to about 10 per cent in the second half of the 1960s. An interesting outcome of these trade policies, is sharp contrast to the 1950s none of the growth in industry during the period of the Second Five-Year Plan was due to import substitution - a remarkable transformation, indeed. Instead, domestic demand and absorption were the dominant factors. As foreign aid had increased, so had imports, and even though manufacturing output grew at impressive rates due to the import policies and foreign resources, imports increased at a faster pace. Both industrial production and investment responded well to the liberalization of imports. The nature of import substituting industrialization had also changed over the years, shifting away from almost

wholly the consumer goods industry to intermediate and capital goods. Table 5.6 shows the differences in the three sectors in the 1960s, and also shows that the growth rate was much higher in the first half of the decade than in the second half. The most interesting observation that can be made from Table 5.6 is that the growth in investment goods was by far the fastest of all sectors during the early 1960s. The reason, according to the Asian Bank, was that since this sector was most dependent on imported raw materials, it benefited the most from import liberalization. Another reason why import substitution slowed down was the EBS, which encouraged the export of manufactured goods. The share of exports in total consumer goods output rose from 15 per cent in 1959/60 to 45 per cent in 1969/70. The impact of the EBS on exports that it 'compensated for the overvaluation of the domestic currency by introducing a series of multiple exchange rates. Depreciated in relation to the official exchange rate so that the profitability of exporting was brought more in line with the incentives for sales in the domestic market'.

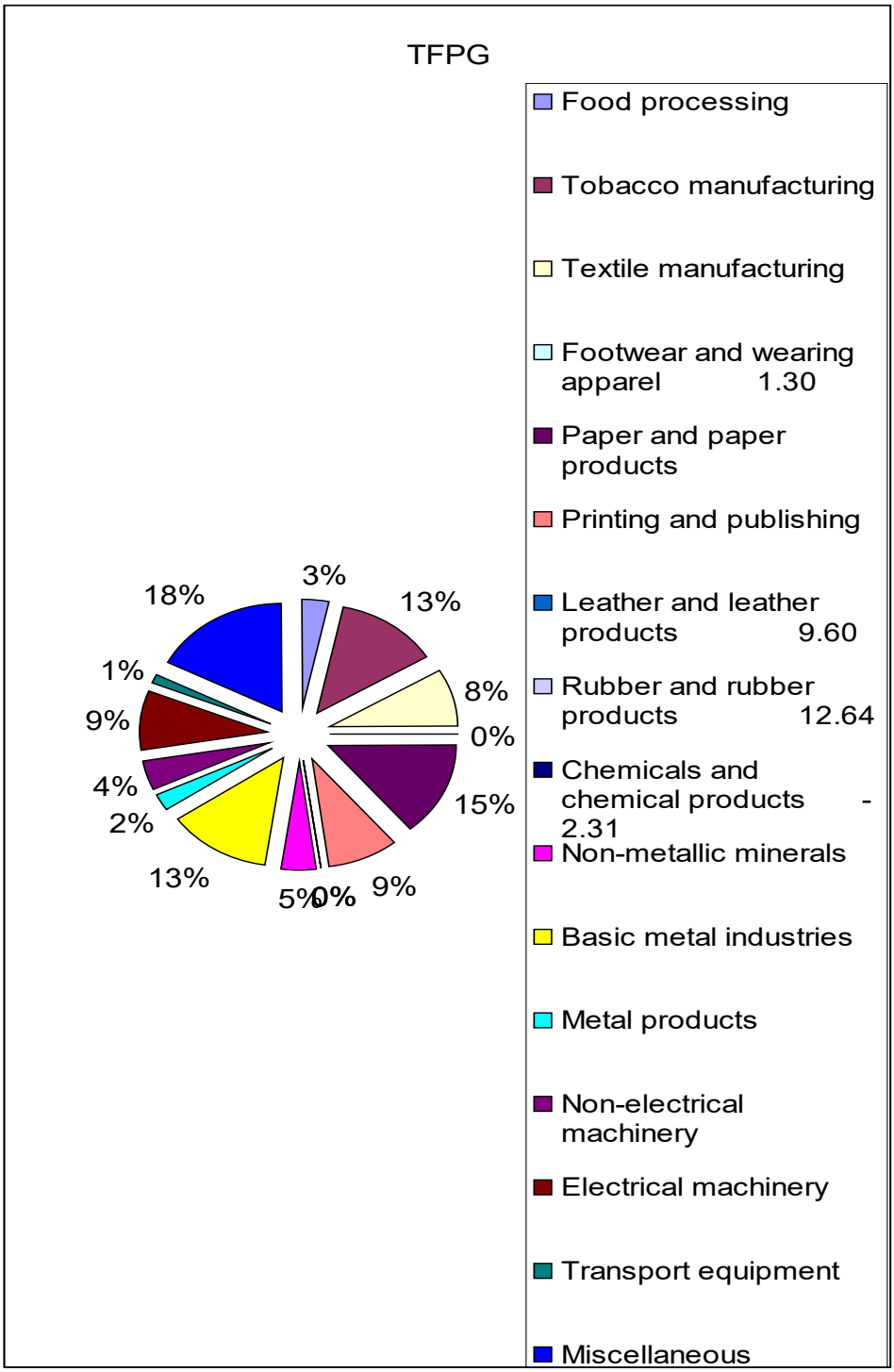
A productivity growth rate, especially total factor productivity growth (TFPG), is one measure, which reveals the efficiency of factor use. The growth rates in total factor productivity shown in Figure 5.2 and Figure5.3 reveal that Pakistan's growth rate of 5.06 per cent was far higher than many comparable countries, indicating both technological dynamism and dynamic allocative efficiency in a comparative perspective. This evidence only underlines the fact that growth in manufacturing was higher than in most other countries in the 1960s, and was highly efficient, as it came about due to improvements in the amount of output per unit input.

Table 5.6 Growth Rate of Manufacturing Units, 1960-1970 (% per annum)

Industries	1960-1965	1965-1970	1960-1970
Total manufacturing	16.0	10.0	12.0
Consumer goods Food	10.6 9.2	9.0 11.3	10.0 11.0
Beverages Tobacco	16.5 17.3	6.1 10.4	11.0 15.0
Textile	5.9	8.7	7.0
Footwear	8.1	4.6	6.0
Woodwork	12.7	5.4	9.0
Furniture	17.0	4.0	11.0
Printing Miscellaneous	9.4 19.3	8.1 7.0	9.0, 13.0
Intermediate goods	12.0, 7.2, 15.7	8.0 ,11.2, 9.6	9.0, 8.0, 12.0
Rubber	17.2	8.5	13.0
Chemicals	20.3	15.9	18.0
Petroleum	49.3	7.4	27.0
Investment goods	20.0, 11.5	8.0, 8.0	13.0,9.0
Non-metals			
Basic metals	12.0	9.8	10.0
Metal products Machinery	21.8, 23.4 ,24.8	7.0, 7.0, 5.7 ,7.5	14.0, 15.0, 16.0
Electrical machinery	26.9		19.0
Transport equipment			

Source: Ahmed, Meekal, and Sayeed, Asad, 'Political Alignments, the State and Industrial Policy in Pakistan: A Comparison of Performance in the 1960s and 1980s', unpublished Ph.D. thesis, University of Cambridge, 1995, p. 54.

Figure-5.2 Growth rate of total factor productivity, 1960-1970

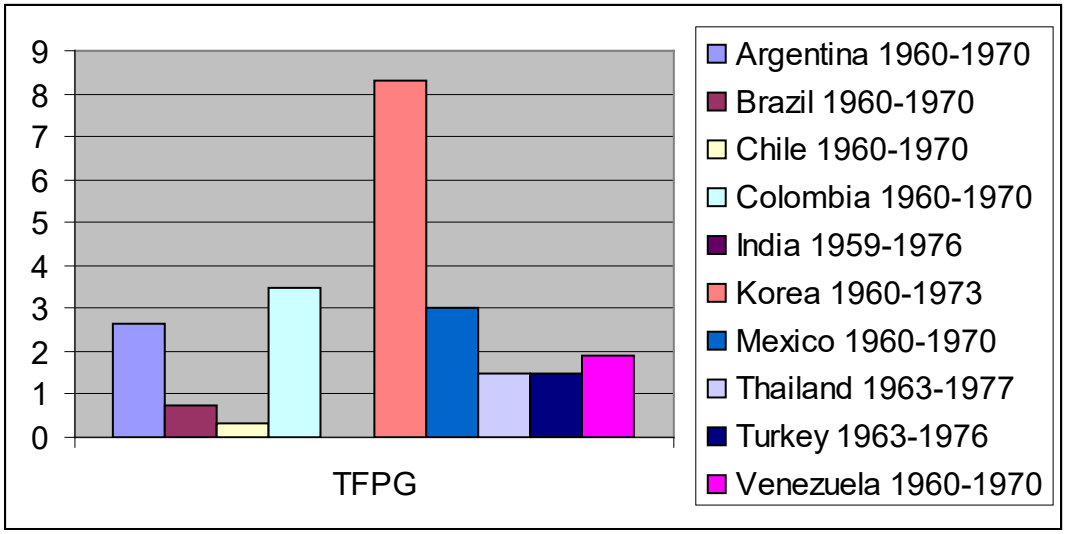


Source: Sayeed, Asad, 'Political Alignments, the State and Industrial Policy in Pakistan: A Comparison of Performance in the 1960s and 1980s', unpublished Ph.D. thesis, University of Cambridge, 1995, p. 56.

Foreign Aid: Foreign aid contributed significantly to Pakistan's growth, from the late 1950s; without it, the rapid increase in development in the 1960s could not have been possible. In the mid-1960s 'the entire social and economic system that had been built up, was heavily supported by and sustained through foreign assistance. The boom in private industrial investment in the first half of the sixties and its subsequent slowing down lies principally in the change in foreign aid inflows to the industrial sector in the sixties.

The entire economic system which operated in Pakistan in the sixties was quite different from that suggested by earlier writers. Its bore little resemblance to classical nineteenth-century capitalism (portrayed by writers like Papanek). On the other hand, the system did not fail because the capitalist class were no longer prepared to 'play the game' or had lost the desire to invest. The system which operated in Pakistan came very close to being what we can term a 'Foreign Aid Dependent Regime' in which the mechanics of industrial growth were in one way or another made dependent on foreign aid inflows. Once these aid flows slowed down, the system, not being able to replace foreign aid with other forms of external finance like direct foreign investment, and without the peculiar boost to profitability associated with the local system for dispensing aid, found it difficult to sustain the earlier growth it had generated. Pakistan's growth in the 1960s, and the policies pursued (import liberalization, for example), were contingent upon the country receiving a substantial amount of foreign aid. Once the aid stopped, so did growth in the economy. And while foreign inflows mattered, the (unwritten) conditions to the aid made the role of the private sector paramount. Papanek, a firm believer in the leading role of capitalism and the private sector, argues that for ideological reasons, the United States, Germany, the World Bank, and others have been strong advocates of private enterprise. A country that caters to this preference is bound to profit. He considers Pakistan's industrial experience from the 1950s to the mid-1960s to be a success story of private enterprise, but the incentives that foreign aid generated were critical. Foreign aid played a crucial role in the creation of favourable conditions and had a direct impact on the private sector.

Figure-5.3: Total factor productivity in manufacturing selected countries



Source: Sayeed, Asad, 'Political Alignments, the State and Industrial Policy in Pakistan: A Comparison of Performance in the 1960s and 1980s, unpublished Ph.D. thesis, University of Cambridge, 1995, p. 56.

Private Sector: Thus, foreign aid in association with the private sector was the main instrument in Pakistan's economic growth in the 1960s. Interestingly enough, there was also an explanation of the economic development model of the 1960s which not only rested its premise on the leading role of the private sector, but also justified increasing inequalities. This was the Doctrine of Functional Inequality.

The concept of Functional Inequality rather eloquently was part of Ayub Khan's Martial Law government's policy, and was the central pillar of the advice given to the Pakistan government by the Harvard Advisory Group. In simple terms the doctrine suggested that resources should be directed towards the industrial sector which has a higher propensity to save, and that agriculture and wages should bear the brunt of this transfer. The idea

was that profits in the industrial sector should be raised giving the push towards growth which will result in automatically positive distributional consequences as development proceeds.

Essentially this doctrine propagated the pursuit of what Papanek calls 'the social utility of greed. The outcome was the concentration of wealth and income in the industrial sector. A dominant small group of monopoly houses had begun to emerge in the 1950s in the industrial sector, a trend which was accentuated in the 1960s. In 1970 there were 44 monopoly houses, which controlled about 77 per cent of gross fixed assets of all manufacturing companies listed on the Karachi Stock Exchange. These firms controlled about 35 per cent of all assets of the entire large-scale manufacturing sector and at the same time had close links with the financial sector. Seven of the seventeen Pakistani banks were under the direct control of the monopoly houses, accounting for 60 per cent of total deposits and 50 per cent of loans and advances. They had an extended network of interlocking directorates, where the board of directors of one company sat on the board of directors of others. Moreover, there were strong links between private industry and government financial institutions: between 1958 and 1970, 65 per cent of total loans disbursed by PICIC went to thirty-seven monopoly houses, with the largest thirteen of these accounting for about 70 per cent of these loans. Dr. Mahbub-ul- Haq, a key supporter and architect of the Ayub government's Doctrine of Functional Inequality, revealed figures, as the Ayub regime was falling, of even greater concentration. He claimed that (the famous) twenty-two families controlled 66 per cent of industrial assets, 70 per cent of insurance, and 80 per cent of total banking assets.

White there was certainly economic concentration at one end of the wealth spectrum, there was also a general belief that income inequalities had increased during the 1960s and that there was no substantial increase in the level of real wages. The labour movement of 1968/9 was a major factor in the fall- of Ayub Khan's regime, as it was fuelled by the perception that the fruits of growth had not trickled down to sections of society other than the industrialists. The strategy of Functional Inequality also gave low priority to the social sectors such as education and health. After the cut in foreign aid in

1965, with foreign exchange down and defence spending up, the ensuing economic crisis between 1965 and 1967 was a key cause of Ayub Khan's downfall.

Table 5.7: Income distribution in Pakistan, 1963/4 and 1969/70

% of Households	% of 1963/4	Income 1969/70
0-10	2.3	3.2
10-20	4.1	4.8
20-30	5.0	5.6
30-60	6.1	6.6
Lowest 40%	17.5	20.2
40-50	7.1	7.4
50-60	8.4	8.6
60-70	9.8	10.0
70-80	11.9	11.8
Middle 40%	37.2	38.0
80-90	15.1	14.7
90-100	30.2	27.1
Highest 20%	45.3	41.8
Gini coefficient		
National	0.386	0.336
Rural	0.362	0.304
Urban	0.433	0.367

Source: Government of Pakistan, Pakistan Economic Survey, 1984-85, Islamabad, 1985.

Note: Income shares according to each decile of household have been estimated by fitting a (Lorenz) curve to the cumulative share of various income groups in total household and income derived from the Household Income and Expenditure Survey for the respective years.

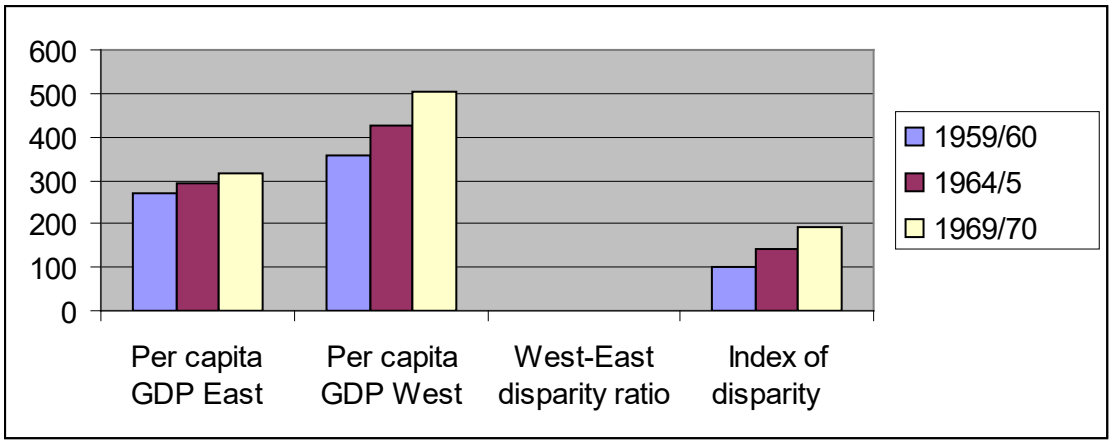
The sugar crisis of 1967/8 acted as a major trigger to a smoldering feeling pf discontent. Prices had risen by 15 per cent in 1965/6 and 10 per cent in 1966/7, adding fuel to the fire. Along with these factors, there was a popular feeling that inequality had increased. They argue that a major factor responsible for this feeling was the considerable increase

in the level of conspicuous consumption and wasteful expenditure on extravagant and lavish housing and other consumer durables by the richer classes in the country. Also, even if the actual level of income distribution had not worsened, the number of people living in abject poverty was still very significant and the display of conspicuous consumption in the face of this extreme poverty stirred considerable tension and finally led to an outbreak of unrest in the country.

Table- 5.8: Per Capita GDP in East & West Pakistan at 1959/1960 constant prices

Year	Per capita GDP East	Per capita GDP West	West-East disparity ratio	Index of disparity
1959/60	269	355	1.32	100
1964/5	293	426	1.45	141
1969/70	314	504	1.61	191

Figure-5.4: Per Capita GDP in East & West Pakistan at 1959/1960 constant prices

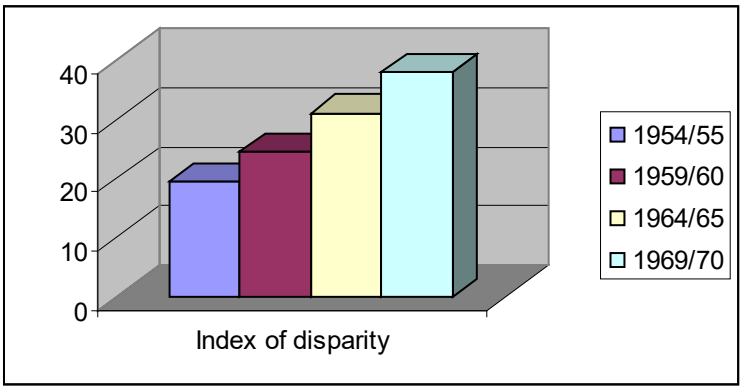


Source: Ahmed, Viqar and Rashid Amjad, The Management of Pakistan's Economy, 1947-82, Oxford University Press, Karachi, 1984, p. 89.

Table 5.7, which shows income inequality over the period, indicates that inequality actually decreased in the 1960s. While there are differences of opinion about the extent of inequality as a result of the policies pursued under Ayub, there is no denying the fact that

interregional disparity between West and East Pakistan did worsen. Even Gustav Papanek accepted the presence of high inequality between the two provinces, although he was able to justify this through an argument that endorsed the social use of inequality. Economists, especially in East Pakistan, were great critics of this policy and argued that all the growth or development that had taken-place was in West Pakistan and that there had been a transfer of resources from East to West (Tables 5.7 and figure- 5.4 give some indications of this phenomenon).

Figure- 5.5: Index of disparity in per capita income (West minus East divided by West)



Source: Ahmed, Viqar and Rashid Amjad, The Management of Pakistan's Economy, 1947-82, Oxford University Press, Karachi, 1984, p. 89

The level of per capita income in West Pakistan was only 10 per cent higher than in East Pakistan in 1949/50. This disparity had risen to over 30 per cent in 1964/5. The 'East Pakistanis complained that not only were they less well off at the time of Partition, but they also had been exploited by the West wing to provide resources for development in that richer province.

The Bhutto Years —1972-1977: (Bad Luck or Bad Management?): If there was any economic continuity between the first and second decades, it seems to have all but evaporated between the Ayub and Yahya regimes and that of Zulfiqar Ali Bhutto. In many ways, there was a clear break from the past, as more than half

of what was Pakistan from 1947 to 1971, had seceded to become an independent country, Bangladesh. Bhutto inherited a new Pakistan, defeated in war by India, and he came to power as Pakistan's first democratically elected leader. These differences from the past were sharp enough, but not only was the political set-up different, Bhutto's economic policies also made a sharp break from the pro-private sector strategies of the earlier years. Bhutto's regime has come in for a lot of criticism for 'destroying' the economy. Critics have argued that his strange concept of socialism was responsible for the dismal growth rates and for the highest rates of inflation ever seen in Pakistan. They have argued that it was poor policies and bad economics which caused the malaise. We examine these claims and also see how factors not in the control of the government affected economic performance. Our interpretation suggests that numerous 'bad luck' factors played a critical role in causing the economy to grow at below trend rates.

There is no conflict that the growth rates of the 1950s and 1960s were particularly impressive. It is also unlikely that those growth rates could have been sustained unless other institutional factors were also changed. Thus, it was inevitable, and more so after the independence of East Pakistan, that the rate of growth would decline. The performance of the Bhutto regime must be seen in the context of the circumstances in which he took over power and the problems that it inherited. Table 6.13 shows the annual growth rates for GDP and its constituents for 1971/2 to 1976/7. A comparison with the 1950s shows -that the growth rates for GDP overall were higher in this period than in the 1950s, although in manufacturing the 1950s had higher rates, while in agriculture the two periods were somewhat similar. For services, given the more developed economy in the 1970s, the growth rate was higher then, despite the fact that industry and agriculture, which form a close link with services, were not growing at the rates of the 1960s. Services grew by 5.7 per cent even when in 1974/5 growth rates in agriculture and manufacturing were both negative. In fact, in each of the three years from 1972 to 1975, the annual growth rate in all services considered together was actually above 10 per cent. Table 6.14 shows the rates of inflation over the Bhutto period.

By any standard, inflation was high in most years of the Bhutto government, especially compared with the very low 3.83 per cent average for the 1960s.

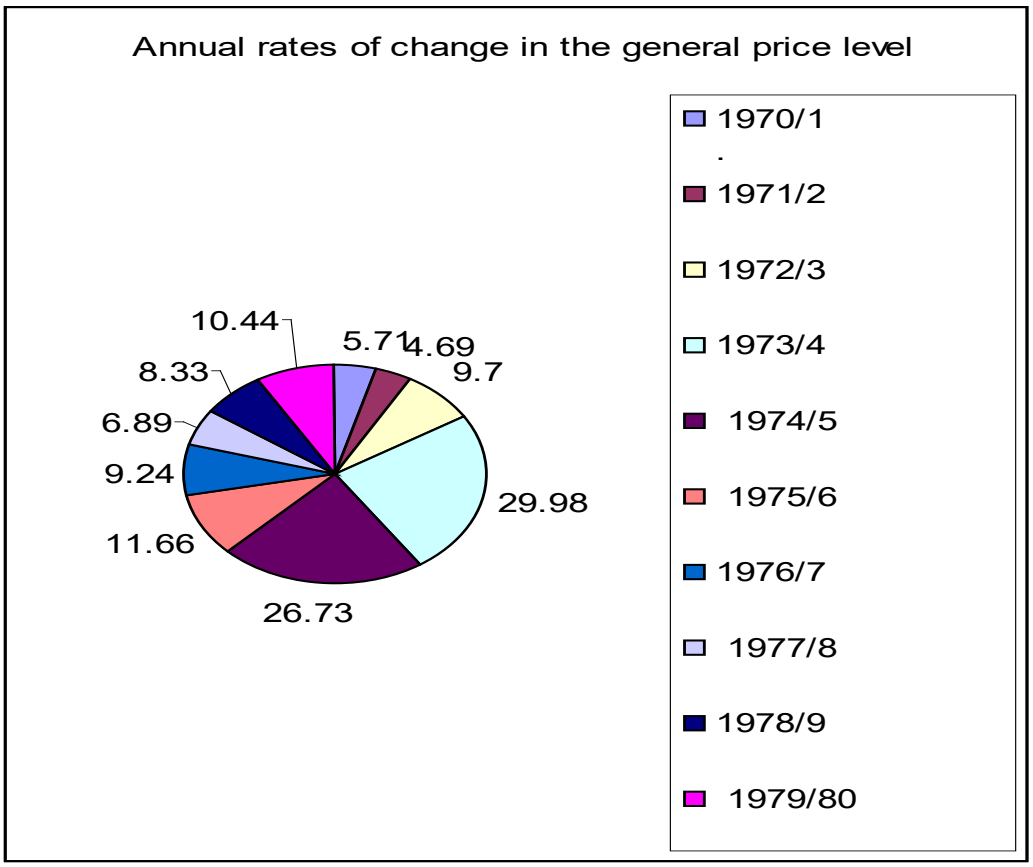
Before we turn to an evaluation of the Bhutto government's policies, a word about the data is of particular interest. The Ayub Khan government fell in 1968 and Bhutto took over from General Yahya Khan in December 1971. However, some studies, when examining the performance of the Bhutto period, lump the post-Ayub three years with the Bhutto period, distorting the facts. One example is Nawab Haider Naqvi and Khwaja Sarmad's study, which in its evaluation of Pakistan's economy in the 1970, considers 1969/70 to 1976/7 as one homogenous period and produces average growth rates for the whole of it. The Bhutto period was a distinct period, so clubbing it with the Yahya period does not reveal the true nature of the Bhutto regime. The Pakistan Economic Survey of 1984/5 makes the same mistake and provides average growth rates for the period 1970-7, calling it the 'Non Plan' period. While there may have been no implementation of the Five-Year Plans produced between 1970 and 1977, to evaluate the performance of the Bhutto regime the correct time-frame needs to be kept in mind. The annual growth rate for 1971/2 means the rate for the period 1970/1 to 1971/2.

Table 5.9: Annual growth rate, 1971-1977, at 1959/60 factor cost (% per annum)

Year ®	Agriculture	Manufacturing		Banking and Insurance	Public Admin & Defence	Services	GDP
		Large scale	Small scale				
1971/2	3.5	-6.8	7.2	0.8	6.8	5.1	1.2
1972/3	1.7	11.9	7.3	29.1	14.1	5.2	7.2
1973/4	4.2	7.5	7.3	6.4	14.8	5,4	7.7
1974/5	-2.1	-1.7	7.3	14.4	33.2	5.7	3.9
1975/6	4.5	-0.5	7.3	3.3	-3.0	5.7	3.3
1976/7	2.5	-0.2	7.3	8.2	7.3	3.2	2.9
1971-1977	2.4	1.7	7.3	10.4	12.2	5.1	4.4

Source: Government of Pakistan, Economic Survey, 1984-85, Islamabad, 1985.

Figure-5.6: Inflation rates in Pakistan,1970-1980 (% per annum)



Growth rates for selected periods (% per annum)

1969/70 to 1976/7	13.96
1976/7 to 1979/80	8.55
1969/70 to 1979/80	12.34

Source: Naqvi, S.N.H. and Khwaja Sarmad, Pakistan in the Seventies, PIDE, Islamabad, 1993.

Economic Policies and Performance: In its election manifesto, the Pakistan People's Party had promised the nationalization of all basic industries and financial institutions. The manifesto had said that those means of production that are the generator of industrial advance or on which depend other industries must not be allowed to be vested in private hands. Secondly, that all enterprises that constitute the infrastructure of the national economy must be in public ownership; thirdly, that institutions dealing with the medium of exchange, that is banking and insurance, must be nationalized. The economic policies of the Bhutto government, rested on the premise that the control of the leading enterprises was to be in the hands of the state. Figure 5.7 highlights the salient features of the nationalization agenda of the Bhutto government.

The first phase of nationalization took place in the large-scale manufacturing sector, essentially in the capital and intermediate goods industry. This produced a small share of the total value added of the sector (less than 20 per cent) since much of the growth in this sector had taken place in the consumer goods industries. The nationalization programme was later extended to the vegetable oil sector and then to cotton ginning and rice milling. The nationalization of banks and insurance companies was a critical assault on the close link that had built up between industrial and financial capital since the mid-1950s. This link had been one of the causes of the economic concentration that became a political issue in the late 1960s. The party's promises to urban organized labour, as to rural peasants and agricultural workers were fulfilled within six months of coming to power through the labour reforms and land reforms of 1972. The devaluation of the Pakistani rupee by 131 per cent had important repercussions as we show below, and removed at one stroke the subsidy the industrialists had received in the earlier period because of the overvalued exchange rate.

Figure 5.7: Bhutto's nationalization programme, 1972-1977

20 December1971	Zulfiqar Ali Bhutto takes over as President of Pakistan.
January 1972	Public takeover of 31 large firms in 10 basic industries: iron and steel, basic metals, heavy engineering, motor-vehicle assembly and manufacture, tractor assembly and manufacture, heavy and basic chemicals, petrochemicals, cement and public utilities.
March 1972	Land reforms!
March 1972	Management and control of 32 life insurance companies.
May 1972	Banking reforms; State Bank of Pakistan extends controls over scheduled banks, re-orientating credit policy towards small farmers and small industrial entrepreneurs.
May 1972	Devaluation of the rupee by 131 percent.
June 1972	Comprehensive labour reforms
August 1972	Comprehensive public health programme
September 1972- September 1974	Nationalization of educational institutions.
June 1973	Trade in cotton and rice nationalized
September 1973	Vegetable oil, petroleum marketing, and shipping nationalized.
January 1974	Nationalization of all private and domestically owned banks.
August 1976	Cotton ginning, rice husking, and flour milling nationalized.

This reform, together with the increase in procurement prices of agricultural goods (which went up by about 100 per cent in this period), made a deliberate attempt to alter the pro-industry anti-agriculture bias of the previous growth strategy. The Export Bonus Scheme, a key feature of the 1960s, was also abandoned.

The impact of the government's policies must be seen in the context of what the government had inherited. The loss of East Pakistan, if for no other reason, was important because 50 per cent of West Pakistan's products found a way into East Pakistan in 1969/70, and the loss of such a large market was cause for concern enough. Furthermore, 18 per cent of the West's imports came from East Pakistan. Hence, new markets had to be found immediately to compensate for this loss of market. The success of the devaluation measure was apparent soon after, when new markets were found and the value of export to areas other than the former East Pakistan rose by 41% in the financial year 1972 and 39% in the financial year 1973. This reflected both a sharp jump (about one-third) in the size of the cotton crop in the exports of cotton and cotton textiles, and the successful diversion of most of the flow of cotton, textiles, rice and other goods with which West Pakistan had previously reimbursed East Pakistan for its flow of jute and jute earnings to West Pakistan.

Table 5.10: Trade pattern, 1970-1977

Year	Exports	Imports (Rs m)	Balance	Exports	Imports ($m)	Balance
1970/1	1,998	3,602	-1,604	420	757	-337
1971/2	3.371	3.495	-124	591	638	*-47*
1972/3	8.551	8.398	153	817	797	20
1973/4	10.161	13.479	-3.318 .	10.626	1.362	-336
1974/5	10.286	20.952	-10.666	1.039	2.114	-1.075
1975/6	11.253	20.465	-9.212	1.137	2.067	-930
1976/7	11,294	23,012	-11,718	1,141	2,325	-1,184

Source: Government of Pakistan, *Pakistan Economic Survey, 1995-96,* Islamabad, 1996

Exports in 1972/3 increased by 153 per cent over the previous year, and manufactured exports grew by 19 per cent in 1973/4, which, according to the Asian Development Bank, 'was due to favourable world demand conditions for cotton textiles, and the capacity available for production for exports following the loss of the East Wing market in 1971.

The growth in exports was a key factor in the growth in industrial output between 1972 and 1974 (see Table 5.9). Agricultural output also rose, and this was attributed to 'the higher support prices for wheat, rice, sugar, and timely and adequate supply of essential inputs. Availability of credit also played a vital role in the improved performance, for after May 1972 when the government had tightened its control over the banking system; more credit was available to the export sector and to small farmers. The export refinance scheme was started by the State Bank of Pakistan in 1973, and its lending rate was lower than the nominal banking rate or the kerb market rate.

The economic boom 'of 1972/3 and 1973/4 seemed to be fairly short-lived and was attributed to the rebound of domestic demand following the disruption in the economy in the early 1970s and to the worldwide commodity boom. However, the world recession after 1974 considerably slowed the demand for Pakistani exports. After about two and a half years of impressive growth, the last three years of the Bhutto government saw the trend substantially reversed with dismal growth rates.

Table 5.11: Investment and growth rates in the large-scale manufacturing sector, 1969-1980, at constant price level of 1969/70 (Rs m)

Years	Private sector	Public sector	Total	Relative share of public Investment in total (%)
(1)	(2)	(3)	(4)	(5)
1969/70	1,208.2	177.1	1,385.3	12.8
1970/1	1,038.4	58.3	1,096.7	5.3
1971/2	699.9	63.8	763.7	8.4
1972/3	313.1	. 45.1	358.2	12:6
1973/4	230.8	113.7	344.5	33.0
1974/5	182.8	276.8	459.6	60.2
1975/6	344.5	831.5	1,176.0	70.7
1976/7	369.0	1,085.3	1,454.3	74.6
1977/8	482.3	1,922.1	2,404.4	79.9
1978/9	459.7	1,944.9	2,404.6	80.9
1979/80	544.6	1,644.0	2,188.6	75.1

Growth rates for selected periods (% per annum)

1969/70 to	1976/7	-45.1	*-b*	*-39.0*	11.5
1976/7 to					
1979/80		17.0	45.5	34.2	12.5
1969/70 to					
1979/80		-b	39.8	11.7	11.9

Source: Naqvi, S.N.H. and Khwaja Sarmad, Pakistan in the Seventies, PIDE, Islamabad, 1993.

Last three years of the Bhutto regime also 'coincide with the "big-push" in public sector investments in long gestation projects and show a dismal performance in both the agricultural and manufacturing sector. Growth rates are trend values significant at the 95 per cent confidence level. Insignificant trend, Values significant at the 90 per cent confidence level.

One outcome of the nationalization measures was the complete reversal of public and private investment. The substantial contribution by the private sector in the 1960s was cut by a stroke. In 1974/5, the height of the Bhutto regime's nationalization programme, private sector ' investment was only 15 per cent of its 1969/70 level (see Table 5.10). Public sector investment, which was 5 per cent of the total in 1970/1, rose to 75 per cent at the end of the Bhutto era. These figures may suggest that the Bhutto regime's nationalization programme alone was responsible for this trend, but it is important to realize that 'private investment had already started to climb down even before nationalization struck it down in 1972 and that the decline in investment during the second half of the 1960s, which indicates that growth in large-scale manufacturing had slowed, was a trend which continued into the 1970s. However, there is no doubt that the anti-industrialist policies and great uncertainty of the 1972-7 period were also responsible for the lack of private sector investment. The private sector had lost all trust in the

government, for Bhutto had broken his promises: 'his assurance of no further nationalization [prior to nationalizing the vegetable oil industry in September 1973] until the elections of 1977 no longer seemed meaningful and the little confidence that the businessmen had developed in the regime was now completely gone. Such promises were broken time and time again.

The Bad Luck Factor: The fact that the economy suffered after 1974 is clear. The reasons, for this, however, are open to some debate. Figure 5.8 shows that a number of events that took place outside the control of the government were largely responsible for the poor performance of the economy after 1974.'There was a very large increase in the prices of imports following the oil price rise in 1973, which resulted in inflation at close to 30 per cent in 1973/4. The oil price rise had begun to affect the gains from devaluation and exports, and in one go wiped out the positive balance of trade from 1972/3. While export growth still showed some positive signs, albeit at a much slower pace, the import bill grew very significantly (see Table 5.9). In one year alone, oil imports rose from US$60 million in 1972/3 to $225 million in 1973/4; fertilizers increased from $40 million to $150 million in the same period. The result of the huge rise in oil prices was an international recession that was not in the control of the Bhutto government.

Figure 5.8: Bhutto: the bad luck factor?

20 December 1971	Zulfiqar Ali Bhutto takes over as President of Pakistan.
May 1972	Devaluation of the Pakistani rupee; initial outcome highly positive with exports growing by more than 100 per cent.
August 1973	Massive floods hit Pakistan; import of food grain.

October 1973	Fourfold increase in international Petroleum prices; imports cost much more; prices of fertilizers, essential inputs, and oil jump; excessive inflation domestically.
1974-1977	World recession follows OPEC price rises; demand for Pakistani export remains severely depressed and affects industrial output.
1974-1975	Huge failure of cotton crop by as much as 25 per cent at a time when international cotton prices had risen affected industrial output.
1976-1977	Worst floods in Pakistan's history; agricultural crops destroyed; further import of food crops; excessive expenditure on public goods measures, all affecting industrial output.

Moreover, in the five years of the Bhutto government, floods and pest attacks damaged crops severely, putting pressure on prices and affecting industrial production. The failure of the cotton crop in 1974/5 came at a time when there was a surge in international prices and hence Pakistan was not able to exploit the situation to its advantage. The year 1976/7 saw Pakistan's worst floods, devastating large areas of cultivated land.

Excessive inflation was seen as Bhutto's biggest failure, but a closer look at the management of the economy and of the growth in monetary assets suggests that much of the inflation' was imported. Table 5.11 shows that excessive monetary growth took place only in the first and last of his five and a half years. The increase in 1971/2 was primarily due to the adjustments necessitated by the loss of East Pakistan and to the increase in exports. The economy had been well managed in the early years without excessive deficit financing despite the costs incurred due to the floods, and monetary expansion had been kept well in line with GNP growth, and was 'almost entirely limited to the private sector. There had in fact been an overall contra dictionary effect in the government and foreign

sector. A very negative perception seems to have become part of the literature on the Bhutto period, where, despite the facts, a number of observers believe that the economy under Bhutto was in a shambles. For example, argues that there was generally poor performance and relative stagnation in the 1970s, and that a lack of fiscal and monetary discipline led to high budget deficits, rapid monetary growth and inflation.

Table 5.12: Differential growth rates of money supply, GDP, and commodity producing sectors, 1969-1980 (% per annum)

Years	Growth of money supply®	Growth of GDP	Excess of col. (2) over col. (4)
(1)	(2)	(3)	(5)
1969/70	10.69	9.78	10.07
1970/1	10.80	0.30	-1.42
1971/2	42.66	1.17	1.35
1972/3	14.21	7.21	4.25
1973/4	11.06	7.74	5.24
1974/5	12.44	3.94	-1.26
1975/6	11.14	3.32	3.48
1976/7	24.30	2.53	1.98
1977/8	22.97	7.38	4.63
1978/9	20.20	4.90	3.90
1979/80	18.51	7.28	7.88

Source: Naqvi, S.N.H. and Khwaja Sarmad, Pakistan in the Seventies, PIDE, Islamabad, 1993.

Growth rate for 1969/70 means the rate for the period from 1968/9 to 1969/70. Growth rates are trend values significant at the 95 per cent confidence level was characterized "by generally poor performance and relative stagnation" or that the 1980s were so much better on all fronts.

The key causes of low growth in the mid-1970s were possibly an extremely adverse weather cycle along with an international recession. Government policy did not help much either, where industrialists were eyed with suspicion, and in response to government fears and threats the industrialists created artificial crises. While organized

labour felt that it had a greater right to the share of industrial produce, industrialists feared more lock-outs or outright nationalization. Entrepreneurs were demoralized and unwilling to invest. Capital and capitalists had fled overseas and it was clear that the economy and industry were faced with a severe crisis, no matter what the causes may originally have been. The Bhutto era has been considered one of Pakistan's worst economically.

The Process of Industrialization in Pakistan 1977-97

After the fall of Zulfiqar Ali Bhutto in July 1977, Pakistan can easily be delineated by two specific eras or periods. From 1977 to August 1988 General Zia-ul-Haq ruled Pakistan, the longest rule ever by a single individual in Pakistan's fifty years of existence. Zia's military dictatorship varied from downright ruthlessness to a more benign form of praetorian democracy in 1985. Despite attempts to introduce participation, starting from the Local Bodies elections of 1979, General Zia never let go of the reins of power, a fact ably demonstrated in May 1988 when the elected government of Mohammad Khan Junejo was summarily dismissed. Zia-ul-Haq was killed in an air crash in August 1988 and we can only speculate about the nature of developments in Pakistan had Zia not met his death in this fashion. Nevertheless, with the death of Zia, we see the end of the Zia era, although much of his legacy still has a strong bearing on political and economic developments in Pakistan some years on.

In the Zia era, Pakistan witnessed the return of high growth rates and an increased role for the private sector, in many ways reminiscent of the Decade of Development of the Ayub regime. But much had changed, in the form of class structures, social and political alliances, and the nature of the development of society, and the comparison between the Ayub and Zia periods makes very interesting reading. However, Appendix 7.1 provides a flavour of the extent and result of differences between the two regimes, regarding the type of entrepreneurs that emerged. Just as much as the 1977-88 period is distinct in its form and manner, so the post-Zia period opens up a very different age in Pakistan's history, both politically and economically. There has been a return to democracy, with elections being held in Pakistan in 1988 after a lapse of eleven years. Moreover, there

have been three general elections since then. Pakistan has seen ten governments between 28 May 1988 and February 1997, and despite this high turnover, the military, which is prone to interfere in national politics in Pakistan, has let the political process take its course.[2] More interestingly, despite the frequent changes in government, the economic programme of different governments in Pakistan has been more or less the same, and one finds a great deal of continuity in policy, especially since September 1988.

Much of what has happened in the economic arena in Pakistan since 1988 forms part of a series of comprehensive structural adjustment programmes undertaken under the close supervision of the International Monetary Fund (IMF) and the World Bank. Although Pakistan's adherence to IMF and World Bank policy began in earnest in 1980 when a large Extended Fund Facility programme was supported by the IMF, followed by many structural adjustment and sectoral loans from the World Bank, it would be fair to say that since 1988 Pakistan's economic programme has totally capitulated to the requirements of the IMF and the World Bank. Since then, Pakistan's numerous and varied governments have failed to come up with any independent economic or industrial development programme, and the very minutely detailed Policy Framework Papers of the IMF and World Bank determine the nature and direction of policy. Given the complete dominance by these two Washingtonian , organizations of the economic life of the country. There are two distinct cycles of Zia's era, we examine first the process of industrialization in the Zia period, and second, the post-1988 era of structural adjustment.

The Zia Years: 1977-1988

The Nature and Extent of Growth

The phenomenal performance overall of the economy in this period can best be gauged from the following observation according to World Development Report 1990, during 1980-88 Pakistan's GDP growth rate of 6.5% was exceeded only by that of Korea, China and Hong Kong . The growth of real wages in Pakistani manufacturing during 1980-88 was just about the fastest in the world - at 6.2% a year surpassed only by Thailand (7.0%) and equaled only by Singapore. For the period 1978-86 GDP averaged growth rate was 7 per cent per annum. According to the World Bank, manufacturing GDP grew at an annual

average rate of 9.5 per cent between 1977 and 1986, and investment in medium- and large-scale industry grew at an average of 18.2 per cent per annum, while total private industrial investment expanded at 15.6 per cent per annum. This is, indeed, a very impressive performance by any standard, whether in comparison with the performance of the Ayub regime or with the newly industrialized countries in the same period.

Table 5.13: Growth rates of output, labour, capital stock, and total factor productivity, 1978-1988

Industry sector	Output	Labour	Capital stock	TFP output	TFP
Food Manufacturing	8.8	7.4	7.3	1.5	-1.1
Beverages Industries	6.5	9.2	12.8	-5.9	-6.7
Tobacco	9.1	1.6	10.9	-1.4	-3.4
Textiles	8.6	1.5	9.4	3.0	3.1
Wearing Apparel	21.0	21.9	10.4	7.9	4.5
Leather Products	7.3	10.7	13.7	-6.0	-19.8
Footwear	8.2	10.0	. 7.8	-0.3	2.2
Ginning, Pressing & Bailing	5.1	2.3	3.1	2.1	-2.7
Wood and Cork Products	13.7	14.5	13.7	-0.1	-0.9
Furniture	13.3	11.8	23.6	-7.0	-11.8
Paper and Paper Products	10.7	7.6	13.8	-1.2	-6.4
Printing and Publishing	10.1	7.6	13.9	-1.3	-2.9
Drugs/Pharmaceuticals	11.3	8.2	13.8	-1.4	-3.3
Industrial Chemicals	11.2	7.1	8.5	3.0	3.2
Other Chemicals	11.2	8.8	8.2	2.9	7.0
Rubber Products	4.8	3.8	16.3	-5.0	-2.9
Plastic Products	18.3	11.7	13.4	5.4	3.3
Glass Products	14.1	8.7	16.1	0.8	-0.5
Other non-metallic	11.7	9.8	14.5	-2.2	-3.1
Iron and Steel	1-7.0	15.3	32.9	-11.0	-12.1
Non-ferrous Metals	-8.6	-0.6	4.3	-10.4	-2.7
Metal Products	-0.9	1.0	8.8	-6.0	-5.9
Non-electrical	17.6	7.5	5.6	11.1	5.3
Electrical Machinery	13.3'	5.7	11.7	3.2	-0.6

Transport Equipment	9.8	3.3	8.5	4.3	9.6
Total (weighted)	9.6	5.8	10.3	0.3	-0.9

Source: Sayeed, Asad, 'Political Alignments, the State and Industrial Policy in Pakistan: A Comparison of Performance in the 1960s and 1980s', unpublished Ph.D. thesis, University of Cambridge, 1995, p. 109.

Table 5.12 shows the annual growth rate in value of output, labour and other indicators for a large number of manufacturing industries in the period 1978-88. The total average growth in this period was a very impressive 9.6 per cent, with the first half of the Zia era showing an even higher rate of 12.8 per cent. In both the Fifth and Sixth Five-Year Plans (1978-83 and 1983-8), actual growth rates exceeded the targets of 12 per cent and 9 per cent, respectively, a rare occurrence in Pakistan's economic record. Table 5.13 shows how the high growth rates were disaggregated over the Fifth and Sixth Five-Year Plans. Although the growth figures are very impressive, a significantly different, and much less rosy, picture emerges with productivity growth figures (fourth column in Table 5.12). Not only is the aggregate of 0.3 per cent per annum low compared to the 5 per cent growth in the 1960s, but also the variation across sectors is significant.

Furthermore, if we aggregate the total factor productivity (TFP) growth rates, we can see that consumer goods have negative TFP growth, with the exception of the wearing apparel industry. A fairly mixed picture is presented by the intermediate goods industry. Table 7.3 highlights the low contribution of TFP growth to overall growth during the decade. As much as 82.3 per cent of the overall growth was due to the growth in the capital stock, 14.5 per cent to labour, and only 3.17 per cent to TFP growth - compare this to the figures presented in the Table 5.13. Pakistan not only is the contribution of TFP significantly lower than that of the developing country average, but the contribution of capital is also inordinately high.

Table 5.14 shows that there had been .very little growth in employment in almost all industries between 1975 and 1986, and that the growth in labour productivity had also fallen in many industries. Interestingly, although the wearing apparel industry

experienced the greatest increase in employment, it also saw output fall by nearly 19 per cent. A UNIDO report on the manufacturing sector gives the reasons for this low employment generation and says that an underlying feature of industrialization in Pakistan is the deteriorating performance of the manufacturing sector in generating new employment opportunities. Although the decade of the 1980s has been a period of relatively high growth in manufacturing value added, the growth in manufacturing employment has remained insignificant. This partly represents more an increase in capital industry than labour absorption during the period of accelerated expansion.

Pakistan's manufacturing sector became more capital intensive between 1975 and 1986 and the share of wages and salaries in value added fell from 26.9 per cent in 1976 to 20.3 per cent in 1986. A report published by the Institute of Developing Economies in Japan found it 'ironic' that some of the public sector dominated industries, such as electrical machinery and chemicals, show a high rate of growth in labour productivity. Firstly, we would expect labour productivity to be higher in capital-intensive projects where the labour-output ratio is high. And secondly, as large firms attain a higher level of capacity utilization, labour productivity will be expected to increase.

Industrial Policy

The 1978-88 period is the only epoch in the country's history when an industrial policy was formulated and executed for any length of time. Zia regime consisting of two sub-periods, 1978-81 and 1982-86.

Table 5.14: Average annual growth rates of value of output, 1978-1988 (constant prices 1976/7)

Industries (PSIC 3-digit)	1978-1988	5th Plan	6th Plan
Food	9.7	13.7	5-7B
Beverages	10.1	16.5	5.06
Tobacco	8.2	11.5	5.63
Textiles	8.8	11.0	7-16
Wearing apparel except footwear	33.9	35.2	32.7
Leather products except footwear	14.2	-1.2	26.4
Footwear	48.5	38-0	71.0
Ginning, pressing and bailing	9.8	8.5	10.7
Wood and cork	21.2	23.8	19.0
Furniture	30.6	38.1	24.5
Paper and paper products	16.9	18.8	15.5
Printing, publishing and allied	10.6	15.2	7.0
Drugs and pharmaceuticals	11.8	12.0	11.6
Industrial chemicals	14.7	19.7	10.65
Other chemicals	13.3	13.4	13.3
Petroleum refining	10.3	22.8	0.3
Miscellaneous petroleum and coal	15.7	34.1	1.0
Rubber products	5.5	10.1	1.8
Plastic products	20.4	30.7	12.1
Pottery, china and earthenware	11.5	20.1	5.8
Glass and glass products	18.8	27.3	15.0
Other non-metallic minerals	18.2	22.5	14.8
Iron and steel basic	19.1	19.9	18.5
Non-ferrous metals	15.0	10.5	23.3
Fabricated metal except machinery	7.9	6.0	7.3
Machinery except electrical	15.3	15.0	20.3
Electrical machinery	13.2	10.6	14.5
Transport equipment	12.9	-3.8	25.6
Scientific equipment	16.0	10.1	16.4
Sports goods	22.1	22.6	18.6
Others	12.1	1.3	10.6
Average growth (total)	10.4	12.8	9.9

Source: Institute of Developing Economies, The Study on Japanese Cooperation in Industrial Policy for Developing Economies: Pakistan, Tokyo, 1994, pp. 257-8.

Table 5.15: Decomposition of manufacturing growth, 1978-1988

Industry sector	*a.*	P	Share of labour %	Share of capital %	Share of TFP%
Food manufacturing	0.13	0.87	11.20	71.92	16.88
Beverages industries	0.11	0.89	16.02	176.25	-92.27
Tobacco	0.40	0.96	0.63	115.37	-16.00
Textiles	0.49	0.51	8.30	55.75	35.96
Wearing apparel	0.24	0.76	24.75	37.73	37.53
Leather products	0.13	0.87	19.69	161.75	-81.44
Footwear	0.29	0.71	35.86	67.34	-3.20
Ginning, pressing, and bailing	0.18	0.86	6.35	51.92	41.73
Wood and cork products	0.24	0.76	24.91	76.06	-0.97
Furniture	0.28	0.72	24.92	128.44	-53.36
Paper and paper products	0.30	0.70	21.50	89.81	-11.31
Printing & publishing	0.40	0.60	29.63	82.99	-12.62
Drugs and pharmaceutical	0.20	0.80	14.59	97.61	-12.20
Industrial chemicals	0.23	0.77	14.26	58.59	27.16
Other chemicals	0.20	0.80	15.77	58.35	25.88
Rubber products	0.52	0.48	40.86	165.93	-106.80
Plastic products	. 0,34	0.66	21.75	48.36	29.89
Glass products	0.38	0.62	23.41	70.75	5.84
Other non-metallic minerals	0.13	0.87	10.63	108.69	-19.32
Iron and steel	0.28	0.72	25.66	138.61	-64.27
Non-ferrous metals	0.50	0.50	3.61	-25.20	121.59
Metal products	0.47	0.53	-56.54	-529.97	686.51
Non-electrical	0.47	0.53	19.86	16.95	63.19
Electrical machinery	0.27	0.73	11.56	64.50	23.94
Transport equipment		0.42	19.71	36.12	44.17
Total (weighted)	*0.20*	0.76	14.50	82.33	3.17

Note: Alpha and beta refer to shares in values added for labour and capital in the year and capital in the base year respectively.

Source: Sayeed, Asad, 'Political Alignments, the State and Industrial Policy in Pakistan: A Comparison of Performance in the 1960s and 1980s unpublished Ph.D. theses, University of Cambridge, 1995, p. 111.

There were three such periods:

- 1977-81, which was the period of cautious attempts at dismantling existing government policies and restoring confidence in the private sector, while simultaneously trying to gain political legitimacy.

- 1982-5, a more forceful drive towards Islamization which followed the regime's consolidation of power .

- 1985-8, The attempt to disengage the government from directs control of the economy. One of the most important concerns of the new Zia regime in mid-1977 was the need to restore business confidence. Particularly private sector confidence and motivation, in order to revive investment in industry and agriculture, so as to improve the economy's performance substantially compared to the less than impressive performance in the Bhutto period. The military government of General Zia-ul-Haq, like the military government of Field Marshal Ayub Khan, made the decision that the private sector was to play the leading role in the industrial sector. Amongst the earliest steps taken by the Zia government to appease the private sector was the denationalization of a number of agro-based industries - rice husking, flour milling and cotton ginning - which were run inefficiently. In September 1977, along, with the denationalization of some small engineering units as well. In December 1977, a number of basic and heavy chemical and cement industries were opened up to the private sector, which was also given further incentives, such as tax holidays in March 1978, which were essentially aimed at encouraging industrial activity in the less developed regions of the country. Export rebates were also given priority, and in

June 1978 the interest rate on fixed investment in agriculture and industry was also reduced. Some attempts were also made by the new military government to ease economic controls and regulations, including the procedures for the sanctioning of private sector investment.

If the prominence given to the private sector brought back memories of the Ayub Khan era, so did the return to planning in the guise of the Five-Year Plans. As an Asian' Development Report stated, with a change in government in 1977 came a change in industrial strategy. The new government reinstated the system of five-year plans, and the Fifth Five-Year Plan was launched in 1978/79.

Table 5.16: Growth and structure of manufacturing employment, 1975-1986

Industry sector	Growth of employment in manufacturing	Structure Labour manufacturing per employee		growth of Value-added employment (%
	1975-86	1975	1986	1975-86
Food products	3.58	9.9	12.9	3.53
Beverages	5.07	0.7	1.0	T1.32*
Tobacco	2.82	1.7	2.1	1.11
Textiles	-1.64	50.6	41.1	-4.31
Wearing apparel,	14.75	0.2	0.9	-18.63**
Leather products	2.81	0.8;	0.9	-1.88**
Wood products,	7.46	0.3	0.5	-4.11
Furniture, except metal	3.75	012	*0.3*	2-24**
Paper and paper products	0.03	1.9	1.6	12.28
Printing and publishing	4.52	1.4	2-11	5-79**
Industrial chemicals	3.33	2.5	3.1	6.91
Misc. petroleum and coal products	6.79	0.1	0-1	3.97**
Rubber products	0.11	25	2-0	1.75
Plastic products	11.26	03	0.6	-
Glass products	3.37	0.5	0.8	-4.71**
Other non-metallic mineral products	1.90	2-6	2.9	3.25
Iron and steel	9.64	4.1	7.5	1.16**

Non-ferrous metals	-5.51	0-1	0.1	-5.19**
Fabricated metal	-3.17	2.7	1.9	3.12**
Machinery, except electrical	11.41	3.3	3.3	0.17
Machinery, electric	0.60	3-5	3.6	8.34
Transport equipment	-1.04	4.7	3.9	6.3
Other manufactured products	-1.01	0.7	0.6	7.96**

*** 1975-82, ** 1975-80, ***1975-85**

Source: UNIDO, Pakistan: Towards Industrial Liberalization! And revitalization, Basil Blackwell, Oxford, 1990, pp. 19 and 22.

In fact, there had not been much planning after the very successful second Five-Year Plan of 1960-5, when the third was curtailed and handicapped by the cut in foreign aid and the political situation domestically. The Third Five-Year Plan was made redundant after the major part of Pakistan became an independent Bangladesh, and the Fourth Five-Year Plan was lost somewhere in Zulfiqar Alt Bhutto's rule of five years, a period better known as the Non-Plan Period.

The investment programme of the Fifth Five-Year Plan gave very high priority to producer and investment goods industries' with industry based on indigenous raw materials next in line. Apart from bringing back the private sector, the stress on the use of indigenous raw materials in industry was also seen as important to revive the sluggish performance of the agricultural sector. The economic managers of the Zia regime were looking for short and medium term gains to accrue from a boost in textile exports. Growth in large-scale manufacturing was projected at the highly ambitious rate of 12 per cent per annum, a target which was, surprisingly, achieved. The policy measure that distinguishes the Zia regime from all others before and after General Zia was that of Islamization. In fact, it became General Zia's government's and his own mission to purify Pakistani society from all the ills and evils that had become ingrained. Islamic laws were enacted and Commissions formed, and even the economy was brought under the

influence of Islamic laws' and principles. Most of the government's effort in long-term management is concentrated on the process of Islamization which, in terms of the long-run impact on the economy, may surpass the restructuring of the development strategy and the plan priorities. The process involves a basic transformation of the entire society and intra-social relationships in conformity with the tenets of Islam. Social justice in every walk of life by following the Islamic principles, especially in the distribution of income and wealth in favour of the poor, and the elimination of interest {sood) charged by banks are viewed as key features of the Islamization process.

Although much was made of the Islamization programme of the Zia regime at that time, most critics of the regime felt that it was a ploy on the part of the military government in order to legitimize and perpetuate its hold on power. Attempts by the state to develop an Islamic economic system were not substantive departures from capitalist industrial culture, but are instead substitutes for specific aspects of it. Islam became the veil behind which Zia and his coterie hide and perpetuated their authoritarian form of government. Although all the Islamic laws passed by that government are still part of the law of the land, the fanfare has died and governments since Zia's have not (as yet) used Islam for propaganda purposes. After the death of General Zia, his period’s economic programme were not give much importance to what was considered to be his key programme, While Islamic codes and regulations do prevail, they seem to exist mainly on paper.

The Public/Private Sector Divide: One would have thought that, with the Zia government's penchant for the private sector, the first step would have been large-scale denationalization and the return of assets seized and nationalized under the Bhutto regime. At the time when Bhutto was deposed, the public sector dominated industrial development and the private sector had been reduced to a much smaller role than under Ayub Khan. An immediate reversal was anticipated, but other than the small and insignificant measures mentioned above, very little denationalization took place. The major contribution by the Zia government in the early years was to give a clear signal to the private sector that the government expected future growth to come from its increased participation in industrial activity.

An Asian Development Bank report defends this action by the Zia regime on the following grounds. The military government made the decision that the private sector was to play the leading role in the industrial sector. However, the existing public industrial sector was quite large, employing over 50,000 persons, and a massive investment program of over Rs40 billion was underway. Thus it was not practical for the government to undertake any large-scale denationalization. Original owners were only prepared to take the units back if the losses accumulated since nationalization in 1972 were written off and the surplus workers fired. The Government could not do that because of political and administrative reasons. Neither, was it possible to abandon the industrial sector investment program because a large proportion of the funds had been either spent or committed in the form of international contracts. The government therefore decided on a more gradual process of reorientation toward private sector-led industrial growth. To restore the confidence of the private sector, the agricultural processing industries taken over in 1976 were denationalized, and a number of industrial incentives similar to those existing during the 1960s were introduced. As for public sector industries, a program for improving efficiency and profitability was initiated, and the investment program was restricted to ongoing projects and to the balancing, modernization and replacement (BMR) of existing public sector units.

However, the study by the Institute of Developing Economies in Japan makes the rather more pertinent point that in contrast to its [the Zia regime's] rhetoric against the Bhutto government's economic agenda, the Zia government was hoping to reap the rewards from investments made by the previous regime. This study continues that, even at the time of the Sixth Five-Year Plan, there were no clear moves towards privatization. In fact, public sector industry was seen as playing an instrumental role in industrialization in particular and development in general. Moreover, the study goes on to make the very astute point that the political economy of the government's decision not to go on a large scale privatization drive was that it did not want to alienate those groups and classes which had benefited from nationalization by seeking employment in the sector. This group also comprised of the urban lower middle class, which had been the most potent political agitator in Pakistan's history while there was no immediate reversal, there certainly was a

marked slowing down. Table 5.16 shows that the public sector's share in total industrial investment fell from as much as 72 per cent in 1978-9 to less than 18 per cent ten years later. Although there was some increase in employment, this was mainly due to the projects originated earlier. The bulk of public sector investment during the first half of the Zia regime was going into ongoing projects. In the Fifth Five-Year Plan (1978-83) only 23 per cent of total public industrial outlay was on new projects. In the early years of the Zia government, public sector output increased much more rapidly than private sector large-scale manufacturing output, but in the second half of the ten years, the growth of the private sector was faster. The impetus of growth in the first three years of the Fifth Plan was the public sector, as many of the projects started earlier, especially in the fertilizer and cement sectors, came online.

Essentially then, while the Zia government was very. favourably inclined towards the private sector and blamed much of the ills of the economy on Bhutto's economic policies, including nationalization. The Zia regime took a far more pragmatic and politically clever line by not denationalizing in haste. It encouraged the private sector by giving it greater incentives and removing controls, and by opening up sectors and areas previously exclusive to the public sector. Once the government realized that ownership and control of the public sector industries was an effective tool for granting political patronage and favour, there seemed little recourse to gift such a means away. The best example of this is the fact that the all powerful and important financial sector was retained by the government, and no denationalization or privatization of banks took place when General Zia was in power.

Table 5.17: Share of public industrial enterprise in total large-scale manufacturing, 1978-1988

Public sector Years Share (%)	Employment	Value added (%)	Share in Total Industries
Investment (%)			
1978/9	14.47	7.12	72.74
1979/80	14.34	14.55	65.25
1980/1	15.24	12.27	58.01
1981/2	16.15	13.28	52.03
1982/3	14.82	13.90	48.29
1983/4	16.36	11.81	44.56
1984/5	-	-	31.38
1985/6	-	-	30.68
1986/7	-	-	21.64
1987/8			17.85

Source: Sayeed, Asad, 'Political Alignments, the State and Industrial Policy in Pakistan: A Comparison of Performance in the 1960s and 1980s', unpublished Ph.D. thesis, University of Cambridge, 1995, p. 117.

Deregulation and Liberalization: The Sixth Five-Year Plan (1983-8) marks the beginning of the process of deregulation and liberalization, which was carried out with much greater force after 1988 when Pakistan's economy became completely subservient to IMF and World Bank directives. The Sixth Five-Year Plan is seen as a departure from the government's earlier policies on industry. It was for the first time that the emphasis moved from purely one of sectoral investment planning to one which also incorporated incentives and institutional reforms to enhance the' efficiency of the industrial sector. Export-led industrialization was mentioned for the first time as a policy goal, and there was an emphasis on the broadening of manufactured exports towards higher value-added items.

Amongst the more important initiatives in pursuit of deregulation and liberalization in this period were the following:

- An increase in the investment sanction limit; drastic reduction in the list of specified industries (which require government sanction); reduction of tariffs on a number of raw materials, intermediate and capital goods;
- Introduction of a three-years liberal trade policy; and upgrading of an Industrial Incentives Reform Cell (IIRC) into a Tariff Commission in 1989 to make recommendations on fiscal anomalies and effective protection.
- A series of measures were introduced to deregulate industrial operations in the cement, oil-seeds and fertilizer industries. Private investment was permitted in cement production and State-owned enterprises allowed to vary their prices. Subsidies substantially reduced and cement imports permitted. A similar package of de-regulation and reform was adopted for the oil-seeds sector and a major divesture programme was initiated by the public ghee corporation**.**

Along with these measures, important steps were taken to liberalize and encourage foreign trade. Prior to 1983, imports were considered to be either 'free' or 'tied', and goods that were on neither of the two lists were banned. In 1983 this system was changed and a negative list was introduced, where everything not on that list was now importable. There was also a replacement of quantitative restrictions (non-tariff barriers) by tariffs, which according to the Asian Development Bank was a significant development since in Pakistan quantitative restrictions have been a more important source of protection than tariffs. To encourage exports**,** manufactured exports were given rebates, and exporters were given import facilities, income tax concessions, and finance at concessionary rates.
The most important and far reaching economic decision taken by the government was to remove the fixed peg of the Rupee to the Dollar by introducing a managed float of the currency in 1982. As a result between 1982 and 1987-88 the Rupee was devalued by 38.5%, with an average devaluation of 7.7% per annum. While there were other macro considerations which dictated the decision to move away from the peg, its impact on industrial decisions to invest and produce was central. The biggest impact was expected to come in export performance. Conventional wisdom has it that, Pakistan's export performance has been sluggish because of an overvalued exchange rate. The overvalued exchange rate, it is argued, discriminates against exports not only in capturing larger

world market shares but also in the implicit protection it accords to manufactured goods at home which inhibits the direction of resources into export industries. Correcting for the exchange rate was seen as the important step in devising an incentive structure geared towards exports.

Devaluation was also expected to perform an important import substitutive function. Devaluation will enhance prices of imported capital and intermediate goods and will thus induce backward linkages for producer goods industries. Thus the decision was also consistent with the industrial policy priorities of the government as outlined above.

The World Bank, not surprisingly, was particularly happy with the results of the deregulation and liberalization policies of the Sixth Plan. It calculated that the 'private sector's share in total fixed investment increased from 38 per cent in FY83 [1982/3] to 42 per cent in FY88 [1987/8] and in the manufacturing sector its share in investment rose from 51 per cent to 83 per cent. In a report published earlier, in 1988, the World Bank argues as follows:

- Industrial growth has been encouraged by an improvement in the industrial policy environment for private sector initiative, in accord with Sixth Plan objectives.
- The composition of industrial investment has shifted heavily toward the private sector.
- Private industrial investment expanded by almost 23% p.a. in real terms during the plan period, as against a 7% annual increase in total industrial investment.
- In total, over 72% of total industrial investment during FY84—87 was contributed by the private sector.
- The restriction that public manufacturing investment be limited to the completion of ongoing projects and to rehabilitation of existing plants contributed to this outcome.

Causes of High Growth and the Success of the Zia Regime: The fact that General Zia ruled Pakistan for more than eleven years surprised almost all observers. In July 1977 when he took over from Bhutto, Zia came across as an inexperienced, bumbling General who, it seemed, either would not be able to hold on to power, or would willingly transfer power to politicians as he kept promising. No one at that time could have envisaged the

fact that General Zia would emerge as Pakistan's longest ruler. Moreover, the only way power was transferred away from Zia to another head of state was through his death in an air crash. The political reasons why he managed to outlast and outwit the opposition have been documented. The reasons why the economy performed as well as it did and how a booming economy helped neutralize all political opposition against the government. While there were many political and human rights grounds for the protests against Zia that continued all through his rule, there were few economic justifications for opposition.

On the whole the manufacturing sector in Pakistan has recorded impressive growth rates during the 1977-88 periods. As we have attempted to show the principle reason for this performance has been a result of two important phenomena:

- The coming on stream of the public sector provided the requisite diversity in the manufacturing sector. This resulted in both the once and for all gains that such large investments are expected to bring in and secondly in the linkage effects that it created.
- The revival of confidence in the private sector to invest in industry once again after the brief interlude of the Bhutto regime. The spheres for private industrial investment that were charted out by the Bhutto regime, i.e. the consumer goods sector and the picking up of linkage effects that the public sector would create, reached fruition in the period under review.
- The underlying reason for high rates of growth and investment for growth in output was buoyant demand in the economy as a whole. Because of the remittances from the Gulf and a growing agricultural and services sector consumption demand increased. Investment demand, on the other hand, was enhanced by high resource inflows from the international community, particularly the US, because of Pakistan's strategic role in the Afghan war.

The high growth rate of GDP, which averaged 7 per cent per annum between 1978-86, was due to a strong expansion in manufacturing led by a booming domestic market, (Due to remittances and the income from illegal trade, increased significantly following the Afghan crisis) and the utilization of excess capacity. Workers' remittances had peaked at

$3 billion in 1982/3, and a steady flow of official capital such as long-term loans and grants, amounting to an 'annual average of more than one billion US dollars enabled the government to finance its way out of the difficult situation created by the deteriorating terms of trade, and helped maintain macroeconomic stability as well as promoting a high growth rate of GDP. During the Fifth Five-Year Plan (1978-83), the yearly average of foreign aid committed to Pakistan was $1.45 billion, up from the yearly average of $871 million during the Non-Plan period 1970-78. This annual average of foreign aid committed to Pakistan during the Sixth Five-Year Plan (1983-8), rose to as much as $2.29 billion.

The contribution of foreign resource inflow was an important source of assistance to the Zia regime and helped finance industrial investment. Interestingly, its share in total investment declined to almost half its share of 1965-70, and to one-sixth of the heyday of the Ayub period (1960-5) when foreign assistance was a critical factor, resulting in very high rates of growth. Foreign resource inflows are yet another similarity between the Zia and Ayub eras, where external sources helped fund Pakistan's economic development programme. Under Ayub, it was US aid that played the most critical role, while under Zia both US aid, following the invasion of Afghanistan by the Soviet Union, and remittances by Pakistani workers contributed very significantly. In some ways, while the 'bad luck' factor may have contributed to the below-par performance of the Bhutto regime, a 'good luck' element, particularly the Soviet invasion of Afghanistan and high Gulf remittances, helped General Zia's economy considerably, and helped prolong his rule. However, such a high dependence on external assistance and on extraneous sources meant that, when foreign inflows ceased, so would economic development. This was most noticeable under the Ayub regime, but also became a factor in the later period of General Zia's rule.

The only achievement of the government was to lure the private sector back into industrial activity. Other than that, it was fortuitous circumstances (the gestation of public sector projects and the international situation) which were responsible for the above average performance of Pakistan's manufacturing.

The 1978-88 period is unique in Pakistan's economic history for exhibiting high output growth without corresponding improvements in the efficiency of factor use in the manufacturing sector. We saw that much of this growth in output was financed by foreign remittances and aid flows coming into the country. The inefficient use of these resources meant that the country squandered the windfall gains that it received as a result of favourable exogenous conditions.

In general, the industrial policy structure of the period was not much different from that pursued in countries which performed markedly better than Pakistan, or for that matter from that which prevailed in the high productivity period of the 1960s. Yet, we also saw that in many cases industrial policy was either not implemented, or the policy structure in some cases was not amenable to productivity growth. The existence of smuggling, the precipitous increase in the number of sick industries, irregularities with the licensing procedures, etc, pointed towards a failure in the implementation of policy during this time. We also saw that policies were not altered even when it was abundantly clear that they were harmful for growth and productivity. In particular, the existence of negative ERPs [effective rates of protection] for certain industries, the regulatory regime of the period and the lack of incentives for value addition in the textile sector were identified as important policy errors.

The Age of Structural Adjustment: 1988 Onwards: The history, political and economic background of the role that the IMF and World Bank began to play in Pakistan's economy after 1988, known as the Structural Adjustment Programme (SAP) to the industrial sector.

The Seventh Five-Year Plan (1988-93) was commissioned at the same time as the IMF/World Bank induced conditionality was accepted by the government in the guise of a structural adjustment programme. The plan had set ambitious targets for overall reforms in the industrial sector, and included further deregulation, privatization, tariff reform, and regulation of foreign investment. As far as the three-year agreement (1988-91) with the IMF was concerned, the industrial policy outlined in the letter of interest committed the government of Pakistan to the following:

i) Limiting the list of specified industries

ii) De-regulating business decisions

iii) Raising the investment-sanctioning limit annually [it was to be raised from Rs700 million in 1988 to RS l billion in 1989]

iv) Phasing out industrial location policies over a three-year period, and provision of infrastructure services at prices that reflect economic costs

v) Divesting the shares of public sector companies to the private sector

vi) Instituting a corporate rationalization programme to enhance efficiency in the remaining, i.e., non-divested, public enterprises

vii) vii) Considering a realistic trade regime as a primary investment or structural adjustment effort

viii) Enhancing export incentives

ix) Reducing the level of protection accorded to different industries

x) Reducing the list of restricted import items as well as those subject to quantitative restrictions

xi) Achieving a tariff range of 0 to 100 per cent by 1st July 1990

xii) Phasing out all tariffs exemptions by 1990/91 except duty drawback for exporters, exemptions for import of capital equipment in key industries and reasonable baggage allowances.

In addition to the above industry-specific recommendations, the following prescriptions of the IMF'S macroeconomic recipe have a direct impact on industrial development in Pakistan.

i) An increase in the level of indirect taxation (in the form of a generalized sales tax) by July 1990

ii) Withdrawal of subsidies on gas, electricity, telephones and fertilizers

iii) An increase in producer prices of major crops (wheat, cotton, sugarcane, rice and oil seeds) and in the prices of petroleum products

iv) A 12.5 per cent reduction in the public sector development programme during the agreement period (1989-1991); and v) restriction on government borrowing and credit allocation to the private sector

The World Bank, in its review of the programme of 1988-91, felt that the economy responded well to these policy reforms. Progress in implementing structural reforms to promote private sector activity has been exceptional during the last four years, despite three changes in government during this period. The large-scale manufacturing sector managed an impressive 7.4 per cent in 1991/2 due essentially to the rapid expansion of cotton manufacture. The World Bank considered Pakistan to have achieved an 'excellent growth performance'.

A major emphasis of the structural adjustment programme was on the enhancement of growth by encouraging the private sector, which was supposed to take a lead role. Amongst the investment and industrial policies followed was a 'forceful' programme of liberalizing the economy from government control. Furthermore, not only was sanctioning of private investment and import licensing abolished, but also a number of other regulatory restrictions (including registration of technical and foreign loan agreements, procedures for employment of foreign workers, etc.) were also removed. Areas of investment previously reserved for the public sector were opened to the private sector, including power generation, commercial and development banking and air and sea transport. [Also], it initiated the privatization of some 105 manufacturing units and began to take steps to expand the privatization program to the energy and telecommunications subsectors. By November 1992, 67 manufacturing units had been sold and important preparatory steps to privatize the telecoms utility (PTC) and gas utilities are underway. Finally, the government also provided investment incentives to the private sector. In particular, to promote investment in rural areas, an incentive package, including a five-year income tax holiday, exemptions from customs duty, sales tax and import surcharges, will be provided for all industries established in rural areas between Dec. 1, 1990 and June 30, 1995.

According to the World Bank, the consequences of following these policies were as follows (see also Table 5.17):

Industrial value added grew by 6.3% p.a. during this period. Manufacturing, electricity and water, which explain most (86%) of this favorable result, expanded by 5.9% and 11.3%. p.a. on average, respectively. Large investments in the energy sector led to significant increases in all major energy sources during this period. Crude oil grew by 5% p.a., gas by 6% p.a., and electricity by 9% p.a., although power shortages continue to be a significant problem. Construction activity was relatively subdued perhaps reflecting the stagnation in public investment. In manufacturing, cotton industries once again dominated the sub sector. However, the strong performance of small-scale manufacturing (which accounts for about one-third of total manufacturing value added) and non-traditional large scale industries is encouraging.

According to the World Bank's analysis, the cornerstone of the government's adjustment programme is to increase the level and efficiency of private investment and activity by deregulating the economy and promoting competition. There is a very strong emphasis in most structural adjustment programmes on increasing foreign direct investment (FDI) and foreign portfolio investment. The government was urged in 1993 to continue pursuing the private sector agenda aggressively in the coming years, a demand that Pakistan's government was eager to pursue in the next three-year programme of 1993-6. While the World Bank and the IMF have concluded that the three-year structural adjustment programmes launched in 1988 and 1993 went rather well - especially in the industrial sector, where the private sector has been the main protagonist of the new policies - it is worth ending this section with an evaluation by a neutral party. The Japanese Institute of Developing Economies, comparing actual industrial production with the targets between 1988 and sectoral contributions to growth rate are computed by weighing the sectoral growth rates by the previous year's sectoral share (in GDP) 1992, draws the following conclusions:

- The first point revealed by an examination of the data is the extent of variation between targets and achievements, and the number of products that were subject to them. We note, for example, that the variations affect up to 30 products for which data were available and range from a deficit of 75% to an excess of 101%. The corresponding growth rates also show large variations.

- The second fact that becomes immediately apparent is the degree to which variations match the difference between revised and original targets for the plan**.** It appears that planning in Pakistan is really an ex-post exercise. In other words, as the planners realize that their original targets are not being met, they revise the targets to more losely approximate likely outcomes. Thus, in 1992, the planners readjusted their targets, in light of the data on actual production as of that year, so that it could be said at the end of the plan period that targets were accomplished. This is really an exercise in self-deception.
- No attempt, it appears, is made to find causes for variations, or solutions to overcome the problems identified.
- Objectives are outlined, targets set, and then the planners await, with bated breath, the ultimate outcome! The monitoring of plan outcomes is not done in a periodic and systematic manner.

Table 5.18: Sectoral contributions to GDP growth, 1981-1992 (%)

Sectoral Contributions to GDP Growth						
Sectors Average	1981/1988	1988/90	1989/90	1990/1	Prelim. 1991/2	Average 1988-1992
Agriculture	1.07	1.77	0.79	1.31	1.64	1.38
of which:						
Wheat	0.06	0.44	-0.04	0.10	0.01	0.13
Rice	0.00	0.02	0.02	0.05	-0.11	-
Cotton	0.35	-0.06	0.04	0.52	1.23	0.41
Sugar Cane	0.00	0.24	-0.10	0.04	-0.08	0.02
Mining	0.04	0.01	0.05	0.06	0.02	0.04
Manufacturing Large-scale	1.44	0.67	1.00	1.11	1.36	1.03
Food and Beverages Related	1.09	0.29	0.60	0.70	0.94	0.63
Cotton	0.15	0.03	0.04	0.03	0.20	0.08
Fertilizers	0.09	0.02	0.03	-0.02	-0.04	-
Petroleum Products Cement	0.04	-0.03	0.03	0.09	0.00	0.02
Pig-iron Automobiles	0.05	-0.02	-0.01	0.03	0.01	0.00
Others	0.57	0.16	0.17	0.31	0.35	0.25
Small-scale	0.36	0.38	0.40	0.41	0.42	0.40
Construction	0.22	0.10	0.13	0.24	6.25	0.18

Electricity, Gas and Water	0.21	0.37	0.44	0.34	0.24	0.35
Transport and Communication	0.73	-0.41	0.61	0.52	0.66	0.
Commerce	1.26	0.87	0.58	0.91	1.25	
Financial Institutions	0.21	0.08	0.09	0.08	0.04	0.07
Public Administration	0.40	0.57	0.20	0.24	0.13	0.28
Other services	0.69	0.77	0.78	0.78	0.79	0.78
GDP (at factor cost)	6.51	4.79	4.67	5.59	6.38	5.35

Source: World Bank, Pakistan: Country Economic Memorandum FY93: Progress Under the Adjustment Program, Report No. 11590-Pak, Washington, 1993, p. 5.

The emergence of a new breed of entrepreneur under Zia: The change in the nature of entrepreneurs from the time of Ayub Khan to the end of the Zia period "1f the Habibs, the Saigols, the Valikas, Ispahanis and Fancys were considered role models for budding businessmen during the 1950s and 1960s, today's corporate kingpins like the Lakhanis, the Sharifs and the Hashwanis have become the idols of aspiring yuppies at the business schools of Karachi and Lahore in the 1980s."

The last decade has seen a significant transformation in the country's industrial elite, as a result of the separation of East Pakistan and the nationalization policy of Zulfikar Ali Bhutto's regime. This is not to say that all the big names from the original '22' have literally gone under. 1n fact, if one goes by the financial assets listed on the stock exchange some of the industrial giants of the pre-nationalization phase - like the Habibs, the Dawoods, the Saigols, the Crescent group and the Wazir A1is - continue to occupy prime positions on top of Pakistan's corporate ladder.

But according to most observers of the country's corporate scene, the list of industrial giants would have been quite different if some of the new groups - like the ubiquitous Sharifs of Lahore, the FECTO group, Captain Athar's Schon group and a horde of other textile empires - had all their companies listed on the exchange. 1 believe that if one was to sum up all the net worth of say, the Ittefaq group, they would certainly be way up among the top 5 industrial giants of the country,' says a veteran observer of Pakistan's corporate scene. He goes on to say that 'the big groups in Pakistan have always held way

above the majority of shareholdings required for controlling the management, and with liberal credit available from DF1s, it does not make any real difference to them if they do not seek equity from the stock market.' It seems that the new industrialists have learnt from the tumultuous '70s when Zulfikar Ali Bhutto used the 'big 22' phenomenon as a major rallying point to come into power and subsequently nationalized many of the big industries.

However, there are some other important ways also in which the new guard is clearly distinct from the old. For one thing, almost all of the big entrepreneurs of the '80s have adopted aggressive marketing and advertising strategies. But while this high-profile corporate strategy may apply to their marketing activities, as mentioned earlier, the opposite is true about their financial standing. While it was a matter of pride for the older industrial giants to be listed on the exclusive club of the 'big 22', their lifestyles were conversely, far less ostentatious than the conspicuous consumption pattern that has become characteristic of the more nouveau brand of financial tycoons today. Financial savvy now amounts to carefully protecting all the particulars of one's financial worth, especially if some of the wealth has been fashionably fuelled through this decade's business obsession of under and over-invoicing.

Another legacy of the Bhutto years - the labour laws - have made the mode of operation of Pakistan's industrial sector in the 1980s different from that of their predecessors. The introduction of the old-age benefit scheme, social security, medical cover, and a limitation on the discretion of the employers to hire and fire, has increased the costs of the employers by considerable proportions. While the corporate generation of the 1960s could happily amass fortunes without being saddled with such 'oppressive' legislation, the new lot has dealt with these laws in quite an ingenious manner. Instead of hiring their labour force on a permanent basis, the industrial sector of the 1980s has resorted to the now popular practice of hiring it on a contract basis. By doing this, they manage to sidestep another major impediment in the way of accumulating huge profits.

However, boasting palatial houses or gleaming limousines these days is not just the hallmark of the business magnates aspiring to become socially indispensable, or of the

powder-kings with not enough places to spend their highly liquid drug money. These are also some of the crasser symbols of bourgeois bounty flashed around by a whole new breed of export-led trade magnates. Indeed, it might even be true to say that the 1980s has seen the proliferation of a new class of entrepreneurs who can match their big brothers in business in terms of conspicuous consumption. These 'businessmen' are mostly exporters of value-added goods like garments, leather products, rugs and other items which have an exotic appeal in the western world and Japan. These exporters with leading names like Ilyas Malik, Mohammed Saeed, Mohammed Hussain, Khalid Javaid, S. Mohammad Din, Aziz Brothers and Haji Abdul Latif have grown and prospered partly as a result of changing governmental priorities, like the devaluation of the rupee. In particular, they have been quick to reap profits from concessions like the very liberal export policy with massive rebates for value-added exports and, like their counterparts in big industries, they have also extorted huge profits by cutting down on labour costs. Instead of retying on the traditional factory-oriented method of production, many exporters have gone for sub-contracting their production to the small power and hand looms, tanneries and weaving units in the informal sector.

While, on the other hand, this arrangement has made it possible for these exporters to keep their overhead costs low, on the other, it has effectively kept the workforce out of the ambit of labour laws. Thus, with their fixed assets working out as almost negligible on paper, they have been able to make an average profit, which ranges from 400 to 700 per cent per unit of exports. But despite these differences in the two different generations of corporate elites, it is not entirety wrong to say that they have essentially made it big by riding on the back of the country's bureaucracy.

Most observers of the first industrial boom assert that the infamous 22 families of the 1960s were more a product of state patronage, rather than that of any intrinsic entrepreneurial genius. Which leads one to wonder if the new business brass has also made it big by accumulating a large share of their booty through the assiduous cultivation of the bureaucracy - who are notorious for not being averse to scratching others' backs if theirs are kept well groomed. Certainly, there can be no denying that the role of the

country's establishment in the concentration of industrial assets has remained almost as significant as it was during the industrial boom of the 1960s. 1f at that point during the 'decade of development', the nascent industrial class of the country was provided easy capital through state-owned financial houses like the P1DC, P1C1C and 1CP, the new breed have not exactly been starved of liberal loan windows through rationalized banks and the many DF1s which have been created over the last 15 years (1NDFC, BEL, etc.) Similarly, the famous bonus voucher scheme of the 1960s and the overvalued rupee - mechanisms for easing the import of raw materials and export of finished products have taken on the guise of excise and export tax rebates, and import of capital equipment at lower duties. Apart from obtaining these concessions which are genera! to the industrial sector, big business has essentially thrived by maintaining a close rapport with the top echelons of the bureaucracy - an arrangement which has occasionally been disturbed during the brief interludes of parliamentary democracy in the country.

Another similarity between the elites of the two different eras is that the big industrial conglomerates have backed their industrial and personal assets by floating insurance companies and banks. After the nationalization of all banks and the major insurance companies during the Bhutto era, it took some time for the new groups to commit so much capital to venture in the financial market. But despite memories of the Bhutto squeeze, over the last 10 years almost all the big groups - the Habibs, the Dawoods, the Adamjees from the old lot, and Hashwani, Lakhani, Shirazi and Firdous groups - have managed to set up insurance companies or modarrabas. The Crescent group is the first which has recently launched its own investment bank.

1n terms of industries again, there seems to be little difference in the product mix of the two eras. Like in the past, most of the industries are essentially textile based. Some of the new names have, however, distinguished themselves by venturing heavily into areas like hoteliering (Hashwanis), steel (Sharifs), auto assembly and light engineering (the Atlas and Sony groups).

The picture that emerges out of the present set-up of corporate activity then, is that it continues to be essentially patronized by the state, which not only supports this group, but also turns a blind eye to its numerous illicit practices.

Since the onset of parliamentary democracy in 1985, however, many politicians have been going into industry in a big way - with some leading names like the Saifullahs, Zarri Sarfaraz, and the late Mohsin Siddiqi. And if the present trend continues, one wouldn't be too far off the mark in conjecturing if the '90s is going to see the new breed of politicians-turned-industrialists pushing out the present tycoons to gain a higher position near the top of the corporate ladder.

Certainly, if one is to go by the business community's recent protest marches and convention jamborees, which embodied its threat to boycott government revenues and withdraw advertisements from the electronic media, it is becoming increasingly clear that they are not exactly going to lie low while the feudal politicians sweep away the fruits of their financial standing. There is little doubt in any business observer's mind that, given the present aggressive posture of the business community, it seems that this time they will preempt the traditional politicians' move to keep the reins of power in their hands by carving out a political niche for themselves.

Privatization

After having gone through the critical analysis of sick units and the performance of public owned industrial units, government had made a commission for their privatization. The detail lists of objectives of this commission are given at appendix-1. The detail of privatized units has been given at appedix-2. The over arching privatizing programme of the public industrial sector has had a dampening affect on productivity of the units. Due to the impending privatization of the enterprises, vital operations like essential maintenance and BMR of the units is not conducted. The uncertainty has been instrumental in sharply reducing the production capacity of many units as well as demoralization of skilled manpower. It is imperative to increase the credibility of this initiative after the over-ambitious, but failed efforts of the previous government. External

developments like the Asian crisis in 1997, the international sanctions on Pakistan in 1998, and the IPP issue, did not create an environment that was conducive for the sale of state-owned enterprises (SOEs). Furthermore, it is becoming increasingly clear that most of Pakistan's SOEs need extensive restructuring before they are put up for sale.

A good example is the Non Commercial Banks (NCBs), where the existing management teams have been successful in downsizing the banks and upgrading the work environment. These banks have also been able to increase their provisioning against NPLs, even at the cost of posting lower operating profits. These actions have improved the market value of the NCBs, but the job is still not done. Whereas the urgency to privatize the NCBs had been driven by the need to insulate them from political pressures to lend, with the aggressive accountability drive, these fears can now be laid to rest.
Even with impressive recoveries from the recent accountability drive, most of the NCBs carry a gaping hole in their balance sheets, which the government is unable to fill. In effect, it would be wiser to delay privatization, allow these banks to further shore-up their asset base and improve operating performance, and then take them to the market. Selling the NCBs prematurely would restrict the pool of interested buyers, and also call into play an adverse selection problem that could undermine the integrity of the new management and owners.

The benefits of internal restructuring before sale would also apply to Pakistan's public utilities (Wapda & Kesc), the oil & gas sector (SSGCL, SNGPL, OGDCL), Pakistan Railways, the engineering sector, and other SOEs. With an import dependent economy, the IMF will have to take ownership to ensure that Pakistan's current account deficit is contained during the course of this fiscal year. If it is not, the consolidation period will have to be extended beyond December 2000, and this entails reopening discussions with the Paris Club and if need be, with commercial banks. The logistics itself are a disheartening thought, not to mention the further loss of confidence of the rescheduled creditors.

In recent years, the IMF's track record in South East Asia and the former Soviet Republics has been checkered. Although the policy prescriptions for some of these countries are questionable, one must realize that the IMF has often intervened in a crisis situation (e.g. SE Asia), and has had to commit to a course of action to stem the market panic. Pakistan's case is different; austerity is needed to reduce a stubborn fiscal imbalance that has been pressurizing the external sector. The resulting program to change the incidence/nature of taxation and to contain public spending is, by definition, a painful process.

State of Education

Pakistan is placed at 146th position out of 178 countries with respect to human development index (HDI), worse is situation shown by the education index where it stands among the bottom 10 countries. Literacy rate for both men and women increased at a very slow pace between FY99and FY02. The overall literacy rate is estimated at 54% in Fy04, probably due to the increased emphasis on basic education in the country to achieve Millennium Development Goal (MDG) of universal primary education. However still 68.4 million people are illiterate in the country.

Education deprivation is one of the major contributing factor for low human development in Pakistan. The literacy profile depicts a substantial gender specific and rural urban disparity. Similar kind of gender and regional disparity also exists at provincial level. Between the provinces, literacy ranges from 36% in Balochistan to 51% in Sindh. The lowest literacy rate at 16% prevails among female of Balochistan, while the highest rate is at 64% among the urban males in Sindh. Reasons of low literacy rate in the country are:

- Low enrollment in the government school.
- Worsening of quality education.
- Shortage of trained and qualified teachers
- Lack of proper physical infrastructure and
- Rising poverty level.

- Gender as well as regional disparity is also apparent in the Gross Primary Enrollment Rate (GPER).
- High drop out rate due to high opportunity cost of education.
- Low public expenditure on education, it is much less than the recommended by the UNESCO for developing countries which is 4% of GNP. Even Less than the countries of the region i.e 1.8 % of GNP.

- Non availability of schools. In 1992-1993 one public school was available for 248 children in the 5-14 age groups. This increased to 264 children 1999-2000 indicating a relative decline in the availability of school.
- Access to the school is another reason and is relatively more important concern for girls whose families do not allow them to attend the school situated away from home.
- Quality of education services provided by the government is not satisfactory.

To achieve the goals of various education policies and remain competitive in the world economy, it is important to pay adequate attention to formation of human capital through education enhancement. To overcome the education deficiencies, it is necessary to increase allocation on education along with improved governance and strengthening of management.

Keeping in view the scarcity of resources and weaknesses of the public sector, public-private community partnership to achieve goals of human welfare can be a wise step.

CHAPTER-6

KAIZEN IMPLEMENTATION AT ASKARI CEMENT LIMITED

Overview of the Organization: Askari Cement Limited (ACL) is having two plants known as Askari Cement Wah which is successor of Associated Cement Ltd, the first cement plant in area now constituting Pakistan. This was the first plant setup by renowned Bombay based Indian Company (Associated Cement) in 1921 with rated capacity' of 120 tones per day. First major expansion was made in 1936 when a kiln of the capacity of 250 tones per day was added followed by enhancement of 300 tones per day in 1950. In 1970 another kiln of 600 tones daily was erected. In 1974 the company was nationalized and put under control of "State Cement Corporation of Pakistan", in 1991 the name of the plant was changed to "Wah Cement Company". In 1993 plant was privatized by the government of Pakistan and acquired by Army Welfare Trust (AWT). The other plant is located at Nizampur near Peshawar in NWFP province.

Askari Cement Limited produces Ordinary Portland Cement (OPC) in accordance with Pakistan Standard PS: 232-1983 and also for special projects according to the contractual obligations. The quality of cement produced at this plant is comparable in quality to the very best in the world .The company is based on the resources of over 800 professionals, including 200 engineers, chemists & financial experts, ACL completed its ISO 9002 implementation in May 1998 and obtained the ISO 9002 certificate from M/s AIB VINCOTTE (Belgium) in the same month thus becoming the first Cement manufacturing unit in Pakistan by achieving this milestone.

Acquisition of Latest Technology

After purchasing the plant from government AWT scrapped the whole old structure and machinery prior to start of the latest state of the art-FLS Dry process and it was named as “Askari Cement Limited”. Askari Cement’s new plant was commissioned in December

1994 that is one of the latest units in Pakistan, having capacity of 3000 tons per day. F.L.Smidth designed and supplied the plant in consultation with M/s Holder Bank, M/s ABB (Switzerland), SIEMENS, and H & B are amongst the other suppliers of control systems, extensive range of most modern equipments, equipped with Programmable Logic Control (PLC) system, Quality Control, X-ray Analyzer and Laboratories. The unit is very much environment friendly, latest technology is used to control the environmental pollution.

Expansion Process

Askari Cement Ltd, Nizampur: Construction of the new plant at Nizampur (NWFP) was started in 1994. Its first line was completed and it started production in 1996. Erection of second line was started in 1997 and completed in last quarter of 2003 and the production has started. The plant was designed by M/S Tianjin Cement Design *&* Research Institute China and was supplied by M/S China Building Material Industrial Corporation (CBMC) for Foreign Economy Technical Corporations China and local machinery was manufactured by Heavy Mechanical Complex (HMC) Taxila, Pakistan. The present plant capacity is 4000 tones per day.

Business Environment

- Askari Cement is a part of Army Welfare Trust and its production depends on two plants “Wah Cement" and "Nizampur Cement". Cement sale generates revenue for Askari Cement. Askari Cement produces, markets and sales the cement within specific environment of cement industry in Pakistan. Up to 1991 there was free market for cement industry. After that cement industry expanded largely and its production was more man the demand in local market. At present, 18.0 million tons cement is produced while the demand is 10.0 million tons only. This difference in production and demand subsequently created price war.

- To save the industry from effects of free market competition. All Pakistan Cement Manufacturing Association (APCMA) formed. Now APCMA authorizes the quota to each cement factory on the basis of its production and regulate the price of cement.
- Due to nature of product its weight and consequently the effects of transportation charges on total price a factory can compete only in some specific nearby areas which are away from any other factory.
- ACL has a network of dealers in NWFP, Punjab and Azad Kashmir. Registered dealers earns rebate on the amount of cement purchased. Permanent clients who are mostly big organizations also enjoy the rebate facility. Askari Cement marketing and sales people are maintaining the market sales and brand name in their areas and exporting a reasonable amount to Afghanistan.
- Area wise targets are fixed by G.M marketing. Manager Marketing and Assistant Managers ensure implementations and realization of those targets. Price is fixed area wise and priority for maximum sale is given to highly priced areas.

Vision : "To Meet the Needs and Expectations of its Customers"

Objectives:

- To be the best and efficient company in the country new technology will be acquired whenever required, product of specifications would be produced and delivered on time at right cost to the entire satisfaction of customers.
- Maintain the Standards of Askari Cement by assigning quality inputs relevant to the designed outputs.
- Achieve quality through team spirit, continued efforts and proper maintenance of the plant.
- Establish and maintain written operating procedures for all the processes in the form of controlled documents. Make these procedures available at appropriate places to perform all the operations accordingly.
- Management shall review the Policies & Objectives and their effectiveness on yearly basis to ensure that they are achieved.

- To reduce cost of production by achieving the consumption norms fixed by management on annual basis.
- Gradual replacement of furnace oil with cheaper alternate fuels.
- To increase capacity utilization of the plant through exploring new markets.

Quality Policy

- Cement shall be produced according to the adopted national / international standards and also for special projects in accordance with the contractual obligations to meet the needs and expectations of our customers.
- All efforts will be made to provide appropriate training to all employees and stakeholders in order to ensure that they possess the required skills in their respective fields.
- Askari Cement Ltd., shall maintain a quality system in accordance with the ISO 9001: 2000 standard as relevant to the business of cement.
- Effectiveness and continuous improvement of Quality Management System (QMS) will be reviewed regularly in Quality Council Meetings

Communication

- **Internal Communication:** The company has established and maintained a procedure for internal communication between various levels / sections and departments ACL regarding the management system and its effectiveness. This ensures that the policies, goals, procedures and records are properly communicated to relevant persons in time to keep them fully aware.
- All the decisions regarding management system, overall corporate policy, quality policy, objectives, company rules & regulation regarding personnel are communicated to all employees of ACL. The following communication methods arc adopted to communicate all information that directly or indirectly affects the quality of work, process or personnel benefits:

- **Downward Communication:** In this way of communication, top management (Board of Directors, Managing Directors & General Manager) decisions i.e., office orders, letters, circulars, policy statements, plans, procedures, telephonic instructions etc are communicated to middle management i.e.. Deputy General Managers, Managers. Middle management conveys these decisions to front line managers i.e.. Deputy Managers, Assistant Managers and Junior Officers.
- **Office Orders / Circulars:** Management decisions regarding rules, regulations, policies and about any other pertinent issues are communicated through office orders, circulars etc which are displayed at Admin block, time office and Central Control Room building notice boards.

Cross Communication

- **Daily Review Meeting:** A daily review meeting is held to discuss all the issues regarding process, product quality, quality system and maintenance and chaired by General Manager (Works). All issues regarding plant maintenance, product and quality management system are discussed. This is a major source of communication of both natures i.e., top to bottom and bottom to top. All departmental heads and sectional in charges or their representatives attend this meeting. Genera] Manager (Works) issues written or oral instructions to concerned person for executing any activity. Record is kept on persisting and daily faults formats which is communicated to all respective departments for corrective / preventive action(s) respectively.

- **Briefing / Presentation to Top Management:** It is another mode of communication that is used to communicate to the top management important issues regarding quality, plant, product, process efficiency, chemical analysis and market survey findings by departmental heads. General Manager & Managing Director also gives presentation to Board of Directors.

- **Reports:** Reports i.e., audit reports, financial reports, data analysis and objectives Vs targets achievements or report on particular issues are also used as a communication tool.

Management Review

Quality Council nominated by the Managing Director has been constituted to review the quality system at regular intervals in a meeting called Quality Council Meeting. All departmental heads are member of this council. It is a forum where Quality Management System is reviewed and findings are communicated through Quality Council Minutes to all members for necessary action(s)

Frequency and Scheduling: The Quality Council meets regularly after every three months at conference room. Central Control Room Building (CCR), Askari Cement Limited (ACL). Responding to special or changing events, the Managing Director may, at his discretion, call for unscheduled additional meeting. The time and date of this meeting is decided by the Managing Director and is intimated to the members by Quality Assurance Department minimum one week in advance.

Members and Attendance: The Managing Director chairs the meeting. In his absence, the meeting is chaired by the General Manager and are attended by the heads of following departments:

i) Managing Director
ii) General Manager
iii) Quarry
iv) Production
v) Mechanical
vi) Electrical
vii) Quality Control
viii) Store
ix) Administration

x) Purchase

xi) Marketing

Those members of Quality Council, who are unable to attend the meeting, send their representatives in the meeting. The absent members receive the minutes of the Quality Council Meeting from Quality Assurance office for further action and implementation.

Notice, Agenda, Working Paper: Quality Assurance (QA) department is responsible to issue the notice, agenda and working paper. Working paper consists of the annexes, provided by members Quality Council along with their progress reports, as such or in compiled form by Quality Assurance. After the meeting, QA prepares and distribute the minutes of the meeting amongst the members of the Quality Council.

Resource Management

In the light of the management reviews i.e., daily review meeting, quality council meeting, Board of Directors meeting and other management controls, the top management determines and provide the resources needed:

• To implement and improve the processes of the quality management system and

• To enhance customer satisfaction by meeting customer requirements

Types of Resources: Following are the examples of the types of resources utilized by Askari Cement Ltd;

- Manpower
- Machinery
- Raw Materials
- Financial resources
- Inspection and Testing Equipment
- Calibration Facilities
- External Experts

- Internal Auditors
- External Auditors
- Training Facilities
- Information
- Transport and Communication

Acquisition of Resources: Request for acquisition of resources is submitted by sectional in charge, verified by departmental heads and approved by the competent authority.
There are two categories of resources:

(a) Internal Resources: These are the type of resources that are available within Askari Cement Ltd. Examples include, computer expertise, technical skills, stores etc.
(b) External Resources: These are the type of resources that are not available within Askari Cement Ltd and have to be acquired from outside sources. Examples include, acquisition of machinery, computers, technical expertise i.e., consultants etc.

Human Resource Department

Commitment of the employees and suitable environment for working are the basic elements for the successfulness of any organization. Hiring of the employees and creating conducive environment are the responsibilities of human resource department. After analyzing the importance of above given factors ACL formed human resource department. This decision will pay off for the progress and prosperity ACL. Human resource department is not fully functional at present which must take start with full zeal. Hiring an employee is one of the most important tasks which have been assigned to human resource department, because at the time of hiring they have to judge that how capable and sincere the man will remain with the organization and what is the main objective, he has behind coming to the organization. See whether he is smart enough to adjust himself in the environment of the organization or not? The requirement of the organization is mostly engineers, technicians and labour.

Activities of HR Department: HRM practices as a mean to contribute to customer's satisfaction, profitability, quality, and other business goals through enhancing and supporting operations. Human resource department is most likely to collaborate with other company functions on employment interviewing, performance management , discipline , efforts to improve quality and productivity. Following activities are performed by the HR Department:

- HR Planning
- Recruiting
- Selection
- Training and Development
- Compensation
- Performance Management
- Employee Relations

Responsibilities and Authorities: Manager Human Resource is responsible to arrange and coordinate for all types of human resources activities i.e. hiring persons, training, development and keeping personal record etc. Departmental Heads are responsible to identify training needs and arrange to impart training to their staff and communicate to HR department accordingly.

DM (HR)/Junior Officer (Training) are responsible to provide all possible means for execution of these training. Junior Officer is also responsible to up date training record of all the employees.

Human Resource Management: Greater and continuous customer's satisfaction and growth remain the ultimate aim of all the commercial and industrial concerns like ACL. Of the factors Which contribute to achieving this end the most important remains the Human Resource. Since contribution by all other factors is directly proportionate to the quality of HR complement employed. Efficient and skilled work force endued with a sense of motivation, discipline and commitment lead by equally competent, disciplined, imaginative, motivated and committed line managers and supervisors imbued with keen

professional outlook and leadership qualities to get the best out of the work force placed at their disposal. This makes all the difference to achieve organizational goals and objectives. To maintain such a HR complement on the roll is all about what we call Human Resource Management.

The management of human resources is considered as one of the most important process of strategic management. The basic aim is to ensure right person for the right job. This includes resources for operation and improvement of the quality manpower to achieve the satisfaction of the customers. The company assigns responsibilities defined in the quality management system to personnel ensuring that they are competent on the basis of applicable education, training, skills and experience. Their qualification, training and experience data are maintained at HR Department. In order to support its human resource policy and increase its competitiveness, Askari Cement Ltd (ACL) is strengthening its human resource tools. The most significant steps include:

- Supporting the employees through latest information on the cement industry.
- Customer's needs are recorded and communicated to the employees for better understanding of the market trends.
- The launching of a new Internet/Intranet portal for officers/employees use.
- The implementation of performance assessment tools (PMS)The emphasis is on development and retraining in close cooperation with employees' consultation.

Purpose: Human Resource Management (HRM) activities include hiring of quality manpower, (right man for the right job) improving employees proficiency and skill level and its diversification to prepare them to' meet their, respective job requirements as more effective team members and where possible support their personal goals.

Scope: This procedure applies to all human resources activities at Askari Cement Limited (ACL).

Responsibilities and Authorities: Manager Human Resource is responsible to arrange and coordinate for all types of human resources activities i.e. hiring persons, training, and development and keeping personal record etc. Departmental Heads are responsible to identify training needs and arrange to impart training to their staff and communicate to HR department accordingly. DM (HR)/Junior Officer (Training) are responsible to provide all possible means for execution of these training. Junior Officer is also responsible to up date training record of all the employees.

Managing the Human Resource Environment: Managing the internal and external environment factors allows employees to make the greatest possible contribution to company productivity and competitiveness and to achieve the objectives. Creating a positive environment for human resources involve:

- Linking HRM practices to the company's business objectives.
- Ensuring that HRM practices comply with federal, state and local laws.
- Designing work that is motivational and satisfactory to the employees as well as maximizes customer's services, quality and productivity.

Strategic Management

Today business organizations exist in an environment of competition. They have a number of resources at their disposal that they can use to compete with other companies. These resources are physical (e.g., plant, equipment, technology and geographical location), organizational (e.g., structure, planning, controlling, coordinating system and group relations) human (e.g. the experience, skill, and intelligence of employees). The goal of strategic management in an organization is to deploy and allocate resources in a way that provides it with a competitive advantage.

"**Strategic Management is a process, an approach to addressing the competitive challenges an organization faces"**

Role of HR Department in Strategic Management

Cement being basic ingredient of construction industry, is vital for the country like Pakistan where poverty problem requires immediate actions in the field of basic need i.e. shelter. Key to success in today's business environment is to simultaneously meet investor or financial needs and those of other stakeholders including customers, employees, and the community. Companies are challenged to reach financial objectives through meeting customer's needs and employees' needs. Innovation, cost reduction and quality objectives, which relate directly to the financial success or failure of the firm are influenced by human resource management practices. Today organizations are facing different competitive challenges which are: -

- The Global challenge
- Stakeholders' needs challenge
- The high work performance systems challenge

It is believed that all aspects human resource management including how companies interact with the environment; prepare, develop, and compensate human resources; design and measure work. It can help companies meet their competitive challenges and create value. Meeting challenges is necessary to create value and to gain competitive advantage. Therefore a well defined HR department headed by GM HR is need of the day because ACL is a forward looking entity in the cement industry and has bright future to progress.

Strategy Formulation: The role of HR department in strategic formulation is dynamic and multi-faceted, based on continuous interaction. In other words it is an Integrative Linkage. HR department should be part of the Strategic Management team of the company. The GM HR should be permanent member of the strategic management team and be involved in all the decision making and strategy formulation. On this basis we can say it is a continuous interaction and HR department is integrated in strategy formulation.

Strategy Implementation: The main role of HR department in Askari Cement Ltd is to deploy talented and skilled employees according to the strategy formulated and the job requirement. The important variables, which determine success in strategy implementation, are:

- Organizational structure
- Task design
- Selection
- Training and Development
- Reward system
- Type of information system

Competence, Awareness and Training

a) **Competence:** A comprehensive competence criterion against each post for officers & workers is established and documented in the Company's Service Rules Doc, # ACL/MD/CSR/001.

b) Awareness and Training: A planning process is being implemented which ensures the proper training, awareness and competence development of people. This planning is carried out while taking into account the organizations processes, customers' needs and expectations, the stages of development of people and the culture of the organization. The objective is to provide people with knowledge and skills, which, together with experience, improve their competence and capabilities. Askari Cement Limited has established and maintained a procedure ACL/QA/HRM/013 to ensure proper capabilities of personnel working. This includes:

(i) Identification of Training Needs: Training needs of existing employees are continually identified by their department head / sections inching. Training of existing employees is a continuous process warranted by following considerations:

- Improving upon existing proficiency level and diversification of skills

- To prepare employees for introduction of new technologies, concepts and process and procedures
- To remove the existing weaknesses observed during routine maintenance and production activities
- Preparing employees particular officers for higher responsibilities
- Helping Officers inculcate a habit of self-study and research

(ii) Training Techniques: Based on the identified training needs, concerned departmental head / section in charge plans and arrange internal on job training sessions of employees. A copy *of* the same plan is submitted to HR department and Junior Officer training ensures the implementation of the same. The training attendance of employees in internal training sessions is recorded on QA.002.00. The attendance sheets are sent to HR department and the training records of concerned persons are updated. Vendors also present some courses such as bearing mounting and lubrication by FAG / SK.F, Process Control, Equipment maintenance by F. I. Smith and Didier on fire Bricks etc. Technical people attend professional meetings, seminars and conferences etc.

(iii) External Training: On receipt of training schedules, Assistant Manager (Personnel & Legal) / Junior Officer Training circulates these training schedules to all departments for selection of suitable course and nomination of personnel. Concerned department head nominates the person for the relevant courses and intimates it to Admin department. Upon training nomination from departments, Assistant Manager (Personnel & Legal) / Junior Officer Training gets the approval from GM and MD. On approval makes arrangements for registration of persons in the course. After completion of course, the concerned persons submit a copy of course contents to drawing office for reference literature. Concerned person also submits a copy of course certificate to Admin department. These certificates are filed in the personal record and the training records of concerned employees are updated.

(iv) Performance Evaluation: At the end of each calendar year Assistant Manager (Personnel & Legal) of Admin department intimates the performance evaluation of

company's personnel, in the form of Annual Confidential Reports and sent to the concerned departmental heads. Departmental head fill these forms and return to Admin department. Performance results for the previous year are assessed based on the following criteria:

• Achievement of specific tasks
• Completion of assignments
• Role in achievement of departmental objectives

In addition, the improvement areas and the corresponding training requirements for next year are also identified. The evaluation forms dully filled are sent back to Admin department. Assistant Manager (Personnel & Legal) / Junior Officer Training compiles the training requirements identified in the evaluation forms and prepares a tentative annual training plan. The training plan is thoroughly reviewed by concerned departmental heads and approved by General Manager (Works).

Training of Existing Employees

Training Needs: Although at the time of initial induction only the best available trained persons are hired with every consideration to merit, training of existing employees is a continuous process warranted by following considerations:

- Improving upon existing proficiency level and diversification of skills.
- To prepare employees for introduction of new technologies, concepts and process and procedures.
- To remove the existing weaknesses observed during routine maintenance and production activities.
- Preparing employees particular officers for higher responsibilities.
- Helping Officers inculcate a habit of self-study and research.

Primary objective of training effort remains focused on creating a well trained competent team capable of meeting their job obligations effectively with emphasis reducing the maintenance and production costs.

Training Plans: Workers as a group and also to address individual shortcomings, clearly listing them down and how the same are to be overcome. Annual Training Plan should be kept flexible to cater for unforeseen maintenance and production needs' and should take into account both internally and externally available training facilities. Based upon the requirement indicated by each Department through their training plans submitted. Admin Department shall coordinate and arrange for:

a) Vacancies on courses/seminars arranged by different Training Institutes/Professional Organizations.

b) Training aids required if any.

c) Visits to Institutes and other Plants to learn from the experience.

d) Training publications, magazines and journals recommended be procured and subscribed

e) Budgetary needs in the light of the aforesaid.

Execution of Training Plan

a) On Job Training: Teaming up weak in any particular aspect with the one who is more skilled with specific instructions to train the weak one during routine duty hours.

b) External Courses/Seminars: Courses and Seminars arranged by various, professional institutes and organizations to impart know how on advanced technologies, practices and processes should be availed for greater learning and introduction of the same at the plant.

c) Study Tour and Visits: To other related plants and concerns to learn from their experience and practices.

d) Internal Courses: Knowledge acquired by few selected on various external courses should be passed on through short courses for the greater benefit of the company and the individuals.

e) Study Period: Where the knowledge acquired could be passed on in relatively routine duration study period. This could follow the research and study assignments on subject of interests assigned to different officers by Head of Departments or the GM (Works).

Quality Management System

Management Commitment: In order to achieve customer satisfaction and excellence in Cement production, he ACL management has established a system in accordance with the ISO 9001 - 2000 requirements, having the following characteristics:

a) Product specifications and characteristics are established according to PS- 232 1983 (R) to provide concrete strength and the importance of meeting customers requirements and satisfy them beyond their expectations is communicated at all levels in the organization.

b) ACL has defined a quality policy and objectives (ACL/QA/QP/002) to consistently produce a qualitative Ordinary Portland Cement and ensured that they are deployed effectively at all departments and levels.

c) Departmental and sectional level quality objectives are also established to achieve the ultimate ACL objectives. Objectives are periodically reviewed and monitored in the Quality Council Meetings.

d) To ensure the implementation of quality management system. Quarterly Quality management review meetings (QCM) arc conducted to review the progress and effectiveness of the planned activities, see clause 5.6 for management review procedure.

e) Most modern & environment friendly technology, highly qualified, experienced and skilled engineers, chemist, technologist, finance and quality expert are employed to achieve the organization objective. Competence criteria against each post is defined in Company's Service Rules Doc. # ACL/MD/CSR7001.

Company's Quality Policy

The quality policy is communicated and enforced through management reviews, training, displays in Urdu and English at appropriate locations in offices and factory premises. Management Representative Deputy General Manager (Production) conducts regular sessions with existing employees and new employees to ensure that all understands quality policy. The quality policy is reviewed at least once in a year in the management review meetings for its continuous suitability and improvement (The quality policy given at Sr. # 04 is the main guiding principles which focuses upon Quality System of the whole organization)

Quality Objectives: Askari Cement Ltd. has established quality objectives at appropriate functions and levels within the organization. These objectives are defined in measurable terms, which are intact interpretations of policy deployment in each department. These objectives are set annually, consistent with the quality policy, and the commitment to **continuous improvement** and meeting requirements of product. Quality Objectives are classified into the following categories:

a) **Company wide Objectives:** These are principle, strategic objectives that apply to the whole organization. These objectives are included in the Quality Policy as defined in the clause 5.3.2. The Managing Director ACL authorizes policy objectives.

b) **Quality Performance Objectives / Management Norms:** These objectives set specific, measurable targets for improving operational performance to ensure product conformity and customer satisfaction. They apply to departments and sections having direct responsibility for activities that require improvement. Performance objectives

are established, documented and monitored in the quality council Meeting and perform review meetings. The General Manager or Managing Director ACL Wah authorizes performance Objectives. These objectives are included in the respective department's quality manual.

c) Product Quality Objectives: These objectives pertain to improvement of product quality i.e.. Compressive strength, fineness and soundness etc. These objectives are set by the GM and MD in accordance with applicable regulatory Cement Standard PS 232 - 1983 (R) and are made available in the Quality Control and Production department. I had the opportunity to have the internship with Askari Cement Ltd, which is successor of Associate Cement Company, the first cement plant in the area now constituting Pakistan. Army Welfare Trust bought this plant in 1996 and changed its brand name to "Askari Cement". The management has carryout good work to make its processes easy and simple in order to achieve the targets. Features which make "**ASKARI CEMENT Limited"** outstanding among other brands are:

Quality: To achieve outstanding quality features, computerized quality control system for raw material proportioning and for finished product (cement) have been provided at the plants.

Quantity: Accuracy in weight is ensured upto 50Kg/bag +, - !% through computerized packing and weighing system.

Prompt Service: Customer satisfaction through prompt professional response is hallmark of the company.

Flexibility/Assured Supply: Company provides cement from any of the two plants to suit customer preference and/ or in case of fault in one plant.

Availability- Area Wise: Because of highest production capacity at two plants in the North Punjab and NWFP, it has consistent availability in all the areas.

Economy: In view of higher strength, its lesser quantity produces the desired results and thus it has significant economy for its consumers who can work it out by using it with deferent prescribed ratios.

Quality Management System Planning

Quality system elements and processes are planned to ensure that the system is appropriate to achieve the quality objectives. Quality system elements and processes planning is documented in the quality manual, quality procedures and in other referenced documents. Planning ensures that change is conducted in a controlled manner and that the integrity of the quality management system is maintained during such change(s).

Product Realization Planning: Planning of product realization, verification and validation processes is addressed in section V of this manual and also in the respective departmental operation manuals.

Continuous Improvement Planning: Improvements of the Quality System are planned within the framework of management reviews. Continuous improvement planning is expressed in the form of Quality System Objectives / Management Norms and defined in the clause 5.4.1 (b) of quality policy.

Quality Review Meetings

Input / Agenda. The agenda for management review meetings is prepared by Quality Assurance and distributed to the participating heads at least 03 days before the meeting. The agenda comprises of following items:

a) Internal Quality Audits Report: Quality Assurance department for review submits a report on internal quality audits and status of preventive and corrective actions taken on

non-conformities. The council review audits results, compare them with the preceding period, and identify areas where improvement is required.

b) Customer Feedback: Marketing Division presents the summary and statistics of customer complaints and high lights the most important and recurring complaints. Council reviews this report and identify the key areas where improvement can be made to minimize complaints and satisfy the customer.

c) Departmental Progress Reports: Members of the Quality Council, submit the progress reports on the implementation of ISO 9001 in their respective departments, mentioning the followings:

i) Progress on the actions taken on the decisions in the previous meetings. In case, a job is not done in time or work is under progress, reasons for delay are mentioned by the responsible person.

ii) Status of Departmental Quality Objectives Vs achievements for (he period under review.

iii) Process performance and product conformity.

iv) Training activities

d) Corrective / Preventive Actions Report: Every departmental head submit a report on corrective and preventive actions, taken on non-conformities regarding product quality, quantity, or any other customer complaints.

e) Changes that could affect the quality management system: Possible changes i.e., arising from new technologies, quality concepts; relevant statutory and regulatory changes are also discussed and reviewed in the QCM if happened.

f) Recommendations for Improvements: Recommendations for improvements submitted by Quality Council Members are discussed and reviewed in the Quality Council Meeting and subsequently implemented if feasible.

Management Information System ACL

Six independent modules, which include Maintenance Management System, Production Planning System, Materials Management System, Administration and Human Resource Development System, Financial Management System and Marketing Management System. These modules can communicate to each other and to a seventh module-the Executive Information System that gives a summary of all aspects of the company to the top management.

The Modular Approach CAS comprises of seven modules. Each module can be installed alone or as part of the integrate family of systems. These modules include:

CAS-E Executive Information System

This sub-system of CAS provides the top management with the necessary current information from the on-line database. This represents, so to 'say, the overall summary of the company status and is able to generate reports about each department.

CAS-M Maintenance Management System

These sub-systems of CAS enables management to keep, track of maintenance related activities at the plant. A sub-set inspection Management system organizes inspection schedules and data analysis methods.

CAS-P Production Planning System

This sub-system of CAS provides the management with production reports consumables status, data analysis and cost control, and other reports related to normal, “actual / budgeted" patterns.

CAS-MM Materials Management System

This sub-system of CAS controls the warehouse activities, store status and materials requisition. Integration with the financial system and maintenance system enables it, to keep all the information coherent. This sub-system of CAS controls other activities. The second part of the system is recording all transactions on local and foreign procurement. Supplier control and product controls are the basic elements to be managed by the proposed module.

CAS-H Admin & HRD System

This sub-system of CAS comprises detai1ed information about employees, which includes conflden‌tia1 information, attendance, loans and advances and other salary. A subset of this system caters for all the particular administration function such as general services.

CAS-R Marketing Management System

It supplies useful information for advance sale breakthroughs. The drawbacks of this system that it required voluminous data collect. The major advantage of this that it can give a powerful edge over competition in difficult economic environments.

CAS- F Financial Management System

This is subsystem of CAS contains the classical financial consideration. The main heads are general accounting, costing, budgeting, reporting and planning. Most of the basic for this system is supplied from the bottom by the other systems, online screens and reports.

Miscellaneous Aspects

Customers' Complaints: Askari Cement has evolved an excellent system to monitor customer's complaints. The system devised to address this aspect caters through following actions:

- Marketing manager checks daily booking and Delivery State.
- Marketing officers visit the market regularly to meet the clients.
- Proper complaint record is put in management's monthly meeting for review.
- Customers are at liberty to launch complaints against any one, which is dealt in a good spirit.
- A proper sampling of daily production is kept at R&D cell at the plant to address any complain of the client.

Working Environment: ACL has an outstanding atmosphere for working that is why the conflicts among the employees occur at very low rate. But whenever any conflict arises first of all it is the duty of the head of the respective department to handle that conflict, if he found himself unable to do so than human resource department is responsible to handle that conflict.

Job Satisfaction: Management of ACL concentrates a lot to make the job satisfaction level maximum among the employees for this they usually motivate their employees by giving them special increments. If any of their employees performs outstandingly than the executives personally meets them and encourages his efforts. They lack non-monitory rewards like making role models and employee of the months. As they do not provide any over time to their employees so the employees do not like to be called after working hours.

Creating a Learning Environment: Learning involves a permanent change in behavior. For employees to acquire knowledge and skill in the training program and apply this information in their jobs, the training programs need to include specific learning

principles. Educational and industrial psychologists and instructional design specialists have identified several conditions under which employees learn best.

Customer Focus: The ACL management, at appropriate levels, determines appropriate customer needs and requirements and converts these into defined requirements with the goal to achieve Customer confidence. Obligations related to Pakistan Standard for OPC, including other regulatory and legal requirements are properly considered while determining customer needs and expectations. Customer's needs and expectations are focused through the following activities:

- Periodical Market surveys conducted by Marketing Division
- Personal visits to potential customers by Marketing Officers
- Market Intelligence Reports by Marketing Staff 0fficer
- Customer Communication
- Customer Feedback
- Customer complaints

CHAPTER-7

INVESTMENT CLIMATE IN PAKISTAN

Openness to Foreign Investment: The Government of Pakistan has adopted a policy of openness to foreign investment and offers a package of incentives to attract foreign investors. Considering the openness of the investment regime, foreign investment activity to date has been relatively modest. In fact, FDI has declined from $1101.7 million in 1995-96 to $682.1 million in 1996-97 and further to $472.3 million in 1998-99. The numerous reasons for this include inadequate infrastructure, perceptions of political instability, law and order difficulties, policy inconsistencies, long-standing unresolved disputes between foreign investors and the government, low rates of domestic investment, and resistance to new policies by some elements of the bureaucracy who have not yet fully adjusted to a more open economic environment. There is a need for continuity in economic policies and to uphold the sanctity of agreements. A succession of investment promotion agencies, most recently the Pakistan Investment Board and its successor, the Board of Investment (BOI), have lacked the bureaucratic authority or the continuity of leadership needed to be effective.

Pakistan's new military government, which came to power on October 12, 1999, is trying to provide the consistent economic policies needed by investors. Chief Executive Musharraf, in his major economic reform speech of December 15, 1999, highlighted increasing Foreign Direct Investment as a major priority of his new government, stressing the need to develop investor confidence through ensuring stability and continuity of policies and to resolve the outstanding disputes with the independent power producers, which he recognized as a major irritant that has damaged Pakistan's image as an investor-friendly country.

As part of an integrated investment promotion strategy, the Government of Pakistan(GOP) undertook during 1992 a comprehensive program of radical economic reforms including liberalization, privatization and deregulation to bring the economy into

a fully market-oriented system. This was aimed at capturing the potential of the private sector in all areas of economic activity.

The Government of Pakistan's Investment Policy of 1997 allows foreign investment on a repatriable basis in agriculture, services, infrastructure and social sectors in addition to the manufacturing sector. In the manufacturing sector, 100 percent ownership of equity by foreign investors was already allowed. In the social and infrastructure sectors, 100 percent ownership of equity by foreign investors is now also permitted. In the services sector 100 percent ownership of equity is allowed at the outset of the investment, but it has to be reduced to 60 percent within 2 years (i.e. there must be 40 percent Pakistani equity). Moreover, a minimum equity investment of $0.5 million is required for the services and the social sectors.

The Government of Pakistan is committed to providing full protection to foreign investment. The principal statutory vehicles for such safeguards are the Foreign Private Investment (Promotion and Protection) Act, 1976 and Economic Reforms Act of 1992.Foreign investors are allowed to participate under the same procedures as the local investors in the bidding process for projects that are to be privatized. Mergers are allowed between multinationals as well as between multinationals and the local companies. In case of mergers and takeovers, the Companies Ordinance, 1984, is applicable.

Right to Private Ownership and Establishment

Foreign and domestic private entities are free to establish and own business enterprises in virtually all sectors of the economy, with the exception of certain sensitive areas such as defense production. Private entities are similarly free to acquire and dispose of their interests in business enterprises.

Protection of Property Rights

Pakistan's legal system protects and facilitates the acquisition and disposition of property rights. The Industrial Property Order, 1979 provides adequate safeguards to protect

industrial property in Pakistan against compulsory acquisition by the government, even for the public interest, without sufficient compensation in accordance with the provisions of the law. This Order protects domestic and foreign investment.

Intellectual Property Rights

Pakistan is a member of Universal Copyright and Bern Conventions. The Copyright Office is a department of the Ministry of Education. Copyright on a registered design is initially granted for a five-year period and may be extended for two additional five-year periods. The Patents Office, a department of the Ministry of Industries, administers registration of patents and designs.

Transparency of Regulatory System

Enforcement of competition law in Pakistan is under the jurisdiction of the Monopoly Control Authority, an independent regulatory authority that lacks enforcement muscle. Pakistan formerly had a relatively high degree of industrial concentration, with widespread licensing procedures restricting entry and serving as vehicles for creating monopolies and oligopolies. The end of the licensing regimes, the decline in bureaucratic controls and liberalizing trend has reduced industrial concentration by bringing down barriers to entry.

There has been much controversy in the country surrounding the independent power producers (IPPs), including allegations that the government of Prime Minister Benazir Bhutto had received large kickbacks and commissions from the IPPs for approving the contracts. This controversy and the ongoing investigations by the government against the IPPs have raised serious doubts in the minds of the foreign investors regarding the sanctity of contractual obligations in Pakistan.

Efficiency of Capital Markets and Portfolio Investment

The capital markets in Pakistan have a narrow base. They are now being developed along modern lines with the assistance of the Asian Development Bank, which has provided a

loan of $250 million for this purpose. The equity market in Pakistan has registered phenomenal growth in terms of size of the market and institutional development, but the fixed income securities market has not developed as quickly. The financial institution reforms have paved the way for the banks to operate on professional lines under the supervision of the State Bank of Pakistan, which is now an autonomous body. The total assets of the banking sector as on March 31, 2000 stood at $32.7 billion whereas the non performing loans of the banking sector stood at $3.35 billion as on December 31,1999.

Conversion and Transfer Policies

Pakistan has a liberal foreign exchange regime with few restrictions on holding foreign exchange and bringing it in or out of the country. There are no limits on the inflow or outflow of funds for remittances of profits, debt service, capital, capital gains, returns on intellectual property or payments for imported inputs.

The State Bank of Pakistan considers all payments other than those against imports as commercial remittances. All such payments are subject to prior approval from the State Bank of Pakistan. Commercial remittances can only be made against a valid contract or an agreement. The agreement or contract must be registered with the State Bank of Pakistan within 30 days of its execution. Additionally, the bank through which the remittance is to be made needs certain other documents outlined in the Foreign Exchange Manual for onward submission to the State Bank of Pakistan. The entire process of registration and submission of documents takes around 50 to 60 days.

There are no restrictions on buying foreign currency from the kerb market. However, if the kerb market is used to remit investment returns without the approval of the State Bank of Pakistan then the preferential tax treatment extended to investors may not be available. The facility for contracting foreign private loans is available to those foreign investors who invest in the sectors open to foreign investment in order to finance the cost of imported plant and machinery required for setting up the project. Loan agreements, however, should be registered and cleared by the State Bank of Pakistan.

Expropriation and Compensation

Economic Reforms: As part of an integrated investment promotion strategy, the GOP undertook during 1992 a comprehensive program of radical economic reforms including liberalization, privatization and deregulation to bring the economy into a fully market-oriented system. This was aimed at capturing the potential of the private sector in all areas of economic activity. The privatization process has been redesigned to make it more transparent. Power generation, telecommunication, highway construction, port development and operations, oil and gas, services/infrastructure, and the social and agriculture sectors have now been opened to foreign investment.

Legal Framework: Pakistan's legal framework and economic strategy do not discriminate against potential foreign investors, but enforcement of contracts can be difficult given the inefficiency of the court system. Foreign investment is generally subject to the same rules as domestic investment, with the exception of certain sensitive areas such as defense production, banking, and broadcasting.

Protection to Foreign Investment: The Government of Pakistan is committed to providing full protection to foreign investment. The principal statutory vehicles for such safeguards are the Foreign Private Investment (Promotion and Protection) Act, 1976, and Economic Reforms Act of 1992.

Institutional Promotion: Successive institutional entities have attempted to ease that process for prospective investors by functioning as a "one-window" interface between the investors and the relevant Pakistani authorities. Now the situation is improving with special efforts by the Board of Investment. In most cases the requirement for a license has been abolished.

Screening Of Foreign Investment: Screening of foreign investment is not carried out in the industrial sector unless foreign investors seek a special incentive package or

government support in the form of guarantees regarding tariff protection or prices. Investment cases seeking special packages have to be approved by the Cabinet Committee on Investment. In the case of non-industrial sectors, investors have to register with the Board of Investment and the Securities and Exchange Commission of Pakistan (SECP) and they must meet the equity requirements and invest in approved sectors.

Incentives for Investment: As far as incentives for investment, exemptions or relief from import duties have been allowed on imported plant and machinery that is not manufactured locally to keep Pakistan competitive in the international market.

Privatization

Power: Karachi Electric Supply Corporation and other distribution and generation companies.

Pakistan Telecommunications & PIA: These are huge projects and have every reason to bring the investors at a massive scale in Pakistan.

Foreign Direct Investment (FDI) in Services Sector is allowed in any activity subject to condition that services which require prior permission/ NOC or license from the concerned agencies will continue to get the same treatment until and unless de-regulated by such agencies and will be subject to provisions of respective sectoral policies.

Impact of Globalization

As economies are growing inventions and innovations are paving way for enlarging the domain of global economy given the universality of the concept, different interpretations have been assigned to it from students of various disciplines converging on one perspective-integration. In simple terms it involves the “world integration of finance markets, nation states and technologies within a free market capitalism on a scale never witnessed before-in a way that is enabling individuals, corporations and nation states to

reach around the world faster".

- Transportation and communication cost has fallen many folds
- Tremendous advancement in science and technology in the field of communication and computer technology are expanding the network of transnational linkage.
- Free and very rapid flow of capital with new magnitude.
- Increased integration of developing economies into the global economy indicating a transformation in international economic relation
- Liberalisation demands the lowering of border tariffs to the imports.
- The hazards of economic integration are compounded by unsatisfactory macroeconomic variables in developing countries.
- Unfettered financial flows from advanced countries to developing economies can create profound destablisation
- Falling trade barriers
- Fast changing advancement in technology
- High mobile investment
- High rate of migration of labour

WTO

Pakistan is a member of the WTO which is the international organization dealing with the rules of trade between nations. The goal of WTO is to help producers of goods and services, exporters and importers conduct their business. Many sectors of our economy will be exposed to the globalization challenges.

Major improvements are to be implemented by the entrepreneurs as well as the government. The entrepreneurs would largely be removing the weaknesses on the cost or quality of inputs/utilities, the machines/technology involved, capitalization structure, organizational set up, knowledge of WTO and other rules, technical/marketing realization to the personnel on buyers, prescribed quality, cost and delivery schedule of the goods being produced.

CHAPTER-8

ANALYSIS

Section-1 Findings from Japanese Success Factors

- Kaizen strategy calls for never-ending efforts for improvement involving everyone in the organization - managers and workers alike.
- The “Japanese’s success has little to do with cultural factors. And the lack of cultural bias means that these practices can be - and are - just as successfully employed elsewhere" - Masaaki Imai
- "Kaizen & Total Quality Control (TQC)" involves everyone in the organization and is aimed at improvement of managerial performance at all levels.
- The true intent of a kaizen event is to hold small events attended by the owners and operators of a process to make improvements to that process which are within the scope of the process participants.
- "Kaizen strategy is the single most important concept in Japanese management – the key to Japanese competitive success"
- Top leadership of the country’s commitment is the key to successful continuous improvement of the industrial sector
- Academia plays an important role in the development of new ideas/philosophy and changing the mindset of people
- Technology is most vital for innovation/development of new product/service in order to meet the customers needs and expectations
- There is a strong correlation between investment and productivity improvement. Japanese invest 34% as compare to U.S. firms which invest about 17 % of their income back into the business
- To gain edge over their competitors Japanese invest almost 3 % of their income in the R&D

- A variety of different skills associated with effective managerial performance to have continuous improvement. Many successful managers have strong combination of technical, interpersonal, conceptual and diagnostic skills.
  - Technical Skills
  - Interpersonal Skills
  - Conceptual Skills
  - Diagnostic Skills
  - Continuous Learning and Improvement

- Emergent strategy pay rich dividends

- Managers in continuous flourishing Japanese companies spent 60 % of their time on continuous improvement of the systems and little time on commanding and controlling the people

- People are the key to the success of Japanese firms

- Increase employees involvement and satisfaction to enhance quality and productivity

- For good corporate governance when operating at international level, Japanese pay 77 % attention to International Human Resource Management

- High quality, low cost is associated with its focus on customer requirements

- Japanese stress on regular evaluation of business performance instead of annually

- **TQM;** To continuously increase value to customers by designing and continuously improving organizational processes and systems to provide improved value to customers.

- **The Use of Quality Tools**
  - PERT
  - Inventory and Total Quality
  - Just-in-Time and Production
  - MRP
  - Operations Scheduling and Inventory Control
  - Gantt Charts
  - Purchasing and Supplier Relationship for Total Quality
  - Low-Bid contracting versus Partnering
  - Large number of suppliers versus Single supplier
  - Acceptance Sampling versus no Incoming Inspection

- **Other Quality Tools**
  - Check Sheets
  - Pareto Analysis and Charts
  - Histograms
  - Scatter Plots
  - Cause –and-Effect Diagram
  - Flowcharts

- Japanese translate customer expectations into the design of new product and service (Ref page-36)
- Quality strategy must permeate an organization throughout its business activities
- Deming, Juran, Kaoru Ishikawa, Philip Crosby and all others have injected a concept of high quality and low cost, which is religiously implemented/executed by Japanese firms
- Cost of quality must be reduced to zero. With low cost and high quality, the firms can provide more value to their customers
- Quality means delivering value to customers in accordance with their expectations (Ref Table 4.1 Page 37)

- Recognition of excellent performer influence other and creates and healthy competitive environment

♦ **New Manufacturing Plants and Equipment:** Japan had a new, large ultramodern industrial base with plants containing latest equipment, technology and manufacturing processes.

♦ **Restrictive Trade Barriers:** While rebuilding its industrial base, Japan maintained restrictive trade barriers to protect its industries. Government trade barriers served to officially keep out imports. Cultural trade barriers, including a definite bias in favor of doing business with other Japanese, also helped to protect Japanese industries.

♦ **Miscellaneous Points**

- Japanese manufacturing firms always striving for survival are, "agile to change and Making full use of entrepreneurship"
- Morale of people is key to increase productivity.
- A holonic management system is one of the tools of tomorrow.
- Human oriented thinking
- Open mindedness
- Finding and achieving customers needs in cooperation with them.
- Flexible and quick response to the environmental changes.

♦ Processes must evolve by gradual improvement rather than radical changes

♦ Improvement should be based on statistical/quantitative evaluation of processes performance

♦ Employees' empowerment is essence of Japanese success. "Kaizen and Total Quality Control (TQC)" involves everyone in the organization and is aimed at improvement of managerial performance at all levels

♦ Continuous improvement is the constant refinement and improvement of products, services and organizational systems to yield improved value to customers

♦ Encourage education and self improvement of everyone in the organization

♦ Ninety five percentage of the problems in a company can be solved with simple tools of analysis and problem solving

- Real improvement depends on learning, that is, understanding why changes are successful through feedback between practices and results, which leads to new goals and approaches
- Understanding customers and suppliers is crucial to planning for quality
- Deming's philosophy 14 points pave the way for the Japanese's success. The most pertinent ones are:
  - Create and publish to all employees a statement of the aims and purposes of the company and other organization.
  - The management must demonstrate constantly their commitment to this statement.
  - Learn the new philosophy, top management and everybody.
  - Understand the purpose of inspection, for improvement of processes and reduction of cost.
  - End of practice of awarding business on the basis of price tag alone.
  - Improvement constantly and forever the system of production and service.
  - Institute training.
  - Teach and institute leadership.
  - Drive out fear, Create trust, and Create a climate of innovation.
  - Eliminate numerical quotes for production. Instead, learn and institute method for improvement.
  - Remove barriers that rob people of pride of workmanship.
  - Encourage education and self-improvement for everyone.
  - Take action to accomplish the transformation.

- **Some of the key elements of Kaoru's philosophy are**
  - Quality begins with education and ends with education
  - The first thing in the quality is to know its requirement
  - The ideal state of quality control occurs when inspection is no longer required
  - Remove the root cause and not the symptoms
  - Quality control is responsibility of all employees
  - Do not confuse the means with objectives
  - Top management must not show anger when facts are presented by subordinates

Section-2 Findings from Industrialization Process

- The main feature of the 1950s was the establishment and expansion of the large-scale manufacturing sector, which ranged from a high annual growth rate of 28.7 per cent in 1953/4 to as low (still high) of 4.9 per cent in 1957/8. Although starting from anon-existing base, and against all odds, Pakistan achieved very impressive rates of growth in its first decade (see Table 5.1).

- Agriculture stagnated to the extent that its growth was not even enough to cope with the growth in population, resulting in a fall in per capita consumption of food grain and the need to import food as well. In the mid 1950s as much as 65 percent of the civilian labour force was employed in agriculture and more than 75per cent of the population lived in rural areas. Hence, a low growth rate in agriculture meant that the potential market for the growing manufacturing sector was also stagnant, restricting further growth in the manufacturing sector. Agriculture was the sick man of economic development in Pakistan during the 1950s. A stagnant agriculture in a predominantly.

- The Korean boom lasted from 1950 to 1952, but by mid-1951 world prices of raw materials began to decline and export earnings also saw a decrease. There were clear signs that the market was heading for a recession, but Pakistan was too slow to react, and policies continued as if nothing had changed.

- The principal determinant of the structure of imports and the set of domestic relative prices was the import licensing system. Licensing was used explicitly as a protective or exchange –saving device.

- While Pakistan's impressive growth rate in the 1950s, was due to the fact that the country started with a low base in the first place, the other important factor was that, due to the restrictive measures enforced on the economy, profit rates in industry were very high. The government had very openly encouraged private sector initiative in economic growth, an encouragement to which the private sector responded enthusiastically. The annual returns on investment ranged from 50 to 100 per cent in the early 1950s, but dropped to between 20

and 50 per cent in the latter part of the decade. There were strong economic incentives to becoming an industrial entrepreneur, but while 'high profits were strongly conducive to industrial investment.

- With the end of the Korean boom, international trade, and especially importing, suddenly became unattractive. Therefore industrial development became a natural choice.

- In the 1950s, when import substituting industrialization was the received wisdom - Pakistan did very well for itself.

- The bias against producing machinery and equipment locally continued, as the import duty on these items was still the lowest, thus making it easier to import these goods rather than produce them at home.

- The main reason why the government could be so generous in its import policy in the first half of the 1960s was critically linked to the availability of foreign aid, which increased from 2.5 per cent of GNP in the mid-1950s to 7 per cent of GNP in the mid-1960s.

- In 1965 the Free List suffered serious setbacks as foreign aid was curtailed, and due to the resulting foreign exchange squeeze, the import liberalization policies were abandoned and many new import controls were introduced. As long as foreign exchange resources were available, largely through aid, the government was eager to follow a liberal import regime.

- The controls re-imposed following the foreign exchange and aid curtailment caused this growth to fall to about 10 per cent in the second half of the 1960s.

- The system, which operated in Pakistan, came very close to being what we can term a 'Foreign Aid Dependent Regime' in which the mechanics of industrial growth were in one way or another made dependent on foreign aid inflows. Once these aids flow slowed down, the system, not being able to replace foreign aid with other forms of external finance like direct foreign investment, and without the peculiar boost to profitability associated with the

local system for dispensing aid, found it difficult to sustain the earlier growth it had generated. Pakistan's growth in the 1960s, and the policies pursued (import liberalization, for example), were contingent upon the country receiving a substantial amount of foreign aid. Once the aid stopped so did growth in the economy.

- Interestingly enough, there was also an explanation of the economic development model of the 1960s, which not only rested its premise on the leading role of the private sector, but also justified increasing inequalities. This was the Doctrine of Functional Inequality.
- The concept of Functional Inequality rather eloquently was part of Ayub Khan's Martial Law government's policy, and was the central pillar of the advice given to the Pakistan government by the Harvard Advisory Group. In simple terms the doctrine suggested that resources should be directed towards the industrial sector which has a higher propensity to save, and that agriculture and wages should bear the brunt of this transfer. The idea was that profits in the industrial sector should be raised giving the push towards growth, which will result in automatically positive distributional consequences as development proceeds.
- The outcome was the concentration of wealth and income in the industrial sector. A dominant small group of monopoly houses had begun to emerge in the 1950s in the industrial sector, a trend which was accentuated in the 1960s. In 1970 there were 44 monopoly houses, which controlled about 77 per cent of gross fixed assets of all manufacturing companies listed on the Karachi Stock Exchange. These firms controlled about 35 per cent of all assets of the entire large-scale manufacturing sector and at the same time had close links with the financial sector.

- Seven of the seventeen Pakistani banks were under the direct control of the monopoly houses, accounting for 60 per cent of total deposits and 50 per cent of loans and advances.
- Between 1958 and 1970, 65 per cent of total loans disbursed by PICIC went to thirty-seven monopoly houses, with the largest thirteen of these accounting for about 70 per cent of these loans.

- In 1974/5, the height of the Bhutto regime's nationalization programme, private sector ' investment was only 15 per cent of its 1969/70 level (see Table 5.10). Public sector investment, which was 5 per cent of the total in 1970/1, rose to 75 per cent at the end of the Bhutto era.

- There is no doubt that the anti-industrialist policies and great uncertainty of the 1972-7 period were also responsible for the lack of private sector investment. The private sector had lost all trust in the government, because Bhutto had broken his promises. His assurances of no further nationalization [prior to nationalizing the vegetable oil industry in September 1973] until the elections of 1977 no longer seemed meaningful and the little confidence that the businessmen had developed in the regime was now completely gone. Such promises were broken time and time again. While organized labour felt that it had a greater right to the share of industrial produce, industrialists feared more lock-outs or outright nationalization. Entrepreneurs were demoralized and unwilling to invest.

- Capital and capitalists had fled overseas and it was clear that the economy and industry were faced with a severe crisis, no matter what the causes may originally have been.

- There have been three general elections since then, Pakistan has seen ten governments between 28 May 1988 and February 1997, and despite this high turnover. The military, which is prone to interfere in national politics in Pakistan, has let the political process take its course. More interestingly, despite the frequent changes in government, the economic programme of different governments in Pakistan has been more or less the same. One finds a great deal of continuity in policy, especially since September 1988.

- Since 1988 Pakistan's economic programme has totally capitulated to the requirements of the IMF and the World Bank. Since then, Pakistan's numerous and varied governments have failed to come up with any independent economic or industrial development programme, and the very minutely detailed Policy Framework Papers of the IMF and World Bank determine the nature and direction of policy. Given the

complete dominance by these two Washingtonian , organizations of the economic life of the country.

- Private industrial investment expanded at 15.6 per cent per annum.

- Manufacturing GDP grew at an annual average rate of 9.5 per cent between 1977 and 1986, and investment in medium- and large-scale industry grew at an average of 18.2 per cent per annum.

- In both the Fifth and Sixth five-year Plans (1978-83 and 1983-8), actual growth rates exceeded the targets of 12 per cent and 9 per cent, respectively, a rare occurrence in Pakistan's economic record.

- Productivity growth figures (fourth column in Table 5.12). Not only is the aggregate of 0.3 per cent per annum low compared to the 5 per cent growth in the 1960s, but also the variation across sectors is significant.

- Because of the remittances from the Gulf and a growing agricultural and services sector consumption demand increased. Investment demand, on the other hand, was enhanced by high resource inflows from the international community, particularly the US, because of Pakistan's strategic role in the Afghan war.

- The high growth rate of GDP which averaged 7 per cent per annum between 1978 and 1986 was due to a strong expansion in manufacturing led by a booming domestic market (due to remittances and the income from illegal trade, which increased significantly following the Afghan crisis) and the utilization of excess capacity.

- During the Fifth Five-Year Plan (1978-83), the yearly average of foreign aid committed to Pakistan was $1.45 billion, up from the yearly average of $871 million during the Non-Plan period 1970-78. This annual average of foreign aid committed to Pakistan during the Sixth Five-Year Plan (1983-8), rose to as much as $2.29 billion.

- During General Zia's period policies were not altered even when it was abundantly clear that they were harmful for growth and productivity. In particular, the existence of negative ERPs [effective rates of protection] for certain industries, the regulatory regime of the period and the lack of incentives for value addition in the textile sector were identified as important policy errors.

- The large-scale manufacturing sector managed an impressive 7.4 per cent in 1991/2 due essentially to the rapid expansion of cotton manufacture. The World Bank considered Pakistan to have achieved an 'excellent growth performance'.

- Under SAP government initiated the privatization process of some 105 manufacturing units and began to take steps to expand the privatization program to the energy and telecommunications sub-sectors as well.

- There is a very strong emphasis in most structural adjustment programmes on increasing foreign direct investment (FDI) and foreign portfolio investment.

Miscellaneous Findings

- It is clear that tariffs and indirect taxes played relatively minor roles in directing resource allocation, even when compared with other policy variables.
- Direct quantitative controls were dominant in setting prices and incentive prices, these controls speeded the process of structural change both by imposing the inducements to invest in various industries and by transferring substantial amount of income to industrialists who reinvested them in the profitable manufacturing sector.

- The directions that industrial growth took were preferably the same as those that would have been taken in the absence of major policy decisions due to market size and domestic resource availability.

- The policies adopted increased the speed with which the transformation of industrial structure occurred, both by increasing incentives and by increasing incomes in the hands of the ‘saving’ sector of the economy.

- Mohsin S. Khan of the IMF, however, has also made an important intervention in the debate over Bhutto's economy, and particularly about the rate of inflation. He writes that 'a good part of the increase in the earlier period [of the Bhutto era] was a result of the oil price shock in 1973/74. If these two years are dropped from the case, the average annual rate of inflation in the 1970s falls to less than 10 per cent ... Certainly, it is not obvious from the numbers that the 1970s.

- Pakistan's performance during the seventies appears unsatisfactory only when compared to that of the sixties. The seventies produced a better overall record compared to the fifties.

- The phenomenal performance overall of the economy in this period can best be gauged from the following observation according to World Development Report 1990, during 1980-88 Pakistan's GDP growth rate of 6.5% was exceeded only by that of Korea, China and Hong Kong .

- Pakistan's numerous and varied governments have failed to come up with any independent economic or industrial development programme, and the very minutely detailed Policy Framework Papers of the IMF and World Bank determine the nature and direction of policy. Given the complete dominance by these two Washingtonian organizations of the economic life of the country.

- The growth of real wages in Pakistani manufacturing during 1980-88 was just about the fastest in the world - at 6.2% a year surpassed only by Thailand (7.0%) and equaled only by Singapore.

- According to the World Bank, manufacturing GDP grew at an annual average rate of 9.5 per cent between 1977 and 1986, and investment in medium- and large-scale industry grew at an average of 18.2 per cent per annum, while total private industrial investment expanded at 15.6 per cent per annum.

- There had been very little growth in employment in almost all industries between 1975 and 1986, and that the growth in labour productivity had also fallen in many industries. Interestingly, although the wearing apparel industry experienced the greatest increase in employment, it also saw output fall by nearly 19 per cent.

- The decade of the 1980s has been a period of relatively high growth in manufacturing value added, the growth in manufacturing employment has remained insignificant. This partly represents more an increase in capital industry than labour absorption during the period of accelerated expansion.

- In fact, there had not been much planning after the very successful second Five-Year Plan of 1960-5, when the third was curtailed and handicapped by the cut in foreign aid and the political situation domestically. The Third Five-Year Plan was made redundant after the major part of Pakistan became an independent Bangladesh, and the Fourth Five-Year Plan was lost somewhere in Zulfiqar Alt Bhutto's rule of five years, a period better known as the Non-Plan Period.

- The economic managers of the Zia regime were looking for short and medium term gains to accrue from a boost in textile exports.
- Growth in large-scale manufacturing was projected at the highly ambitious rate of 12 per cent per annum, a target which was, surprisingly, achieved.

- The main feature of the 1950s was the establishment and expansion of the large-scale manufacturing sector, which ranged from a high annual growth rate of 28.7 per cent in 1953/4 to as low of 4.9 per cent in 1957/8.

- Since import licenses for raw materials were linked to installed capacity, this created a tendency to install extra plants in order to avoid raw material bottlenecks.

- Government policies explicitly aimed at large scale industries and large scale enterprises received special privileges. All favourable policies were directed towards the large-scale sector and in fact, according to the Asian Development Bank study, discriminated against the small-scale sector. The fact that this sector is exempt from or evades any form of tax and generally free rides on utilities such as electricity, gas, water and sewerage, means that it enjoys an implicit "hands off" policy. For the individual small producer, the external economies generated by the large were as important as those it obtained through the evolution of vertical specialization within the small scale sector. The experience of the successful small-scale sector in Japan and Taiwan, argues that :

  - The large-scale capital goods sector can create the appropriate linkages for the embodiment of technical change in equipment, which can then enhance the productivity of the small sector accordingly.
  - Secondly, because of economies of scale, the large scale sector can contribute towards reducing the cost of intermediate and capital goods for the small scale.
  - Thirdly, with large firms subcontracting to the small, productivity enhancement and technical up-gradation is further encouraged through user-producer interactions, quality standards, specification requirements, etc.
  - Fourthly, this link with the large-scale sector can at times be critical; since the experience of countries where the small-scale sector has flourished shows that 'ultimately the fortunes of the small are intimately linked with those of the large. Hence, any strategy to improve the small-scale sector will also need to address the issue of developing an efficient large-scale intermediate and capital goods industry. Areas where linkages between the small- and large-scale manufacturing sectors already exist will need to be further strengthened so that both benefit.

- The cottage and small-scale segment of the textile industry employs more than double the number of workers in the large-scale textile sector. According to a study by the Institute of Developing Economies, the negative productivity in the textile and garment sector is mainly the result of fragmentation of the industry, shifting from large-scale to smaller-scale units. Under the Bhutto government the textile sector lost the importance it held in the state policy regime in the '60s. This is because the emphasis of the state shifted towards the creation of public sector intermediate and capital goods industry and was no longer on the promotion of growth through manufacturing exports. Moreover, the Cottage Industries Act created a bias against large-scale production and this act changed the structure of the industry in the textile sector, resulting in the fragmentation of firm size. Both output and employment in the small-scale sector grew significantly after the Act, with the number of power looms increasing from 20,000 in 1968 to 32,000 in 1972 and to 53,000 in 1978.

- Moreover, the nationalization programme of the Bhutto government broke the hold of the large-scale manufacturing sector generally, but most importantly, the power of this group was significantly depleted as the critical link between the financial and industrial sectors was ruptured.
- Large productivity differences exist between the two sectors, as can be seen in Table. The labour productivity (0/L) for the large-scale sector is expected to be higher due to the higher capital-labour ratio in the sector.

Table: Labour productivity (0/L) and capital-output ratio, small scale and large scale, 1983/4 and 1987/8, for selected industries (Rs 000)

Industry sector	1983/4				1987/8			
	Small scale		Large scale		Small scale		Large scale	
	K/0	0/L	K/0	0/L	K/0	0/L	K/0	0/L
Food	0.31	85.78	0.22	399.51	0.31	64.65	0.28	454.5
Textiles	0.23	41.11	0.40	105.98	0.44	19.86	0.45	170.4
Footwear	0.08	21.60	0.16	100.87	0.09	24.23	0.18	441.2

Wood and Cork	1.04	11.35	1.24	141.21	0.88	17.34	0.94	147.4
Furniture	0.28	15.27	0.29	85.67	0.32	18.97	0.78	125.8
Non-metallic minerals	0.10	86.53	0.65	303.30	0.23	51.98	0.80	387.72
Metal and metal working	0.33	19.98	0.27	113.38	0.30	28.40	0.28	173.60
Non-electrical machinery	0.97	15.86	0.24	209.50	0.57	29.88	0.35	210.17
Others	0.23	26.62	0.36	103.16	0.39	25.45	0.26	123.5

Source: Sayeed, Asad, Political Alignments, the State and Industrial Policy in Pakistan: A Comparison of Performance in the 1960s and 1980s', unpublished Ph.D. thesis, University of Cambridge, 1995, p. 40.

- Essentially Pakistan failed to diversify into other products and lines at a critical juncture when the world textile industry was undergoing change.

- The main expansion of public enterprises took place under the government of Zulfiqar Ah Butto following his nationalization programme of 1972. The role of public sector industry in the 1950s and 1960s was mainly to supplement and assist the private sector, which was considered to be the leading vehicle of industrial development. The 1972 nationalization process reversed that trend, with the public sector taking the lead.

- The inclusion of socio-political goals in the objective function of the existence and operations of public industrial enterprises pull down productivity and profitability of these units.

- Pakistan's early industrial and economic growth was predicated on an import substituting industrialization policy, which was the conventional wisdom of the times and was being followed by most young developing countries. The main tools for such a policy consisted of protecting domestic industry by building up trade barriers in the form of tariff and non-tariff restrictions, using multiple exchange rates, and import licensing.

- The textile industry in Pakistan has paid scant attention to increasing productivity or innovating new products. Quality has also been ignored.

- There has been no focus on scientific management and very little amount of money has been spared for research and development. Again, only minimal amounts have been allocated for skill development.

- The textile sector has played a crucial role in Pakistan's economy. It employs about 40 per cent of the industrial labour force, accounts for around 60 per cent of merchandise export receipts and contributes 20 per cent to total value-added in the large-scale manufacturing sector. The performance of Pakistan's economy is to a significant extent determined by the state of health of this important sector. Unfortunately, the sickness of this sector during the last two-three years has had an adverse impact on the domestic output growth, employment generation, export earnings and the performance of the financial sector.

- At present, there are 463 textile units in the country of which 234 are listed. There are 8.8 million spindles, 139,960 rotors and 150,000 to 200,000 shuttleless and power looms. According to official estimates.87 textile mills have remained closed as of April 1996.
- The textile industry at present, is in a crisis. Not only is a significant proportion of the industry closed, it is suffering from low productivity and escalating cost of production. 1n view of the liberalization and globalization of international trade under the World Trade Organization (WTO), the industry is confronted with a vast challenge which necessitates a massive improvement in its productivity.

- Notwithstanding the fact that the Export Promotion Bureau projects Pakistan as the 'Cotton Country' Pakistan's share in world textile garment exports is a mere two per cent. The country undoubtedly has prodigious potential to become a significant player in the international textile market provided it develops the capacity to produce high

value-addition goods at competitive prices for which an essential precondition is the improvement ii' the quality of yarn. Pakistan can considerably increase it's export receipts from the textile sector by improving quality. Improvement in quality will also enable us to retain our market share once quotas are completely abolished by the year 2005. Unfortunately, the textile industry in Pakistan has paid scant attention to increasing productivity or innovating new products. Quality has also been ignored. There has been no focus on scientific management and very little amount of money has been spared for research and development. Again, only minimal amounts have been allocated for skill development.

- Again, the government policies for the regulation and development of this crucial sector have been ad-hoc and non-pragmatic aimed primarily at short term crisis management without a clear long term vision.

- A quick revival of Pakistan's industrial sector is a up hill task in prevailing environment. Although the change in government has uplifted general sentiments, the structural problems in Pakistan's industrial sector remain. Despite the threat to evaders, the taxation system still needs to be reformed. Amongst the potential engines of growth, reviving sick units is also a difficult proposition, while the agricultural sector has too many engrained problems to post a swift turnaround.

Furthermore, in the current environment and given the state of Pakistan's State Owned Enterprises, the privatization drive should be implemented in stages, with internal restructuring as the first step:

- In effect, Pakistan's growth prospects are not very optimistic. However, this scenario should not be viewed too negatively or as a failure of this government. It is our view that this is a period of consolidation, where economic growth may have to be sacrificed to implement painful measures that are needed to place the country on a more sustainable path of economic development. This transition will be harder on account of adverse international prices that have already put Pakistan's external sector under a

great deal of pressure. This issue will play a dominant role in determining the immediate direction of Pakistan's economy.

- **Impediments to Overall Industrial Growth**. Some of the major factors regarding adequate industrial growth are listed below:

Small Industrial Sector

- Difficulties in getting loans from banks due to the entrepreneur's weak position for providing guarantees, etc
- Lack of information about marketing of outputs.
- Obsolete plant and machinery and use of out dated technology.
- Management weaknesses.
- Higher utility cost.
- Lack of working capital.
- Inconsistent/ overlapping Industrial and Fiscal policies.
- Lack of entrepreneurial skills.
- Skewed labour laws.
- Low skill and educational levels of technical manpower.

Large Industrial Sector

- Lack of export orientation.
- Lack of research and development.
- Use of out dated technology.
- High interest rates.
- High ever increasing cost of inputs particularly utilities cost.
- Absence of developed marketing networks.
- Imbalance in demand and supply.
- Over capacity in certain industries.
- Frequent changes in the tariff structure.

- Inconsistent/ overlapping industrial and fiscal policies.
- Skewed labour laws.

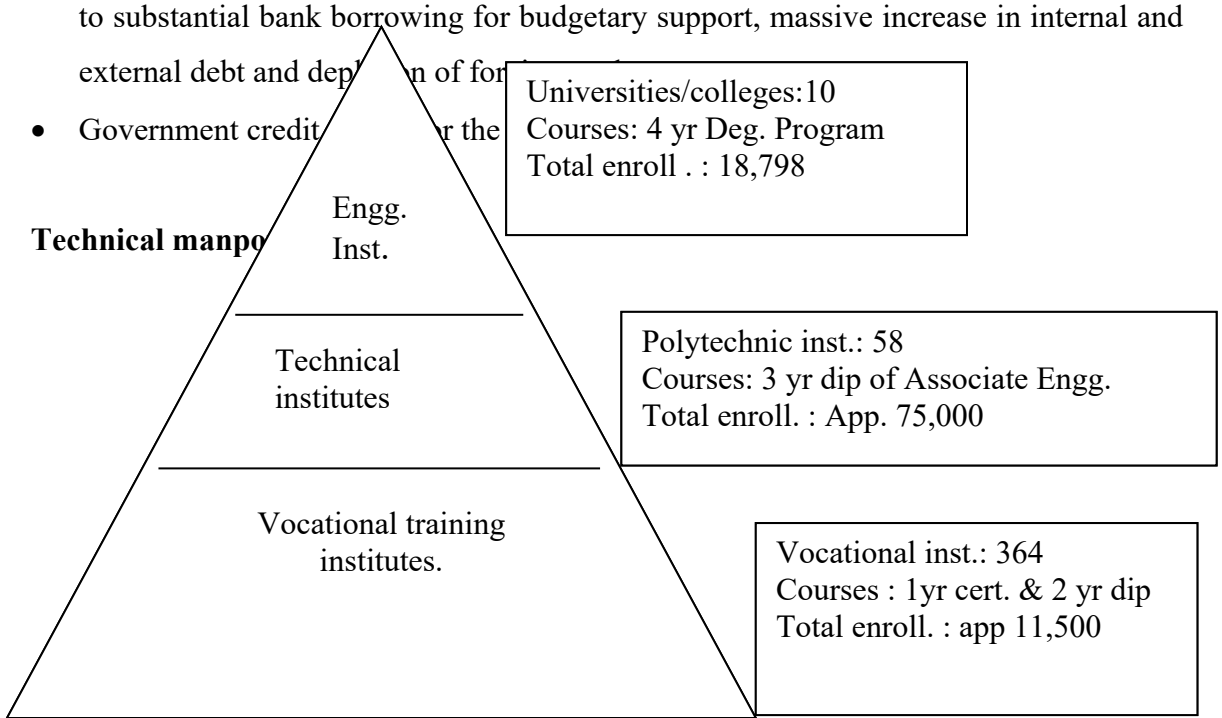
Miscellaneous Causes of Slow Industrial Growth

- Absence of long term vision
- Neglected technical human resources development
- Conflicting & personalized objectives
- Breakdown of implementation and regulatory mechanism
- Emphasis on low technology & low value added production
- Limited focus on agro based industry.
- Absence of integrated & consistent approach.
- Irrational tariff structure.
- Deficient infrastructure.
- Lack of professionalism.
- Low literacy rate which is the main cause of it
- Poor labour management relations
- Investors confidence has been shattered due to
  - IPP case
  - Intellectual copy right protection
  - Inconsistency in government policies
  - Closing of foreign currency accounts after nuclear explosion in 1998
  - There are a lot of number of units are sick
  - Agriculture sector was neglected
  - Lack of competition in the domestic market
  - Paradigm shift from capitalism to socialism has glaring impact on industry as whole
  - Adjustment program has negative impact, specially due to the interference by IMF and World Bank in the policy formulation
  - Lack of cooperation/coordination among different ministries and government agencies dedicated to look after industrial aspects
  - Political motivated policies formed by different political governments

- Lack of accountability system in the country
- Different incentive packages initiated by the politically influenced motivated governments had also negative impact as whole on the industries
- Withdrawal of foreign support in late 1960s
- Failure to adopt changes in technology
- Dollar rupee disparity
- Trade deficit is another major hurdle in the continuous improvement of industrial sector
- Integrated approach is not visible
- World trade liberalization and global economy
- Restriction imposed by World Bank and IMF to their loan recipients to liberalized their markets for foreign investors/traders
- Political influence/involvement in the affairs of financial institution specially in the functioning of SBP. The unjustified tradition of political profiteering from the operations of the financial system has not only adversely affected its performance but also lowered its public image :

- Nationalization of Banks in 1974 and creation of Pakistan-Banking Council was created and assigned the functions similar to those of State Bank
- Political interference
- Trade unions
- Inability and unwillingness of government to make adjustment in spending levels, led to substantial bank borrowing for budgetary support, massive increase in internal and external debt and dep[illegible]n of for[illegible]
- Government credit [illegible]r the

Technical manpo



Poor Investment State. A number of factors inhibited the investors from making larger investments in Pakistan, among the notable inhibiting factors includes:

- Investigations by NAB and the non-civilian supra-agency (ISI) of investors who announced to make investments in Pakistan.
- Political situation
- Rising political clout of the religious groups.
- Edgy relations with India and of late with Afghanistan.
- Weak infrastructure, in particular ports and shipping that hardly meets the requirements and expectations of foreign investors.
- High cost of utilities.
- Bureaucratic inertia.
- Absence of long-term economic plans and past record of frequent changes in the economic policies.

Inadequate FDI: It may be noted that in the case of China the expatriate population of that country has been instrumental in transferring the capital and technology, in a big way to their parent country and thus becoming a catalyst for change and boom in the economy. The potential of expatriate Pakistanis, who remit $4.2 billion (app) every year and can also play a pivotal role in the development of industrial base in Pakistan. At a time when the remittances of overseas Pakistanis start declining then there is need to motivate them to make investments in Pakistan. There are many factors contributing towards the creation of an environment that is not conducive for attracting higher FDI. These factors include:

- Weak intellectual property rights.
- Lack of continuity in policies and lack of credibility of various governments in honoring international agreements.
- Above all, weak politico-security situation within the country and in its relations with India. If all other irritants are removed the security factor remains the most hindering

factor in attracting FDI into Pakistan. In that case, amongst the regional countries, China would benefit the most and with its recent reform programme it will continue to be the most attractive place for FDI.

- Focusing exclusively on one area while neglecting other aspects of human and social development can be very dangerous. As research has proven, it is social and human development that makes a strong basis for sustainable economic development. This is where Pakistan needs to pay attention. Trade liberalization under WTO regime is Pakistan's obligation, but at the same time it should be complied to in a manner with least adverse implications for the social sectors of the economy.

Public Sector in Pakistan: Pakistan received its independence after World War II, two important alternatives, economic and industrial models were available. Once private capitalism was perceived as dynamic but somewhat disorderly leading to wide inequalities in income and wealth and to the creation of private bastions of power. Equally important the Pakistani private sector was regarded as financially weak, immature and incompetent. The second model state socialism was admired because its purposeful planning was perceived as being relatively better. Using these enterprises as a vehicle of industrialization in what many of its proponents thought would be only a transitory, catalytic function would therefore pose no threat to democratic freedoms. The idea at least originally was for state and private enterprise to work together in a harmonious division of labour with the state undertaking certain pioneering investment as well as investments in the basic industries while at the same time supporting private industry to the point where the latter would progressively take on more ambitious tasks.

After Pakistan’s independence in 1947, some other reasons arose for the creation of public enterprises. In both India and Sri Lanka the pursuit of ideology dictated state ownership and the public enterprise form was used to administer either nationalized (formerly private) firms or new activities which the governments of both countries felt should be undertaken by the public sector. On the other hand in Pakistan public enterprises were established because of the absence of the alternative organizations (a weak private sector). In order to meet the demand for goods and services the Pakistani government created public enterprises. However the main idea behind all these reasons was the government’s desire to

pursue their political, social and economic goals most efficiently and the enterprise form was seen as the way to accomplish them.

From the beginning of its independence the Pakistani government conceived the provision of infrastructure for an intensive industrialization effort as its primary developmental role. Its industrial policy statement of 1948 emphasized public ownership and operation of the usual gamut of public utilities such as the mails, telegraph, telephone, radio, railroads and air transport. Like Brazilian's PSE's "state capitalism" in Pakistan refers to the important decision making role of the public sector of supposedly free-market economy. The economic role of the Pakistani state can be broken into two broad categories of functions: the state as a regulator of economic activity and the state as the direct participant in economic activity. The first category would include the classic allocative, stabilizing and distributive functions of the state implemented through a variety of traditional tools: monetary, credit, fiscal policies, trade and exchange rate policies, price controls and so on. As a direct participant in the economy, Pakistan is also important as an owner of the banks and enterprises. The state as a regulator and as an entrepreneur – both of these separate, but interrelated roles of the Pakistani public sector grew in importance over the last thirty years.

Pakistan has the wide range of state-owned companies. By 1988 more than 200 public enterprises were operating in many sectors of the economy. More importantly the government's firms have grown rapidly in both the size and scale of operations and now include all but one of the largest enterprises in the country. At the same time, a large private sector has grown and prospered in Pakistan often with close input or output links with the state companies.

The existing set of public industrial and manufacturing enterprises in Pakistan has also emerged after undergoing significant changes over the years with regard to motives, means and mode for governmental intervention. The protection subsides and other incentives provided by the government of Pakistan led to the "setting up" of inefficient industries in terms of capacity utilization. It was felt that manufacturing was the major engine of development, and it did play its role successfully in 1950s and 1960s to emphasize on import substitution. Industry in the 1970s was to concentrate on big, sophisticated,

industrial units to increase self-sufficiency in the intermediate and capital goods industries. The significance of the public industrial sector under the ministry of production, government of Pakistan, emanates from the strategic nature of its products i.e., fertilizers, cement, petroleum products, steel, etc. The importance of this sector is also due to its emergence as a large industrial conglomerate which manages 36% of the total (reported) industrial capital stock. In the international context the public industrial enterprises in Pakistan's share are quite high if we consider them as on large industrial conglomerate, and place it against the 600 major companies of the third world countries. The term "public enterprise" in the context of Pakistan includes four types of autonomous government organizations:

- Departmental commercial undertakings/ enterprises.
- Statutory public corporations.
- Holding corporations (and the joint stock companies that are controlled by these corporations).
- Authorities and boards which possess some autonomy from government control.

Due to dissatisfaction, principally with commercial performance of their public enterprises, performance and management improvement, contracting out, denationalization and privatization, dis-investment and liquidation have all been policies employed by government in varying degrees with varying results. As a country which has created over 200 public enterprises Pakistan has also been concerned with the management and performance of its public enterprises sector and this study is a part of the effort to identify and deal with the issues and problems which confront this sector. Pakistan like other developing countries is also embarking on the road of privatization. Since its inception she has been following a policy of a mixed economy. However with the massive nationalization of big industries by the socialist regime in 1972, the public sector has been playing a role for many role for many years. The experience of public enterprises in Pakistan like some other developing countries has not been very satisfactory. A number of public enterprises have been running into losses and the government has had to finance a considerable amount of subsidization. It was argued that the poor performance of SMEs has badly affected the economy of the country as a whole. Consequently, nowadays the role of the SMEs is being replaced by the private sector and planning implementation for

massive privatization is currently under way in Pakistan. Privatization is being considered at large, as a means of achieving the goal of prosperity within the country.

Productivity of Agricultural Sector: It is noted that industrialization in Pakistan failed to reach the coveted take-off stage. Amongst many other reasons for this failure, one important reason was that productivity did not show a substantial improvement in the agricultural sector. Without the required improvement in the agricultural sector, any attempt to accelerate industrialization was likely to be frustrated, on the supply side, by shortage of food and raw materials and on the demand side, by lack of increase in the purchasing power.

Infrastructure: Weaknesses of the infrastructure are one of the major hurdles in rapid industrialization of the country. Energy, road, gas, ports, telecommunication and other facilities are inadequate and inefficient to meet the rising requirement of the domestic and foreign investments. A massive program of infrastructure in rural and backward areas is necessary to fully exploit the development potential of the country.

Political Instability: It has badly affected the industrial progress in the country. Political instability remains the prime concern of domestic and foreign investors. Government policies can be consistent if there is political stability. Lack of it creates law and order situation, which is detrimental to investment climate. Pakistan is still far from stabilizing these important factors.

Location: Each tier or enterprise has its own specific problems for example, the size of enterprise poses problems of financing and knowledge of operating industries. Cottage and small industries / entrepreneurs generally have skills and dexterity to manufacture specific items but they do no have capability to finance or market their products. In case of medium size entrepreneurs, identification of industry as well as gathering of information about its prospects is one of the major problems. Large entrepreneurs suffer from the classification of technology, formation of joint ventures, over coming the government Red-Tapism and classification of infrastructure. As far as location is concerned rural areas suffer more due to lack of infrastructure and acquiring of skilled manpower as compared to urban areas.

Credit: In Pakistan the credit supply for industrial development at best is insufficient, haphazard and in most cases unproductive. There are number of commercial banks and development finance institutions, whose function is industrial loaning, more or less overlap and they almost use the same criteria for sanctioning industrial loans. However each institution works independently in a water tight compartment without any coordination at national level. Similarly there is no clear-cut distinction between a small investor and large investor.

Education: Education and industrialization have a very high correlation. All industrial countries have a very high rate of literacy. Therefore, it is essential that great emphasis on education is provided if Pakistan wants to develop its industry. Education at grass root level both to males and females should be provided as conscious efforts should develop industry in the country. At the higher level, there are very few institutions which impart hardly any practical education to the potential businessmen and industrialists. The institute of business administration and university of management sciences are though commendable efforts but they still lack a practical approach to business education.

Racial Disturbance: The ethnic disturbance, especially in Karachi and Hyderabad has slow down in production in manufacturing sector.

Unfavourable Industrial Structure: In Pakistan, the protection structure favours consumer goods industries and less to the final and intermediate and capital goods industries. Consequently, there is marginal increase in the shine of capital and intermediate goods industries.

Lack of Industrial Consultancy Firms: Non-availability of marketing and consultancy firms are also a major problem. If these firms are available to the capitalists for channellizing them investment among competing industrial units, they can come forward for investment.

Lack of Specialization: There is lack of specialization in industrial sector in Pakistan i.e., Special and qualified engineers, accountants and organizers etc.

Economic Sanctions: The economic sanctions imposed by the advanced countries as a result of nuclear explosion by Pakistan in "May 1998" have weakened the growth of manufacturing sector.

Training: Management is a very important aspect of entrepreneurial development. It tends over marketing, technical and financial aspects w2hich allows an entrepreneur to run an enterprise successfully. In Pakistan, practical aspects of management are not tough at the college or university level. Very few institutions provide technical training at secondary level. At the local level there are institutions which provide practical training and award diplomas for such skills welding, auto mechanic etc. Contracting, Adam smith in the 18th century said

"**A person should be assigned to do only that part of the work which he can undertake more efficiently."**

This has been the basis of the emergence of sub-contracting through out the world because it reduces cost of production, creates large employment opportunities particularly the rural level. And minimizes the need for vast infrastructure setup. Examples of successful sub-contracting exist in countries like Switzerland for watches, Germany for electronic / electric products and Japan for auto mobile industry. This aspect needs attention and promotion. Acquisition and transformation of technology, It is extremely important for new entrants in business and industry to know the most appropriate and economical technology to be adopted in new ventures. Generally speaking for large units it is acquisition of technology from abroad where as for medium and small scale industries it is development of technology at the local level. In terms of local available technology, there are institutions like PCSIR, PERAC etc who are supposed to provide local technology. But, somehow, these institutions have so far played supply oriented and not the demand oriented roles. There is also no interaction between these institutions between these institutions and new entrepreneurs.

Data Base Advisory Service: One of the greatest handicaps in developing entrepreneurship in Pakistan is the lack of correct and up to date statistical information and availability of free advisory service in identification of projects suitable to the specific needs of potential entrepreneurs. Investments advisory center of Pakistan has been working

on these lines but its geographical coverage had been the main factors limiting its usefulness.

Role of the Government: The present government realises that involvement of private sector is essential for industrial development of the country. It has reiterated time and again that the government does not want to run the industries but wants to restrict its role to providing necessary support services for the development of private sector. Under the bold policy initiatives adopted by the government, all the rooms, which were previously opened to government to install, operate and mange industrial units have been left open to the private sector. A massive program of denationalization of state owned enterprises is under way. However lack of provision of desired infrastructure non-provision of technology, training, education and finance are some of the impediments. Control and regulation and continued interference with entrepreneurial functions have become bottle necks and thus effect the industrialization process.

A number of factors inhibited the investors from making large investment in the country. Among the notable inhibiting factors includes:

- Investigations by NAB and the non-civilian supra-agency (ISI) of investors who announced to make investments in Pakistan.
- Political situation, including constitutional deadlock.
- Rising political clout of the religious groups.
- Weak infrastructure, in particular ports and shipping that hardly meets the requirements and expectations of foreign investors.
- High cost of electricity.
- Bureaucratic inertia.
- Absence of long-term economic plans and past record of frequent changes in the economic policies.

Section-3

Investment Climate In Pakistan

Openness to Foreign Investment: The Government of Pakistan has adopted a policy of openness to foreign investment and offers a package of incentives to attract foreign investors. Considering the openness of the investment regime, foreign investment activity to date has been relatively modest. In fact, FDI has declined from $1101.7 million in 1995-96 to $682.1 million in 1996-97 and further to $472.3 million in 1998-99. The numerous reasons for this include inadequate infrastructure, perceptions of political instability, law and order difficulties, policy inconsistencies, long-standing unresolved disputes between foreign investors and the government, low rates of domestic investment, and resistance to new policies by some elements of the bureaucracy who have not yet fully adjusted to a more open economic environment. There is a need for continuity in economic policies and to uphold the sanctity of agreements. A succession of investment promotion agencies, most recently the Pakistan Investment Board and its successor, the Board of Investment (BOI), have lacked the bureaucratic authority or the continuity of leadership needed to be effective. Pakistan's new military government, which came to power on October 12, 1999, is trying to provide the consistent economic policies needed by investors. Chief Executive Musharraf, in his major economic reform speech of December 15, 1999, highlighted increasing Foreign Direct Investment as a major priority of his new government, stressing the need to develop investor confidence through ensuring stability and continuity of policies and to resolve the outstanding disputes with the independent power producers, which he recognized as a major irritant that has damaged Pakistan's image as an investor-friendly country. As part of an integrated investment promotion strategy, the GOP undertook during 1992 a comprehensive program of radical economic reforms including liberalization, privatization and deregulation to bring the economy into a fully market-oriented system. This was aimed at capturing the potential of the private sector in all areas of economic activity. The Government of Pakistan's Investment

Policy of 1997 allows foreign investment on a repatriable basis in agriculture, services, infrastructure and social sectors in addition to the manufacturing sector. In the manufacturing sector, 100 percent ownership of equity by foreign investors was already allowed. In the social and infrastructure sectors, 100 percent ownership of equity by foreign

investors is now also permitted. In the services sector 100 percent ownership of equity is allowed at the outset of the investment, but it has to be reduced to 60 percent within 2 years (i.e. there must be 40 percent Pakistani equity). Moreover, a minimum equity investment of $0.5 million is required for the services and the social sectors. The Government of Pakistan is committed to providing full protection to foreign investment. The principal statutory vehicles for such safeguards are the Foreign Private Investment (Promotion and Protection) Act, 1976 and Economic Reforms Act of 1992.Foreign investors are allowed to participate under the same procedures as the local investors in the bidding process for projects that are to be privatized. Mergers are allowed between multinationals as well as between multinationals and the local companies. In case of mergers and takeovers, the Companies Ordinance, 1984, is applicable.

Right to Private Ownership and Establishment: Foreign and domestic private entities are free to establish and own business enterprises in virtually all sectors of the economy, with the exception of certain sensitive areas such as defense production. Private entities are similarly free to acquire and dispose of their interests in business enterprises.

Protection of Property Rights: Pakistan's legal system protects and facilitates the acquisition and disposition of property rights. The Industrial Property Order, 1979 provides adequate safeguards to protect industrial property in Pakistan against compulsory acquisition by the government, even for the public interest, without sufficient compensation in accordance with the provisions of the law. This Order protects domestic and foreign investment.

Intellectual Property Rights: Pakistan is a member of universal copyright and bern conventions. The copyright office is a department of the ministry of education. Copyright on a registered design is initially granted for a five-year period and may be extended for two additional five-year periods. The patent office, a department of the ministry of industries, administers registration of patents and designs.

Transparency of Regulatory System: Enforcement of competition law in Pakistan is under the jurisdiction of the Monopoly Control Authority (MCA). An independent regulatory authority which was created in seventies but it lacks enforcement muscle to achieve its goal due to certain inherent structural weaknesses. However some other authorities which are operating independently. Pakistan formerly had a relatively high degree of industrial concentration, with wide spread licensing procedures restricting entry and serving as vehicles for creating monopolies and oligopolies. The end of the licensing regimes, the decline in bureaucratic controls and liberalizing trend has reduced industrial concentration by bringing down barriers to entry.

There has been much controversy in the country surrounding the independent power producers (IPPs), including allegations that the government of Prime Minister Benazir Bhutto had received large kickbacks and commissions from the IPPs for approving the contracts. This controversy and the ongoing investigations by the government against the IPPs have raised serious doubts in the minds of the foreign investors regarding the sanctity of contractual obligations in Pakistan.

Efficiency of Capital Markets and Portfolio Investment: The capital markets in Pakistan have a narrow base. They are now being developed along modern lines with the assistance of the Asian development bank, which has provided a loan of $250 million for this purpose. The equity market in Pakistan has registered phenomenal growth in terms of size of the market and institutional development, but the fixed income securities market has not developed as quickly. The financial institution reforms have paved the way for the banks to operate on professional lines under the supervision of the state bank of Pakistan, which is now an autonomous body. The total assets of the banking sector as on march 31, 2000 stood at $32.7 billion whereas the non performing loans of the banking sector stood at $3.35 billion as on December 31,1999.

Conversion and Transfer Policies: Pakistan has a liberal foreign exchange regime with few restrictions on holding foreign exchange and bringing it in or out of the country. There are no limits on the inflow or outflow of funds for remittances of profits, debt service, capital, capital gains, returns on intellectual property or payments for imported inputs.

The State Bank of Pakistan considers all payments other than those against imports as commercial remittances. All such payments are subject to prior approval from the State Bank of Pakistan. Commercial remittances can only be made against a valid contract or an agreement. The agreement or contract must be registered with the State Bank of Pakistan

within 30 days of its execution. Additionally, the bank through which the remittance is to be made needs certain other documents outlined in the Foreign Exchange Manual for onward submission to the State Bank of Pakistan. The entire process of registration and submission of documents takes around 50 to 60 days.

There are no restrictions on buying foreign currency from the kerb market. However, if the kerb market is used to remit investment returns without the approval of the State Bank of Pakistan then the preferential tax treatment extended to investors may not be available. The facility for contracting foreign private loans is available to those foreign investors who invest in the sectors open to foreign investment in order to finance the cost of imported plant and machinery required for setting up the project. Loan agreements, however, should be registered and cleared by the State Bank of Pakistan.

Expropriation and Compensation

Economic Reforms: As part of an integrated investment promotion strategy, the GOP undertook during 1992 a comprehensive program of radical economic reforms including liberalization, privatization and deregulation to bring the economy into a fully market-oriented system. This was aimed at capturing the potential of the private sector in all areas of economic activity. The privatization process has been redesigned to make it more transparent. Power generation, telecommunication, highway construction, port development and operations, oil and gas, services/infrastructure, and the social and agriculture sectors have now been opened to foreign investment.

Legal Framework: Pakistan's legal framework and economic strategy do not discriminate against potential foreign investors, but enforcement of contracts can be difficult given the

inefficiency of the court system. Foreign investment is generally subject to the same rules as domestic investment, with the exception of certain sensitive areas such as defense production, banking, and broadcasting.

Protection to Foreign Investment: The Government of Pakistan is committed to providing full protection to foreign investment. The principal statutory vehicles for such safeguards are the Foreign Private Investment (Promotion and Protection) Act, 1976, and Economic Reforms Act of 1992.

Institutional Promotion: Successive institutional entities have attempted to ease that process for prospective investors by functioning as a "one-window" interface between the investors and the relevant Pakistani authorities. Now the situation is improving with special efforts by the Board of Investment. In most cases the requirement for a license has been abolished.

Screening of Foreign Investment: Screening of foreign investment is not carried out in the industrial sector unless foreign investors seek a special incentive package or government support in the form of guarantees regarding tariff protection or prices. Investment cases seeking special packages have to be approved by the Cabinet Committee on Investment. In the case of non-industrial sectors, investors have to register with the Board of Investment and the Securities and Exchange Commission of Pakistan (SECP) and they must meet the equity requirements and invest in approved sectors.

Incentives for Investment: As far as incentives for investment, exemptions or relief from import duties have been allowed on imported plant and machinery that is not manufactured locally to keep Pakistan competitive in the international market.

Privatization

The privatization programme had started in 1991. During 1991 to 2003 ,130 privatization transactions have been completed and proceeds of Rs. 98170.2 million were realised. Fifteen industrial units are excluded from the privatization programme either for liquidation purpose or being non-privatizable. Following are major projects on the list of privatization commission:

- **Power**: Karachi Electric Supply Corporation and other distribution and generation companies.
- **Pakistan Telecommunications & PIA**: These are huge projects and have every reason to bring the investors at a massive scale in Pakistan.

Section-4 **Manufacturing/Engineering Industry Of Pakistan**

Brief Overview Of Manufacturing Sector: Fiscal year 2000-01 has been the best performing year for manufacturing sector of Pakistan in decades. That year had seen manufacturing, registering a stellar growth of 7.6 percent with major contribution coming from large-scale manufacturing, which recorded 8.6 percent growth. The challenge before government had been to sustain this growth during the fiscal year 2001-02. However, while fixing the growth target of large-scale manufacturing, some slow down was anticipated for two reasons. Firstly, as a result of 8.6 percent growth in 2000-01, the base for large-scale manufacturing was already high. Secondly, the impact of possible slow down in global economy in general and the US economy in particular were also taken into account.

Accordingly, the large-scale manufacturing was originally targeted to grow by 6.5 percent in 2001-02. The events of September 11 and consequent development thereafter, adversely affected the performance of this sector. Serious difficulties caused by the events of September 11 notwithstanding, Pakistan's overall manufacturing sector registered a growth of 4.4 percent and large-scale manufacturing grew by 4.0 percent during the outgoing fiscal year. When viewed at the backdrop of development, that has taken place in many developing and transition economies after the events of September 11, the performance of large-scale manufacturing in Pakistan appeared more than satisfactory. The large-scale manufacturing (LSM) was targeted at 6.5 percent in 2001-02. As a result of the events of September 11 and consequent development, thereafter, the target was revised downward to 3.2 percent. The fiscal year 2001-02 however began with a positive note as large-scale manufacturing continued to exhibit a rising trend until September 2001.

Large-scale manufacturing grew by 5.3 percent in the first quarter (July –September) of the outgoing fiscal year. The events of September 11 and their aftermath adversely affected the performance of this sector. As shown in Table 3.1, the growth of large-scale manufacturing slowed to 0.6 percent in October and turned negative to the extent of 5.7 percent in November 2001, that is, during the peak of Afghan War. Once the war ended, the

large-scale manufacturing staged an impressive recovery during the month of December and January when it grew by 6.8 percent and 16.3 percent, respectively. .

Table: Month-Wise Industrial Growth (July-March)

Month	2000-01	2001-02	
July	6.4	3.6	
August	10.3	4.1	
September	7.9	8.2	
October	11.1	0.6	
November	0.3	-5.7	
December	-13.5	6.8	
January	9.6	16.3	
February	21.2	-10.3	
March	22.9	6.4	
(Cumulative)	7.6	4.0	8.6%(LSM only)

Source: Federal Bureau of Statistics

The month of February 2002 also known as a "black month" for industrial production, because all major industrial groups registered, substantial negative growth with the exceptions of textile and apparel. Several non-economic factors were responsible for the poor performance of industrial production in the month of February 2002. Firstly, the working days in the month of February 2002 were reduced to 18-19 days because of the Eid and other holidays. Secondly, the performance of February 2002 was measured against an extraordinarily high base (21.2 percent growth in February 2001). Thirdly, automobile production declined by 21 percent because car manufacturers created artificial shortage by cutting their production.

Such behavior is equivalent to restraining the country's economic growth, especially when automobile sector is the most protected industry in Pakistan. Given the persistence of

excess demand, car manufacturers have never attempted to match the demand by increasing capacity utilization. Finally, the production of Phosphate fertilizer was 5.6 percent and Nitrogenous fertilizer declined by almost 49.5 percent because fertilizer industries were carrying excess stock and wanted to export 200,000 tons. However, exports could not be materialized, therefore the industry had to cut fertilizer production. Excess carry-over stock of fertilizer was due to the decline in off-take, which was mainly caused by the prevalent drought situation. As a result, industrial production declined by 10.3 percent in February 2002.

Large-scale manufacturing bounced back in March 2002 and registered a growth of 6.4 percent over March 2001. This was an impressive recovery considering the fact that large-scale manufacturing had grown by almost 23 percent in March 2002 and must be viewed against an extra-ordinary high base of March 2001. The growth surged upward to 4.0 percent on cumulative basis during the first nine months (July-March) of the current fiscal year. Whereas the cumulative position for the seven-month (July-Jan) had been 5.2 percent. If we exclude the index for the month of February, which shows abnormal behavior from overall quantum index of July-March 2000-01 and 2001-02 for the sake of comparison, the growth is as high as 5.4 percent for the 2002 year as against 4.7 percent for previous year. This shows the gravity of the damage, the month of February had inflicted on the growth figures of July-March, 2001-02.

Table: Group-wise and Month-wise Industrial Growth (July-March, 2001-02) (Percent)

Group	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Food, Beverages & Tobacco	-1.0	1.5	16.5	5.7	-32.4	6.2	31.4	-11.8	13.0
Textile & Apparel	2.5	0.3	3.9	3.5	4.8	4.4	5.2	7.0	7.8
Leather Products	-6.2	4.1	2.0	3.4	-1.7	-5.3	-6.4	-14.0	-6.7
Paper & Paper Board	7.5	-0.2	3.4	0.1	7.4	21.6	0.9	-10.9	-2.6

Chemicals, Rubber & Plastic	2.8	0.0	0.9	3.6	1.2	2.9	17.3	-21.1	-8.5
Petroleum Products	31.1	30.2	30.1	3.2	43.6	19.7	39.0	-10.9	2.4
Tyres & Tubes	2.7	100.1	18.6	25.6	12.7	0.6	-19.0	-29.4	-12.1
Non-Metallic Mineral Prod.	10.5	2.3	15.6	-9.2	-20.4	-8.9	-12.5	-21.5	46.4
Basic Metal Industries	-17.5	-2.1	9.7	-3.2	-16.9	2.2	0.6	-20.3	-2.7
Metal Products & Machinery	-1.9	20.3	6.0	-10.1	-15.8	6.1	9.4	-17.3	9.8
Automobile	5.7	13.5	22.7	-24.8	-22.7	41.9	-13.4	-21.0	26.7
Overall Growth	3.6	4.1	8.2	0.6	-5.7	6.8	16.3	-10.3	6.4

Source: Federal Bureau of Statistics

There were indications that industrial production would accelerate during the remaining period. For example, the figures available for the month of April for major industries like cement, sugar and automobile showed tremendous growth and analysts were hopeful for continuation of a similar positive trend in the remaining months of the fiscal year.

Sugar production stood at 3.0 million tons, which is 9.2 percent higher than the corresponding period of last year. Similarly, Automobile production also increased significantly in March and was likely to accelerate further during the remaining months of the fiscal year. Cement production also picked up and registered a growth of almost 50 percent in March 2002 as against the corresponding month of last year. These all

indications lead to the fact that industrial productions would accelerate in the remaining months, which were later on complemented by the data of 2002-03.

Evaluation of Selected Industries of LSM.

Textile Industry: Inspite of drastic changes that occurred in the production patterns over the year, the textile sector remains the backbone of the economy and is still contributing around 70 percent to export earning and acting as major employer of industrial labour force. The textile sector depends on agriculture for supply of raw material, therefore whatever happens to cotton crop is likely to affect the performance of textile sector. During the current fiscal year the textile sector showed greater resilience to lower cotton crop and performed well as far as production is concerned. After suffering stagnation for last 5 year, textile exports started improving, especially the value added product performed well in export markets inspite of lower demand and depressed prices in the international market. Foreign direct investment (FDI) in the textile sector also doubled from last year rising from US $ 4.6 million to $ 10.5 million in July–March 2001-02, and is estimated to be over $20 million in 2002-03.

Cement Industry: There are 24+ cement units in the country, with total installed capacity of 16300 thousand tones. Out of these 24 units, 4 units with installed capacity of 1831 thousand tonnes are in the public sector and 20 units having capacity of 14,440 thousand tonnes are in the private sector. The total production of cement is recorded at 9.8 million tonnes during July-March 2001-02 as compared to 9.7 million tonnes in the same period of previous year, showing an increase of 1.8 percent. The sharp fluctuation in cement prices and relatively lesser demand for cement have been responsible for the decline in cement production in the mentioned fiscal year. Cement production has however increased by 50 percent in the month of March 2002 and is likely to increase further in April to June 2002-03.

Automobile Industry, The performance of automobile industry has been dreary at best, over the last five years. During the fiscal year 2001-02 the automobile industry has registered mixed trend and the production of LCVs, motorcycles, trucks and, jeeps and cars increased by 15.0 percent, 5.4 percent, 5.7 percent and 3.6 percent, respectively during July-April 2001-02. However, the production of tractors declined by 26.2 percent, and buses 23.1 percent, followed the declining trend. The automobile group as a whole registered an improvement of 1.9 percent in the first ten months of the current fiscal year as against 23.3 percent growth in the comparable period of last year.

The automobile industry enjoys the status of the most protected industry in Pakistan where the effective protection rate (EPR) ranges between 701 percent to over 5000 percent. The local car assemblers are fighting for the share of market through non-price factors like advertisement and alliance with leasing companies. Against estimated national demand for 100 thousand cars, the local car industry has never produced over 40 thousand cars with the current year being an exception.

Cotton Spinning Sector: The spinning sector of textile is one of the most important sectors. At present, it is comprised of 445 textile mills (50 composite units and 395 spinning units) with 7.2 Million spindles and 64 thousand rotors in operation. The capacity utilization stagnated at 87 percent in spindles and 45 percent in rotors, during July- March, 2001-02. The production of cotton yarn increased to 1347.7 thousand tones in July-March 2001-02 as against 1286.2 thousand tones in the comparable period of last year, thereby, registering a growth of 4.8 percent, (The export of cotton yarn remained more or less of last year's level during July-March 2001-02). The value of yarn export however declined by 12.4 percent because of the depressed international price of yarn. The decline in yarn exports was compensated by the exports of high value added products. This implies that a shift is taking place from lower to higher value added export products.

Weaving & Made-Up Sector: The weaving and made-up sector comprising of hosiery, garments, towels, canvas, and bed wear have three different sub-sectors in weaving viz. integrated, independent weaving units, and power looms units.

Revival Of Sick Units (A Step Towards WTO): The sick units are hostile to development of financial institutions. To give a boost to these units and lessen the burden of financial institutions, the government formed Corporate Industrial Restructuring Corporation (CIRC) with a mandate to sell 868 such units through open public auction and complete the work within a year. These units in the private sector were identified by the CIRC in consultation with the concerned banks as these units were closed for many years and owed over Rs. 107 billion to the nationalized commercial banks (NCB's) and DFI's.

The CIRC would take over these assets from the government owned banks and financial institutions at their book value and in return, the government will issue bonds to these banks at the time of privatization of the unit or after three years of take-over, whichever is earlier. The CIRC had selected 101 cases for the process from six banks and financial institutions. The CIRC became operational after promulgation of two ordinances in September and November 2000. The original borrowers were given the chance to settle their dues within 30 days or otherwise the CIRC starts executing cases through the courts. The strategy to auction the irretrievable sick industrial units, is the last ditch attempt by the government to solve the twin problems of sick industries and non- performing loans of the NCBs/ DFIs. The CIRC has so far acquired 120 units involving Rs.16.1 billion and auctioned 48 units involving Rs.6.4 billion of the NCBs/ DFI's and the process is still underway.

Public Sector Industries: The Public Sector Industries had provided nucleus for large-scale capital goods producing industries in the Seventies. But the government started reducing its direct role in managing industries by resorting to the policies of deregulation and privatization. Before the start of Privatization in 1990-91, there were twelve holding corporations with 116 manufacturing units. As a result of massive privatization/ transfer of ownership, this number of units under administrative control shrank to 38 in 2002. During the period under review, the public sector industries under the administrative control of the Ministry of Industries & Production continued to operate within the general economic policy framework of focusing on optimal utilization of existing capacities and adhering to cost efficiency. Key performance indicators present the following picture of performance

during July-June, 2001-2002 (8 months actual & 4 months projected) in comparison to the same period last year.

Table: Performance of Public Sector Industries (Excluding Pak Steel) (Rs. In Million)

Item	2000-2001	2001-2002 **	% Change
Production Value*	6,500	6,282	-3.36
Net Sales	14,774	15,233	3.11
Pre-Tax Profit	754	879	16.57
Taxes and Duties	3,595	3,613	0.50
No. of Employees	11,140	8,355	-25.00

{* At constant prices of 1987-88. ** Actual for 8 months (July- Feb) and expected for 4 months (Mar- June)}

Source: Expert Advisory Cell, Ministry of Industry & Production, Federal Bureau of Statistics

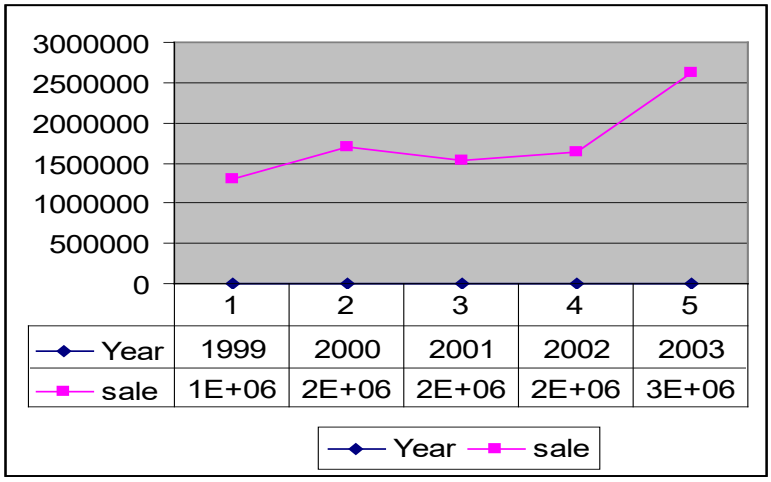
Performance of Pakistan Steel: One of the most important elements in manufacturing sector of Pakistan is the steel mill, without its evaluation, true impact on the manufacturing sector can never be known. Pakistan Steel was established with the objective of enhancing domestic availability of basic raw material for engineering and construction industries. It facilitated establishment of downstream steel industries in the country. The production capacity of Pakistan Steel is 1.1 million tons of raw steel per annum with built-in potential to expand its capacity to over 3 million tones per annum. The Steel Mill is producing coke, pig iron, billets, hot rolled coils/sheets, cold rolled coils/sheets, formed sections like channels, angles, galvanized sheets etc.

The industrial estate of Pakistan steel, spread over an area of 1420 acres within its periphery, for the benefit of entrepreneurs, attracted 22 downstream units so far along with 21 located in different parts of the country. The downstream industries are basically producing value added engineering goods such as steel pipes (small, medium and large diameter), seamless pipes, wire rod and baling hoops, small sections, reinforcement bars, slag cement, slag wool, automotive parts etc.

Section-5 **Findings From Askari Cement Limited**

Performance results of Askari Cement after the implementation of "Continuous Improvement Philosophy."

- **Operating Results of the Company from 1999-2003**



Source: Annual Reports of Askari Cement Limited 2000-2003

Reasons for the Success of Askari Cement Limited. Considering the age of Askari Cement Limited, environment of the cement industry and number of competitors in the market, sales volume of the company is a great success. Following are the main reasons of its success:

Quality	Provides short curing and soundness
Strength	Gains highest strength of 7000 and more PSI as compare to 5950 SI required by British Standards. Fineness around 2900-3000 cm sq/gm as compare to 2250 cm sq gm under British Standards.
Consistency	Ensured through ISO 9001 2000 certification.
Quantity	Accuracy in weight is ensured up to 50 kg/bag +_1%

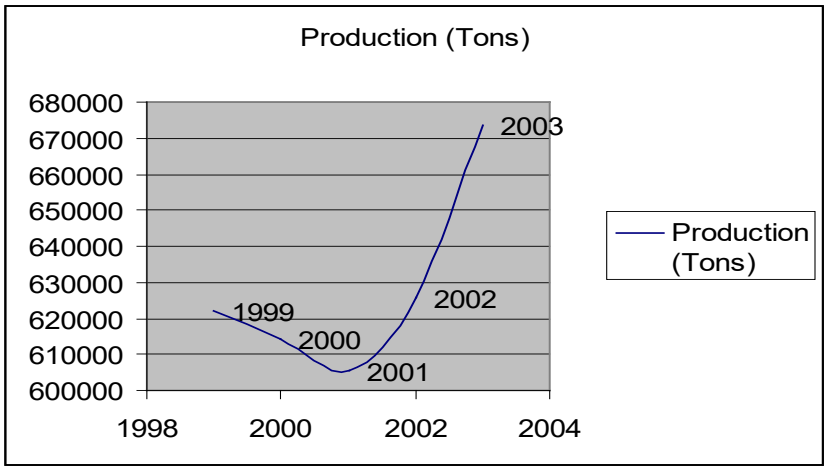
Prompt Service	Easy booking through telephone/fax and quick delivery system is provided to the clients.
Flexibility/ Assured supply	It is because of adequate production facility and efficient management system adopted by the company.
Availability	Askari Cement Ltd has two plants functioning efficiently with a dedicated staff who ensure that plants operates at the required capacity.

- **Capacity utilization of the company from 1999-2003**

Year	Production (Tons)	% 0f capacity utilization
1999	622168	65%
2000	614469	63%
200	605657	60%
2002	625610	66%
2003	673575	71%

Source: Annual Reports of Askari Cement Limited 2000-2003

- **Total Production of the company from 1999-2003**



Source: Annual Reports of Askari Cement Limited 2000-2003

- **Financial Position of the Company 2000-2003**

Category	2000	2001	2002	2003
Current Assets	6288138	742010	781306	771511
Current Liabilities	1854514	1049787	799300	739665
Operating Fixed Assets	5508727	5006936	4548217	4233447
Total assets	6288138	6752872	5332108	5645800
Long Term Liabilities	1768197	2455935	237397	1920257
Share holders Equity	2462341	2243932	2290088	2240776

Source: Annual Reports of Askari Cement Limited 2000-2003

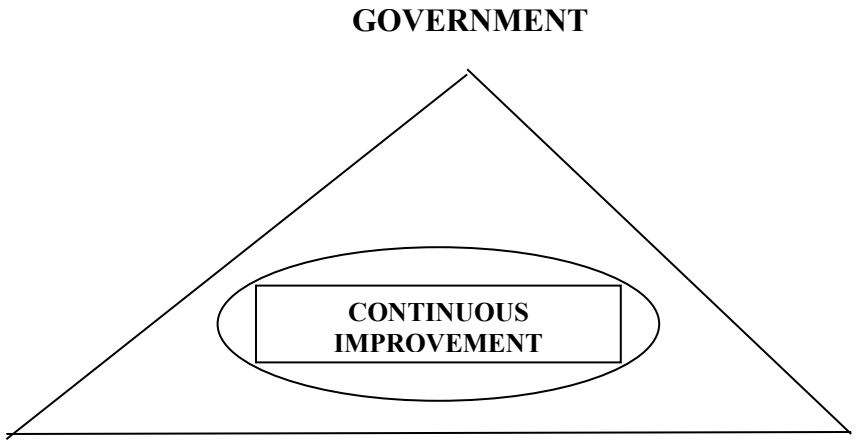
- **Results with respect to following have achieved:**

- Attitude of the employees has been changed to accept the development changes in the organization.
- Empowerment and Interpersonal aspects have given due attention.
- Inter Group Development culture has been inculcated in the mind of employees.
- Team Development is the essence of the ACL's performance.
- Leadership and Authority has been assigned to each level in accordance with job specification.
- Problem solving is at top priority of the management.
- Employees are involved in decision making.

CHAPTER-9

A SUGGESTED CONTINUOUS IMPROVEMENT FRAMEWORK

The three principle players of continuous improvement of quality and productivity are Government, Industrialists and Academia. If an integrated infrastructure, a set of management practices and a set of tools and techniques support all these, it will pay rich dividends. It is therefore recommended that efforts of all these must work together.



A humble effort has been made to enlist various aspects related to these factors so that the present and future challenges are met in dignified manners in the competitive/dynamic world of today.

STEPS TO BE TAKEN BY GOVERNMENT

Coherent and Consistent Industrial Policies: Strategies for continuous productivity and quality improvement require, in the first instance, coherent and comprehensive policies at the macro level as against adhocism. To have desirable results consistency in policy is must, which is achieved through:

- Commitment of country's top leadership to ensure consistency in policies related to the industrial sector's development
- Suitability of applicable rules/laws/regulations and their fair implementation
- Reducing dependency on foreign aid and involvement of international financial institutions
- Long term legislative cover for industrial development in areas of fiscal, tariff infrastructure development and human development resource policies
- Involving private sector in the formulation and implementation of trade, industry, fiscal and other industry related policies
- Reducing trade deficit by lowering imports and improving export through continuous improvement of quality/productivity

Development of Human Resource: As per UNDP report of 2003,Pakistan's ranking is 146 out 178 countries hence there is a dire need to address this issue in order to meet the challenges of future by taking following actions:

- Demand based development of skilled labour and professional expertise for the managerial cadres be developed with the assistance of public and private sector education institutions
- Establishment of good educational institutes to impart quality education/technical training to bridge the gap of skilled work force in the country
- Public and private sector education institutions specially related to business and technical related education be encouraged through different incentives to assist the government and industrial sector to develop Human Resource Capital
- Public-private community partnership to achieve goals of human development
- Technology is vital for the improvement of quality and productivity of education institutions in order to provide skilled workforce to keep the momentum of

continuous improvement in the industry

Conducive Environment: Kaizen philosophy can only be feasible if sick industrial units are revived and investors are persuaded to establish new industrial units in Pakistan. Investors whether local or foreign are hesitant to invest in Pakistan, especially after nuclear explosion by Pakistan in 1998, incident of 9/11 and war initiated against terrorism. Hence it is imperative for the government of Pakistan to ensure conducive environment so that a step in the right direction is taken inline with Kaizen philosophy which helped Japan to improve its industrial base and consequently Japan emerged as great industrial power. Following will ensure conducive environment:

- Stable law and order situation
- Stable political environment by strengthening democratic institutions
- Effective, efficient and credible accountability system. Speedy and transparent judicial system
- Better infrastructure, particularly at the ports and shipping services that hardly meet the requirements and expectations of industrial sector
- Un-interrupted utility services at lower cost are necessary to have competitive advantage both in domestic and international markets
- Adequate physical infrastructure is established in the new industrial zones and up gradation of existing facilities in the old industrial zones
- Availability of quality raw material at reasonable price to compete within local and international markets

Quality Education: Pakistan having 150 million human beings full of talent lacks skilled workforce that impedes its industrial growth. The root cause of the poor state of human resource has been identified as the prevailing education system. It is therefore imperative for the leadership of Pakistan that immediate and concrete steps are taken to address this problem. At present public expenditure on education is 0.2 % of GDP which is much less than the recommended by the UNESCO for developing countries. This is even less than the countries of the region whose average budget is 1.8 % of GDP. Hence concerted efforts are needed to increase the literacy rate and to bridge the skilled gap with a view to meet the modern day challenges through:

- Consistent education policy
- Adequate percentage of GDP is placed at the disposal of ministry of education.
- Redesigning of syllabi in line with modern teaching especially to improve entrepreneurial skills and professional management
- Appointment of quality faculty
- Effective performance appraisal system be introduced for promotion of deserving faculty member
- Two tier system of education prevailing in the country be either eliminated or its expenditure be altered in such a way that all the deserving students get admitted to these institutions
- Responsive, participatory and accountable system of educational governance and management by empowering the local government should be introduced. Engage civil society and local government/education ministry to formulate, implement and monitor the strategies for educational development
- Adequate infrastructure be ensured in the education institutions:
  - Buildings
  - Laboratories
  - Libraries
  - Play grounds
  - Latest technology i.e. multimedia etc

Financial Aspects

- A legally autonomous role for the SBP is required for sound management of liquidity in the national interest. It would be crucial to enable it to efficiently and impartially regulate financial sector which is being under-cut by economically unjustified political consideration
- Frequent changes in the taxation system should be avoided.
- Loans provided by financial institutions to industrial sector should be on minimum interest rate
- Loan finance regulations should be strictly enforced/implemented through SBP

- An integrated Fiscal, Industrial and Trade policy is needed to address the domestic and international challenges in order to set pace for the continuous growth of industries
- FDI should be attracted which will bring technology, management skill, competitive environment & capital for making new products in addition to new market brands.

Miscellaneous

- Appropriate measures should be taken against dumping and smuggling
- Linkage between small and large industries supply chain and R&D efforts
- Efficient management of industrial zones
- Protection of consumer interests
- The recognition and awarding of excellent performing companies will set a milestone in the continuous improvement
- Pakistan's SOEs, privatization drive should be implemented in stages, with internal restructuring as the first step to attract best investor and to retain the employees of the subject industrial unit
- Protection and incentives to the foreign investors with a view to attract more FDI and to improve the competitive environment:
  - Better taxation system
  - Protection of intellectual property right
  - Joint Venture
  - Compatible prices of the raw materials
  - International standard infrastructures
- To support the continuous improvement of industrial sector, there is a dire need of making policies which should ensure agricultural development on the compatible footing
- Tackling of poverty trap, specially the rural areas, which is the backbone of our industries. This can be done by increasing the productivity of farmers

ROLE OF ACADEMIA

Population, economy, environment, poverty, modernization, industrial and all other social issues can be addressed through education. Academia has to play a very vital role in the development human resource which is the backbone of industrial sector. Following steps should be taken by the academia:

- Assist the government and corporate sector to improve the human capital:
  - Redesigning the education syllabi in accordance with modern teaching of business & technical training needs
  - Teachers should change their teaching style, their conduct should be as facilitators rather than lecturers
  - Improving the education system of Pakistan in order to have skilled and disciplined manpower
- Inculcate in students, the habit of learning more than one international language to make their place in the international market and to beat international competitors at domestic as well as international markets
- Provide nurseries for future entrepreneurs/workforce to enhance their skills/professional approach
- Make affiliation with the world-renowned universities to enhance the quality of education. Linkage with the foreign universities will enhance quality of education through:
  - Developing curriculum with the help of foreign scholars and faculty
  - Getting education and training from foreign universities
  - Arranging seminars, workshops and combine training sessions
  - Arranging visits of students and faculty to these universities
- Assist the corporate sector to provide literate environment to absorb the new technology and to change the mindset of the stakeholders
- Case studies should be developed on local enterprises operating in local business and regulatory environment. Like a case study prepared by Wharton School of Commerce, University of Pennsylvania USA on "PSO Corporate Transformation"

- Internship to be arranged with local industries for business and technical education of students in practical environment
- Academia should assist education institutions to establish support centers like IBA to provide training, research and consultancy services to public as well as private sector
- Efforts should made to inculcate the habit of conducting research among faculty and students by providing reasonable incentive i.e. rewards, recognition etc
- Carryout critical analysis of prevailing environment of Pakistan's industries and entrepreneurs in order to suggest measures in the peculiar environment of Pakistan
- Publication of books, journals/magazines for the guidance of corporate sector, specially covering the aspects of TQM, continuous improvement and text book for training on WTO
- Arranging Seminars, Workshop and Training Session with the help of eminent national and international scholars with a view to:
    - Broaden the vision of faculty and students
    - Share the latest development in the field of business education
    - Share the R&D efforts of developed countries in the industrial sector
    - Creating awareness among the corporate leader & workforce
    - To have updated knowledge with regard to business education
- Make cell like "University-Industry Technology Cooperation" for industry related research it will pave the way to meet the challenges of future
- Arrange country-wide "University- Industry Technology Support Program"
- Assist the government in preparing the criteria for "National Quality/Productivity Award" for recognition of excellent performer in the development of industrial sector

STEPS TO BE TAKEN BY INDUSTRIALISTS

Having gone through the analysis it is clear that under the prevailing environment internally or externally stage is set to execute the philosophy of continuous improvement in Pakistan. Good corporate governance is another vital organ for continue improvement of any industry which is ensured by:

- Involvement of top management
- Skilled and futuristic management
- Dedicated and goal oriented management having a futuristic vision and competitive spirit
- Empowering / involvement of all tiers of the organization

Following framework is suggested to cultivate the Kaizen philosophy:

Step-1 : Strategic Planning

Planning establishes coordinated effort and gives direction to managers and non-managers alike. Without planning, departments could be working at cross purposes and prevent an organization from moving efficiently toward its objectives, hence following actions are suggested:

- Carry out SWOT analysis
- Set a benchmark to start with
- Re-defining the organization's vision or mission statement and goals or objectives in the light of changing environment and future challenges
- Publish to all employees a mission statement and objectives of the organization
- Revised standards and establish an overall strategy for achieving these standards
- Develop a comprehensive hierarchy of plans to integrate and coordinate activities of the organization
- Emphasize on processes that establish a way of thinking oriented at improving processes and a management system that support and acknowledges people's process-oriented efforts for improvement
- Simplify the processes with help of IT
- With a view to provide quality products/services to the customers following steps are recommended:

- All management activities should eventually lead to increased customer satisfaction. People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit
- Carry out BMR
- Acquire adequate technology to add value to the products and services
- Higher product quality with lower cost

- To carry out BMR finance should be generated by taking following actions:
  - Shares to be floated to the general public and employees
  - Joint venture and if it is undertaken with the foreign firm it will bring finance as well as latest technology and expertise
  - Loan from commercial institutions at a minimum interest rate

- HR practices to be updated in accordance with the redefined goals/objectives
- Evolved the standing operating procedures and monitoring system
- Shift the ownership at process level
- Devote adequate budget for training of employees
- Develop employees mind set to adopt new changes and develop team's spirit
- Management labour relation should be improved

Step-2 : Analyse the Gap

- Carryout regular monitoring, compare actual performance against the defined objectives/standards and identify deviation because regular evaluation of business performance pays rich dividends
- Check team's spirit / culture in the organization
- Evaluate the industrial entity whether it is progressing as learning organization or otherwise

Step-3 : Implementation

- To achieve the desire results more efficiently, all related resources and activities should be managed as a process

- Execute the new process and practices
- Ensure discipline at the Workplace encourage suggestion System
- Reduce errors, defects, waste, and their related costs
- Ensure the satisfaction of customer because an enterprise can prosper only if customers who purchase its products or services are satisfied
- Organizational culture should be improved by:
  - Involving employees in decision making
  - Empowering the employees
  - Improving the communication
- To ensure continuous learning, arrange training of the employees with the help of existing industrial units or through business/technical education institutions to develop their skills
- Management should work continuously towards revising the current standards, once they have been mastered, and then establishes higher ones to make the organization progressive & futuristic
- Measure and reduce the cost of poor quality
- Ensure effective performance appraisal system
- Recognize and award the excellent performer
- Talent pool to be arranged and promotion be based on the merit
- Individual having potential and desire to develop be given continuous training. Employees be motivated to develop their best through:
  - Better management
  - Training
  - Incentive
  - Involvement in the organization affairs

- Increasing productivity and effectiveness in the use of all resources
- Management should devote maximum time on continuous improvement rather than command and control
- The evolution of IT and the role it play in the organization continues to be quite dramatic. Today, information system plays a vital and increasing strategic role in

the production environment, management, creative marketing, financial institutions and delivery of product and services

Miscellaneous

- Entrepreneurship to be developed to meet the challenges of future. People with sound entrepreneurial skills and adequate techno-managerial backgrounds should be inducted to lead the enterprises. In the private sector enterprises, it is vital that management should be segregated from ownership. Greater techno-managerial and financial expertise utilized as professionalism to run efficient and productive enterprise

- Encourage group decision making, information sharing and knowledge management

- The people making and organization are as critical as are the various organizational processes/machines, hence their development/grooming should get priority over all other aspects. This is achieved by adhering to following:
  - HRM should be the champion of organization ’s competitive edge rather than market forces lead the HRM
  - Imparting continuous and future oriented training
  - Effective performance appraisal system to identity talented and motivated/willing employees who have potential and desire to develop their skills
  - Ensuring employees motivation and commitment
  - Involving, empowering and providing conclusive learning environment

CONCLUSION

Improvement refers to both incremental improvement that are small and gradual and breakthrough, or large and rapid, improvement. Improvements may take any one of several forms:

- Enhancing value to the customer through new and improved products and services
- Reducing errors, defects, waste, and their related costs
- Increasing productivity and effectiveness in the use of all resources
- Improving responsiveness and cycle time performance for such processes as resolving customer complaints or new product introduction

Kaizen strategy calls for never-ending efforts for improvement involving everyone in the organization - managers and workers alike. Country's top leadership commitment is the key to successful of continuous improvement of the industrial sector. Entrepreneurs and Academia are also the other two major components of Kaizen philosophy, which plays an important role in the development of new ideas/philosophy and changing the mindset of people. To start with like Japanese adequate new technology and equipment/machines are most vital for laying out foundation for development of new product/service in order to meet the customers needs and expectations. Following steps will pave the way for continuous productivity/quality improvement:

- Invest adequate amount of income in the training
- A variety of different skills associated with effective managerial performance i.e. technical, interpersonal, conceptual and diagnostic skills will enhance the performance of the organization
- Managers should spent 60 % of their time on continuous improvement of the systems and little time on commanding and controlling the people
- People are the key to the success of firms hence their involvement and satisfaction is vital to enhance quality and productivity
- Encourage education and self improvement of everyone in the organization
- Recognition of excellent performer influence others and creates a healthy competitive environment

- Quality begins with education and ends with education hence institute continuous training
- Quality strategy must permeate an organization throughout its business activities
- Cost of quality must be reduced because with low cost and high quality, the firms can provide more value to their customers
- Quality control is responsibility of all employees
- Good corporate governance and regular evaluation of business performance in term of processes improvements and cost of quality reduction instead of annually pays rich dividends
- To continuously increase value to customers by designing and continuously improving organizational processes and systems to provide improved value to customers
- Processes must evolve by gradual improvement rather than radical changes
- Flexible and quick response to the environmental changes is essence of continuous improvement

Continuous improvement is the constant refinement and improvement of products, services and organizational systems to yield improved value to customers. Real improvement depends on learning that understands why changes are successful through feedback between practices and results, which leads to new goals and approaches.

REFERENCES

- Productivity Engineering and Management by David J. Sumanth
- Product Management by Ray Mond. D. Hehman
- Contemporary Issues in Management of Organization by A.R.Jafari
- Public Productivity and Management Review Volume xvi Fall 1992 Number 1
- Regional Studies
- The Economist
- Pakistan &Gulf Economist
- National Development & Security Volume viii Number 1 August 1999
- National Development & Security Volume viii Number 3 February 2000
- Pakistan and Malaysia "A Comparative Study in National Integration" by M. Nazrul Islam
- Pakistan "Political and Economic history since 1947" by Omar Noman
- Ahmed, Viqar and Rashid Amjad, The Management of Pakistan's Economy, 1947-82, Oxford University Press, Karachi, 1984, p. 89.
- Lewis, Stephen, Economic policy and Industrial growth in Pakistan, George Allen & Unwin Ltd London, 1969.
- Government of Pakistan, Pakistan Economic Survey, 1984-85, Islamabad, 1985.
- Ahmed, Meekal, and Sayeed, Asad, 'Political Alignments, the State and Industrial Policy in Pakistan: A Comparison of Performance in the 1960s and 1980s', unpublished Ph.D. thesis, University of Cambridge, 1995, p. 54.
- Naqvi, S.N.H. and Khwaja Sarmad, Pakistan in the Seventies, PIDE, Islamabad, 1993.
- Government of Pakistan, Pakistan Economic Survey, 1995-96, Islamabad, 1996

- UNIDO, Pakistan: Towards Industrial Liberalization! And revitalization, Basil Blackwell, Oxford, 1990, pp. 19 and 22.
- Institute of Developing Economies, The Study on Japanese Cooperation in Industrial Policy for Developing Economies: Pakistan, Tokyo, 1994, pp. 257-8

- World Bank, Pakistan: Country Economic Memorandum FY93: Progress Under the Adjustment Program, Report No. 11590-Pak, Washington, 1993, p. 5.
- Management (Total Quality in global environment) by Michael J. Stahl R.W. Rahnet , productivity, people and public policy U. S. Chamber of commerce. Washington D. C. 1981
- Issues in Pakistan's economy by S. Akbar Zaidi published by Oxford University Press.
- Management a global perspective by Heinz Weihrich and Harold Koontz.
- Management (Fifth Edition) by Stephen. P. Robbins & Mary Coultar