CHAPTER FOUR

4.1 THE RESEARCH AND RESEARCH METHODOLOGY

A. 4.1.1 RESEARCH METHODOLOGY

4.1.1.1 OBJECTIVES

As this research study is on training activities of police officers (i.e. PIs and PSIs) it was felt necessary to have the very first objective to find out the present status of training scenario from police officer and hence questioner was design properly to find out the present status of training activates for these police activity. It is felt that unless we find out the present quality, frequency and type give of present programs, it is logical to go ahead with the finding out the adequate contents for training input of these officers and hence this was taken as very first objectives.

Once we find out the present scenario, the next stage is of finding out the present contents of the training programs. Here contents include the issues on which present ally PI and PSI are getting trainings. Similarly it is also necessary to find out effectiveness of the present training program, also how they are related (training inputs) to the job efficiency of Police Officers. Hence the second objective id to find out the present contents of effectiveness, which are going on present.
In tired objective, after finding out the present status of training program and continent of the training program and effectiveness of training program, It is tried to find out required inputs and effectiveness, which will be in position of enhance the quality of out put of PI and PSIs. The third objective is the core of the research. In this research, it is studied in depth and evolved the exact contents, which are directly linked with PI and PSIs.

In fourth objective it is decided to find out the level of moral and job satisfaction of PI and PSIs. The moral and Job satisfaction are considered here the department like police, moral and job satisfaction plays very importance role. The department like police is constantly dealing with anti social elements and many times they have to take the risk of their life also. Considering this fact, the factors like. Moral and job satisfaction are considered.

The fifth objective could be the out come of the research, in fifth objective, it is suggested to evolve effective training strategies which can be adopted and implemented for the better out put from the police officers like Pi and PSIs.

Considering the above mentioned reasons, objectives are ---

1. **To find out the present state/position of training activities for police officers.**

2. **To assess the contents and find out the effectiveness of the present training programs which are going on, for the police dept.**
3. To identify the required training needs of the police Department (officers mentioned).

4. To study the level of Moral and Job satisfaction among the Police officers.

5. To study Effective training Strategies for Police Department.

4.1.1.2 HYPOYTHISIS

For this research study, Five hypothesis are formed / considered. They are as follows.

The first hypostasis, as considered, is based on the present performance of the police officers and personal informal discussions with the police officers. It is express that presently work load of PI and PSI is tremendously increased due to increasing population and the kind of democratic political system we have. Even superior do not find time, to think about proper Human Resource practices and hence to design need based training program for PI and PSIs. Presentably there are training institutes, for police department like Police training collage Nasik, but this c kind of institute mainly focus on entry level training programs and they are having very less training program designing and conducting training program during service period with objective of performance enhancement and hence such kind of training programs are not producing required / desired results.
In second one, it is assumed, based on the informal discussion, that whatever in service training programs are designed and conducted, mainly they are theoretical one and at present, recent and emerging practical aspects are not considered due to lack of proper study and research, Hence presently training programs are lacking this aspect and hence training programs are not effective enough to improve the performance of PI and PSI.

In third one, from the cases like Mumbai bomb blast, 1993, Telghi Stamp Scam 2003, it has got proved that police officers are facing lot of problem due to mal practices adopted by higher officers in the department itself. As the Ex. Commissioner of Mumbai got arrested in the serious cases. Such kind of incidences can affect adversely on the moral of the police officers and it may create serious law and order problem in the state of Maharashtra. In spite of such cases, today Maharashtra is not having serious problem of law and order. This fact itself proves, the high moral of police officers and hence, in spite of high moral, they are not having proper job satisfaction, which can be achieved with proper need based training to the police officers.

Forth one goes that, today the training programs planned for police officers are very less in numbers and also not dealing with the issues like attitude, thinking style and honesty. Hence it is evident that the attitude required to enforce the law is not there, and police officers are felling to control political interference in maintaining law and order. Considering this fact it
is very necessary to design the training program, which will give inputs on attitude, thinking style and honesty.

Fifth hypothesis as, earlier training were not considered and taken seriously, but now scenario is changed and it is accepted that training can improve the quality of output. The same principal is applicable to Police Department and if training programs are designed properly based on actual need then certainly they will add value to the output the police officers. Based on the above mentioned information and observations, the following Hypothesis are formed:

1. **Presently training activities for police officers (police Inspectors and sub Inspectors) are not very effective and there is great demand for effective training program for these police Officers.**

2. The contents and methods of present training programs are not producing any fruitful results for police departments.

3. There is high moral in police department in spite of less job satisfaction.

4. There is great need of rethink about the training strategies, methods and frequency of Training Programs, for police department.
5. **Well design effective training strategies will add value inequality and efficiency of Police Department.**

### 4.1.1.3 SCOPE OF THE STUDY

Considering the present situation of Police Dept. in Maharashtra, it is crystal clear that the Police is in need of honest, professional and need based training inputs, which will provide them the effective way out which will lead them to maintain the peaceful and clean social situation without practicing any kind of foul tools. In other words, only effective and need based training programs can provide the police Dept. the will power and the skills which are at present required for effective out put. To have the exact idea of the importance of training, we may refer to the literature of a famous Management Guru – **Peter Drucker.**

In *The Practice of Management*, still a classic of management literature, Peter Drucker (died in Nov.2005) charges senior management with three functions – Managing Performance, Managing Managers, and Managing Workforce and work. He says: 'Man, alone of all the resources available to man, can grow and develop', and 'It implies the consideration of human beings as a resource. '. Ensuing chapters in the book are devoted to Drucker's second and third functions of management -managing managers, and managing workers and work. Taken together, managers and workers represent the human resources of an organization.
The business of managing human resources is variously named in different organizations, using such well-known terms as 'personnel management', 'labour relations', 'manpower resourcing', and 'staff management'. While most authorities agree upon the importance of these functions, surprisingly little attention has been given to justifying, the considerable effort and expense which is required if a successful outcome is to be achieved. Primary responsibility is usually ascribed to line management, with the personnel department providing a supporting service, although line-staff relationships in modern organizations can be highly complex.

Training is the main tool by which one can plan for the human resource development within the organization. Hence this research is undertaken to identify the exact training needs of the PI and PSI working under CP, Pune. With the help of this research systematic training activities can be planned for them. The application of this research is in many areas and ways. The main application areas of this research could be ---

- To apply and use the subject which have come out of this research in the present training programs for PI and PSIs
- To design the separate Training Module for PI and PSI as per the recommendations of this research
- To change the present systems relating to PI and PSI, considering the out come of this research
To modify the working conditions of PI and PSIs, for better work output

To judge, what people are expecting from PI and PSI and make the changes accordingly

To design the Physical Training for PI and PSI to maintain their health

In the outcome of this research there is great emphasis on the "Stress" - that is felt by the majority of citizens that this aspect is totally neglected so far and hence, there should be some majors to relieve the PI and PSIs from this.

It is come out from this research, very clearly, that there is too much Political Interference in the police dept. Sr. Police Officers could take notice of this and take some necessary actions.

4.1.1.4 RESEARCH METHODOLOGY

In any kind of research study, research methodology place very important role. As, the entire learning of the research based on the research methodology, today the information is coming to us from all over world and though it is very easy to get information, it is extremely difficult to select the appropriate information. Every day new knowledge in upon us. Every body id student and learning has become lifelong. In such scenario, one has to very every careful to learn from the out side world and get the exact required information. Hence
required information. Hence while designing this research study the great
care has been taken to decide on the research methodology. In this research
study it was required to find out all the related information on training to
police officers like PI and PSIs.

4.1.1.5 Research Design:

Descriptive Research Design was used for this research study.

4.1.1.6 Problem Statement And Area Of Study

The study was worded as –

“Identification of Training Needs of Police Officers – PI and PSI,
working under Commissioner of Police, Pune city”

Respondent PI and PSIs -- from CP Office, Pune City

Respondent Member of Public -- form Pune City

4.1.1.7 Primary Data Collection:

The main purpose of the research is to find out the training needs of PI and
PSIs working in Pune and hence it was necessary to collect primary data from
PI and PSIs. To collect the primary data for this study, a detailed questionnaire
was designed and administer to the respondents. (To see questioner please
refer annexure)
4.1.1.7.1 Respondents Type One:

It was decided primary data from Police Inspectors and Police Sub Inspectors posted within the jurisdiction of commissioner of Police Pune city. As the basic objective training need for PI and PSIs, it was necessary to collect information from them directly regarding the training programs they are attending presentably. It was also felt necessary to find out PI and PSI about their own training presentably given to them by the department. Hence the questioner was sent to all the PIs and PSIs working in police stations under the jurisdiction of commissioner of Police, Pune city. (150 PI and PISs)

4.1.1.7.2 Respondent Type Two:

To collect primary data from public was not the basic requirement of this research but considering that citizens of Pune can add value to the quality of this research and another factor that police is working for people and hence their opinion shall be considered while reaching to any conclusions, the primary data from public was collected. It is felt that based on the day to day experience people would be in position to give some good suggestion for designing the training inputs PI and PSIs and hence separate questioner administered to 800 citizens staying within jurisdiction of commissioner of Police of Pune city. The basic objective top collects information to find out heir opinion about the training of PI and PSIs. Which would be based on day-to-day experience of the police officers.
4.1.1.8 Secondary Data:

Apart from primary data, it was also necessary to collect secondary data for the getting understanding the subject and to have the full probe conclusion. The secondary data was collected regarding the present status of training programs of PI and PSIs the time spent on training programs, feeling of the police officers about training and so on from the sources like.

1. Sardar Vallabhbhai Patel Police Academy, Hyderabad.

2. Office of the Commissioner of Police, Pune.

3. Various libraries like Pune University, British council Library and IMDR.

4. Internet.

4.1.1.9 Sample Design:

Stratified Random Sampling procedure was adopted for data collection.

4.1.1.10 Sample Size:

Sample size is given as under -

Police PI and PSI, working under the jurisdiction of CP office, Pune. The questionnaire was send to all the PI and PSI working under CP office, Pune, out of them, we could receive back 57 questionnaire, duly filled in and researcher could collect data from PI and PSIs working in following police stations in Pune city, which is 40% of all the PI and PSI working in Police Stations in Pune city. The remaining PI and PSIs could not send questionnaire back to researcher due to their non-availability in the city for official and personal reasons. The list of police stations is like --
4.1.1.11 Sampling Units: (Police Stations)

- Chatushrungi
- Deccan
- Khadki
- Vishrambag
- Kothrud
- Swargate
- Vishrantwadi
- Bhosari

Questionnaire sent to --

- Senior Police Officers - PI and PSI All from the above Police stations-150
- Members of Public – 800 citizens from Pune
  (From Pune city )
- Syllabi of Indoor and Outdoor training for Police Constables were collected from concerned police officers for reference and study purpose.

4.1.1.12 Tools and Techniques for data collection:

Literature survey, critical appraisal of syllabi and questionnaires were employed for data collection. The questionnaires were developed in English and
administered to PI and PSI from Pune city. The questionnaire were in three parts.

The description of each questionnaire is presented below:

A. For getting 'training related information which is in practice' from PI and PSIs

B. For getting 'training related information on expected training in future' from PI and PSIs

C. For getting 'attitude' related information from PI and PSIs.

The test contained short answer type and alternative response (Yes/No) type questions. The questions focused on Professional Knowledge essential for civil police officer. Questionnaire is appended (Appendix)

Self-Assessment Questionnaire of Professional Skills.

The investigator identified following Professional skills:

- Communication
- Computer Knowledge
- Interviewing/Interrogating
- Behavior with public
- Riot control
- Investigation Skills
- Collecting evidence
- Skills of giving evidence in court

The respondents were required to –
i) Assess themselves on the Professional Skills on a Five Point-Scale (Excellent/Very Good / Good / Satisfactory/Poor)

ii) Indicate whether training was imparted to them or not in above skills.

iii) Indicate their training requirements in the skills. (The questionnaire is at Appendix)

Ethical Values Questionnaire For PI and PSI:

An attitude and ethical value survey was conducted to get the internal responses of police officers. Ten typical most frequently occurring situations demanding ethical responses were identified. These ten typical situations are related to Commitment towards Work, Powerlessness, Helplessness, Pride in Uniform, Brutality, Bias against weaker sections, Communal bias, Respect for Human Rights, Attitude towards training, Corruption, Casteism, Uncivil Attitude, Integrity, Action Orientation, devotion to duty, risk taking capability, respect for law and so on.

The questions which aimed at both positive and negative feelings and PI and PSIs shall select their option answer.

Example:

"All illiterate and poor persons have criminal mentality"

(The questionnaire is at Appendix)

Attitude Scale for Police PI and PSI

Attitude Scale consisting of both positive and negative polarities was used for eliciting the attitudes of PI-PSIs. The scale of measurement was
SA - Strongly Agree
A - Agree
C - Can not say
D - Disagree
SD - Strongly Disagree

Examples:

- It is difficult for an honest and sincere PI and PSI to work in Police Dept.
- If the systems are not good and supportive then PI and PSI cannot work properly (The questionnaire is at Appendix)

Questionnaire on "Improving Professionalism in Police Officers"

In order to get / elicit the opinion of Police Officers on the possible strategies for Improving Professionalism, a Five-Point-Scale was constructed. The Respondents were required to indicate their opinion on the potential of each measure to improve professionalism among Police Constables.

Example:

Personal Skills (like communication, gathering of evidence, team work) are important for PI and PSI.

Point Scale was

☑ To great extent
☑ Considerable extent
☑ Some extent
☑ Not at all
4.1.1.13 Perception of Public Regarding Police Dept. / Service.

Though the main purpose of this research was not to collect data / information from people, we collected it to enhance the quality of the research. In order to get / elicit the perception of the public about police, the following seven point - Agree / Not Agree - Type Scale - was constructed.

- Behavior
- Treatment
- Corruption
- Abusive
- Competent
- Hardworking
- Nexus with Criminals
- Responsible

In second part, citizens from Pune city were asked to provide the scale to the training inputs for PI and PSIs, on which they should be given training. ( The questionnaire is at Appendix )

On each aspect, the basis of their response was also ascertained. The basis might be - Own Experience, Experience of Others, Hearsay, Television, Newspapers, etc.

The Questionnaire is administered to 800 citizens residing in Pune city, within the jurisdiction of CP Office, Pune. Out of 800 questionnaire, we could receive back 430 questionnaire, dully filled in.
Public Male – Female Ratio is —

Male Respondents = 273
Female Respondents = 157

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Total = 430

Age wise Details:

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<th>Age Group</th>
<th>No. Of Respondent</th>
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<td>18 – 30</td>
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<tr>
<td>31 – 45</td>
<td>243</td>
</tr>
<tr>
<td>46 – 54</td>
<td>063</td>
</tr>
<tr>
<td>55 &amp; above</td>
<td>050</td>
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</tbody>
</table>
B. 4.2 IMPORTANCE AND HISTORY OF PUNE CITY

4.2.1. Introduction

For this research, we selected the jurisdiction of Pune city. There are few reasons for selecting Pune for the purpose of this research. Today, Pune is growing city from various angles like Industry, IT sector, Hotel Industry, Education Hub and so on and hence the population of Pune city is continuously increasing. Due to all these factors, the role of Police is becoming vital from the point of maintaining law and order. Though Police, in presence of all the internal problems, is dealing the situation very effectively, the researcher felt that this is the time and the area to study the police training needs for better output.

Pune, earlier called or known as Punyanagari, is most important city from many ways. From the point of view of history, culture, education, politics, sports and now IT industry, Pune has its own impact and contribution. Not only this but People from Pune took lead in many social reforms, which latter on became, of national importance. Before medieval times the Pune was a small village and only during the period of Shivaji Maharaj Pune discovered its own importance.

4.2.2 In Medieval Times

Resuming the political scenario of the 16th century. Shahaji’s contribution is the most remarkable. Shahaji, Shivaji’s father, gave special attention to Pune by detailing his trusted minister Dadoji Kondaddeo of Malthan for administering the revenue collection, treasury, raising army and developing his private property.
Indirectly, it was a training arrangement aimed at developing military and political administrative abilities of his non Shivaji. In 1625, Shahaji lived in Pune, appointed Rango Bapuji Dhadaphale as the Town Administrator and encouraged planned inhabitation by expanding Kasba, Shanivar, Somwar and Raviwar Peths (localities).

Shivaji was born at the Shivneri for in 1630 and Dadoji, as a guardian of the family, was held up at the Shiveneri Fort. Shahaji was far away from Pune on his usual military campaigns. Taking advantage of this situation, Murar Jogedo Pandit, a sardar of Adilshah, attacked and plundered Pune with a view to crushing the rising importance of Shahaji, the king maker of the rival power of Nizamshahi. He not only carried out a massacre in Pune, but also dug the land of Pune by ass-drawn ploughs in order to bring shame to the place.

In 1638, Dadoji regained possession of Pune and in order to drive away the evil spirits and the dreadful superstitious fears, reploughed the whole land of Pune by ploughs made of pure gold. In 1640, he built the Lal-Mahal palace for Shivaji and his mother Jijabai, near the temples of the God and Goddess-protectors of Pune, namely, Kasba Ganapati and Jogeshwari.

After a few years, Shivaji initiated his Swaraj movement with the help of young and dedicated mawalas, poor peasants from western ghats. He could never stay leisurely at Pune because he was constantly involved in battles, guerilla wars and unending political strategies. He gave priority to capturing forts rather than the plains. Therefore, Pune remained directly under the command of Mughals. In 1663, shahistekhan, uncle of Aurangzeb, lived in the Lai Mahal palace and was detailed for liquidating Shivaji’s political power. By an ambush, Shivaji assaulted
the Mughal guards, reached the bed of Shashtekhan and, while trying to kill him, cut his fingers by his sword, as the Khan fled from a window.

Aurangzeb then deputed Raja Jaisingh and Dilherkhan to crush Shivaji. Shivaji, being aware of his limitations, made a tactful treaty with Jaisin gh and went to Delhi as an ordinary Sardar in the court of Aurangzeb where he was imprisoned due to his definance. Within a short period of time, Shivaji managed to free himself and return to Raigad miraculously. Shivaji’s formal coronation was celebrated with great gusto in the year 1673. After Shivaji’s death in 1680, there was a period of trial and tribulation, because the Mughal emperor Aurangzeb himself landed in the Deccan to command the special military campaign for destroying the Maratha power. He captured Sambhaji, persecuted him and killed him with vindictive cruelty. As a reaction, the Marathas produced self-made generals like Dhanaji Jadhav & Santaji Ghorpade, who continued the relentless war of independence for over two decades, employing guerilla warfare tactics.

After the death of Aurangzeb in 1707, Marathas under the leadership of Shivaji’s second son Rajaram (who was in political exile at Jinji fort) regained Swaraj. Balaji Vishwanath Bhat, a statesman close to the veteran Maratha General Dhanaji Jadhav, opened diplomatic negotiations with the Mughal emperor and freed Shahu, son of Sambhaji and his mother Yesubai who were in custody at Delhi.

Shahu was freed by the Mughals in order to produce internal strife between him and Rajaram’s widow Tarabai who operated from Kolhapur. Dhanaji made Shahu the Chhatrapati of Satara, Shahu appointed Balaji vishwanath as his ‘Chief Minister’, i.e, Peshwa.
Balaji concentrated on the North rather than indulging in petty family feuds with the Kolhapur throne. It was quite an opportune period because Aurangzeb’s sons were incompetent and the Mughals were a decadent power. Therefore, Balaji moved from Satara to Pune with his close friend Sardar Purandare with a view to keeping a constant vigil over the goings-on in Delhi.

In 1720, Bajirao became the Peshwa after the death of his father. He was then hardly 20 years old. His maiden campaign in the North (Bundelkhand) was a great success. As a reward, Shahu gifted him the city of Pune. After a couple of years Bajirao was allowed to make Pune the headquarters of the Maratha army, treasury and administration. A fortified palace was needed for these headquarters. And that was Shaniwar Wada. It was completed in 1730.

In 1749, Nanasaheb Peshwa – Bajirao’s son, built the Parvati Temple. He introduced the system of public exchequer, accounts, audit, judiciary and civil administration. In his time Peshwa’s treasury was full and there was prosperity in the capital. He constructed the Lakadi Pool, a wooden bridge on the Mutha River.

By 1760, the Maratha power attained its highest pinnacle of glory. The Marathas not only conquered the entire country from Dwaraka to Cuttack and Delhi to Mysore, but also dashed into the Afghan territory across the Khyber pass. Pune had acquired the status of one of the major capital cities of the contemporary world like London, Paris, Vienna and Shanghai.

In 1761, the Maratha power faced its first major set-back at the Panipat war. Nanasaheb died of shock. His young son Madhavrao took over and could regain the prestige by defeating Abdalies, Rohilas. Pathans, Mujghals, Nababs, Nizams
and Hyder Alis of Mysore. He could achieve all these things due to the team spirit and disciplined integrity of his general and counselors.

After his premature death, his younger brother Narayanrao was murdered by hired palace guards. For that offence, Raghoba, his uncle and the greatest and seniormost warrior of the Peshwa family, was indicated as a co-culprit by the Peshwa’s court. He was sentenced to death by his own employee Ramshastri Prabhune. Prabhune was pressured by Raghoba but he refused to yield and submitted his resignation in order to maintain the honour and credibility of the judiciary. This could only happen in Pune!

After the death of Narayanrao, his young son Sawai Madhavrao was made Peshwa by the consensus of the senior statesmen of the Maratha power and the status of guardianship was conferred on Nana Phadanvis by the collective strength of Maratha generals and administrators. Nana established a liaison with Napoleon, Turks, the Ameer of Afghanistan and made secret treaties with Bhosale of Nagpur, Tipu of Srirangpattanam, the Nizam of Hyderabad, Shinde, Holkar, Pawar and Gaekwads from Malwa and Gujarat. He had engineered a master plot for driving away the Englishmen from India by uniting their common enemies from home and abroad. Pune was naturally in the political limelight during this period.

Nana Phadnavis also improved Pune’s beauty and civic amenities. He built the drainage system in 1782 and constructed water supply arrangements in 1790. Sardar Raste built houds (tanks) for drinking water supply in Shukrawar and Bhavani peths.

Bajirao II built Vishrambaugwada in 1811. Bajirao was defeated by the British. This was the result not only of his incompetence, but also of internal feuds,
anarchy, and lack of arms and finances. In 1820, the Britishers established a permanent Cantonment of Army in the eastern part of the city.

4.2.3 In the British Raj

Between 1818 and 1848, the British showed a very crooked and revengeful attitude towards Pune. Pune’s population which was around 1 ½ lakhs, suddenly dropped to about 40,000 only. All the best wadas and mansions not only of the Peshwas but also those of their sardars were pulled down. More than 30 beautiful parks were ruined. Libraries, records, collections of curios and artistic things, Sanskrit schools etc. were destroyed. Ultimately, the Chhatrapati of Satara was dethroned. Those were the darkest and saddest years for Pune city. The British carried out a sinister plan of destroying the glorious heritage of Pune. As a result of victimization and persecution, a terrible exodus of Pune’s populace followed.

Vasudeo Balwant Phadke’s efforts to challenge British power were abortive. Educated people had to find some other means for freedom movement within the framework of the British administration and the liberal values of democracy. Poona suburban Municipality was founded and the experiment of self-government at the local level became successful because of the enlightened participation of Pune’s citizens.

After 1850, the Britishers began to construct public amenities like the Pune-Bombay rail tract in 1856 and Khadakwasha dam in 1867, They revived Sanskrit pathshals in 1830 and started Deccan College, as well as the first College of Engineering of country at Pune. Dakshina fellowships to scholars were resumed.
In 1886, the Pune-Miraj meter gauge line was added and Pune was connected to Bombau, Miraj and Kolhapur. During the period of political stability of 1850s to 1880s, Pune's industries and business thrived. Pune began to grow again. Officers of the Department of Meteorology were shifted from Simla to Pune in the year 1875.

During the same period, i.e., from 1870 to 1890, Pune was made the seasonal capital of the Bombay Presidency and the headquarters of the Southern Command of the Armed forces. In 1884, Fergusson College was founded by Vishnushastri Chiplunkar, Lokmanya Tilak, G.G.Agarkar and Namjoshi.

The period of 1880 to 1920 was a very turbulent period when Gopal Krishna Gokhale came into the limelight as the best parliamentarian, administrator and Government adviser; and Lokmanya Bal Gangadhar Tilak emerged as the veteran hero of the patriotic movement, who by his scholarship, sacrifice, courage and wisdom gained respect from his rivals from the camps of liberals as well as moderates.

The young revolutionaries like V.D. Savarkar, Chaphekar brothers, Senapati Bapat, Vinobha Bhave, S.A. Dange etc. adored Tilak and sought his support and blessings. Tilak encouraged Swadeshi, i.e., patronage to Indian goods, Swaraj, i.e., self-government, nationalist education and non-cooperation to alien rule. He mustered public support to industries such as the Paisa Fund glass factory at Talegaon, Kirolskar Industries and many other business ventures, banks and cooperatives run and owned by the first generation of Maharashtrian entrepreneurs.

In 1885, Deccan Paper Mills was started in Pune by a leading Parsee family. In 1887, Shri Anandrao Godambe took a lead in organizing a factory of brass and
copperware, which failed and was taken over by M/s. Hukumchand and renamed as Gujarat Metal Factory. In 1893, Raja Bahadur Motilal Pittie started the first textile mill in Pune. The glass factory at Talegaon commenced its production in 1908. In 1896, the great artist Raja Ravivarma started his Litho Press at Malavali near Pune. The Govt. Photozinco Press was started by 1888. The Central Water & Power Research station was instituted at Pune in 1916 for conducting research in the construction of dams, ports, and hydro-electric power projects.

Between 1920s and 1940s many cooperative urban and commercial banks along with insurance companies were launched by persons like Prof. V.G.Kale, D.G.Karve, L.B.Bhopatkar, N.C.Kelkar, Shri. Vamanrao Varde, Shri Dhondumama Sathe, Diwan Bahadur Godbole etc. and cooperative and private sugar factories were established due to the efforts of Dr. D.R.Gadgil, Shembekar, Dahanukar, Girme, Borawake, Bikhe, Apte, Agashe, Walchand, Doshi etc. The Bank of Maharashtra was started by Kale, Sathe and Vaikunthabhai Mehta. The Mahratta Chamber of Commerce & Industries was the brainchild of A.R.Bhat. In 1946 the Kirloskars shifted their main activity of production of oil engines to Khadki. Shri. Shantanurao Kirloskar, the young engineer trained at M.I.T. in the U.S.A. brought a revolution in technocratic management of Pune industries. With his new ideas, encouragement and leadership, many new units in engineering industries were opened during the 50s and 60s.

4.2.4 After Independence

The National Chemical Laboratory was set up in Pune in 1949. The National Defence Academy also was started at Khadakwasla near Pune 1950. In
1955 Hindustan Antibiotics a giant public sector company was established at Pimpri. The Hadapsar industrial complex emerged in 1956 and it attracted Kirloskar Pneumatics, to be followed by many reputed companies like Bharat Forge, Indian Hume Pipe, and Western India Flour Mills. In 1960, the MIDC expanded its industrial estates in Primpri-Chinchwad and Bhosari. Several new industrial units came up in various areas on the outskirts of Pune, such as Kothrud, Pavati, Kondhwe, Ahmednagar Road, Paud, Peerangut, Vithalwadi, Dhankawadi etc.

Exactly 200 years after the debacles at Panipat, Pune faced another great tragedy in 1961 when the earthen dam at Panshet on the outskirts of Pune burst and caused great havoc by flooding the city. People had to move to safer and far off area on the peripheries of the city. It proved to be a blessing in disguise because Panshet brought about a wave of new metropolitization and industrialization.

4.2.5 Post 1970s – Fastest Growth

The present Pune in the 7th ranking industrial metro of India. During the last two decades, Pune's urban growth has the fastest rate in Asia and the Kothrud urban area, which has the fastest rate in the world, has found a place in the Guinness Book of World Records.

There were 1473 industrial units in Pune in 1972. In 1984 the number reached about 5000. There were around 75000 industrial employees in 1972; now the number has reached around 2.5 lakhs. The capital employed in 1972 was Rs. 129 crores; now it is around Rs 2000 crores. The turnover of industries has