

M.S. RANDHAWA



VOL II



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A HISTORY OF
AGRICULTURE
IN INDIA

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Volume II

A History of Agriculture in India, Vol. II, covers the period from A.D. 1206 to 1761, which saw the rise and spread of Islam, the rule of the Turks, the spread of the bhakti-cult, the splendours of Vijayanagar, the rule of the Mughals, with an Afghan interlude, the Portuguese discovery of India, and the rise of Maratha and Sikh powers. During this period, culture was mostly urban-based and agriculture was considered an activity not worthy of notice by the elite. Consequently, the peasants were generally poor. Nevertheless, sifting through the well-documented accounts of the contemporary historians, the author gives us a vivid account of how gardening and landscaping reached excellence in Mughal India. Extensive quotations from *namas* written by the courtiers and accounts of European travellers give us an insight into the keen observations of Babur and Jahangir on plants, birds and animals, and provide us information on crops, fruit plants, animal husbandry and the prices of agricultural commodities during the medieval period. We also learn about the reclamation of waste-lands, the digging of the Jamuna Canal, the construction of the Vijayanagar dam, the methods of land-revenue assessment, and the administrative reforms of Sher Shah Suri and Akbar. Of no less importance is the Portuguese discovery of India, which brought in its wake maize, tobacco, potato, tomato, beans, groundnut, cashewnut, rubber, pineapple, guava, and flowers such as morning-glory, nasturtium and marigold. This panorama of agricultural history is unfolded against the prevailing political and socio-economic background.

A HISTORY OF AGRICULTURE IN INDIA

VOLUME II
EIGHTH TO EIGHTEENTH CENTURY

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PREFACE

INDIAN history has been divided into ancient, mediaeval and modern periods. The period between A.D. 1206 (the year of accession of Qutb-ud-din Aibak as Sultan of India) and 1761 (occupation of Delhi by the Marathas) is ordinarily accepted as the mediaeval period of Indian history. The mediaeval period is also designated as Muhammedan period in contrast with the earlier Hindu-Buddhist period of ancient India.

The sources of information on Mediaeval India are the observations of Arab geographers on Sind, Multan and Gujarat, the histories recorded by the Muslim historians, the accounts of travellers and biographies of the Mughal emperors.

The history of a country cannot be properly understood in isolation from that of other countries. Events in Arabia, Turkey, Iran, Central Asia and Afghanistan in the mediaeval period profoundly affected India. Hence, it is necessary to know about religious, cultural and socio-economic movements which took place in these countries. The rise of Islam in Arabia in the seventh century affected the course of history profoundly. Islam sparked a social revolution which had an impact on all the countries in the neighbourhood of Arabia, including India. Sind, which had maritime and trade relations with Arabia, Iraq and Iran, was conquered by the Arab, Muhammed-bin-Qasim in A.D. 711, and in the ninth century it had two independent Arab principalities.

In the tenth and eleventh centuries Arab geographers wrote on the geography, climate, people, soils and crops of Sind and Gujarat. The earliest among them was Ibn Khurdadba, a high official of the Caliphs of Baghdad, who died in A.D. 912. He employed his leisure in topographical and geographical researches, and the result was his book *Kitāb-l Masālik wā-l Mamālik (Book of Roads and Kingdoms)*, in which he provides an excellent description of Sind, its people and crops.

Ibn Haukal, a native of Baghdad, a traveller and a trader, travelled in the various countries under the Muhammedan rule between A.D. 943 and 968. He gave the same title to his book as Ibn Khurdadba. His description of Sind and Multan is vivid. He mentions a number of towns which he visited and also gives the names of crops which he saw growing in Sind.

Al Idrisi, a native of Ceuta in Morocco, was a well-known geographer. He travelled in Europe in the early twelfth century and eventually settled in Sicily at the court of Roger II, at whose instance he wrote *Nazhatu-l Mushtaq*, a book on geography. He compiled it from the existing works,

and further information he derived from travellers whose verbal statements he compared and tested. He described the towns of Sind, Multan and Gujarat, as well as the crops.

Kazwini, a native of Kazwin in Iran, compiled an encyclopaedia named *Ajaibu-l Makhluqāt era Ghaibaibu-Mawjudāt* (*Wonders of things created, and marvels of things existing*) in A.D. 1275. In it he described the Sun temple of Multan and the temple of Somnath in Gujarat.

The Muhammedan historians of the Sultanate were mostly courtiers and *qādis*. They were contemporaries who had seen and taken part in the events they narrated. That is why their record of events is vivid and authentic. Their histories are, however, records of battles, conspiracies, revolts, murders and fratricides. Elliot remarks, 'Of domestic history, we have in our Indian Annalists absolutely nothing, and the same may be remarked of nearly all Muhammedan historians, except Ibn Khaldun. By them society is never contemplated, either in its conventional usages or recognized privileges; its constituent elements or mutual relations; in its established classes or popular institutions, in its private recesses or habitual intercourses. In notices of commerce, agriculture, internal police, and local judicature, they are equally deficient. A fact, an anecdote, a speech, a remark, which would illustrate the condition of the common people, or of any rank subordinate to the highest, is considered too insignificant to be suffered to intrude upon a relation which concerns only grandees and ministers, thrones and imperial powers.'¹

One is constrained to remark that it is agriculture and the condition of cultivators which were of least interest to the Muhammedan historians. May be, it was due to the fact that Islam is an urban religion, and the emphasis on the part of the Muhammedan elite was on administration, trade, commerce and urban life. As such, they considered agriculture as an insignificant activity not worthy of notice and those who practised it as persons of no consequence.

There are, however, two exceptions to the general rule among the Muhammedan historians of the Sultanate period, viz. Zia-ud-din Barni and Shams-i-Siraj Afif. Barni belonged to the ruling class of Delhi. His father Mu'ayyid al-Mulk was *naib* to Arkali Khan, the second son of Sultan Jalal al-din Khalji. His paternal uncle Malik 'Ala' al-Mulk was the *Kotwal* of Delhi under Sultan 'Ala' al-din Khalji and a prominent royal counsellor. His maternal grandfather, Sipah Salar Husam al-din, was appointed to the *shahnagi* of Lakhnauti by Sultan Balban. Barni himself became a *nadim* or boon companion of Sultan Muhammad-bin-Tughlak. In his *Tarikh-i-Firozshahi*, Barni records facts relating to administration,

¹Elliot, H.M. and Dowson, J. *The History of India as Told by Its Own Historians*, Vol. I, pp. ix-xx

agrarian conditions and economy.

Shams-i-Siraj Afif in his *Tarikh-i-Firozshahi* provides administrative details and gives information on the condition of the common people. According to Professor Dowson, this history gives us altogether a better view of the internal condition of India under a Muhammedan sovereign than is presented by any other work, except the *Ain-i-Akbari*. Written in a plain style, the book is chapterized unlike other works. Afif descended from a family which dwelt at Abohar. His great-grandfather was the Collector of Revenue of Abohar. He himself was attached to the court of Firozshah Tughlak and accompanied him on his hunting expeditions. He provides details about the founding of the city of Hissar Firoza, the present-day Hissar. He also describes the sources of the king's revenue and the digging of the West Jamuna canal.

Of the Islamic travellers who came to India during the Sultanate, the most perceptive was Ibn Battuta. On 14 June 1325, he started on his travels from his home town of Tangier in Morocco. He travelled in Africa, Arabia, Iran, Turkey, Central Asia, India and China. It is estimated that he covered 120,700 kilometres (75,000 miles) on foot, by horse and by camel. In India he enjoyed for some years the patronage of the Sultan Muhammed Tughlak, who appointed him *Qadi* of Delhi. Later on, he incurred the displeasure of the Sultan for associating with a dissident Sufi, and he thought it prudent to leave Delhi. The Sultan, out of politeness, appointed him his envoy to the Emperor of China, and he reached China by sea. On his return to Tangier, Ibn Battuta dictated his memoirs, which contain information on the people of the countries he visited, their climate, physical features, mineral products, fauna and flora. Incidentally, the only account of the crops of north India in the Sultanate period is in Ibn Battuta's travelogue.

Of the Hindu kingdom of Vijayanagar, which was extinguished by the Sultans of Deccan in 1565, a graphic account is provided by Abdur Razzak. He was born at Herat on 6 November 1413 and died in 1482. His father, Is'hak, was employed by Sultan Shah Rukh as a *Qazi* and *Imam*. He was sent by Sultan Shah Rukh as his ambassador to Devaraya II, the Hindu King of Vijayanagar, in 1443. He is the author of *Mailla 'u-s Sa'dain*, a travelogue, in which he provides a descriptive account of Calicut and Vijayanagar. Along with an account of the Hindu King Devaraya II, and his court, he describes life in Vijayanagar, and the methods adopted for catching elephants.

The best account of the Sultanates of Deccan is provided by Firishta. Muhammed Kasim Hindu Shah, surnamed Firishta, was born at Astarabad, on the borders of the Caspian Sea, about A.D. 1570. His father travelled in India and eventually reached Ahmadnagar in Deccan, and was employed by Murtaza Nizam Shah as a Persian tutor for his son. After his father's

death, he proceeded to Bijapur in 1589 and was employed by Ibrahim Adil Shah. He wrote his history of India, known as *Tarikh-i-Firishta*, on a suggestion from Ibrahim Adil Shah, who felt the need of a general history of the Muhammedans in India avoiding falsehoods and flatteries which had disfigured works of this nature. Firishta completed his history in 1612 when Jahangir was ruling over Delhi. He named it *Gulshan-i-Ibrahimi* after his patron, and *Nauras-nāma*, after the new capital Nauras, which the king commenced building in 1599. Firishta made extensive use of Barni's *Tarikh-i-Firozshahi* in dealing with the Sultanate of Delhi in his history.

After the defeat of Humayun by Sher Shah in 1540 an Afghan interregnum starts in the history of India, which lasted till 1555. An account of this period is provided in *Tarikh-i-Sher Shāhi* and *Wakiāt-i-Mushtāqi*. *Tarikh-i-Sher Shāhi* was written by Abbas Khan Samani by order of Emperor Akbar. Abbas Khan was an Afghan connected by marriage with the family of Sher Shah. He provides an excellent account of the revenue regulations of Sher Shah. Shaikh Rizkulla Mushtaki (1492-1581) provides an account of Sher Shah's constructive works, e.g. roads and sarais, in his *Wakiāt-i-Mushtāki*.

Tarikh-i-Daudi was written by Abdulla during the reign of Jahangir. His account of the Afghan kings commences with the reign of Bahlol Lodi and concludes with the reign of Daud Shah, the last Afghan ruler, after whom he named his history.

The Mughal period is well documented in the *namas* and histories. *Babur-nama* was dictated by Babur to a scribe during 1528 to 1530 in one of the gardens in the suburb of Agra. *Humayun-nama* was written by the historian Ghias-ud-din alias Khondamir in 1534. *Akbar-nama* and *Ain-i-Akbari* were written by Abu-l Fazl during the reign of Akbar. Abu-l Fazl's *Ain-i-Akbari* provides authentic information on crops and fruit plants grown in Mughal India, prices of commodities, and animal husbandry. For the state of agriculture and animal husbandry in Mughal India, it has the same value as Kautilya's *Arthashastra* in Mauryan India. Jahangir wrote his own biography, the *Tuzk-i-Jahangiri*, in which he recorded his observations on animals, birds and plants.

During the reign of Akbar, the writing of histories was encouraged. Three outstanding works written during his reign are mentioned below.

Tarikh-i-Alfi, a history of the Muhammedan nations up to the thousandth year of the Hijra era, was written at the command of Emperor Akbar. In this project a number of authors participated, but the main work was done by Maulana Ahmad. A part of this history was written by Asaf Khan. It is divided into five books and it extends from A.D. 622 to 1592.

Tabākāt-i Akbari was written by Nazim-ud-din Ahmad Bakshi. It is said that Nazim-ud-din was incomparably upright, and excelled all his contemporaries in administrative knowledge as well as in the clearness

of his intellect. He was appointed by Akbar to the office of the Bakhshi of the Government of Gujarat.

Tarikh-i Badauni was written by 'Abdu-l Kadir Badauni. It is a general history of India from the time of Mahmud Ghaznavi to 1596. Badauni studied various sciences under renowned scholars and excelled in music, history and astronomy. On the orders of Akbar he translated two out of the 18 sections of the *Mahabharata*.

The best and most impartial history of the Mughal India is *Muntakhabu-l Lubāb* by Muhammad Hashim alias Khafi Khan. He commences with the invasion of Babur and concludes with the fourteenth year of the reign of Mohammed Shah. Muhammad Hashim was a private gentleman living at Delhi and on his own initiative compiled a register of all events of Mohammed Shah's reign. The value of Khafi Khan's history lies in its record of events during the reign of Aurangzeb when the writing of histories was forbidden, and Khafi Khan was obliged to continue his labours in secret. He also provides details regarding the Marathas, their methods of warfare and collection of *chauth*.

Apart from *namas* and histories, we get information of great value from the accounts of European travellers about the Mughal India. During the seventeenth century a number of European travellers, English, Dutch, French and Italian, came to India. The most prominent of these were Ralph Fitch (1583-1591); John Mildenhall (1603-1605); William Finch (1608-1611); William Hawkins (1608-1613); Thomas Coryat (1614-1617); Edward Terry (1616-1619); Francisco Pelsaert (1620-1627); Pietro Della Valle (1623-1624); John De Laet (1625-1631); Peter Mundy (1628-1634); John Albert de Mandelslo (1638-1639); Sebastian Manrique (1640-1642); Jean Baptiste Tavernier (1640-1667); Niccolao Manucci (1653-1708); M. Francois Bernier (1656-1668) and Monsieur de Thevenot (1666-1667). Of them Pelsaert, Manucci and Bernier made excellent observations on the crops and people of India. Bernier, the French doctor—the most scholarly of all—came of a peasant stock and he noted with sympathy and concern the wretched condition of the peasants in India.

There are histories of India by British historians written before Elliot and Dowson's classic work, *The History of India as Told by Its Own Historians*. These are James Mill's *History of British India* (1817), G.R. Gleig's *History of the British Empire in India* (1830) and Mountstuart Elphinstone's *History of India—the Hindu and Mahometan Periods* (1841).

James Mill divided the pre-British history of India into two periods, Hindu and Muhammedan. He was a utilitarian, and his history betrays that bias. 'In looking at the pursuits of any nation, to draw from them indications of the state of civilization, no mark is so important as the nature of the *end* to which they are directed,' states Mill. He continues, 'Exactly in proportion as *utility* is the object of every pursuit, may we regard a

nation as civilized. Exactly in proportion as its ingenuity is wasted on contemptible and mischievous objects, though it may be, in itself, an ingenuity of no ordinary kind, the nation may safely be denominated barbarous.

‘According to this rule, the astronomical and mathematical sciences afford conclusive evidence against the Hindus. They have been cultivated exclusively for the purposes of astrology, one of the most irrational of all imaginable pursuits—one of those which most infallibly denote a nation barbarous.’

It is not correct that the mathematical sciences of the Hindus were applied to astrology alone. The greater number of the results of their arithmetic, algebra, and astronomy have no relation to astrology and are indispensable to the ordinary purposes of social life.

If Mill’s thesis of utility is accepted, then basic science has no place in the civilized society and those who indulge in it cannot claim to be civilized. How ill-informed was James Mill about the achievements of the Hindus in science is amply proved from the researches of Sir William Jones, who regarded the ancient Hindus as the Greeks of Asian civilization. Their inventions included the decimal scale, apologues and the game of chess, and, according to Jones, the Vedanta contained all the philosophies of Pythagoras and Plato.

Firishta’s history was translated into English by General John Briggs in 1829. In 1832 Briggs published his *History of the Rise and Progress of Mohamadan Power in India*, in which he made use of his translation of Firishta’s history. Montstuart Elphinstone’s *The History of India—the Hindu and Mahometan Periods* (1841) also relies on Briggs’s translation of Firishta’s history for the account of the Sultanate period. Written in a pleasant style, Elphinstone’s history of India is the best in the pre-Elliot and Dowson period. Narrating the qualities which a historian should possess, Sir William Jones remarks: ‘The first duty of a historian was to be free from prejudice; his first obligation, to accept nothing as fact without reliable evidence. Having established his facts, the historian should narrate them in a pleasing style, preserving a proper chronology. He should unfold the causes at work in the historical process, taking into account the characters of distinguished men as well as the interplay of ‘chance’ and human motives. In short, “an unbiased integrity, a comprehensive view of nature, an exact knowledge of men and manners, a mind stored with free and generous principles, a penetrating sagacity, a fine taste and copious eloquence” were the necessary qualifications of a good historian. These are the qualities which Elphinstone had in ample measure.

The primary sources of information on the history of India in the Mediaeval period are the eight volumes of the *History of India as Told by Its Own Historians*, by Sir Henry Miers Elliot, published from 1867 to 1877. Born in 1808, Elliot became Secretary to the Government of India in 1847

in the Foreign Department under Lord Hardinge and later on under Lord Dalhousie. He died at the early age of forty-five in 1853 in Cape of Good Hope in South Africa, where he had gone to restore his health. His papers were taken to London by his widow and were entrusted by the Directors of the East India Company to the care of Professor John Dowson of the Staff College, Sandhurst. These papers contained translations into English of the writings of the early Arab geographers and Muhammedan historians which were in Arabic and Persian. Some of these translations were by Elliot and others were by different English officers and Indian *munshis*. Professor Dowson edited these translations. The first volume was published in 1867 and the remaining seven by 1877. These eight volumes, along with the *Bibliotheca Indica* series published in about the same period by the Asiatic Society of Bengal, are the principal sources for the history of Mediaeval period.

The modern historians of Mediaeval India from 1903 onwards have been 'mining' Elliot and Dowson's eight volumes for their histories. These include such standard works as S. Lane-Poole's *Mediaeval India—Under Mohammedan Rule* (1903); Vincent Smith's *Akbar, The Great Mogol* (1917); Pringle Kennedy's *A History of the Great Moghuls* (1905 and 1911); the *Oxford History of India* (1919); the third and fourth volumes of the *Cambridge History of India*, viz. *Turks and Afghans* (1928) and *The Moghul Period* (1937). These histories, as well as those of Sir Jadu Nath Sarcar, are largely political and constitutional and are replete with details about court conspiracies, rebellions and battles. There are three exceptions, viz. Ishwari Prasad's *History of Mediaeval India* (1925); Rawlinson's *India, a Short Cultural History* (1937), and Michael Edwardes's *A History of India* (1961). Apart from political developments Ishwari Prasad's *History of Mediaeval India* also deals with art, architecture and literature. He made use of the works of Cunningham, Burgess and Marshall in the realm of archaeology. He also deals with the social, cultural and religious movements. Ishwari Prasad made a good attempt to present a history of India which deals with the life of man in its varied aspects.

An excellent cultural history of India is H.G. Rawlinson's *India, a Short Cultural History* (1937). It is a survey of the cultural scene in India from Vedic India to the nineteenth century. It deals with art and architecture, literature, education and social and religious movements.

In *History of India*, Michael Edwardes provides a balanced view of India's history. He has also attempted to give a view of the life of the people of India within the framework of political events. A bunch of photographs of buildings, sculptures, paintings and people provides a view of the country, its people and their culture.

W.H. Moreland of the Indian Civil Service, who served in the United Provinces of Agra and Oudh, was a pioneer in the economic history of India.

In *India at the Death of Akbar, an Economic Study* (1920) and *The Agrarian System of Moslem India*, Moreland presents an analysis of the economy of the Mughal Empire, the condition of the peasants, their habitat, their crops and implements. He also provides a detailed account of the revenue administration of the Mughals and their predecessors, the Afghans.

The trail blazed by Moreland remained neglected for a long time till Irfan Habib came on the scene with the publication in 1963 of *The Agrarian System of Mughal India, 1556-1707*. He is the first historian to diagnose the correct nature of the agrarian revolts of the Jats, Satnamis, Marathas and Sikhs, which ultimately shattered the Mughal Empire. By a massive array of evidence he also highlighted the wretched condition of the peasants in Mughal India. This must have come as a shock to those who are dazzled by the grandeur of the mosques, mausoleums, forts and palaces of the Mughals.

There are some writers of history who assign overwhelming importance to economic factors. Economic factors are no doubt important in history, but are not the sole factors. Man cannot live without bread, but he does not live by bread alone. More people have died for the sake of their faith and ideas than for bread. The spiritual side of human personality is equally important, and religion has played as great a role in history as economics.

Subjects such as history and economics are also attempting to become scientific in the present century. As in science, the search for truth is becoming the main concern of the historian. The duty of a historian is to discover truth, and he must not distort or suppress it to suit pre-conceived theories. Theory should be derived from the facts truthfully discovered. A mere collection of facts without an attempt at meaningful analysis and interpretation is a fruitless endeavour. However, it must be admitted that it is not easy to discover truth, for peoples' minds are clouded by wishful thinking and pre-conceived ideas.

This is an attempt to present a history of agriculture in the Mediaeval period, which covers the Sultanate and the Mughal rule. I have mainly relied on Elliot and Dowson's works and the accounts of travellers. It should, however, be noted that the facts and events that I have culled from these works are such as are usually ignored by historians whose main interest is in political and constitutional aspects.

Political history, however, cannot be totally ignored in a history of agriculture. Elliot concluded that the mediaeval Muslim society was morally inferior and its rulers were tyrants. This was not always so. There were some monarchs who were men of vision, with a constructive frame of mind, and with sympathy for the masses. It has been seen that whenever there was a broad-minded monarch ruling over India, with sympathy for the tillers of the soil, the economy improved and people were happy. This is

what happened during the rule of Firoz Shah Tughlak, Sher Shah Suri and Akbar. Hence, the arrangement which I have adopted is to describe the history of agriculture against the background of political history.

A source of which the historians have made little use are the paintings of the Mughal and the Rajput schools of the sixteenth to the eighteenth centuries. No amount of writing can convey what a painting reveals. The Mughal portraits tell us about the physical appearance of principal actors in the drama of history and also reveal their character. The power which we see in the face of Akbar is no longer there in the faces of his successors. Contemporary portraits reveal the sensuousness of Jahangir, the elegance of Shah Jahan, the asceticism and the cunning of Aurangzeb, and the imbecility of the later Mughals who were rulers only in name. The paintings also reveal vividly the socio-economic conditions, the types of clothes worn by the people, their weapons and tools, and the fauna and flora. It was under the patronage of Akbar (1556-1605) that Mughal painting began and magnificent series were painted illustrating the *Babur-nama* and the *Akbar-nama*. Jahangir encouraged his artists to paint rare birds, animals and plants. The paintings of the *Babur-nama* illustrate the birds, domestic and wild animals and fruit trees grown in India during the reign of Akbar. In fact, the *Babur-nama* is the first illustrated Natural History of India in the sixteenth and early seventeenth centuries. Research and study of Indian miniature paintings has been my hobby since 1950. During the last thirty years, I have seen thousands of Mughal and Rajput paintings in public and private collections in India as well as in England, the U.S.A. and the U.S.S.R. This research enabled me to select paintings that are relevant to agriculture and animal husbandry.

This book provides a panoramic view of the condition of the cultivators of the soil, their crops and their political and socio-economic environment in the Mediaeval period of India, based on evidence from primary sources. It is not exclusively a history of agriculture but also a social history of that period.

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CHAPTER I

THE RISE AND SPREAD OF ISLAM

THE ROLE OF THE ARAB HORSE AND THE CAMEL
THE CALIPHATE, THE CONQUEST OF NORTH AFRICA AND SPAIN
THE ARAB CONTRIBUTION TO SCIENCE, AGRICULTURE AND
HORTICULTURE

ARABIA is a plateau, 610 to 1,524 metres (2,000 to 5,000 feet) high, with desert, rocks and oases. Much of the land is an arid waste, shingly in the north and sandy in the south. Its climate has been described as one of alternate frying and freezing. Sand-storms are common in summer, and a hot wind, called *simoom*, blows for many days at a stretch. In the desert are sand-dunes in all directions, and appear like sea-waves piled on each other, suddenly arrested and converted into reddish sand. Below the sand are vast oil-fields, over some of which pillars of fire hover by night. Among the sand-dunes at some places are the oases with groves of datepalms. Plodding through the sand are camels, led by hook-nosed, wiry men wearing flowing robes. In the cities are domed mosques with needle-like minarets from which the muezzin calls the faithful to the prayers. The houses have mud walls and flat roofs and are box-like. The women are veiled and are seldom seen by the outsiders. Some of them are beautiful, and it is their charm and beauty, their guiles and passion, which are celebrated in the *Arabian Nights*.

THE PROPHET

Muhammad, the founder of Islam, was born in Mecca in A.D. 570 and died in A.D. 632. This was the period when Harsha ruled over India; China was under the Tang Dynasty; Chosroes II ruled over Persia; and Heraclius was the Emperor of the Eastern Roman Empire. Mecca, with a population of about twenty thousand, was a pilgrimage centre, and Kaaba, a small square temple of black stone, was the chief attraction for the pilgrims. A meteorite, regarded as a god, was its corner-stone, and all other minor tribal gods were under its protection.

On account of his campaign against idolatry, there arose great opposition to Muhammad in Mecca, and on 20 September 622 he fled to Yathrib, which later on acquired the name of Medina. In A.D. 629, Muhammad conquered Mecca, and in A.D. 632, when he died at the age of sixty-two, he was the master of all Arabia.

ISLAM, A SOCIAL REVOLUTIONARY CREED

The new religion of Islam was a social revolutionary creed. It preached

brotherhood of Islam and every Moslem regarded every other Moslem as his brother. Muhammed preached that all believers were equal before God, and the rich must share their wealth with the poor. Many of the Prophet's early followers came from the ranks of the poor and the depressed. The Islamic principle of equality had a great appeal for the working people who were oppressed in the class- and caste-ridden societies of the Roman, Byzantine and Persian empires. Its spirit of generosity and brotherhood and its simple doctrine of one God made a great impact on the people who were baffled with the obscure Christian dogmas of the Trinity and the Magian mysticism.

GEOGRAPHICAL SITUATION OF ARABIA AND TRADE

The geographical situation of Arabia proved as much a boon to the renascent Islam as was the situation of England between Europe and America.

Arabia was situated between the old civilizations of India, Iran, China, Mesopotamia and Egypt, and any power which could control this Arabian bridge between the Orient, Europe and Africa could also control the vital trade-routes and the trade. The heavy taxation and misrule of the Byzantine Empire diverted the Chinese trade to Arabia, and the tribes flourished as never before. The Arab caravans took over the commodities from India near the present Aden, and further up also from Abyssinia. They brought this merchandise to Mecca. From Mecca the caravans passed through Medina and reached Damascus, which had become an emporium of the trade with Europe.

THE CAMEL AND THE ARAB HORSE

The camel and the Arab horse have played as great a role in the phenomenal rise and spread of Islam as its social revolutionary programme of equality and fraternity. The development of the Arab horse by the Bedouins is the first great achievement in animal breeding of which there is any definite record. The safety of the owners hinged upon the speed and the endurance of their horses and, hence, they laid emphasis on these qualities in their breeding programmes and achieved them to a high degree. Peake and Fleure state that the famous breed of drought-resistant Arab horses was evolved in Nejd, the central oasis of Arabia, about the close of the fourth century. The Arab horse proved a formidable weapon of warfare and the cavalry charges of the Arabs broke up the armies of Iran, Egypt, Byzantium, Spain and the Hindu India.

The camel is essentially a desert-dweller and came into its own only when the Afrasian steppe land had dried up. The figure of a camel has been found in a First Dynasty tomb in Egypt. The camel appeared in Mesopotamia about 1000 B.C. However, it was many centuries later that the camel achieved any importance. It was about the fourth century that

the camel began to be used as a ship of the desert. The peculiar structure of its stomach with devices for storing water and gobbled-up food enables the camel to pass many days without food and water. With the use of the camel the deserts no longer remained a barrier against human intercourse. The mastery over the camel stimulated intercourse between China, Iran, Mesopotamia, Egypt, Arabia and Europe, and promoted trade. Trade has played a great role in the diffusion of culture and interchange of ideas. A trader acquires a broader outlook and sheds local prejudices by meeting people with different customs. Trade sharpens the critical faculty and thus opens the gates of knowledge and progress.

How the animals and plants which form a part of a people's environment affect their economic and social life is also interesting. As the wealth of a desert nomad consists of camels, horses, sheep, goats and date-palms, the mathematical apportionment of shares among parents, brothers, sisters, daughters, etc., is peculiarly suitable for such communities. This shows how suitable Islamic law of inheritance is for desert nomads. On the other hand, the exclusion of females from inheritance to maintain the solidarity of the village community was peculiarly suitable for the peasants of the Hindu India.

THE CALIPHATE

Abu Bakr succeeded Muhammad as his Caliph in A.D. 632. He was followed by Omar (A.D. 634-644), whose general, Khalid, defeated the army of Heraclius in A.D. 636 upon the banks of the Yarmak, a tributary of the Jordan. Damascus was taken in A.D. 635. In A.D. 641, the Persian army was defeated at Nahavend by Caliph Omar, and Iran, Mesopotamia and Central Asia passed into Muslim hands. Alexandria was sacked in A.D. 642. Syria, Iran and Egypt were conquered by the Arab Army, all in a period of twenty-five years. Thus the Arabs controlled the trade routes from China, India and Africa. Under Walid I (A.D. 705-714), northern Africa and Spain were conquered.

In A.D. 749, Abdus Abbas became the first Abbasid Caliph with his capital at Baghdad. The Abbasids were Shias, the followers of Ali, son-in-law of the Prophet. They were more liberal in outlook than their predecessors, the Omayyads. In A.D. 757 the Caliph Al-Mansur founded a new capital at Baghdad on the Tigris. Under Haroun-al-Rashid (A.D. 786-809), a contemporary of Charlemagne, Baghdad became a great trading and literary centre. It attracted Greek, Nestorian Christian and Jewish scholars and philosophers from all over. The Caliph sent scholars to different parts of the Eastern Roman Empire to collect and purchase all the available works of Greek philosophers. It was thus that the works of Aristotle, Plato, Hippocrates, Galen, Euclid, Appolonius, Ptolemy and others became available to them, and they got them translated into Arabic. To

the translations they appended erudite commentaries. Thus arose a great Arabic culture, liberal in spirit, which absorbed the best elements of the Persian and Egyptian cultures, and the science of the Greeks and the Hindus. Through Baghdad, the Hindu medical, astronomical and mathematical theories found their way to mediaeval Europe. Caliph Al Mamun (A.D. 813-833) obtained copies of scientific manuscripts from India, which were sometimes collated to establish a sound text. Didactic fables of India, e.g. the *Panchatantra*, adopted the guise of *Kalila and Damna*, and later on became popular in Europe as Aesop's fables.

Unlike the Romans, the followers of Islam regarded trade and labour as honourable professions. The Caliphs of Baghdad were also part-time traders, and they purchased their personal goods with the proceeds of their manual labour. They organized the Moslem industrial workers, such as weavers, goldsmiths and blacksmiths, in guilds, and supervised and patronized them. Trade involves travel, visiting distant lands and observing their people as well as their soil, rocks, minerals, fauna and flora. It makes a person observant, and encourages him to think in abstract. From the eighth to eleventh centuries, the entire trade of India and China, on the one hand, and of Europe, on the other, was with the Arabs. The extent of the Arab empire in the ninth century is shown in Fig. 1. An enormous number

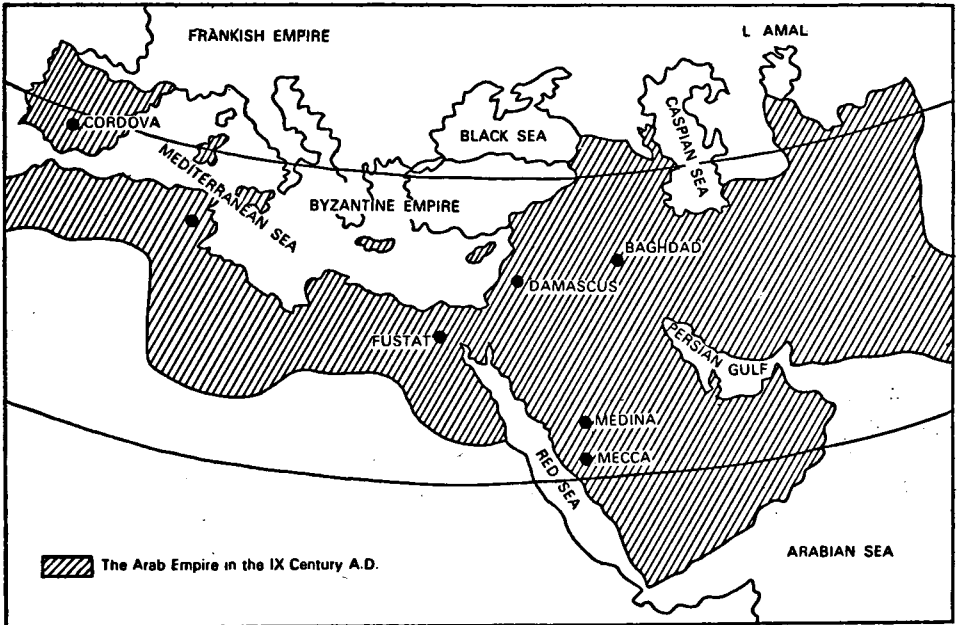


FIG. 1. The Arab Empire was at its maximum extent in the 9th century A.D.

of Arab coins, dating from the end of the seventh to the beginning of the eleventh century, which have been found in Russia, Finland, Sweden and Norway, indicate the extent of Islamic trade in northern Europe. This trade with the countries of the East and the West became a great source of wealth to the Arabs. With this wealth, they raised armies which enabled them to extend their conquests. Its most beneficent effect was the rise of a leisured class which occupied itself with studies and pursuit of knowledge.

THE ARAB CONQUEST OF SPAIN

Here reference may be made to the Arab conquest of Spain. The leader of the first expedition into Spain was Tariq, a Berber, who with a force of three hundred Arabs and seven thousand Berbers defeated the West Goths in a great battle in A.D. 711. As compared with the Arab invaders, these Goths were unlettered savages. In A.D. 720, the Arabs reached the Pyrenees. It was Charles Martel who defeated the Moslems at Poitiers in A.D. 732 and saved the Christian Europe. If he had lost the battle, the whole of Europe would have been conquered by the Moslems, and the history of the world would have been different.

During the Arab occupation, many families of Christians living in Spain were converted to Islam. Toledo became a great centre of learning. Cordoba in the tenth century was the most civilized city in Europe. It had seventy libraries and nine hundred public baths.

The Moors, as the Arabs were called, made a great impact on the life of the people of Spain. They introduced new musical instruments, e.g. the lute (*al-ūd*), guitar (*cītāra*) and rebeck (*rabāb*). The word troubador is of Arabic origin (from *tarrabā*, to sing or make music). The chess, which was borrowed by the Persians from India, was introduced by the Moslems into Spain, and from there it spread to the rest of Europe.

New manufactures and fashions spread to the West—'cottons; muslins from Mosul; baldachins from Baghdad; damasks and damascenes from Damascus; 'sarsenets' or Saracen stuffs; samites and dimities and diapers from Byzantium; the 'atlas' (Arabic *atlas*), a sort of silk-satin manufactured in the East; rugs and carpets and tapestries from the Near East and Central Asia; lacquers; new colours such as carmine and lilac (the words are both Arabic); dyes and drugs and spices and scents, such as alum and aloes, cloves and incense, indigo and sandalwood; articles of dress and of fashion, such as camlets and jupes (from the Arabic *jubbah*), or powders and glass-mirrors; works of art in pottery, glass, gold, silver, and enamel; and even the rosary itself, which is said to have come from the Buddhists of India by way of Syria to western Europe.¹

From Spain and Sicily, where the civilization of the Arabs attained its

¹Arnold, Sir Thomas, and Guillaume, A. *The Legacy of Islam*, pp. 60, 61

acme, it transmitted its influence into France and Italy. Its greatest gift to Europe was paper. The Moslems learnt paper-making from the Chinese workmen whom they captured in Samargand in A.D. 704. The first paper factories were established by the Moslems in Spain and Sicily in the twelfth century. Paper provided the foundation for the renaissance in literature, which followed the invention of the printing-press.

ARABS PROMOTE SCIENCE

The Arabs also played a great role in the promotion of science. 'If the Greek was the father, then the Arab was the foster-father of the scientific method,' observed H.G. Wells. Chemistry, algebra, astronomy, optics and medicine flourished in the cities of Basra, Baghdad, Cairo and Cordoba.

After paper, the greatest contribution of the Arabs to the advancement of knowledge was the introduction of the Hindu invention of the zero in arithmetic. Before this, the Roman numerals were in use and their range was limited. The zero liberated arithmetic, and people could now count in millions, billions and trillions.

The leading work of Indian science, the *Brahma-Siddhanta* of Brahma Gupta, was translated into Arabic, and was given the name of *Sind-Hind*.

With the aid of new instruments of observation, the Arab philosophers acquired the exact knowledge of the circumference of the earth, and the position and the number of planets. Astronomy began to outgrow its primitive form (divinations of astrology), and developed into an exact science. Although algebra had been invented by Diophantus of Alexandria, it did not become an object of common study until the age of Arabic learning. Botany was studied for medical purposes; yet the discovery of two thousand varieties of plants by Dioscorides represented the birth of a new science. Chemistry owes its origin and initial development to the industry of the Arabs. The most renowned of the alchemists was Jabir ibn Hayyan (fl. about A.D. 800), and Al-Razi (about A.D. 865-925), also known as Rhazes. The Arab alchemists discovered new substances, such as potash, nitrate of silver, and nitric and sulphuric acids. The word alcohol is Arabic.

It was in the science of medicine that the Arabs made the greatest progress. Masua and Geber, the disciples of Galen, and Avicena (A.D. 980-1037), were born in Bukhara. They were great physicians. Avicena's *Qanun-i-Shifa* is the greatest treatise in Moslem medicine, and was the textbook of Moslem physicians throughout the Middle Ages. The school of Salerno, the centre of medical learning in Europe until the sixteenth century, owed its origin to the Arabs.

Al Farabi, a great physician, taught at Damascus as well as at Baghdad. His commentary on Aristotle was studied for centuries as an authoritative work. Roger Bacon learnt mathematics from his works.

The Arabs were not merely the carriers of science, they were also inno-

vators. In the eleventh century lived Al Hassan (A.D. 965-1039) of Basra, who deserves a place among the greatest scientists of all ages. Optics was his special subject. He corrected the mistaken notion of the Greeks that the rays of light issued from the eye. By anatomical and geometrical reasoning, he proved that the rays of light came from the object seen and impinged on the retina. There is ground for belief that Kepler borrowed his optical views from Al Hassan.

The mechanical clock, introduced into Europe in the fourteenth century, was adopted from Moslem models. 'The clock had great influence upon the development of Western technics and Western civilization in general', observes Geise.

Al Gazali, son of an Andalusian merchant, anticipated Descartes in reducing the standard of truth to self-consciousness.

'The distinctive merit of the Arab scholars was the zeal to acquire knowledge through observation,' observes M. N. Roy. 'They discarded the vanity of airy speculation, and stood firmly on the ground known to them.'

They held that philosophy must be based on mathematics; and it should cease to be an idle speculation: abstract thought should be guided by precise reasoning, based on concrete facts and established laws in order to produce positive results.

In navigation, the Arabs, with their improved astrolabe and mariner's compass, were leaders. The astrolabe was invented by al-Fazari, about A.D. 775, at Baghdad. The magnetic compass was an invention of the Chinese, and the Arabs possibly borrowed it from them and improved upon it. In the ninth century, their ships reached Java and Sumatra. About the middle of the tenth century, Arab ships reached the Chinese town of Khanfu, now Canton. It may be mentioned that the word 'admiral' is of Arabic origin, and so are cable, average, shallop (*sloop*), barque, and monsoon.

In the Moslem Spain, it was between A.D. 1058 and 1269 that a galaxy of men of genius flourished, e.g. Al-Bakrī and Idrīsī, the geographers, and Ibn Zuhr (Avenzoar), the physician, Avempace, Averroes (Ibnrushd) and Ibn Tufayl, the philosophers, Ibn' Arabī of Murcia, the mystic, Maimonides, the Jewish savant, and Ibn Jubayr, the traveller. Averroes (A.D. 1126-1198) taught at Cordoba, and among his students were many Christians. He made a sharp division between religious and scientific truth, and thus liberated science from the dogmas of Christianity and Islam. Averroes and Averroism dominated the scientific thought of Europe for four hundred years.

From the ninth to the thirteenth century, the Moslem civilization was greatly superior to the civilization of Europe. 'While Europe lay for the most part in misery and decay, both materially and spiritually, the Spanish Muslims created a splendid civilization and an organized economic life. Muslim Spain played a decisive part in the development of art, science,

philosophy and poetry, and its influence reached even to the highest peaks of the Christian thought of the thirteenth century, to Thomas Aquinas and Dante. Then, if ever, Spain was "the torch of Europe".²

THE CONTRIBUTION OF THE ARABS TO AGRICULTURE AND HORTICULTURE

The Arabs were also innovators in agriculture. They had improved systems of irrigation. They wrote scientific treatises on farming. They excelled in horticulture, knowing how to graft and how to produce new varieties of fruits and flowers. In Egypt their water works and canals enabled the farmers to irrigate the higher ground, and much waste-land was made to yield rich harvests. The increasing numbers of pilgrims to Mecca needed so much grain that the Arabs reopened the ancient canal of the Ptolemies between the Nile and the Red Sea to speed up the passage of wheat to Mecca, and the early Abbasid caliphs are said to have thought of digging a Suez canal. Under the Omniad dynasty in Spain an intricate system of irrigation carried water from the mountains to the plains and opened immense tracts of arid land. The Arabs terraced the slopes with vineyards. In country that had been reduced to a depopulated and dry waste by the Visigoths, villages multiplied and cities sprang up. Into western Europe from Mohammedan countries were introduced orange, lemon, peach, apricot, banana, spinach, artichoke, rice, sugarcane, sesame, carob, melon, cotton, saffron, rose, morning-glory, and many other flowers and plants, and the silkworm with the mulberry tree.

The Arabs specialized in the culture of date-palms. According to Swingle, the date-palm produces more well-mineralized, highly flavoured and nutritious human food per acre than any other temperate-zone crop. While it has its feet in running water, its head is in the fires of heaven. In the date-gardens of Iraq, two tiers of crops are grown below the date-palms, viz. fruit-trees like olives, almonds, pomegranates, peaches, oranges and lemons, and below them vegetables, berries and flowers.

What were the plants grown by the Arabs in their gardens in Spain? What the Arab gardeners regarded as correct rules for planting, and some of the garden plants which they favoured, says Hyams, can be gathered from an authoritative twelfth-century work on agriculture and horticulture written by Yahyā ibn Muhammad (Abū Zakarīyā). 'Abū Zakarīyā says that all garden doorways should be framed by clipped evergreens, that cypresses should be used to line paths and grouped to mark the junctions of paths. He objects to the mixing of evergreen with deciduous trees. He liked to see canals and pools shaded by trees or bowers, to prevent excessive loss of water through evaporation. Plants named in his text include lemon and orange trees, pines and most of our common deciduous trees, cypresses,

² Arnold, Sir Thomas and Guillaume, A. *The Legacy of Islam*, p. 5

oleander, myrtle and rose as the only flowering shrubs, violets, lavender, balm, mint, thyme, marjoram, iris, mallow, box and bay laurel. He lays much stress on aromatics, as, indeed, did all the Islamic gardeners. His climbing plants are vines, jasmines and ivy.³

ARCHITECTURE

The dome and the horseshoe arch are distinct contributions of the Arabs to the architecture of Spain. The architecture of Moorish places, known as the Alhambra and the Alcazar, is marked by dignity and splendour. As the painting and sculpting of the human form was forbidden by Islam, the Moslem architects and masons took recourse to geometry. The vaults of mosques and palaces were encrusted with circular and polygonal studs, the stalactites. A new type of beauty, the beauty of crystals, emerged. The use of brilliantly coloured and decorated tiles further enriched their buildings.

CHAHAR-BAGH DESIGN

From the Persians, the Arabs learnt the *chahar-bagh* design of the garden lay-out. Thus when they were in Spain they introduced two great innovations, viz. the cultivation of date-palms and the lay-out of gardens with crossed channels containing fountains of water. On this pattern, the Arabs raised splendid gardens at Cordoba, Seville and Granada.

The gardens of Alhambra and Generalife in Granada, with their canals, jets of water and flower-beds, also bear the impress of the Persian *chahar-bagh*. The Arabs left an indelible impress on the horticulture of Spain and Portugal, where the entire vocabulary concerned with irrigation is Arabic, and so are the names of numerous flowers, fruits, vegetables, shrubs and trees.

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³ Hyams, E. *A History of Gardens and Gardening*, p. 84

CHAPTER 2

THE ARAB CONQUEST OF SIND

IBN HAUKAL'S OBSERVATIONS ON
THE COUNTRY, PEOPLE AND CROPS OF SIND
AL IDRISI'S ACCOUNT OF GUJARAT AND KERALA
LAND REVENUE, CESSSES AND TAXES IN SIND
Eighth Century A.D. to Eleventh Century A.D.

SIND was a part of India nearest to the Arab home-land. Apart from climatic and geographical conditions, the social conditions were also ideal for the Arab invaders. The lower classes were chafing under the tyranny of the upper-class Brahmans and Rajputs. The cultivators of Sind and the Punjab, who were never too orthodox, welcomed the Islamic invaders as liberators from caste tyranny. In A.D. 711-712 Muhammad-bin-Qasim conquered Sind and parts of Punjab. Debal the seaport fell to the Arabs in A.D. 711. Dahir, the Hindu king of Sind, was killed in a battle with the Arabs in A.D. 712, and they occupied his capital Brahmanabad. Mohd-bin-Qasim conquered Sind with the active assistance of Jats and other agricultural communities. The exploited castes of North India embraced Islam in large numbers to escape from the tyranny of the caste-system, and to enjoy the privileges which the religion of the conquerors conferred on them.

Military colonies were established by the Arabs at Mansura, Kusdar, and Multan, and large areas of fertile land were given to the Arab soldiers as military tenure. Sind remained an Arab province until A.D. 871, when, as the authority of Abbasids of Baghdad declined, two Arab chiefs established independent principalities, one in Upper Sind with its capital at Multan, and the other in Lower Sind.

What was the condition of Sind in the tenth century? Ibn Haukal, an Arab geographer, a native of Baghdad, left Baghdad in A.D. 943 and, after passing through various lands under Muslim rule, returned to that city in A.D. 968. He has left a graphic description of Sind, its cities, villages, people and crops in his *Kita'bu-l Masā'lik Wā-l Mamā'lik*, which is reproduced below.

‘The city of Debal is to the west of the Mihran, towards the sea. It is a large mart, and the port not only of this but neighbouring regions. Debal is remarkable for the richness of its grain cultivation, but it is not over-abundant in large trees or the date tree. It is famous for the manufacture of swords. The inhabitants generally maintain themselves by their commerce.

‘The city of Famhal is on the borders of Hind, towards Saimur, and the country between those two places belongs to Hind. The countries between

Famhal and Makran, and Budha, and beyond it as far as the borders of Multan, are all dependencies of Sind. The infidels who inhabit Sind are called Budha and Mand. They reside in the tract between Turan, Multan, and Mansura, to the west of the Mihran. They breed camels, which are sought after in Khurasan and elsewhere, for the purpose of having crosses from those of Bactria.

'The city where the Budhites carry on their trade is Kandabil, and they resemble men of the desert. They live in houses made of reeds and grass. The Mands dwell on the banks of the Mihran, from the boundary of Multan to the sea, and in the desert between Makran and Famhal. They have many cattle sheds and pasturages, and form a large population.

'There are Jam'a Masjids at Famhal, Sindan, Saimur, and Kambaya, all which are strong' and great cities, and the Muhammadan precepts are openly observed. They produce mangoes, cocoa-nuts, lemons and rice in great abundance, also great quantities of honey, but there are no date trees to be found in them.

'The villages of Dahuk and Kalwan are contiguous to each other, situated between Labi and Armabil. Kalwan is a dependency of Makran, and Dahuk that of Mansura. In these last-mentioned places fruit is scarce, but crops grow without irrigation, and cattle are abundant.

'Kasdar is a city with dependent towns and villages. The governor is Muin bin Ahmad, but the Khutba is read in the name of the Khalifa only, and the place of his residence is at the city of Kaba-Kanan. This is a cheap place, where pomegranates, grapes, and other pleasant fruits are met with in abundance.

'There is a desert between Bania, Kamuhul, and Kambaya. From Kambaya to Saimur the villages lie close to one another, and there is much land under cultivation. The Moslims and infidels in this tract wear the same dresses, and let their beards grow in the same fashion. They use fine muslin garments on account of the extreme heat. The men of Multan dress in the same way. The language of Mansura, Multan, and those parts is Arabic and Sindian. In Makran they use Persian and Makranic. All wear short tunics except the merchants, who wear shirts and cloaks of cotton, like the men of Trak and Persia.

'Makran contains chiefly pasturages and fields, which cannot be irrigated on account of the deficiency of water. Between Mansura and Makran the waters from the Mihran form lakes, and the inhabitants of the country are the Indian races called Zat. Those who are near the river dwell in houses formed of reeds, like the Berbers, and eat fish and aquatic birds.... Another clan of them, who live remote from the banks, are like the Kurds, and feed on milk, cheese, and bread made of millet.'¹

¹Elliot and Dowson. *The History of India*...., Vol. I, pp. 37-40

INDIA IN THE ELEVENTH CENTURY

Al Idrisi was born at Ceuta, in Morocco, towards the end of the eleventh century. He travelled in Europe and eventually settled in Sicily. He gives the following description of the Indians and their country.

'The Indians are divided into seven castes. The first is that of the Sakriya. These are the most noble; from among them kings are chosen, and from no others. All the other castes pay homage to them, but they render homage to no one. Next come the Brahmans, who are the religious class. They dress in the skins of tigers and other animals. Sometimes one of them, taking a staff in his hand, will assemble a crowd around him, and will stand from morn till eve speaking to his auditors of the glory and power of God, and explaining to them the events which brought destruction upon the ancient people, that is, upon the Brahmans. They never drink wine nor fermented liquors. They worship idols (whom they consider to be) able to intercede with the Most High. The third caste is that of the Kastariya, who may drink as much as three rats of wine, but not more, lest they should lose their reason. This caste may marry Brahman women, but Brahmans cannot take their women to wife. Next comes the Sharduya, who are labourers and agriculturists, then the Basya, who are artisans and mechanics; then the Sabdaliya (or Sandaliya), who are singers, and whose women are noted for their beauty; and, lastly, the Zakya, who are jugglers, tumblers, and players of various instruments.'

Commenting on the character of Indians, Idrisi states, 'The Indians are naturally inclined to justice, and never depart from it in their actions. Their good faith, honesty and fidelity to their engagements are well known, and they are so famous for these qualities that people flock to their country from every side; hence the country is flourishing and their condition prosperous.' Among other characteristic marks of their love of truth and horror of vice, the following is related: 'When a man has a right to demand anything of another, and he happens to meet him, he has only to draw a circular line upon the ground and to make his debtor enter it, which the latter never fails to do, and the debtor cannot leave this circle without satisfying his creditor, or obtaining the remission of the debt.'

Commenting on the country, its climate and crops, Idrisi wrote, 'The climate is hot. The country produces dates and sugarcanes in abundance. There are hardly any other fruits, if we except one, a sort of fruit called *laimun*, as big as an apple and of a very sour taste, and another which resembles the peach both in shape and taste. Mansura in Sind, that of which we are now speaking, is great, populous, rich, and commercial. Its environs are fertile. The buildings are constructed of bricks, tiles, and plaster. It is a place of recreation and of pleasure. Trade flourishes. The bazars are filled with people, and well stocked with goods. The lower classes wear the Persian costume, but the princes wear tunics, and allow their hair to grow

long like the princes of India. The money is silver and copper. The weight of the drachma (dinar) is five times that of the (ordinary) drachma. The Tatariya coins also are current here. Fish is plentiful, meat is cheap, and foreign and native fruits abound.

'East of Sindan there is an island bearing the same name and dependent on India. It is large and well cultivated, and the cocoa-nut palm, kana, and rattan grow there.

'Saimur, five days from Sindan, is a large well-built town. Cocoa-nut trees grow here in abundance; henna also grows here, and the mountains produce many aromatic plants, which are exported.

'Five miles by sea (from Kulam Mali) lies the island of Mali, which is large and pretty. It is an elevated plateau, but not very hilly, and is covered with vegetation. The pepper vine grows in this island, as in Kandarina and Jirbatan, but it is found nowhere else but in these three places. It is a shrub, having a trunk like that of the vine; the leaf is like the convolvulus, but longer; it bears grapes like those of the Shabuka, each bunch of which is sheltered by a leaf which curls over when the fruit is ripe. White pepper is what is gathered as it begins to ripen, or even before. Ibn Khurdadba states that the leaves curl over the bunches to protect them from the rain, and that they return to their natural position when the rain is over—a surprising fact!

'Kambaya, Subara, Sindan and Saimur form part of India. The last named belongs to a country whose king is called Balhara.

'Baruh (Baruch, Broach) is a large handsome town, well-built of bricks and plaster. The inhabitants are rich and engaged in trade, and they freely enter upon speculations and distant expeditions. It is a port for the vessels coming from China, as it is also for those of Sind. In all Nahrwara and its environs there is no other mode of travelling except in chariots drawn by oxen under the control of a driver. These carriages are fitted with harness and traces, and are used for the carriage of goods.

'The inhabitants of Nahrwara live upon rice, peas, beans, haricots, lentils, mash, fish, and animals that have died a natural death, for they never kill winged or other animals. They have a great veneration for oxen, and by a privilege confined to the species, they inter them after death. When these animals are enfeebled by age, and are unable to work, they free them from all labour and provide them with food without exacting any return.

'Opposite the sea-port town of Baruh lies the island of Mullan, which produces pepper in large quantities, and is two days' journey from Sindan. From Sindan to Balbak is also two days. Balbak produces cocoa-nuts, figs, bananas and rice. It is here that vessels change their courses for the different islands of India.

'Fandarina is a town built at the mouth of a river which comes from

Manibar (Malabar), where vessels from India and Sind cast anchor. The inhabitants are rich, the markets well supplied, and trade flourishing. North of this town there is a very high mountain covered with trees, villages and flocks. The cardamom grows here and forms the staple of a considerable trade. It grows like the grains of hemp, and the grains are enclosed in pods. From Fandarina to Jirbatan, a populous town on a little river, is five days. It is fertile in rice and grain and supplies provisions to the markets of Sarandib. Pepper grows in the neighbouring mountains. From Jirbatan to Sanji and Kaikasar two days. These are maritime towns near to each other; the neighbourhood produces rice and corn. From hence to Kilkayan one day. From Kilkayan to Lulu and to Kanja one day. The vicinity is fertile in rice and wheat, and produces sapan wood abundantly. The growth of this tree resembles that of the oleander. Cocoa-nut trees abound.'

LAND REVENUE CASSES AND TAXES

'The ordinary revenue which the Arab rulers were entitled to collect from the provinces committed to them was derived from the land-tax, and from the capitation-tax upon those who had not embraced the Muhammadan religion; but there were many miscellaneous cesses besides, which, in the aggregate, yielded large returns.

'The land-tax was usually rated at two-fifths of the produce of wheat and barley, if the fields were watered by public canals; three-tenths, if irrigated by wheels or other artificial means; and one-fourth, if altogether unirrigated. If arable land was left uncultivated, it seems to have paid one dirham per *jarib*, and one-tenth of the probable produce. Of dates, grapes and garden produce, one-third was taken, either in kind or money; and one-fifth (*khums*) of the yield of wines, fishing, pearls, and generally of any product not derived from cultivation, was to be delivered in kind, or paid in value, even before the expenses had been defrayed.

'These taxes were according to the original institutes of 'Umar, when he assessed the Sawad, or cultivated lands of 'Irak; but, in course of time, they were everywhere greatly enhanced, even to one-half of the produce of the land, or rather according to the ability of the people to pay. In short, the rates above mentioned were merely a nominal value put upon the land; for the collection of the revenues was, in many instances, left to rapacious farmers, who covered their contracts and benefited themselves besides, at the expense of the cultivators.

'Besides this ordinary land-tax, we read, in the *Chach-nama*, of other burdens laid upon Sindian cultivators, which seem to have been independent of the former: such as the *baj*, and the *'ushari*. Other extraordinary conditions were occasionally imposed on some of the tribes. The Jats dwelling beyond the river Aral were compelled to bring a dog on each occasion of

paying their respects, besides being branded upon the hand.

'Sumptuary laws, moreover, were established, and enforced with great stringency. Certain tribes were prohibited from wearing fine linen, from riding on horses, and from covering their heads and feet. If they committed theft, their women and children were burnt to death. Others had to protect caravans, and to furnish guides to Muhammadans.

'The natives were also enjoined, in conformity with an old law of 'Umar's, to feed every Muhammadan traveller for three days and nights.'

In early stages it was a social oppression which prompted some Hindus to embrace Islam. Later on the motive was purely economic. 'All the unconverted tribes were, without exception, liable to the capitation-tax (*jizya*), which, as it was a religious as well as a political duty to collect, was always exacted with rigour and punctuality, and frequently with insult,' state Dowson and Elliot.

'According to the original ordinance of 'Umar, those persons who were of any persuasion non-Muhammadan were called *Zimmis*, or those under protection, and were assessed with a toleration, or poll-tax, at the following rates. A person in easy circumstances had to pay 48 dirhams a year, one of moderate means 24 dirhams, and one in an inferior station, or who derived his subsistence from manual labour, 12 dirhams. Women, children and persons unable to work paid nothing. But a century had not elapsed when 'Umar the Second, considering these rates too moderate, calculated what a man could gain during the year, and what he could subsist on, and claimed all the rest, amounting to four or five dinars, about two pounds, a year.

'As the tax ceased upon any one's becoming a Moslem—when he was enfranchised from his dependence, and was invested with the privileges of a citizen and companion—its severe enforcement was often found more efficacious than argument or persuasion in inducing the victims to offer themselves as converts to the faith.'² This explains large-scale conversions of Hindus to Islam in Sind and Western Punjab.

²Elliot and Dowson. *The History of India...*, Vol. I, pp. 87, 90, 474-478

CHAPTER 3

THE RULE OF THE TURKS

MAHMUD GHAZNAVI, MUHAMMAD GHORI, AND THE SLAVE KINGS

A.D. 998-1290

INCURSIONS OF MONGOLS

THE spread of Islam was in three waves. The first was the Arab wave from the seventh to the early ninth century which ebbed in A.D. 809, when Caliph Haroun-al-Raschid died. After his death his empire fell into civil war and confusion. The second was the Turkish wave in the eleventh century. The Turks came from Turkistan in Central Asia. They became converts to Islam and, led by the chiefs of the family of the Seljuks, they conquered the Arab empire of Baghdad and also Asia Minor. They started a fanatical struggle against Christianity. The Christians of Europe led seven Crusades against them from A.D. 1099 to 1244. The third was the Mongol wave in the thirteenth and fourteenth centuries. The Mongols were heathens, but in the fourteenth century embraced Islam.

The Arab wave in India ended with the conquest of Sind and a part of the Punjab. The Rajputs checked further Islamic advance in India for about three centuries.

Afghanistan has a key position in regard to the Indian subcontinent. It was ruled by Hindu Shahi dynasty in the ninth century. The last of them, Lagatürmān, who reigned at the end of the ninth century, was thrown into prison by Kalar, his Brahman minister, who usurped the throne, and founded a new dynasty of Brahman Shahis. The names of seven kings of this dynasty are recorded by Alberuni. The last four of them were Jaipal, Anandapal, Trilochanpal and Bhimpal. It was Jaipal who, after this retreat from Kabul, made Bhatinda the capital of his Punjab kingdom.

SABAKTIGIN

Alpatgin, a Turk serving Abdul Malik, the Samanid king of Bokhara, settled at Ghazni with about eight hundred followers, in A.D. 961. Alpatgin died in A.D. 969. Sabaktigin, originally a Turki slave of the governor of Khorasan, married Alpatgin's daughter. He carved out from himself a kingdom at Ghazni in A.D. 977. Sabaktigin made his first raid into India and conquered Peshawar from Jaipal in A.D. 991.

MAHMUD GHAZNAVI (A.D. 998-1030)

In A.D. 997 Mahmud succeeded his father, Sabaktigin. Mahmud was a religious fanatic, and he vowed to invade India every year. He raided India seventeen times according to Sir Henry Elliot. His custom was to leave

Ghazni early in October, and utilize the cold weather for his marauding operations. At the beginning of summer he used to return from Hindustan to enjoy the cool climate of his native country Afghanistan. He used to bring large number of prisoners as slaves, and these included skilled masons whom he employed for the construction of mosques and palaces at Ghazni.

In A.D. 1001 he defeated Jaipal, Raja of the Punjab, whose dominion extended on the West to Kabul. In the course of four campaigns Jaipal lost all his territory west of the Indus, and Peshawar was occupied by the Moslems. In A.D. 1022, Mahmud annexed the Punjab and became an Indian ruler. In the succeeding years, Mahmud plundered the temples of Kangra (A.D. 1009), Mathura (A.D. 1018), and Somnath (A.D. 1024), and on each occasion he returned to Ghazni with fabulous quantities of gold, silver and diamonds.

Here we may refer to Kazwini's *Asaru-l Bilad* (Monuments of Countries). Kazwini, an encyclopaedist, was born in the town of Kazwin (in Iran). He compiled his works from the writings of other travellers in A.D. 1263. About Somnath he writes, 'A celebrated city of India, situated on the shore of the sea, and washed by its waves. Among the wonders of that place was the temple in which was placed the idol called Somnat. This idol was in the middle of the temple without anything to support it from below, or to suspend it from above. When the king asked his companions what they had to say about the marvel of the idol, and of its staying in the air without prop or support, several maintained that it was upheld by some hidden support. The king directed a person to go and feel all around and above and below it with a spear, which he did, but met with no obstacle. One of the attendants then stated his opinion that the canopy was made of loadstone, and the idol of iron, and that the ingenious builder had skilfully contrived that the magnet should not exercise a greater force on any one side—hence the idol was suspended in the middle. Some coincided, others differed.' Permission was obtained from the Sultan to remove some stones from the top of the canopy to settle the point. When two stones were removed from the summit the idol swerved on one side, when more were taken away it inclined still further, until at last it rested on the ground.'¹ It was application of science for achieving a practical objective, which was paraded as a miracle. Nevertheless it indicates that knowledge of science was advanced in India.

Mahmud was a patron of scholars. Among them was the famous Persian poet Firdausi, who wrote the *Shah-nama*. Khondamir in the *Habibu-s Siyar* thus mentions how Firdausi came to Ghazni and what treatment he received from the Sultan. 'Firdausi was another one of the poets contemporary with Sultan Mahmud; his history is well known. It is written in the

¹Elliot and Dowson. *The History of India...*, Vol. I, pp. 98, 99

books of learned authors that during his first years Firdausi took great pleasure in versification. It happened that at one time he received ill-treatment from somebody, upon which he set out for Ghazni, which was the royal residence of the Sultan Mahmud, with the intention of lodging his complaint. When he arrived near that city, he saw in a certain garden three persons who were sitting together, and seemed to be very intimate. He conjectured that they were the servants of the Sultan, and said within himself, "I will go to them, and tell them some of my business; perhaps I shall gain some advantage by it." When he came near the resting-place where 'Unsuri, 'Asjudi and Farrukhi were sitting, those individuals were astonished at him and said, "He will spoil our quiet converse." They communed with one another, and agreed to tell this person that they were the poets of the Sultan, and that they held no intercourse with any one who was not a poet; that they would recite three verses, to which it would be difficult to add a fourth, and that they would say that whoever would make a fourth verse would be admitted into their society, and unless he could do so he would be excluded.

'When Firdausi arrived where they were sitting, they played off upon him that which they had determined among themselves. Firdausi said, "Recite your verses". 'Unsuri said, "The moon has no brightness like your cheek." Farrukhi said, "There is not a rose in the rose-garden like your face." 'Asjudi said, "Your eye-lashes pierce through a coat of mail." Firdausi, upon hearing those verses, instantly replied, "Like the spear of Geo in the fight with Pushan." The poets were astonished at his readiness, and inquired about the story of Geo and Pushan. Firdausi told them the story at full length, and accordingly, when he arrived at Court, he experienced kind treatment, and Mahmud told him that he had made a paradise of his Court, and it was owing to this that he assumed his titular name of Firdausi.

'Having afterwards been appointed to compose the *Shah-nama*, he wrote a thousand verses, and took them to the king, who highly applauded them, and made him a present of a thousand dinars. When Firdausi had finished writing the *Shah-nama*, he took the book, which contained 60,000 verses, to the Sultan, expecting that he would get a *dinar* for each verse, as he had done before; but some envious persons of mean disposition, indulging their malignity, wondered what must be the value of that poet who was worth being exalted by such a large gift, and they made the Sultan give him 60,000 *dirhams* instead. When Firdausi came out of the bath, and they brought those *dirhams* before him, he was exceedingly vexed at the circumstance, and gave 20,000 *dirhams* to the bath-keeper, 20,000 to a sherbet-seller who had brought some beverage for him, and the remaining 20,000 *dirhams* he gave to the person who brought the money. Having composed about forty verses, as a satire upon the Sultan, he introduced

them into the beginning or conclusion of the *Shah-nama*, and fled to Tus.

'One day, some little time after this circumstance, Ahmad bin Hasan Maimandi was out hunting with the Sultan, and having come close to him, he repeated several verses out of the *Shah-nama*, which were exceedingly applauded by the Sultan, who asked whose poetry it was. He answered that the verses were the produce of the genius of Firdausi. The Sultan repented of his neglect of that incomparable poet, and ordered them to take 60,000 *dinars* with rich robes of honour to Tus, and to ask Firdausi's pardon. In the *Baharistan* it is written that when those presents came in at one gate of Tus, the coffin of Firdausi was carried out at the other. An only daughter was his heiress, to whom the emissaries of the Sultan offered those honourable presents; but she, from the pride inherent in her disposition, refused them and said, 'I have enough wealth to last me to the end of my days; I have no need of this money.'²

Summing up the character of Mahmud, Khondamir observed, 'From generosity he derived no honour. As the shell guards the pearl, so he guarded his wealth. He had treasuries full of jewels, but not a single poor man derived benefit therefrom.'

Mahmud died in A.D. 1030. 'It is said that two days before his death he ordered all the bags of gold and silver coins which were in his treasury, and all the jewels, and all the valuables which he had collected during the days of his sovereignty, to be brought into his presence. They were accordingly all laid out in the court-yard of his palace, which, in the eyes of the spectators, appeared like a garden full of flowers of red, yellow, violet, and other colours. He looked at them with sorrow, and wept very bitterly. After shedding many tears, he ordered them to be taken back to the treasury, and he did not give a farthing to any deserving man, notwithstanding he knew that in a day or two he must depart from this world. When the king had seen the valuable contents of his treasury, he sat in a litter and went out to the field. There he reviewed all his personal slaves, his cattle, Arab horses, camels, etc., and after casting his eye upon them, and crying with great sorrow and regret, he returned to his palace.'

Mahmud built an empire which extended from the Punjab to the Caspian. Vincent Smith observed. 'So far as India was concerned Mahmud was simply a bandit operating on a large scale.' He killed thousands of people, and destroyed priceless monuments. Alberuni correctly observed, 'Mahmud utterly ruined the prosperity of India.'

MUHAMMAD GHORI

The foundation of Islamic rule in India was laid by Shihab-ud-din

²Khondamir, *Habibu-s Siyar*, in Elliot and Dowson, *The History of India...*, Vol. IV, pp. 190, 191, 192 and 166



FIG. 2. India at the death of Mahmud Ghaznavi, 1030. Chola kings ruled South India. Rest of India was ruled by Rajput dynasties.

Mahummud Ghori. He was the governor of Ghazni. In A.D. 1175 he conquered Multan. In A.D. 1182 he conquered Sind and the Punjab. He defeated Prithviraj Chauhan at Taraori or Tarain in Karnal District in A.D. 1192, and thus broke the power of the Rajputs.

The Islamic expansion in India in the close of the twelfth century was rapid. In A.D. 1194 the Moslem armies began to move eastwards. The sacred city of Benares was captured by Qutb-ud-din Aibek, Muhammad Ghori's general.

BAKHTIYAR

In A.D. 1199 Bihar was ravaged by Muhammad ibn Bakhtiyar, an intrepid Turk. The University of Nalanda was destroyed, its library burnt, and all the Buddhist monks, or shaven Brahmans, as the Moslems called them, slaughtered. As Minhaju-s Siraj states, 'Muhammad Bakhtiyar with great vigour and audacity rushed in at the gate of the fort and gained possession of the place. Great plunder fell into the hands of the victors. Most of the inhabitants of the place were Brahmans with shaven heads. They were put to death. Large numbers of books were found there, and when the Muhammadans saw them, they called for some persons to explain their contents, but all the men had been killed. It was discovered that the whole fort and city was a place of study (*madrassa*). In the Hindi language the word Behar (*vihar*) means a college.'³

After the conquest of Bihar, Bakhtiyar turned his attention to Bengal, which was ruled by Lakshmansena. Leaving his army behind, with only eighteen horsemen, Bakhtiyar surprised Lakshmansena at his dinner. Lakshmansena fled in panic, and his wives, maidservants and treasure fell into the hands of the invader. Bakhtiyar destroyed Nuddea, the capital of Bengal, and established the seat of his government at Lakhnawti.

Bloated by success, Bakhtiyar invaded Assam and marched towards the mountains of Tibet. The tribesmen followed the scorched-earth policy and not a *straw* of food nor a blade of grass or fodder was to be found. The Moslem invaders were compelled to kill and eat their horses. The Rai of Kamrup collected his men and surrounded the Moslem army. The Moslem army tried to cross the Tista. Bakhtiyar crossed the river with about a hundred horsemen, and all the rest were drowned.

Soon after A.D. 1200, the whole of northern India except Rajasthan, Malwa and part of Gujarat, were conquered by the Moslem armies.

CASTE-SYSTEM—CAUSE OF DEFEAT OF HINDU ARMIES

The main cause of the defeat of the Hindus was their caste-system. Fighting was the profession of the Rajputs, the Kshatriyas, who were the rulers. There must have been lakhs of able-bodied persons among the other castes, who, given an opportunity, would have fought the Islamic armies with greater valour. However, all this talent and prowess was not available to the Indian army due to caste monopoly of the Rajputs. Besides

³Minhaju-s Siraj. *Tabakat-i-Nasiri*, in Elliot and Dowson, *The History of India...*, Vol. II, p. 306

the Hindu army had no national feeling. Rather than making a united front against the invaders, they were riven with petty jealousies, viz. the ire of treacherous Jai Chand of Kanauj against Prithviraj Chauhan for abducting his daughter, with the result that they were both destroyed one by one. The Islamic armies had a strong cavalry force which functioned as an offensive weapon in the open field. Elephants, on which the Rajputs relied, could not stand cavalry charges of the Moslems and, in panic, turned tail and trampled the Rajput soldiers. The Rajputs, lacking confidence, believed in defence and shut themselves up in their strong forts. The Islamic commanders adopted the device of construction of *pashebs*, rising mounds of earth made by heaping sand-bags right up to the ramparts of the fort and thus invading the fort. Besides the besieged armies could also be starved into submission by cutting off their food supplies.

THE SLAVE DYNASTY—A.D. 1206-1290

Muhammad Ghori was assassinated in A.D. 1206 on the banks of the Indus. Qutb-ud-din Aibek, the Commander-in-Chief of Ghori's army, was elected Sultan by the Turkish army officers. He is remembered for the construction of the victory pillar, known after his name as Qutb Minar, and for the mosque called Quwat-ul-Islam which was built with stones taken from twenty-seven Hindu temples. Both these monuments are in Mehrauli, a suburb of Delhi. Qutb-ud-din Aibek died in a polo accident in A.D. 1210.

ILTUTMISH—A.D. 1210-1236

The next king was Iltutmish, son-in-law of Qutb-ud-din, who completed the Qutb Minar. He was a builder as well as a conqueror and administrator. During his reign India was threatened by the heathen Mongol hordes of Chingiz Khan, whose real name was Temujin. Chingiz Khan was his official title. Minhaju-s Siraj, the author of the *Tabakat-i-Nasiri*, thus describes the physical appearance and character of Chingiz Khan. 'Trustworthy persons have related that the Chingiz Khan, at the time when he came into Khurasan, was sixty-five years old, a man of tall stature, of vigorous build, robust in body, the hair on his face scanty and turned white, with cat's eyes, possessed of great energy, discernment, genius, and understanding, awe-striking, a butcher, just, resolute, an overthrower of enemies, intrepid, sanguinary, cruel.' Fortunately, the Mongols deterred by summer heat turned back at Peshawar and proceeded to Western Asia and on to the banks of the Dnieper. The Mongols conquered the whole Chinese Empire. They reduced west-central Asia including Afghanistan and Iran and invaded eastern Europe, overrunning southern Russia, Poland, and Hungary. In A.D. 1227, when Chingiz Khan died, his empire extended from the Pacific to Black Sea (Fig. 3). In A.D. 1258, the Mongols overthrew the Abbasid

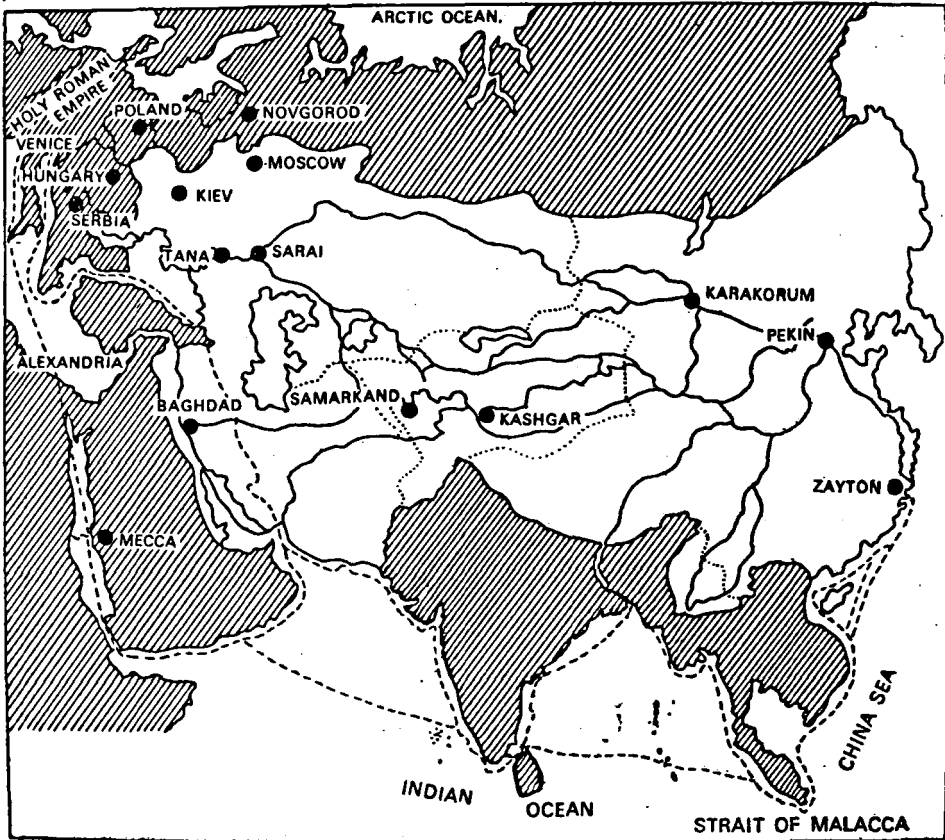


FIG. 3. The Mongol Empire in 1290 (shown in white). It embraced China, Central Asia, Iran, Iraq and a good bit of Russia. The principal trade routes between China and Europe are shown.

Caliphate of Baghdad and attacked the Moslems in Syria. Wherever they penetrated, whether into Moslem or Christian lands, they recklessly destroyed life and property. As Jawaini, the Persian chronicler observed, 'They came, burnt, slaughtered, plundered and departed.'

THE SULTAN RAZIYA—A.D. 1236-1240

Realizing that his sons were worthless, Iltutmish nominated his daughter Raziya as his successor as he discerned in her countenance the signs of power and bravery. In *Tabakat-i-Nasiri* she is described as a great monarch, who was wise, just, generous, the protector of her subjects, and the leader of her armies. Minhaju-s Siraj comments that though she was endowed

with all the qualities befitting a king, she was not born of the right sex, and so all these virtues were worthless. The Sultan Raziya discarded the dress and veil of women and put on a coat and a cap, and thus clad rode on an elephant to show herself to her people. She appointed Yakut, an Abyssian, as her personal attendant. This led to jealousies among her Turkish amirs, and in A.D. 1240 they deposed her. Later she married Altuniya, the Governor of Bhatinda. Her husband attempted to occupy the throne, but both husband and wife were killed in October 1240.

NASIR-UD-DIN—A.D. 1246-1266

Nasir-ud-din, a kind and scholarly person, who patronized scholars, was made Sultan in A.D. 1246. He was the patron of the historian Minhaj-us Siraj, who named his work, *Tabakat-i-Nasiri*, after him. Nasir-ud-din appointed him Kazi of Delhi. In A.D. 1259, a campaign was carried against Meos of Aravalli hills on the outskirts of Delhi. The Meos led by their chief named Malka, plundered the goods of Moslems, stole cattle, and ravaged the villages in the districts of Haryana and Bayana. It is for the first time that we hear about Haryana in history of Mediaeval India. They were severely punished by Ulugh Khan Balban, Nasir-ud-din's father-in-law and minister, who was virtually the ruler. About 12,000 Meos, men, women, and children, were slaughtered. To hold the Meos down, Balban built a fort and a line of police posts.

BALBAN—A.D. 1266-1267

On the death of Nasir-ud-din in A.D. 1266, Balban, who was virtually in command of State affairs, succeeded him. He was a stern man, who ruled ruthlessly. He liquidated the clique of Turkish amirs who were a constant source of trouble. He put down brigands who plundered caravans. He refortified Lahore to ensure its safety from the Mongols. In his court were fifteen refugee kings and princes from Turkistan and adjoining area which had been occupied by the Mongols.

The Doab was in disorder. He distributed the land in Doab in fiefs to Turkish nobles, who were asked to clear the jungles and to root out the Hindu rebels. Balban died in A.D. 1286.

CHAPTER 4

THE RULE OF THE TURKS

THE KHALJIS

A.D. 1290-1320

THE PRICE CONTROL REGULATIONS AND REVENUE ADMINISTRATIVE MEASURES OF ALA-UD-DIN KHALJI WRETCHED CONDITION OF THE PEASANTRY

JALAL-UD-DIN FIROZ (A.D. 1290-1296), a seventy-year-old man, was the founder of the Khaljis Dynasty. The Khaljis were a Turkish tribe domiciled in Afghanistan. Jalal-ud-din was a mild old man, a poor administrator who knew neither how to punish his foes nor reward his friends. A thousand thugs arrested by his army were transported to Bengal and set free. He was murdered in A.D. 1296, and his successor was his nephew, Ala-ud-din Khalji (A.D. 1296-1316), a vigorous but unscrupulous man. He restored order by curbing the power of rebellious chiefs. Grants of land given to them were confiscated. He developed a system of espionage which kept him informed about the intentions of his officials. Drinking of wine and dinner parties were prohibited.

In A.D. 1297, Gujarat was conquered by the army of Ala-ud-din and the renovated temple of Somnath was demolished. Ranthambor was captured in A.D. 1301, and its Rajput ruler Hamir Dev executed. The fort of Chitor was captured in A.D. 1303. The Raja of Malwa was defeated in A.D. 1305, and Ujjain, Mandu and Dhar were annexed. In A.D. 1308, Malik Kafur, Ala-ud-din's general, invaded south India and looted hoards of gold and precious stones from the temples. He captured Devagiri, and the Kakatiya capital, Warangal. In A.D. 1311, Malik Kafur defeated the Hoysala King Ballala III, and invaded the Pandyan country, Ma'bar.

BIRTH OF ISLAMIC ARCHITECTURE AND HINDUSTANI MUSIC

The rule of Khaljis was not totally sterile. During this period, Indian architecture saw a remarkable development by the introduction of the Islamic arch and the dome. It also witnessed the birth of Hindustani music. The pioneer of the cultural movement was Amir Khusrau (A.D. 1253-1325), the celebrated poet and musician, known as *Tuti-i-Hind*, or Parrot of India, a tribute to his eloquence. He was the son of a Lachin Turk, who came as a refugee to India from Balkh. His father settled in Patyali, where Khusrau was born. In due course Khusrau shifted to Delhi, where he received the patronage of the Khalji and Tughlaq kings. His preceptor was Nizamuddin Auliya, the celebrated Sufi saint. Khusrau acquired such proficiency in Indian music that he even defeated Naik Gopal, a renowned Hindu musician

from South India. Gopal used to be carried about by a band of twelve hundred disciples, who served as his palanquin-bearers. The contest between the two was held in the court of Ala-ud-din Khalji. He composed three poems, viz. the *Qiran-us-Sa'dain*, the *Miftah-ul-futuh*, the *Nuh Sipahr*, and a book of prose, the *Khazā'in-ul-futūh*. They contain information about contemporary history and social conditions. His poem called *Dewalrani Khizr Khan* is intermixed with contemporary historical events, and the *Tughluk-nama* deals with the rise and fall of Khusrau Khan, the usurper, and the accession of Ghiyas-ud-din Tughlak.

MONGOL INVASION

In A.D. 1299 India was menaced by a Mongol invasion. Their leader, Qutlugh Khwaja, planned the conquest of Delhi. Amir Khusrau, who saw the Mongol horde, thus describes them. 'There were more than a thousand Tatar infidels and warriors of other tribes, riding on camels, great commanders in battle, all with steel-like bodies clothed in cotton; with faces like fire, with caps of sheep-skin, with their heads shorn. Their eyes were so narrow and piercing that they might have bored a hole in a brazen vessel. Their stink was more horrible than their colour. Their faces were set on their bodies as if they had no neck. Their cheeks resembled soft leathern bottles, full of wrinkles and knots. Their noses extended from cheek to cheek, and their mouths from cheek-bone to cheek-bone. Their nostrils resembled rotten graves, and from them the hair descended as far as the lips. Their moustaches were of extravagant length. They had but scanty beards about their chins. Their chests, of a colour half black, half white, were so covered with lice, that they looked like sesame growing on a bad soil. Their whole body, indeed, was covered with these insects, and their skin as rough-grained as chagreen leather, fit only to be converted into shoes. They devoured dogs and pigs with their nasty teeth. Their origin is derived from dogs, but they have larger bones. The king marvelled at their beastly countenances, and said that God had created them out of hell-fire. They looked like so many white demons, and the people fled from them everywhere in affright.'¹

The Mongols were defeated by the army of Ala-ud-din. Thousands of them were taken prisoners and were killed by trampling them under the feet of elephants.

CONDITION OF THE PEASANTRY

The rural area was populated by the Hindu peasants, while the Moslem population was confined to small towns (*qasbas*). According to Muhammed Habib, the religion of Islam is fundamentally a city creed. 'The Moslem

¹Amir Khusrau. *Kiranu-s Sa'dain*, in Elliot and Dowson, *The History of India...*, Vol. III, p. 528

requires certain social amenities, which are available only in urban areas. These are—the congregational mosque for his five prayers; the common graveyard where his fellow Muslims may bury him neatly and tearlessly and pray for the forgiveness of his sins; a school for the education of his children; a *hafiz*, preferably blind, who may recite the whole of the Quran in the month of Ramazan; and last, but not the least, social intercourse with an academic flavour in it.² Even now in Uttar Pradesh and Bihar, the most populous states of northern India, which received the fullest impact of Islamic rule, the distribution of population follows this pattern.

In the towns adequate number of educated Moslem were available to fill the administrative posts. In the rural area, the Moslem rulers had to rely on Hindu rent-collectors, who were called *khutas* and *muqaddams*. The peasants were called *bilahars*. They were ruled by Rais, Rawats and Chaudharis. Some of them were defiant and paid nothing to the government and even imprisoned its agents. They had their small private armies and indulged in the game of mutual destruction and looting of caravans of traders. The Sultan sent his army from time to time to realize dues from the Hindu rural aristocracy and dealt with the rural population savagely and created a reign of terror.

The condition of Hindu peasants was never so wretched as during the oppressive rule of Ala-ud-din. It was the result of a deliberate policy of the Sultan to impoverish them. Talking to a Mullah, Ala-ud-din said, 'Be assured then that the Hindus will never become submissive and obedient till they are reduced to poverty. I have, therefore, given orders that just sufficient shall be left to them from year to year, of corn, milk, and curds, but that they shall not be allowed to accumulate hoards and property.'³

The measures taken by this Sultan were:

1. The standard of the revenue demand was fixed at one-half of the produce without any allowances or deductions.
2. The Chiefs' perquisites were abolished, so that all the land occupied by them was to be brought under assessment at the full rate.
3. The method of assessment was to be measurement, the charges being calculated on the basis of standard yields.
4. A grazing-tax was imposed apart from the assessment on cultivation.

Zia-ud-din Barni, the Moslem historian, thus details these measures. 'After the promulgation of these interdicts, the Sultan requested the wise men to supply some rules and regulations for grinding down the Hindus,

²Habib, M. *Introduction to Elliot and Dowson's History of India...*, Vol. II, p.69

³Zia-ud-din Barni. *Tarikh-Firoz Shahi*, in Elliot and Dowson, *The History of India...*, Vol. III, p. 185

and for depriving them of that wealth and property which fosters disaffection and rebellion. There was to be one rule for the payment of tribute applicable to all, from the *khuta* to the *balahar* (peasant), and the heaviest tribute was not to fall upon the poorest. The Hindu was to be so reduced as to be left unable to keep a horse to ride on, to carry arms, to wear fine clothes, or to enjoy any of the luxuries of life. To effect these important objects of government two regulations were made. The first was that all cultivation, whether on a small or large scale, was to be carried on by measurement at a certain rate for every *biswa*. Half of the produce was to be paid without any diminution, and this rule was to apply to *khutas* and *balahars*, without the slightest distinction. The *khutas* were also to be deprived of all their peculiar privileges. The second related to buffaloes, goats, and other animals from which milk is obtained. A tax for pasturage, at a fixed rate, was to be levied, and was to be demanded for every inhabited house, so that no animal, however wretched, could escape the tax. Heavier burdens were not to be placed upon the poor, but the rules as to the payment of the tribute were to apply equally to rich and poor. Collectors, clerks, and other officers employed in revenue matters who took bribes and acted dishonestly were all dismissed. Sharaf Kai, *naib wazir-i-mamalik*, an accomplished scribe and a most honest and intelligent man, who had no rival either in capacity or integrity, exerted himself strenuously for some years in enforcing these regulations in all the villages and towns. . . . They were so strictly carried out that the *chaudharis* and *khuts* and *mukaddims* were not able to ride on horseback, to find weapons, to get fine clothes, or to indulge in betel. The same rules for the collection of the tribute applied to all alike, and the people were brought to such a state of obedience that one revenue officer would string twenty *khuts*, *mukaddims*, or *chaudharis* together by the neck, and enforce payment by blows. No Hindu could hold up his head, and in their houses no sign of gold or silver, *tankas* or *jitals*, or of any superfluity was to be seen. These things, which nourish insubordination and rebellion, were no longer to be found. Driven by destitution, the wives of the *khuts* and *mukaddims* went and served for hire in the houses of the Musulmans. Sharaf Kai, *naib-wazir*, so rigorously enforced his demands and exactions against the collectors and other revenue officers, and such investigations were made that every single *jital* against their names was ascertained from the books of the *patwaris* (village accountants). Blows, confinement in the stock, imprisonment and chains, were all employed to enforce payment. There was no chance of a single *tanka* being taken dishonestly, or as bribery, from a Hindu or Musulman. The revenue collectors and officers were so coerced and checked that for five hundred or a thousand *tankas* they were imprisoned and kept in chains for years. Men looked upon revenue officers as something worse than fever. Clerkship was a great crime, and no man would give his daughter to a clerk. Death was deemed preferable to revenue

employment. Oft times fiscal officers fell into prison, and had to endure blows and stripes.⁴

The net result of these measures was universal poverty and degradation among the peasantry. Their standard of living was reduced to the lowest level. All the surplus which was taken from them was spent on the maintenance of a large standing army. Above all, they had lost their freedom, and were governed by aliens who had no respect for their culture.

RURAL ECONOMY OF EUROPE IN THE TWELFTH AND THIRTEENTH CENTURIES

Here it would be pertinent to examine the agrarian conditions and the state of agriculture in Europe in the twelfth and thirteenth centuries by way of comparison. Carlton Hayes states : 'The twelfth and thirteenth centuries constituted a period of significant agrarian as well as commercial development in Europe. Much of the change was a natural expansion of agriculture resulting from an increase in population. But the growth of trade and urban life also radically affected the economy of the rural manor. Since much of the surplus population was drawn to the towns and since towns depended on food brought from the outside, a heightened agricultural production was necessitated. And the provisioning of towns opened up the possibility of farming for profit, rather than merely for local manorial consumption. Thus the clearing of new agricultural land from the forest, which had commenced in the early middle ages, reached its climax in the twelfth and thirteenth centuries. Afterwards, for several centuries, there was not much further addition to cultivated land in central or western Europe. A great deal of the new farming of the high middle age was done in districts opened up along the frontiers, but much was also done within the older regions, where there was forest land to be cleared. Technological improvements furthered agricultural progress. The wheelbarrow, which came into use in the thirteenth century, was helpful; and the appearance of windmills in the same period was of marked utility, especially in areas where natural waterflow was sluggish.

'The effects of the rise of towns on agriculture were striking. Manors which in the early feudal age produced only for home consumption were now able to produce a surplus for sale outside. Grain became an article of mercantile circulation, brought by the peasant to the town or sold to the merchant who traded in foodstuffs. As a consequence, money circulated more freely in the countryside. Peasants were able to buy freedom or to become tenant farmers paying a fixed rent. Some became labourers for hire. The size of holdings could be increased more readily by hard-working

⁴Zia-ud-din Barni. *Tarikh-i-Firoz Shahi*, in Elliot and Dowson, *The History of India...*, Vol. I, pp. 18, 183

peasants who invested their savings in more land. Even the bourgeoisie speculated in land. The immobility of the manorial relationship was broken.

'Since the dues and rents exacted by the landlords were usually fixed by immemorial custom and did not fluctuate, and since the general increase in money caused a rise in prices, many landlords—nobles, abbey, and bishops—faced serious financial loss if not ruin. These in order to keep their serfs from running away to the towns and if possible to increase their revenues were forced to enfranchise serfs and to accept money rent. Since the process of emancipation was primarily the result of economic change, it was more rapid and widespread in the regions where commercial development was most advanced. Accordingly, in western and central Europe, by A.D. 1300, a substantial proportion of the peasants were in reality tenant farmers, not serfs in the older sense. In eastern Europe, on the other hand, serfdom was more general and lasted longer.

'Another significant effect of the commercial revival was the tendency toward agricultural specialization. Certain regions concentrated on one product. Some landlords devoted all their acres to a crop which could be exported. The Cistercian abbey of England, for example, were famous for their wool. In certain favourable areas, vineyards spread at the expense of grain growing. All these tendencies quickened in the later middle ages.'⁵ In India such developments did not take place, and agriculture deteriorated.

PRICE CONTROL MEASURES OF ALA-UD-DIN

Ala-ud-din made his mark in history by his price control measures. Barni thus narrates how it was achieved. 'The Sultan consulted with his most experienced ministers as to the means of reducing the prices of provisions without resorting to severe and tyrannical punishments. His councillors replied that the necessities of life would never become cheap until the price of grain was fixed by regulations and tariffs. Cheapness of grain is a universal benefit. So some regulations were issued, which kept down the price for some years.

REGULATION I. FIXING THE PRICE OF GRAIN

Wheat	per maund	7½	jitals
Barley	"	4	"
Rice	"	5	"
Māsh	"	5	"
Chanā	"	5	"
Moth	"	3	"

⁵Hayes, Carlton J.H. *History of Europe*, pp. 257-259

This scale of prices was maintained as long as Ala-ud-din lived, and grain never rose one *dāng*, whether the rains were abundant or scanty. This unvarying price of grain in the markets was looked upon as one of the wonders of the time.

REGULATION II. ADMINISTRATIVE ARRANGEMENT

To secure the cheapness of grain, Malik Kabul Ulugh Khan, a wise and practical man, was appointed controller of the markets. He received a large territory and used to go round the markets in great state with many a horse and on foot. He had clever deputies, friends of his own, who were appointed by the crown. Intelligent spies also were sent into the markets.

REGULATION III. ACCUMULATION OF CORN IN THE KING'S GRANARIES

The Sultan gave orders that all the *khalsa* villages of the doab should pay the tribute in kind. Corn was brought into the granaries of the city of Delhi. In the country dependent on the New City half the Sultan's portion of the produce was ordered to be taken in grain. In Jhain also, and in the villages of Jhain, stores were to be formed. These stores of grain were to be sent into the city in caravans. By these means so much royal grain came to Delhi that there never was a time when there were not two or three royal granaries full of grain in the city. When there was a deficiency of rain, or when for any reason the caravans did not arrive, and grain became scarce in the markets, then the royal stores were opened and the corn was sold at the tariff price, according to the wants of the people. Grain was also consigned to the caravans from New City. Through these two rules, grain never was deficient in the markets, and never rose one *dāng* above the fixed price.

REGULATION IV. CONTROL OVER TRANSPORTATION

The Sultan placed all the carriers of his kingdom under the controller of the markets. Orders were given for arresting the head carriers and for bringing them in chains before the controller of the markets, who was directed to detain them until they agreed upon one common mode of action and gave bail for each other. Nor were they to be released until they brought their wives and children, beasts of burden and cattle, and all their property, and fixed their abodes in the villages along the banks of the Jumna. An overseer was to be placed over the carriers and their families, on behalf of the controller of the markets, to whom the carriers were to submit. Until all this was done the chiefs were to be kept in chains. Under the operation of this rule, so much grain found its way into the markets that it was unnecessary to open the royal stores, and grain did not rise a *dāng* above the standard.

REGULATION V. REGRATING

The fifth provision for securing the cheapness of grain was against regrating. This was so rigidly enforced that no merchant, farmer, corn-handler, or any one else, could hold back secretly a *man* or half a *man* of grain and sell it at his shop for a *dāng* or a *diram* above the regulated price. If regrated grain was discovered, it was forfeited to the Sultan, and the regrater was fined. Engagements were taken from the governors and other revenue officers in the doab that no one under their authority should be allowed to regrate, and if any man was discovered to have regrated, the deputy and his officers were fined, and had to make their defence to the throne.

REGULATION VI. CONTROL OVER CULTIVATORS

Engagements were taken from the provincial revenue officers and their assistants that they would provide that the corn-carriers should be supplied with corn by the *raiya*s on the field at a fixed price. The Sultan also gave orders that engagements should be taken from the chief *diwan*, and from the overseers and other revenue officers in the countries of the doab, near the capital, that they should so vigorously collect the tribute that the cultivators should be unable to carry away any corn from the fields into their houses and to regrate. They were to be compelled to sell their corn in the fields to the corn-carriers at a low price, so that the dealers should have no excuse for neglecting to bring the corn into the markets. A constant supply was thus secured. To give the villagers a chance of profit, they were permitted to carry their corn into the market and sell it at the regulation price.

REGULATION VII. CONTROL OVER MARKET

Reports used to be made daily to the Sultan of the market rate and of the market transactions from three distinct sources: 1st, the superintendent made a report of the market rate and of the market transactions; 2nd, the *barids*, or reporters, made a statement; 3rd, the *manhis*, or spies, made a report. If there was any variance in these reports, the superintendent received punishment. The various officials of the market were well aware that all the ins and outs of the market were reported to the Sultan through three different channels, and so there was no opportunity of their deviating from the market rules in the smallest particular.

All the wise men of the age were astonished at the evenness and the price in the markets. If the rains had fallen regularly, and the seasons had been always favourable, there would have been nothing so wonderful in grain remaining at one price; but the extraordinary part of the matter was that during the reign of Ala-ud-din there were years in which the rains were deficient, but instead of the usual scarcity ensuing, there was no want of corn in Delhi, and there was no rise in the price either in the grain brought

out of the royal granaries, or in that imported by the dealers. This was indeed the wonder of the age, and no other monarch was able to effect it. Once or twice when the rains were deficient a market overseer reported that the price had risen half a *jital*, and he received twenty blows with the stick. When the rains failed, a quantity of corn, sufficient for the daily supply of each quarter of the city, was consigned to the dealers every day from the market, and half a *man* used to be allowed to the ordinary purchasers in the markets. Thus the gentry and traders, who had no villages or lands, used to get grain from the markets. If in such a season any poor person went to the market, and did not get assistance, the overseer received his punishment whenever the fact found its way to the king's ears.

For the purpose of securing low prices for piece goods, garments, sugar, vegetables, fruits, animal oil, and lamp oil, five Regulations were issued.

SLAVERY

For securing a cheap rate for the purchase of horses, slaves, and cattle four Regulations were issued.

REGULATION IV. PRICE OF SLAVES

The price of a serving girl was fixed from 5 to 12 *tankas*, of a concubine at 20, 30 or 40 *tankas*. The price for a male slave was 100 or 200 *tankas*, or less. If such a slave as could not in these days be bought for 1,000 or 2,000 *tankas* came into the market, he was sold for what he would fetch, in order to escape the reports of the informers. Handsome lads fetched from 20 to 30 *tankas*; the price of slave-labourers was 10 to 15 *tankas*, and of young domestic slaves 17 or 18 *tankas*

Great pains were taken to secure low prices for all things sold at the stalls in the markets, from caps to shoes, from combs to needles, etc., etc. Although the articles were of the most trifling value, the Sultan took the greatest trouble to fix the prices and settle the profit of the vendors.

The fourth Regulation for securing cheapness provided severe punishments; blows, and cutting off flesh from the haunches of those who gave short weight. The market people, however, could not refrain from giving short weight. They sold their goods according to the established rate, but they cheated the purchasers in the weight, especially ignorant people and children. When the Sultan turned his attention to the subject, he discovered that the market people, as usual, were acting dishonestly. He, therefore, used to send for some of the poor ignorant boys, who attended to his pigeon-houses, and to give them ten or twenty *dirams* to go into the market and buy bread and various other articles for him. When the boys had purchased the articles, and brought them to the Sultan, the inspector of the market was sent for, and he had to weigh the things in the presence of the Sultan. If the weight was less than required by the Sultan's scale of prices,

the inspector took the lad and went to the shop of the dealer who had given short weight, and placed the purchased article before him. The inspector then took from his shop whatever was deficient, and afterwards cut from his haunches an equal weight of flesh, which was thrown down before his eyes. The certainty of this punishment kept the traders honest, and restrained them from giving short weight, and other knavish tricks. Nay, they gave such good weight that purchasers often got somewhat in excess.'

'During the reign of Ala-ud-din, either through his agency or the beneficent ruling of Providence, there were several remarkable events and matters which had never been witnessed or heard of in any age or time, and probably never will again', states Barni. 'The cheapness of grain, clothes, and necessaries of life. The constant succession of victories. The destruction and rolling back of the Mongols. The maintenance of a large army at a small cost. The severe punishment and repression of rebels, and the general prevalence of loyalty. The safety of the roads in all directions. The honest dealings of the *bazar* people. The erection and repair of mosques, minarets, and forts, and the excavation of tanks. That during the last ten years of the reign the hearts of Musulmans in general were inclined to rectitude, truth, honesty, justice and temperance.'⁶

Ala-ud-din certainly succeeded in preserving an artificial cheapness in the markets of Delhi, but at the cost of savage oppression. Cheapness of foodgrains for the city people was achieved at the cost of the Hindu peasants.

Muhammed Habib gives the title of rural revolution to the revenue administrative measures of Ala-ud-din. He further equates Ala-ud-din with Mao Tse-Tung. To give such proceedings the name of rural revolution is inappropriate and misleading. The beneficiaries of these measures were the Sultan, his Turkish officials and army, and not the cultivators of land. They had to give half the gross produce to the government instead of one-sixth provided by immemorial rule. Thus their standard of living which was already wretched, was further lowered.

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⁶Zia-ud-din Barni. *Tarikh-i-Firoz Shahi*, in Elliot and Dowson, *The History of India...*, Vol. III, pp. 192 to 197, 206, 207

CHAPTER 5

THE RULE OF THE TURKS

THE TUGHLAKS

A.D. 1321-1325

GHIAS-UD-DIN TUGHLAK, HIS REVENUE AND POSTAL SYSTEM

ALA-UD-DIN's successor was his son, Kutb-ud-din Mubarak, a pleasure-loving debauch, who held his durbar decked out in female finery and jewels. He was killed by Khusru Khan, his general, in A.D. 1320. Khusru Khan assumed the title of Sultan Nasir-ud-din.

GHIAS-UD-DIN TUGHLAK (A.D. 1321-1325)

In A.D. 1321, Ghias-ud-din Tughlak, a Turk who was Governor of Depalpur in Punjab, rebelled and defeated Khusru Khan and became the Sultan of Delhi. He built the fort of Tughlakabad. He subdued rebellious governors and Hindu rulers. In A.D. 1323 Bidar and Warangal were captured and the Kakatiya kingdom came to an end. Bengal was reconquered.

ENCOURAGEMENT OF AGRICULTURE

The chief concern of Ghias-ud-din Tughlak, however, was the encouragement and extension of agriculture. He had understood that only a monetary incentive could motivate the cultivators to improve their agriculture, and he reduced the atrocious demand for land revenue fixed by Ala-ud-din Khalji. Zia-ud-din Barni thus narrates, in his *Tarikh-i-Firoz Shahi*, the measures taken by the Sultan. 'In the generosity of his nature, he ordered that the land revenues of the country should be settled upon just principles with reference to the produce. The officers of the Exchequer were ordered not to assess more than one in ten, or one in eleven upon the reports of informers or the statements of valuers. They were to be careful that cultivation increased year by year. Something was to be left over and above the tribute, so that the country might not be ruined by the weight of taxation and the way to improvement be barred. The revenue was to be collected in such a way that the *raiya*s should increase their cultivation; that the lands already in cultivation might be kept so, and some little be added to them every year. So much was not to be exacted at once that the cultivation should fall off, and no increase be made in future. Countries are ruined and are kept in poverty by excessive taxation and the exorbitant demands of kings. The Hindus were to be taxed so that they might not be blinded with wealth, and so become discontented and rebellious; nor, on

the other hand, be so reduced to poverty and destitution as to be unable to pursue their husbandry.¹

In regard to the Chiefs and headmen, the so-called intermediaries, Ghias-ud-din rejected Ala-ud-din's view that they should be reduced to the economic level of peasants. They had responsibilities, and were entitled to remuneration accordingly; their perquisites were to be left to them without assessment, and their income from grazing was not to be taxed; but the Governors were to take measures to prevent them from levying any additional revenue from the peasants. In this way it was hoped to enable the Chiefs to live in comfort, but not in such affluence as might lead to rebellion.

POSTAL SYSTEM

Shahabu-d-Din Abu-l 'Abbas Ahmad, a native of Damascus (d. 1348 A.D.) in his *Masaliku-l Absar fi Mamaliku-l Amsar* (Travels of the Eyes into the Kingdoms of Different Countries) thus describes this system of communication. 'For communicating the events which happen in distant provinces, there are established, between the capital and the chief cities of the different countries, posts, placed at certain distances from each other, which are like the post-relays in Egypt and Syria; but they are less wide apart, because the distance between them is not more than four bow-shots, or even less. At each of these posts ten swift runners are stationed, whose duty it is to convey letters to the next station without the least delay. As soon as one of these men receives a letter, he runs off as rapidly as possible, and delivers it to the next runner, who starts immediately with similar speed, while the former returns quietly to his own post. Thus a letter from a very distant place is conveyed in a very short time with greater alacrity than if it had been transmitted by post, or by camel express. At each of these post-stations there are mosques, where prayers are said, and where travellers can find shelter, reservoirs full of good water, and markets where all things necessary for the food of man and beast can be purchased, so that there is very little necessity for carrying water, or food, or tents.'²

Ibn Battuta, who saw this system of post during the reign of Muhammed-bin-Tughlak, states, 'The *barid* or post in India is of two kinds. The horse-post is called *ulak*, and is carried on by means of horses belonging to the Sultan stationed at every four miles. The foot-post is thus arranged. Each mile is divided into three equal parts, called *dawah*, which signifies one-third of a mile. Among the Indians the mile is called *kos*. At each third of mile there is a village well populated; outside of which are three tents, in which

¹Zia-ud-din Barni. *Tarikh-i-Firoz Shahi*, in Elliot and Dowson, *The History of India. . .*, Vol. III, pp. 230, 231

²Shahabu-d-Din Abu-l 'Abbas Ahmad. *Masaliku-l Absar fi Mamaliku-l Amsar*, in Elliot and Dowson, *The History of India. . .*, Vol III, p. 581

are men ready to depart. These men gird up their loins, and take in their hands a whip about two cubits long, tipped with brass bells. When the runner leaves the village, he holds the letter in one hand, and in the other the whip with the bells. He runs with all his strength, and when the men in the tents hear the sound of the bells they prepare to receive him. When he arrives, one of them takes the letter and sets off with all speed. He keeps on cracking his whip until he reaches the next *dawah*. Thus, these couriers proceed until the letter reaches its destination.

This kind of post is quicker than the horse-post; and the fruits of Khurasan, which are much sought after in India, are often conveyed by this means.' It may be mentioned that this system of post was used by the Sultan's government only for official communication, and it was not available to common people.

DEATH OF GHIAS-UD-DIN

Ghias-ud-din, on return from an expedition to Bengal, was received with great pomp by his son Muhammad Jauna, entitled Ulugh Khan, who is better known by his royal name Muhammad-bin-Tughlak. A wooden pavilion was built and magnificently adorned with colourful tapestry. It suddenly collapsed and Ghias-ud-din was killed. He lies buried in a massive tomb, which he had built in his life-time in front of his citadel of Tughlaka-bad.

CHAPTER 6

THE RULE OF THE TURKS

THE TUGHLAKS

MUHAMMAD-BIN-TUGHLAK

A.D. 1325-1351

IBN BATTUTA, THE TRAVELLER OF ISLAM

EXPERIMENTS IN CHANGE OF CAPITAL, PAPER MONEY

COURT CEREMONIAL, SYSTEM OF GIFTS

ULUGH KHAN, the parricide, ascended the throne in A.D. 1325 and assumed the name of Muhammad-bin-Tughlak, as he is known in history books. He was a most extra-ordinary man, a keen student of Persian poetry, a philosopher and a mathematician. He had good knowledge of logic and the philosophy of the Greeks. He had a scientific mind and he used to attend sick persons for the purpose of watching the symptoms of extraordinary diseases. At the same time he was cruel and recklessly spilled human blood. Ibn Battuta describing the character of the Sultan, says, 'This king is of all men the most addicted to the making of gifts and the shedding of blood. His gate is never without some poor man enriched or some living man executed, and there are current amongst the people many stories of his generosity and courage and of his cruelty and violence towards criminals. He slew both small and great, and spared not the learned, the pious, or the noble. Daily there were brought to the council-hall men in chains, fetters, and bonds, and they were led away, some to execution, some to torture, some to scourging. May God preserve us from such calamities!'¹ Some of his schemes indicates that he was a megalomaniac and not fully sane, e.g. plan for conquest of China by sending an expedition across the Himalayas and transfer of capital from Delhi to Deogir in Deccan. On his return from Deogir on one occasion he caused a tooth which he had lost to be interred in a magnificent stone mausoleum, which is still in existence at Bhir.

IBN BATTUTA (THE TRAVELLER OF ISLAM)

Our knowledge of the state of India in early half of the fourteenth century is largely due to the visit paid by Ibn Battuta, a traveller with keen power of observation. He had an insatiable lust for travel and was always on the move. He calls himself 'The Traveller of Islam', and his ambition was to see all countries under Islamic domination. He was a native of Tangiers in Morocco. He travelled over the greater part of Asia, and visited India in the reign of Muhammad-bin-Tughlak, about whose generosity to

¹Gibb, H.A.R. *The Travels of Ibn Battuta*, p. 657

learned Moslems from foreign countries he had heard many accounts. After journeying through the Central Asian desert, he arrived at Khwarizm, the largest city of the Turks, known for the quality of its melons. Passing through Bukhara and Samarqand he reached Balkh. From Balkh he travelled through the mountainous country of Kohistan. He crossed into Afghanistan over the Hindukush, which, he explains, means 'Slayer of Indians', because the Hindu slave boys and girls who were brought from India died there in large numbers as a result of the extreme cold and the quantity of snow. He joined a caravan and entered Punjab. A great caravan which preceded him lost many camels and horses, but he arrived safely at the Indus, which he describes as the river of Sind. He reached this river on the night of 12 September 1333. After crossing the Indus he passed through a forest of reeds, in which he saw a rhinoceros for the first time. The heat was intense, and his companions used to sit naked except for a cloth round the waist and another soaked with water on their shoulders; this dried in a very short time and they had to keep constantly wetting it again. He ultimately reached the city of Multan. From Multan he reached the town of Ajudh-an (Pakpatan), where he met the saint Sheikh Farid. From Ajudh-an he reached the city of Abohar, now in Ferozepur district of the Punjab. From Abohar, he reached Sarsati, the modern Sirsa in Hissar district, which was known for its excellent rice. From Sarsati he reached Hansi, and ultimately Palam, the suburb of Delhi.

After a long stay during which he was sustained by gifts of money given by the Wazir and the Queen mother he had an audience with the Sultan, who gave orders to assign him the villages of Badali, Basahi and half of Balara, which yielded a total revenue of 5,000 dinars a year. In A.D. 1334 he had another audience with the Sultan. Every time the Sultan said an encouraging word to him, he kissed his hand. He recalls that he kissed it seven times. He was given a gold embroidered robe of honour by the Sultan. In addition to the three villages he had, he was given the villages of Jawza and Malikpur. In all, he received a revenue of 12,000 dinars a year from these villages. Eventually he was appointed qadi of the royal city of Delhi.

The Travels of Ibn Battuta illumine a dark century of Indian history. It informs us of the history of the early Moslem rulers of India from Sultan Kutb-ud-din Aibak onwards to Sultan Muhammad-bin-Tughlak. As he dictated his travels on return to his native Morocco, he could write fearlessly. It tells us about the Sultan's character, his idiosyncracies, palace ceremonial, public audiences, festival ceremonies, as well as of tortures and executions ordered by him. We also learn about the conditions of the city of Delhi, its mosques, hospices and tanks. In the following account Ibn Battuta describes the Palace of the Sultan, his public audience and court ceremonial.

THE SULTAN'S PALACE, AUDIENCE HALL AND PUBLIC AUDIENCE

'The Sultan's palace at Dihli is called *Dār Sarā* and contains many gates. At the first gate there are posted a number of men in charge of it, and beside it sit buglers, trumpeters and pipe-players. When any amir or person of note arrives, they sound their instruments and say during this fanfare, "So-and-so has come, so-and-so has come." The same takes place also at the second and third gates. Outside the first gate are platforms on which sit the *jalladūn*, who are the executioners, for the custom among them is that when the Sultan orders a man to be executed, the sentence is carried out at the gate of the public audience hall, and the body lies there three nights. Between the first and second gates there is a large vestibule with platforms built along with sides, on which sit those troops whose turn of duty it is to guard the gates. At the second gate also there are seated the porters who are in charge of it. Between the second and third gates there is a large platform on which the principal *naqīb*, sits; in front of him there is a gold mace, which he holds in his hand, and on his head he wears a tall jewelled cap of gold, surmounted by peacock feathers. The other *naqībs* stand before him, each wearing a low gilded cap on his head and a girdle round his waist and holding in his hand a whip with a gold or silver handle. This second gate leads to a large and commodious audience hall in which the people sit.

'At the third gate there are platforms occupied by the scribes of the door. One of their customs is that none may pass through this gate except those whom the Sultan has expressly designated to enter, and for each person he prescribes a number of his companions and men who may enter along with him. Whenever any person comes to this gate the scribes write down "So-and-so came at the first hour" or the second or later hours, until the close of the day, and the Sultan studies this report after the last evening prayer. They also take note of everything of any kind that happens at the gate, and certain of the sons of the *maliks* are appointed to transmit what they write to the Sultan. Another of their customs is that anyone who absents himself from the Sultan's palace for three days or more, with or without excuse, may not enter this door thereafter except by the Sultan's permission. If he has an excuse of illness or otherwise he presents before him a gift such as is suitable (for one of his rank or office) to offer to the Sultan. So also do those who present themselves at the court on return from their journeys; the doctor of the law presents a copy of the *Qurān* or a book or the like, the faqir presents a prayer-carpet, rosary, toothpick, etc., and the amirs and such present horses, camels and weapons. This third door opens into the immense and vast hall called *Hazār Ustūn*, which means (in Persian) 'a thousand pillars'. The pillars are of painted wood and support a wooden roof, most exquisitely carved. The people sit under this, and it is in this hall that the Sultan sits for public audience.

'The order of his public audience. As a rule his audiences are held after the afternoon prayer, although he often holds them early in the day. He sits on a raised seat standing on a dais carpeted in white, with a large cushion behind him and two others as arm-rests on his right and left. His left foot is tucked under him, in the same way that one sits when reciting the creed during prayers; this is the way in which all the people of India sit. When he takes his seat, the vizier stands in front of him, the secretaries behind the vizier, then the chamberlains behind them. The chief of the chamberlains is Firuz Malik, the son of the Sultan's uncle and his deputy, and he is that one of the chamberlains who stands closest to the Sultan. Next to him comes the private chamberlain, then the deputy private chamberlain, then the steward of the palace and his deputy, then (an officer called) 'the honour of the chamberlains', (another officer called) 'the master of the chamberlains', and a group (of officials) under their orders; and next, following the chamberlains, the *naqibs*, of whom there are about a hundred.

'As the Sultan sits down the chamberlains and *naqibs* say, in their loudest voice, *Bismillah*. Then the 'great king' Qabula takes his place behind the Sultan, standing with a fly-whisk in his hand to drive off the flies. A hundred armour-bearers stand on the right of the Sultan and a like number on the left, carrying shields, swords, and bows. To right and left all the way down the hall stand the Grand Qadi, next to him the chief preacher, then the rest of the qadis, then the chief jurists, then the chiefs of the Shari'is (descendants of the Prophet), then the shaikhs, then the Sultan's brothers and relations by marriage, then the principal amirs, then the chiefs of those called *aziz* (that is to say, the foreigners), then the qadis.

'Then they bring in sixty horses saddled and bridled with the royal harness, some of them with the trappings of the Caliphate, namely those with bridles and girths of black silk gilded, and some with the same in white silk gilded, which are reserved for the Sultan's exclusive use. Half of these horses are ranged on the right and half on the left, where the Sultan can see them. Next fifty elephants are brought in; these are adorned with silken and gold cloths, and have their tusks shod with iron for service in killing criminals. On the neck of each elephant is its mahout, who carries a sort of iron battle-axe with which he punishes it and directs it to do what is required of it. Each elephant has on its back a sort of large box capable of holding twenty warriors or more or less, according to its bulk and the size of its body. At the corners of (each) such box there are fixed four banners. These elephants are trained to make obeisance to the Sultan and to incline their heads, and when they do so the chamberlains cry, in a loud voice, *Bismillah*. They also are arranged half on the right and half on the left, behind the persons (already) standing there. As each person enters who has an appointed place of standing on the right or left, he makes obeisance on reaching the station of the chamberlains, and the chamberlains say

Bismillah, regulating the loudness of their utterance by the height of reputation of the person who is making his obeisance, and who then retires of his appointed place on the right or left, beyond which he never passes. If it is one of the infidel Hindus who makes obeisance, the chamberlains and the naqibs say to him, "God guide thee". The Sultan's slaves stand behind all those in attendance, having in their hands shields and swords, and no one can come in (to the hall) between their ranks, but only by passing before the chamberlains who stand in front of the Sultan.

CEREMONIES ON RETURN FROM A JOURNEY

The ceremonies which were observed on the return of the Sultan from journeys outside the capital are thus described by Ibn Battuta. 'When the Sultan returns from a journey, the elephants are decorated, and on sixteen of them are placed sixteen parasols, some brocaded and some set with jewels. Wooden pavilions are built several storeys high and covered with silk cloths, and in each storey there are singing girls wearing magnificent dresses and ornaments, with dancing girls amongst them. In the centre of each pavilion is a large tank made of skins and filled with syrup-water, from which all the people, natives or strangers, may drink, receiving at the same time betel leaves and areca-nuts. The space between the pavilions is carpeted with silk cloths, on which the sultan's horse treads. The walls of the street along which he passes from the gate of the city to the gate of the palace are hung with silk cloths. In front of him march footmen from his own slaves, several thousands in number, and behind come the mob and the soldiers. On one of his entries into the capital I saw three or four small catapults placed on elephants throwing gold and silver coins amongst the people from the moment when he entered the city until he reached the palace.'³

ESTABLISHMENT OF THE SULTAN AND SHIKAR

The main pre-occupations of the Sultan were war-fare, shikar, and offering and receiving gifts. Besides he kept an enormous establishment for feasting his nobles and military leaders, and for show and entertainment.

Shahab-ud-din, the author of *Masaliku-l Absar*, states, 'At the court of this prince, there are maintained 1,200 physicians; 10,000 falconers who ride on horseback and carry birds trained for hawking; 300 beaters go in front and put up the game; 3,000 dealers in articles required for hawking accompany him when he goes out hunting; 500 table companions dine with him. He supports 1,200 musicians excluding his slave musicians to the number of 1,000, who are more especially charged with the teaching of music, and 1,000 poets of the three languages, Arabic, Persian and Indian. A repast is served at which 20,000 men are present—Khans, Maliks, Amirs,

³Gibb, H.A.R. *The Travels of Ibn Battuta*, Vol. III, pp. 658-662

Sipahsalars, and other officers. At his private meals, i.e. at dinner and supper, the Sultan receives learned lawyers to the number of 200, who share meals with him and converse with him upon learned topics.' According to the report of the royal cook, 2,500 oxen, 2,000 sheep, and other animals and birds were daily slaughtered for the supplies of the royal kitchen.' For shikar, he employed 10,000 falconers who rode on horseback in the chase, 3,000 beaters, 3,000 provision dealers, and others. Four collapsible double-storeyed houses were carried in his train by 200 camels, together with tents, canopies and a variety of pavilions. The object of these hunts was to exercise his men and horses, so that they keep fit, and may not be found wanting when times of danger and war arrive.

REVENUE COLLECTIONS AND GIFTS OF PROVINCIAL OFFICERS

Revenue collected from the provinces was presented by the provincial officers in the form of ingots or vessels made of gold and silver. Ibn Battuta states, 'When the provincial officers come to the court with gifts and sums of revenue collected from taxes in the provinces, they have vessels made of gold and silver, such as basins, ewers and so forth. They also have ingots of gold and silver made like bricks, which they call *khisht* (Persian, meaning 'brick'). The *farrashān* (those who look after the furnishings), who are the Sultan's slaves, take up their stand in a row, with the gift in their hands, each one of them holding one piece. Then the elephants are brought forward, if there should be any of them included in the gift, next the horses saddled and bridled, then the mules, then the camels carrying the money.'

SULTAN'S GIFTS TO NOBLES

Sultan Muhammad-bin-Tughlak used to present two robes of honour, one in the cold and the other in the hot season, to each of his nobles. In the reign of Sultan Firuz Tughluq there were 36 different stores full of choice and rare goods. The superintendents of the stores were instructed to buy every rare and exquisitely finished article, at any price.

MANUFACTORY—KARKHANAS

For the manufacture of robes of honour and other textiles which were presented to the nobles and foreigners who came as visitors, the Sultan maintained a *karkhana* or manufactory. Shahabu-d-Din states, 'The Sultan has a manufactory, in which 400 silk-weavers are employed, and where they make stuffs of all kinds for the dresses of persons attached to the Court, for robes of honour and presents, in addition to the stuffs which are brought every year from China, 'Irak, and Alexandria. Every year the Sultan distributes 200,000 complete dresses, 100,000 in spring, and 100,000 in autumn. The spring dresses consist principally of the goods manufactured at Alexandria. Those of the autumn are almost exclusively of silk manu-

factured at Delhi or imported from China and 'Irak. Dresses are also distributed to the monasteries and hermitages.

'The Sultan keeps in his service 500 manufacturers of golden tissues, who weave the gold brocades worn by the wives of the Sultan, and given away as presents to the *amirs* and their wives. Every year he gives away 10,000 Arab horses, of excellent breed, sometimes with saddle and bridle. . .'

ROYAL STORES

The articles manufactured were kept in Royal Stores which maintained separate sections for the supply of royal standards (the '*alamkhana*') and the care of the royal library (*kitabkhana*) and the gong and chronometer (*ghariyalkhana*), the jewel house (*jawahirkhana*) and the royal pastures. These were under the charge of a noble who was assisted by subordinate superintendents (*mutasarrifs*). All of them were paid very high salaries, and the charge of a store was considered quite as remunerative as the governorship of a big town like Multan.³

GIFTS FROM FOREIGNERS

Foreigners who came to the court of the Sultan for seeking employment always brought some gifts. They had partnership with merchants and as such were not required to make any cash payment. Ibn Battuta states, 'Every person proceeding to the court of this king must needs have a gift ready to present to him, in order to gain his favour. The sultan requites him for it by a gift many times its value. When his subjects grew accustomed to this practice, the merchants in Sind and India began to furnish each newcomer with thousands of *dinars* as a loan, and to supply him with whatever he might desire to offer as a gift or to use on his own behalf, such as riding animals, camels, and goods. They place both their money and their persons at his service, and stand before him like attendants. When he reaches the Sultan, he receives a magnificent gift from him and pays off his debt to them. This trade of theirs is a flourishing one and brings in vast profits. On reaching Sind I followed this practice and bought horses, camels, white slaves and other goods from the merchants. I had already bought from an 'Iraqi' merchant in Ghazna about thirty horses and a camel with a load of arrows, for this is one of the things presented to the Sultan. This merchant went off to Khurasan and on returning to India received his money from me.'⁴

EXCHANGE OF GIFTS WITH A CHINESE EMBASSY

An embassy came from the Buddhist Emperor of China. 'The king of

³Shahabu-d-Din Abu-l 'Abbas Ahmad. *Masaliku-l Absar*, in Elliot and Dowson, *The History of India. . .*, Vol. III, p. 578

Gibb, H.A.R. *Rehla of Ibn Battuta: Travels in Asia and Africa*, pp. 184, 185

China had sent valuable gifts to the Sultan, including a hundred slaves of both sexes, five hundred pieces of velvet and silk cloth, musk, jewelled garments and weapons, with a request that the Sultan would permit him to rebuild the idol-temple which is near the mountains called Qarajil (Himalayas). It is in a place known as Sambhal, to which the Chinese go on pilgrimage; the Muslim army in India had captured it, laid it in ruins and sacked it. The Sultan, on receiving this gift, wrote to the king saying that the request could not be granted by Islamic law, as permission to build a temple in the territories of the Muslims was granted only to those who paid a poll-tax; to which he added, "If thou wilt pay the *jizya* we shall empower thee to build it. And peace be on those who follow the True Guidance." He requited his present with an even richer one—a hundred thoroughbred horses, a hundred white slaves, a hundred Hindu dancing and singing girls, twelve hundred pieces of various kinds of cloth, gold and silver candelabra and basins, brocade robes, caps, quivers, swords, gloves embroidered with pearls, and fifteen eunuchs.' This indicates the scale on which gifts were exchanged in inter-state dealings, and also display of unprecedented arrogance.

Apart from his eccentricities and generosity, Muhammad-bin-Tughlak deserves mention for three fantastic projects, viz. the transfer of capital from Delhi to Deogir in Deccan, issue of copper tokens as substitute for silver money, and a disastrous expedition into the Outer Himalayas.

TRANSFER OF CAPITAL FROM DELHI TO DEOGIR IN DECCAN

'A project of Sultan Muhammad, which was ruinous to the capital of the empire, and distressing to the chief men of the country', says Barni, 'was what of making Deogir his capital, under the title of Daulatabad. This place held a central situation: Delhi, Gujarat, Lakhnauti, Sat-ganw, Sunar-ganw, Tilang, Ma'bar, Dhur-samundar, and Kampila were about equidistant from thence, there being but a slight difference in the distances. Without any consultation, and without carefully looking into the advantages and disadvantages on every side, he brought ruins upon Delhi, that city which, for 170 or 180 years, had grown in prosperity, and rivalled Baghdad and Cairo. The city, with its *sarais*, and its suburbs and villages, spread over four or five *kos*. All was destroyed. So complete was the ruin that not a cat or a dog was left among the buildings of the city, in its palaces or in its suburbs. Troops of the natives, with their families and dependents, wives and children, men-servants and maid-servants, were forced to remove. The people, who for many years and for generations had been natives and inhabitants of the land, were broken-hearted. Many, from the toils of the long journey, perished on the road, and those who arrived at Deogir could

not endure the pain of exile. In despondency they pined to death. All around Deogir, which is an infidel land, there sprung up graveyards of Musulmans. The Sultan was bounteous in his liberality and favours to the emigrants, both on their journey and on their arrival; but they were tender, and they could not endure the exile and suffering. They laid down their heads in that heathen land, and of all the multitudes of emigrants, few only survived to return to their home. Thus this city, the envy of the cities of the inhabited world, was reduced to ruin. The Sultan brought learned men and gentlemen, tradesmen and landholders, into the city (Delhi) from certain towns in his territory, and made them reside there. But this importation of strangers did not populate the city; many of them died there, and more returned to their native homes. These changes and alterations were the cause of great injury to the country.⁵

Another explanation given for the change of capital was the Sultan's annoyance with the inhabitants of Delhi who wrote letters full of insults and invectives against him. "They sealed them up, and writing upon them these words, "By the head of the king of the world, no one but himself must read this writing," they threw them at night into the hall of audience. When the Sultan opened them he found that they contained insults and invectives against himself. He decided to ruin Delhi; so he purchased all the houses and inns from the inhabitants, paid them the price, and then ordered them to remove to Daulatabad. At first they were unwilling to obey, but the crier of the monarch proclaimed that no one must be found in Delhi after three days.

"A person in whom I felt confidence assured me that the Sultan mounted one evening upon the roof of his palace, and, casting his eyes over the city of Delhi, in which there was neither fire, smoke, nor light, he said, "Now my heart is satisfied, and my feelings are appeased." When we entered this capital we found it in the state which has been described. It was empty, abandoned, and had but a small population."⁶

ISSUE OF COPPER MONEY AS SUBSTITUTE FOR SILVER MONEY

Hard-pressed for cash to meet the expenditure on a large army, he devised an ingenious solution. He had heard about use of paper currency of Kublai Khan in China⁷, and of the parchment currency of the Il-Khans of Iran. If a piece of paper bearing the authentication of a king could pass on as money, then why not tokens in copper? He issued copper tokens,

⁵Zia-ud-din Barni, *Tarikh-i-Firoz Shahi*, in Elliot and Dowson, *The History of India...*, Vol. III, pp. 238, 239

⁶Gibb, H.A.R. *Travels of Ibn Battuta*, in Elliot and Dowson, *The History of India...*, Vol. III, pp. 613, 614

to pass current for the silver *tanka* of 140 grains. As a result of this experiment, the entire economy was shattered. Barni states, "The project did great harm to the country. It increased the daring and arrogance of the disaffected in Hindustan, and augmented the pride and prosperity of all the Hindus. This was the issue of copper money. The Sultan, in his lofty ambition, had conceived it to be his work to subdue the whole habitable world and bring it under his rule. To accomplish this impossible design, an army of countless numbers was necessary, and this could not be obtained without plenty of money. The Sultan's bounty and munificence had caused a great deficiency in the treasury, so he introduced his copper money, and gave orders that it should be used in buying and selling, and should pass current, just as the gold and silver coins had passed. The promulgation of this edict turned the house of every Hindu into a mint, and the Hindus of the various provinces coined krons and lacs of copper coins. With these they paid their tribute, and with these they purchased horses, arms, and fine things of all kinds. The *rais*, the village headmen and landowners, grew rich and strong upon these copper coins, but the State was impoverished. No long time passed before distant countries would take the copper *tanka* only as copper. In those places where fear of the Sultan's edict prevailed, the gold *tanka* rose to be worth a hundred of (the copper) *tankas*. Every goldsmith struck copper coins in his workshop, and the treasury was filled with these copper coins. So low did they fall that they were not valued more than pebbles or potsherds. The old coin, from its great scarcity, rose four-fold and five-fold in value. When trade was interrupted on every side, and when the copper *tankas* had become more worthless than clods, and of no use, the Sultan repealed his edict, and in great wrath he proclaimed that whoever possessed copper coins should bring them to the treasury, and receive the old gold coins in exchange. Thousands of men from various quarters, who possessed thousands of these copper coins, and, caring nothing for them, had flung them into corners along with their copper pots, now brought them to the treasury, and received in exchange gold *tankas* and silver *tankas*, *shash-ganis* and *du-ganis*, which they carried to their homes. So many of these copper *tankas* were brought to the treasury that heaps of them rose up in Tughlakabad like mountains. Great

* Ibn Battuta giving an account of his travels in China states, "The Chinese use neither (gold) *dinars* nor (silver) *dirhams* in their commerce. All the gold and silver that comes into their country is cast by them into ingots, as we have described. Their buying and selling is carried on exclusively by means of pieces of paper, each of the size of the palm of the hand, and stamped with the Sultan's seal. Twenty-five of these pieces of paper are called a *balisht*, which takes the place of the *dinar* with us (as the unit of currency). When these notes become torn by handling, one takes them to an office corresponding to our mint, and receives their equivalent in new notes on delivering up the old ones."



FIG. 4. The Tughlak empire in 1351 at the death of Muhammed Tughlak.

sums went out of the treasury in exchange for the copper, and a great deficiency was caused.

When the Sultan found that his project had failed, and that great loss had been entailed upon the treasury through his copper coins, he more than ever turned against his subjects.'

EXPEDITION TO THE HIMALAYAS

'A project which inflicted a heavy loss upon the army was the design which he formed of capturing the mountain of Kara-jal. Barni states, 'His conception was that, as he had undertaken the conquest of Khurasan, he would (first) bring under the dominion of Islam this mountain, which lies between the territories of Hind and those of China, so that the passage for horses and soldiers and the march of the army might be rendered easy. To effect this object a large force, under distinguished *amirs* and generals, was sent to the mountain of Kara-jal, with orders to subdue the whole mountain. In obedience to orders, it marched into the mountains and encamped in various places, but the Hindus closed the passes and cut off its retreat. The whole force was thus destroyed at one stroke, and out of all this chosen body of men only ten horsemen returned to Delhi to spread the news of its discomfiture.'⁸

This was in fact a punitive expedition against hill chietains, sent into the mountains by way of Nagarkot (Kangra). It was overtaken by the heavy rains. The Sultan's prestige suffered such a blow by this disaster that the provinces already simmering with discontent were ready to blaze into rebellion.

During the last two years of his reign he was busy pursuing a Gujarati rebel by the name of Taghi. Taghi fled into Sind, and the Sultan, though prostrated by an attack of fever, pursued him to Tatta. On 20 March 1351 he died and, as Budauni said, 'the king was freed of his people, and they of their king.'

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⁸ Zia-ud-din Barni. *Tarikh-i Firoz Shahi*, in Elliot and Dowson, *The History of India...*, Vol. III, pp. 240, 241

CHAPTER 7

URBAN LIFE UNDER THE SULTANATE

CITY OF DELHI, URBAN SOCIAL REVOLUTION

SOCIETY, FOOD, DRESS, RIVER TRANSPORT, MARITIME TRADE AND CULTURE

THE CITY of Delhi, which was of vast extent and population, was made up of four contiguous towns, viz. (i) Delhi, the old Hindu city, which included the present township of Mehrauli and adjoining villages, (ii) Tughlakabad, founded by Ghias-ud-din Tughlak, (iii) Siri, which had the residence of Ala-ud-din Khalji and his son Qutb-ud-din, and (iv) Jahan Panah, which had the palace of Muhammad-bin-Tughlak. The last two are now covered by modern housing colonies of South Delhi. The site was well-chosen, as it was on high ground and safe from the floods of the Jumna. Muhammad-bin-Tughlak wanted to unite the four towns within a single wall, but after building a part of it he gave up the rest because of the great expense entailed in its construction.

The city of Delhi was surrounded by a high wall, which had twenty-eight gates. The gates were guarded by police officers, who were supervised by the city Kotwal. In the centre of the city was the cathedral mosque which accommodated large number of people. Two main roads running at right-angles intersected in the middle of the city and were connected with the main gates of the outer wall. On both sides of these roads were the four wings of the city bazar with rows of shops facing each other. These wings of the bazar were occupied by special classes of tradesmen and guilds of craftsmen. Outside Delhi was a large reservoir, called Shamsi Talab, from which the inhabitants drew their drinking water. It was two miles (3.2 km) in length and one mile (1.6 km) broad. Ibn Battuta states that when the water dried up at the sides of the reservoir, farmers planted sugarcane, gherkins, cucumbers, green melons and musk-melons. The musk-melons were very sweet but of small size.

The city of Delhi, as it was known in Turkish rule, was founded by Iltutmish (A.D. 1211-1236). Here the Sultan lived in his palace. The entire life of the city revolved around the Sultan and his employees. Mohammad Habib states, 'The city had a large number of inns, some of them being charity concerns, for all kinds of merchants and travellers. Some 10,000 to 20,000 load-cattle were used by the Hindu Naiks to supply provisions to the city. There were general markets for things of common use and specialized markets for grain, cloth, horses, and slaves of all nationalities. The markets were overrun by brokers (*dallals*), who helped people to buy and sell. Industries grew up along with commerce—industries of

all types from the manufacture of armament to the training of prostitutes and dancing girls. Delhi was also the centre of banking. All sorts of people wanted loans, including the high Turkish officers, some of whom were always in the debt of Hindu money-lenders.

The houses of the *amirs* were three- or four-storey buildings with a winding staircase on one side. The houses of the rich merchants were of the same style, but they were in the heart of the crowded city-quarters; the lower storey was used for sales and business transactions and the upper storeys for the residence of the family. The average inn was like present-day college hostels, i.e. rooms in a rectangle with a verandah running in front of them and a gate that could be locked up.

The *bazārs* were congested; but the congestion was bearable due to the absence of wheeled traffic. The mode of locomotion for those who could afford it was by horses and litters. The majority of the people lived in mud-houses with thatched roofs. Some lived under a *chappar* (straw-roof) supported by a mud-wall on one side and rough sticks on the other, getting some protection from the sun and rain but none from the wind and dust.

'Dehli owing to the combination of learning and action is like Bokhara,' Amir Khusrau declares. 'For all its faults, its citizens loved it. They never called it merely by its name, but in prose and verse they referred to it as 'Hazrat-i Dehli' (Revered Dehli) or the *shahr* (the city).'¹

GRANARIES IN CITY WALL

'The wall which surrounds the city of Dehli is unparalleled,' states Ibn Battuta. 'The breadth of the wall itself is eleven cubits, and inside it are rooms where night-watchmen and keepers of the gates are lodged. The wall contains also stores for provisions, which they call 'granaries', as well as stores for war equipment and for mangonels and stone-throwing machines (*ra'adāt*). Grain keeps in it for a very long time without going bad or becoming damaged. I have seen rice brought out of one of these stores, and although it had gone black in colour it was still good to the taste. I have also seen *kudhrū* millet taken out of them. All these stores had been laid up by the Sultan Balban ninety years before. There is room inside the wall for horsemen and infantry to march from one end of the town to the other, and it has window openings pierced on the town side, through which light enters. The lower courses of this wall are constructed with stone and the upper courses with baked brick, and its towers are numerous and set at short intervals. The city has twenty-eight gates. Their name for gate is *darwāza*.'²

¹Mohammad Habib. *Introduction to Elliot and Dowson's History of India*, Vol. II, pp. 63-68

²Gibb, H.A.R. *The Travels of Ibn Battuta*, p. 621

URBAN SOCIAL REVOLUTION

According to Mohammad Habib, though Islam was not planned as a city-creed throughout its history it has found it easier to operate in urban areas. The Arabs inherited the concept of city-state from the Greeks and Romans. Culture flourished only in the cities of Arabia and not in the peripheral desert. The Arabic language has the same root word for city and civilization, viz. *madina*, *tamaddan*. Besides, the leaders of early Islam were merchants and traders.

India of the eleventh century was a country of fortified cities and towns, and fortified villages (*mawas*). The caste groups, the Brahmans, the Kshatriyas, and the Vaishyas lived within the city-walls and the fortified villages, while the Shudras and non-caste groups, e.g. weavers, cobblers, oil-men, butchers, dyers, jugglers, basket-makers, sailors, elephant drivers and the hunters of wild animals and birds, all lived outside the city-wall. It was these castes, the under-privileged and despised, who welcomed Islam. As Mohammad Habib observes, 'Face to face with the social and economic provision of the *Shariat* and the Hindu *Smritis* as practical alternatives, the Indian city-worker preferred the *Shariat*.'³ The Ghorian Turkish officers permitted them to live inside city-walls. They got converted to Islam en masse. They helped to stabilize the new regime and were its main supporters. The cities developed into thriving centres of cottage industries and commerce. By the middle of the thirteenth century there were large number of Moslem workers of Indian origin in every city and town of northern India. Even now there is a large concentration of Moslem workers in the towns of Uttar Pradesh and Bihar.

The urban working classes were given various monetary incentives by the rulers. Apart from the fact that they were not liable to pay *jizya*, there were tax remissions on some of their trades and products. 'Firoz Shah in his *Futuhat* says that he had remitted taxes on the following: vegetables; brokerage; butchers; amusements; flowers, betel-leaves; octroi on grain and cereals; scribes; indigo; fish; cotton-carding; soap-making; sale of ropes; oil-making; parched grain; taxes from shopkeepers for the use of public lands; cloth-printing; gambling-houses; suits and petitions; police dues; *qassabi* (slaughtering animals); butter-making; grazing-tax; fines of various kinds; *danganah* (an impost in addition to the octroi); ground-rent of houses and shops; *duri* (forced requisition of cattle); roasted mince-meat; fruits; marriages; and brick-kilns.' This list also indicates the variety of professions in the cities.

It is often stated that large number of Hindus were converted to Islam by Moslem Sufis and Saints. 'No document proving any organized religious propaganda by the Mussalmans during this period has yet been un-

³Mohammad Habib. *Introduction to Elliot and Dowson's History of India*, Vol. II, pp. 4, 52

earthed,' states Mohammad Habib. 'The wholesale conversions attributed to the Muslim mystics of this period are found in later-day fabrications only and these works must be totally discarded.'⁴

SOCIETY, RULING CLASS AND SLAVES

Turks were the ruling class. The officers of the highest rank were called *khans*, then the *maliks*, then the *amirs*, then the *isfahsalar*s (generals), and lastly the officers (*jand*). Then there were *kazis*, and learned men, *shaikhs* and *fakirs*. There were also merchants who also carried on diverse trades.

The ruling class was served by male and female slaves. They were of two types, viz. those imported from Turkistan, and those who belonged to India. Male slaves kept in the harems were castrated at an early age. Brisk trade in eunuchs, as they are called, was carried on in Bengal. Female slaves were of two types, viz. those kept for domestic work and those for the pleasure of their company as concubines.

War against the Hindus was the chief source of slaves. Those who escaped being killed in the war were captured and sold as slaves. Shaha-buddin (1297-1348 A.D.), an Arab scholar, states, 'The Sultan never ceases to show the greatest zeal in making war upon the infidels. Every day thousands of slaves are sold at a very low price, so great is the number of prisoners. According to the unanimous statements of the travellers I have cited, the value, at Dehli, of a young slave girl, for domestic service, does not exceed eight *tankas*. Those who are deemed fit to fill the parts of domestic and concubine sell for about fifteen *tankas*. In other cities the prices are still lower. Abu-s-Safa Umar bin Is'hak Shabali assured me that he bought a young slave in the flower of his youth for four *dirhams*. The rest may be understood from this. But still, in spite of the low price of slaves, 20,000 *tankas*, and even more, are paid for young Indian girls. I inquired the reason—and was told that these young girls are remarkable for their beauty, and the grace of their manners.'⁵

Food

The usual rule was two meals a day. Their usual drink was cool and fresh water. Betel-leaves and areca-nuts were chewed by urban people. On festivals, toddy or some cheap country spirit was drunk by the peasants. The members of the family, especially the females, slept in a single room during cold weather, or in the open courtyard during summer. There were no bathrooms in the house. People went to wells or rivers for bathing.

⁴Mohammad Habib. *Introduction to Elliot and Douson's History of India*, Vol. II, pp. 56, 57

⁵Shahab-ud-Din Abu-l'Abbas Ahmad. *Masaliku-l Absar fi Mamaliku-l Ansar*, in Elliot and Douson, *The History of India...*, Vol. III, 580, 581

On an average three meals were taken among the well-to-do classes, namely, the morning breakfast, the mid-day meals, and the early evening dinner. For breakfast in the morning, the Hindus usually took *khichri* or boiled rice and pulses. The Muslims preferred to eat fried bread and *kabābs*. The ordinary Muslim meal consisted of wheat bread, fried bread, and chicken. Hindus as a rule were vegetarians.

SOCIAL PARTIES

The popular term for social parties and entertainments was *jashn*. The rooms where the guests assembled were decorated with rich carpets. Aloe-wood and incense were burnt to deodorize the stale air. Rose-water was sprinkled over the party. Fruits were served in silver and golden trays. Wine was served by handsome cup-bearers, the *sākīs*. Wine was, however, consumed secretly. Ibn Battuta states, 'Neither do the Hindus drink wine, for this in their eyes is the greatest of vices. The Muslims in India take the same view, and any Muslim who drinks it is punished with eighty stripes, and shut up in a *matamore* for three months, which is opened only at the hours of meals.'

DRESS

For their head-dress, the Sultans of Delhi usually wore a *kulāh* or the tall Tartar cap. Jalāl-ud-dīn is reported to have worn a turban. For coating they used tight-fitting tunics or *qaba*, made of muslin or fine wool. In cold weather, the Sultan wore an overcoat over the tunic, called the *dagla*, which was like a dressing gown stuffed with carded cotton. The upper-country Brahman put a caste-mark (*tilaka*) on his forehead and a *dhoti*. In Gujarat, some people used a red handkerchief as head-dress. Some of the Gujarati Baniyas wore long shirts of silk or cotton and short coats of silk. The Brahmans of Gujarat wore a *dhoti* and usually went bare above the waist.

Woman's garments were of two varieties. One consisted of a long *chadar* or fine sheet of muslin like the modern *sari*, and a bodice with short sleeves, going down the back to the waist, with an *angiya* or brassière of a dark colour. The other variety, which was more popular in the doab, consisted of a *lahanga* or a long and very loose skirt, a *chola* and an *angiya* with a *dopatta* or a long scarf which was used to cover the head. Ladies of Gujarat wore leather shoes with gold trimmings. For toilet women used antimony for the eyes, vermilion for marking the parting of the hair, musk for the breast, and a black powder for the eye-brows; henna (*Lawsonia inermis*) was used for dyeing hands and feet in summer.

PURDAH

Moslem women were kept in seclusion. Hindus also adopted *purdah*

for their women. This was mainly to protect them from the attention of the rulers.

AMUSEMENTS

For amusement, a variety of indoor games was played. Chess, *chaupar*, *nard* (Persian backgammon) and cards were popular.

Chess was considered to be the aristocrat of all indoor games. Amir Khusrau and Malik Muhammad Jaisi refer to the game of chess in their works which indicates its popularity among all classes. Amir Khusrau confirms the Indian origin of chess.

Chaupar is an ancient game which is played even nowadays under three different names—*pachisi*, *chausar*, and *chaupar*. The playing of *chaupar* was especially popular among the Hindus.

Mention may be made of the game of *nard* or the Persian backgammon, which was introduced into Hindustan very early in the Muslim period. *Nard* was played on a wooden board, square in shape.

Among other minor amusements were pigeon-flying and cock-fighting.

PETS

The parrot was a familiar pet. Monkeys were also kept as domestic pets. Dogs of great variety were popular and were trained for the chase.

CONVEYANCES AND MODE OF TRAVEL

People went on horse-back or travelled in *gardun* or wheeled carriages of great variety. In Khambayat, coaches and chariots of great beauty were used. They were like rooms; their windows were adorned with gilded leather or silk hangings; their mattresses were made of silk. Their quilts and cushions were of silk. Women sat in *dolas*, a palanquin-like structure supported on bamboos and carried by porters in batches of eight, who worked in shifts. *Palkis* (palanquins) were used by rich people for long-distance travel. At the halting stages were inns and shops.

RIVER TRANSPORT

For river transport, large ship-like boats were used. The governor of Sind, states Ibn Battuta, had fifteen ships with which he sailed down the river, carrying his baggage. One of these was a ship called the *ahawrah*. In the centre of it there was a wooden cabin reached by a staircase, and on top of this there was a place prepared for the governor to sit in. His suite sat in front of him and slaves stood to right and left, while the crew of about forty men rowed. Accompanying the *ahawrah* were four ships to the right and left, two of which carried the governor's standards, kettle-drums, trumpets and singers.

MARITIME TRADE—EXPORTS AND IMPORTS

In the fourteenth and fifteenth centuries Arabs were the masters of the Indian ocean and they completely controlled the maritime trade between India, Middle East and Europe. Indian goods were carried to Alexandria and Damascus by caravans of camels, and from there reached Mediterranean countries through Italian merchants. Some of the countries round the Persian Gulf depended on India for their food supply. The export trade of India was mainly through the ports of Gujarat, Malabar and Bengal. Aden was the port of call for ships arriving there from Cambay, Thānā, Quilon, Calicut, Fandarina, Shaliyat, Mangalore, Fakanor, Hinawr, and Sindabur. A colony of Indian merchants lived in this city. A minor entrepot of the Indian trade was the neighbouring port of Zhafar (Defar), which exported horses to India in return for Indian rice and cotton. On the Indian side Malabar was the clearing house of the merchandise from the East and the West across the Indian Ocean. Merchants of Fārs and Yemen disembarked at the port of Mangalore, and Chinese ships bound for India entered the ports of Ely, Calicut, and Quilon.

INDIAN EXPORTS

Exports from India were pepper, cloves, ginger and cardamoms, tamarinds, sandal-wood and brazil-wood, saffron, indigo, wax, iron, sugar, rice, coconuts, precious stones, benzoin, porcelain, cloth from Cambay, Chaul, and Dabhol, and Bengal muslins.

IMPORTS

Imports into India consisted of Arabian horses, dates, raisins, salt, sulphur and coarse seed-pearls, coral, quicksilver, vermilion, lead, gold and silver, alum, madder, rose-water, and saffron, as well as opium of superior quality.

TRADE WITH EAST AFRICA

Trade with East Africa was fostered by the chain of Arab settlements on the African coast like those of Zeila, Makdashau, Mombasa and Kilwa. Many ships from 'the kingdom of Cambay' (Gujarāt), visited Makdashau with cloth and spices and returned with cargoes of gold, ivory and wax. Cambay cloths and beads were exported by Gujarati merchants in large ships to the three ports of Melinde, Mombasa, and Kilwa, whence they were carried by the local Muslim merchants to the ports of the Zambesi delta and Sofala, further south, for sale to the inhabitants of a great Bantu kingdom in the interior. The cargoes of gold and ivory were conveyed via Sofala to the three East African ports mentioned above, whence they were carried back home by the Gujarati merchants.

TRADE WITH SOUTH-EAST AND EAST ASIA

'In the early part of the fourteenth century, regular voyages were made by Chinese ships to the three Malabar ports of Ely, Calicut and Quilon. The Chinese imports into the Indian ports were silks, coloured taffetas and satins, cloves and nutmegs, blue and white porcelain, gold, silver, copper, iron, vermilion, and quicksilver.'⁶

TRADE WITH CHINA AND SOUTH EAST ASIA

Trade between India, East Indies and China was in the hands of Arabs and Chinese. Ibn Battuta states, 'At that time trade was carried on on an extensive scale between China and Malabar.

'The Chinese vessels are of three kinds; large ships called *chunks*, middle-sized ones called *zaws* (dhows), and small ones called *kakams*. The large ships have anything from twelve down to three sails, which are made of bamboo rods plaited like mats. They are never lowered, but turned according to the direction of the wind; at anchor they are left floating in the wind. A ship carries a complement of a thousand men, six hundred of whom are sailors and four hundred men-at-arms, including archers, men with shields and arbalists, who throw naphtha. Each large vessel is accompanied by three smaller ones, the "half", the "third", and the "quarter". These vessels are built only in the towns of Zaytun and Sin-Kalan (Canton). The vessel has four docks and contains rooms, cabins, and saloons for merchants; a cabin has chambers and a lavatory, and can be locked by its occupant, who takes along with him slave girls and wives. Often a man will live in his cabin unknown to any of the others on board until they meet on reaching some town. The sailors have their children living on board ship, and they cultivate green stuffs, vegetables and ginger in wooden tanks.... Some of the Chinese own large numbers of ships on which their factors are sent to foreign countries. There is no people in the world wealthier than the Chinese.'⁷

CULTURE

Reference has already been made to the development of Hindustani music, and the contribution made by Amir Khusrau; political unity in Northern India, fostered by the Delhi Sultanate, also stimulated the process of evolution of a common language. The language of Delhi at that time was *Khari Boli* mixed with Hariyanvi. Amir Khusrau called it *Zaban-i-Dehlavi*, or the speech of Delhi. Khusrau is reckoned as a writer of Urdu. The army of the Sultans consisted of Turks and Indian converts to Islam, who spoke either Persian or Punjabi. A number of Punjabi and Persian words

⁶Majumdar, R.C. *History and Culture of the Indian People—the Delhi Sultanate*, pp. 648-650
⁷Gibb, H.A.R. *Rehla of Ibn Battuta: Travels in Asia and Africa*, pp. 235, 236

got absorbed in *Zaban-i-Dehlavi*. This 'speech of Delhi', also called *Hindavi*, was carried by the Imperial troops, traders and *faqeers* to the Punjab, Uttar Pradesh, Bihar, Central India, Rajasthan, Gujarat and Deccan. It adapted Persian script and became a respectable medium for poetry. Ultimately in the reign of Shah Jahan it came to be known as Urdu and became the *lingua franca* of northern India. Urdu is a Turkish word, which means 'camp'. Urdu is a Persianized form of western Hindi.

The greatest contribution of the Sultanate to Indian culture was paper. Indians used *bhojapatra* or birch-bark and slips of palm leaves for writing and painting. In the thirteenth century Moslems introduced paper from Central Asia. They had learnt the technique of paper-making from some Chinese whom they had captured in Samarkand. In the fourteenth century paper came into use in India for writing and painting. Jain paintings of the fourteenth century are on paper, but the oblong format of palm-leaf manuscripts persists. Indirectly the Moslems also stimulated the development of Jain painting. Construction of temples was forbidden and as such the rich Jain merchants as an act of merit employed artists who painted their religious texts, the *kalpasutaras*, which were concealed in underground libraries.

The large number of plain and illuminated manuscripts and other documents that have come down to us from the period indicate the existence of a paper industry. Mention is even made of a market of booksellers in Delhi. The quantity of the paper however was not sufficient to cope with the demand.

Most conspicuous contribution of the Sultans was in the field of architecture. The Hindus had no conception of the device of arch. The Moslems introduced the arch and the dome in Indian architecture. Hindu masons adapted the arch, the dome and minaret for the buildings they constructed for their Turkish rulers. The Sultans constructed their mausoleums during their life-time so that their remains were interred with due dignity. In fact, after meeting the expense on the maintenance of the army, the surplus was spent on building mosques and mausoleums, a number of which can be seen in South Delhi.

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CHAPTER 8

RULE OF MUHAMMED-BIN-TUGHLAK

THE HINDU PEASANTS, THEIR HABITAT,
SUTTEE, RUIN OF THE PEASANTRY OF THE GANGETIC DOAB
A SCHEME FOR RECLAMATION OF WASTE-LANDS

BY AND LARGE, the Hindu cultivators of land in Central and East Punjab, Haryana, Uttar Pradesh and Bihar retained their religion, and converts to Islam from among them were few. This pattern of distribution of population subsisted throughout the Muslim rule and remains so even now. 'Of the inhabitants of India the majority are infidels', states Ibn Battuta, 'some of them are subjects (ryots) under Muslim rule (literally 'under the *dhimma* of the Muslims', i.e. protection on payment of tribute taxes), and live in villages governed by a Muslim headman appointed by the tax-collector or subordinate officer in whose fief (*iqṭā*) the village lies. Others of them are rebels and warriors, who maintain themselves in the fastnesses of the mountains and plunder travellers.'

The impressions of Ibn Battuta are based on personal experience as he was assigned the revenue of some villages near the City of Delhi for his maintenance. Ibn Battuta states, 'the Sultan gave orders to assign to me such a number of villages as would produce a revenue of 5,000 *dinars* a year. The vizier and the offices of the administration assigned them to me accordingly, and I went out to visit them. One was a village called Badali, another a village called Basahi, and half of a village called Balara. These villages were at a distance of sixteen *kurūhs*, that is to say miles, in a *sadī* known as the *sadī* of Hind. But, the *sadī* being in their usage a group of a hundred villages. The territories of the city also are divided into hundreds, each hundred of which has a *jawṭarī* (*al-jawṭarī* is the Hindi *chowdhri*), that is to say a shaikh, from among the infidels of those lands, and a *mutasqrrif*, who is the person who collects the revenues.

'There had arrived at that time some captives taken from the infidels and the vizier sent me ten girls from among them. I gave the man who brought them one of them—he was not at all pleased with that—and my companions took three young ones amongst them; as for the rest I do not know what happened to them. Female captives there are very cheap because they are dirty and do not know civilized ways. Even the educated ones are cheap, so that no one there needs to buy captives.

'The infidels in the land of India inhabit a territory which is not geographically separated from that of the Muslims, and their lands are contiguous, but though the Muslims have the upper hand over them yet the infidels maintain themselves in inaccessible mountains and rugged places,

and they have forests of reeds, and as their reeds are not hollow but of large growth and are interlaced with one another, fire makes no impression on them and they are of great strength. The infidels live in these forests which are for them as good as city walls, and inside them they have their cattle and grain and supplies of water collected from the rains, so that they cannot be overcome except by strong armies of men who go into those forests and cut down those reeds with instruments made for the purpose.¹

NO SOCIAL INTERCOURSE WITH MOSLEM RULING CLASS

There was no social intercourse between the Hindus and the Muslims. Vincent Smith observes, 'The process of the Moslem conquest tended to tighten the bonds of caste. The Hindus, unable on the whole to resist the Moslems in the field, defended themselves passively by the increased rigidity of caste association.'² Ibn Battuta states, 'Indian idolators (Brahmans and Hindus) never make friends with Muslims, and never give them to eat or to drink out of their vessels, although at the same time they neither act nor speak offensively to them. We were compelled to have some flesh cooked for us by some of them, and they would bring it in their pots and sit at a distance from us. They would also serve us with rice, which is their principal food, on banana leaves, and then go away.'

TOILET

Describing the toilet of Indians, Ibn Battuta states, 'The Indians put oil of sesame on their heads and afterwards wash their hair with fuller's earth. This refreshes the body and makes the hair glossy and long, and that is the reason why the Indians and those who live in their country have long beards.'

SUTTEE

The Hindus observed the custom of Suttee. According to Vincent Smith, there is some indication that Suttee was practised by the Aryans in pre-Vedic times before their entry into India. Describing the strange customs of the people of Taxila, Strabo states that he had heard from some persons of wives burning themselves along with their deceased husbands and doing so gladly; and that those women who refused to burn themselves were held in disgrace. Ibn Battuta saw a widow being burnt and gives a vivid account of the tragic scene. 'I saw the people hurrying out. I asked them what was happening and they told me that one of the Hindu infidels had died, that a fire had been kindled to burn him, and his wife would burn herself along with him. After the burning my companions came back and

¹Gibb, H.A.R. *The Travels of Ibn Battuta*, p. 741

²Smith, V.A. *The Oxford History of India*, p. 66

told me that she had embraced the dead man until she herself was burned with him. Later on I used often to see a Hindu woman, richly dressed, riding on horse-back, followed by both Muslims and infidels; and preceded by drums and trumpets, she was accompanied by Brahmans, who are the chiefs of the Hindus. In the sultan's dominions they ask him permission to burn her, which he accords them. The burning of the wife after her husband's death is regarded by them as a commendable act, but is not compulsory; only when a widow burns herself does her family acquire a certain prestige by it and gain a reputation for fidelity. A widow who does not burn herself dresses in coarse garments and lives with her own people in misery, despised for her lack of fidelity, but she is not forced to burn herself. Once in the town of Amjari (Amjhera, near Dhar) I saw three women whose husbands had been killed in battle and who had agreed to burn themselves. Each one had a horse brought to her and mounted it, richly dressed and perfumed. In her right hand she held a coconut, with which she played, and in her left a mirror, in which she looked at her face. They were surrounded by Brahmans and their own relatives, and were preceded by drums, trumpets and bugles. Every one of the infidels said to them "Take greetings from me to my father, or brother, or mother, or friend" and they would say "Yes" and smile at them. I rode out with my companions to see the way in which the burning was carried out. After three miles (4.8 km) we came to a dark place with much water and shady trees, amongst which there were four pavilions, each containing a stone idol. Between the pavilions there was a basin of water over which a dense shade was cast by trees so thickly set that the sun could not penetrate them. The place looked like a spot in hell—God preserve us from it! On reaching these pavilions they descended to the pool, plunged into it and divested themselves of their clothes and ornaments, which they distributed as alms. Each one was then given an unsewn garment of coarse cotton and tied part of it round her waist and part over her head and shoulders. The fires had been lit near this basin in a low lying spot, and oil of sesame poured over them, so that the flames were increased. There were about fifteen men there with faggots of thin wood and about ten others with heavy pieces of wood, and the drummers and trumpeters were standing by waiting for the woman's coming. The fire was screened off by a blanket held by some men, so that she should not be frightened by the sight of it. I saw one of them, on coming to the blanket, pull it violently out of the men's hands, saying to them with a smile, "Do you frighten me with the fire? I know that it is a fire, so let me alone." Thereupon she joined her hands above her head in salutation to the fire and cast herself into it. At the same moment the drums, trumpets and bugles were sounded, the men threw their firewood on her and the others put the heavy wood on top of her to prevent her moving, cries were raised and there was a loud clamour. When I saw this I had all

but fallen off my horse if my companions had not quickly brought water to me and laved my face, after which I withdrew.’³

FESTIVALS AND PILGRIMAGES

While the ruling classes amused themselves with dinner parties and *shikar*, the poor Hindu peasants found relief in observance of religious festivals and periodical pilgrimages to holy shrines. The most popular festivals were Basant Panchami, Holi, Diwali, Dussehra and Shivaratri. The worship of Shiva figures prominently in the Basant Panchami festival. People put on yellow clothes to harmonize with the yellow blossoms of *sarson*. Holi, the spring festival, was celebrated by throwing coloured water and red powder. Diwali, the festival of lights, celebrates the return of Rama from exile. Lamps were lighted in homes as well as in temples and public buildings. Dussehra was celebrated with great enthusiasm for a number of days. The births of Rama, Krishna, Parasurama and Narasingha were also celebrated.

Large parties of Hindu pilgrims travelled together for safety and mutual help to holy places on the Ganges. Such journeys provided relaxation from their monotonous existence.

CROWN LANDS

‘The Sultan was the biggest landholder in the kingdom; in fact, the only one whose property had an undisputed legal basis,’ states Ashraf. ‘He could choose the most fertile tracts of land and employ the resources of the whole State to enhance their productive capacity. A separate staff of officers was employed to administer his private lands.’

PEASANT ECONOMY

Of the produce of land, a large share went to the State in the form of the land-tax and various perquisites. Of the remainder, a customary share was fixed for various classes of domestic and other labourers. The peasant and his family kept the rest for their own use.⁴ A certain proportion went to the share of the priest and the temple. The carpenters, the smiths, the potters, the washermen, the scavengers, etc., were better off as they had to incur no expenditure, e.g. on feeding of livestock, and payment in cash and kind to agricultural labourers.

RUIN OF THE PEASANTRY OF THE GANGETIC DOAB

‘A project of the Sultan which operated to the ruin of the country and the decay of the people,’ states Barni, ‘was that he thought he ought to get ten or five per cent more tribute from the lands in the doab. To accomplish

³Gibb, H.A.R. *Rehla of Ibn Battuta: Travels in Asia and Africa*, pp. 192, 193

⁴Ashraf, K.M. *Life and Conditions of the People of Hindustan*, pp. 64, 123

this he invented some oppressive *abwabs* (cesses), and made stoppages from the land-revenues until the backs of the *raiya*s were broken. The cesses were collected so rigorously that the *raiya*s were impoverished and reduced to beggary. Those who were rich and had property became rebels; the lands were ruined, and cultivation was entirely arrested. When the *raiya*s in distant countries heard of the distress and ruin of the *raiya*s in the doab, through fear of the same evil befalling them, they threw off their allegiance and betook themselves to the jungles. The decline of cultivation, and the distress of the *raiya*s in the doab, and the failure of convoys of corn from Hindustan, produced a fatal famine in Delhi and its environs, and throughout the doab. Grain became dear. There was a deficiency of rain, so the famine became general. It continued for some years, and thousands upon thousands of people perished of want. Communities were reduced to distress, and families were broken up. The glory of the State, and the power of the government of Sultan Muhammad, from this time withered and decayed.⁵

Sheikh-Nuru-l-Hakk gives further details of the ruin of the peasantry of the Gangetic doab. He states, 'The whole of the doab became unable any longer to bear up against the grievous rack-renting and oppressive taxes. The people in despair set fire to their barns and stacks, and, carrying away their cattle, became wanderers in the wide world. Upon this, the Sultan gave orders that every such peasant who might be seized should be put to death, and that the whole country should be ravaged and given up to indiscriminate plunder. He even himself marched out of the city for that purpose, as if he had been doing on a hunting expedition, put to the sword all the remaining population, and ordered their heads to be displayed from the battlements of the fort. In this way he utterly depopulated whole tracts of his kingdom, and inflicted such rigorous punishment that the whole world stood aghast.'⁶

A SCHEME FOR RECLAMATION OF WASTE-LANDS

The Sultan now thought of rehabilitating agriculture. He encouraged the digging of wells and gave loans to the cultivators. He evolved a scheme for State farming and reclamation of waste-lands. 'A department, called *diwan-i-amir-i koh*, was organized to promote agriculture, and officers to it were appointed. The country was divided into imaginary rectangles (*daira*) of thirty *karohs* by thirty *karohs* on two conditions—not a handful of land in all these *karohs* was to be left uncultivated and every crop was to

⁵Zia-ud-din Barni. *Tarikh-i-Firoz Shahi*, in Elliot and Dowson, *The History of India...*, Vol. III, p. 238

⁶Sheikh Nuru-l-Hakk. *Zubdatu-t Tawarikh*, in Elliot and Dowson, *The History of India...*, Vol. VI, pp. 184, 185

be changed; thus wheat was to be grown instead of barley, sugarcane instead of wheat, and grapes and dates instead of sugarcane. This rotation displayed complete ignorance of the principles of agriculture. About a hundred *shiqdars*, or undertakers, were to be appointed (to these imaginary rectangles). Greedy men, men in distress and reckless adventurers came and undertook within three years to bring under cultivation three hundred thousand *bighas* of barren land (*zamin-i akhal*) and to provide three thousand horses from the barren land. They gave written deeds to this effect. To this reckless group, which undertook to cultivate barren land, various awards were given—caparisoned horses, cloaks of brocade and cash. Out of a loan (*sondhar*) of three lakhs of *tankas* promised to each of them, every one got fifty thousand *tankas* in immediate cash. The money they got seemed the price of their blood.⁷ Fortunately for them the Sultan died at Thatta. Had he returned all the *shiqdars* and loanees would have been despatched to hell.

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CHAPTER 9

THE SULTANATE

CROPS, TREES AND FRUITS

HORSE TRADE, COINAGE,

WEIGHTS AND PRICES OF COMMODITIES

THE Muslim historians give detailed accounts of the victories of the Sultans, court intrigues, murders, quarrels and rebellions, but they do not mention what crops and fruit trees were grown by the Indians. The solitary record of crops and fruit-trees in the Sultanate period is by Ibn Battuta. When he entered the city of Sarsati (Sirsa), he mentions that it was a large town with quantities of rice of an excellent sort, which was exported to the capital, Delhi.

Among the fruit trees he mentions *ber*, mango, jack-tree, *jamun*, *mahua*, and pomegranate.

DESCRIPTION OF THE TREES OF INDIA AND THEIR FRUITS

'The first town we entered was the city of Abuhar,' states Ibn Battuta, 'which is the first of these lands of Hind, a small but pretty place with a large population, and with flowing streams and trees. There are not to be found in India any trees of our country except the lote-tree (*Zizyphus lotus*), but there it is of great girth and its fruit is about as large as a gall nut, and very sweet. They have many trees none of which are to be found either in our country or elsewhere.

'One of them is the *'anbah* (mango; from Hindi *amb*). It is a tree which resembles orange trees but is larger in size and more leafy. The shade which it gives is the densest of any, but it is oppressive and if one sleeps beneath it he becomes enervated. Its fruit is of the size of a large pear. When the fruit is green and not yet fully ripe the people gather those of them that fall, put salt on them and pickle them as limes and lemons are pickled in our country. The Indians pickle also green ginger and clusters of pepper, which they eat with meat dishes, taking after each mouthful a little of these pickled fruits. When the mango ripens in the season of autumn rains its fruit becomes yellow and then they eat it like apples, some people cutting it with a knife while others simply suck it. The fruit is sweet, with a little acidity mingled with its sweetness, and has a large stone which they plant, like orange pips and other fruit stones, and the trees sprout from them.

'Then there are the *shakī* and the *barkī*—the jack-tree (*Artocarpus heterophyllus*). These are trees of great age with leaves like those of the walnut, and their fruits come out from the trunk of the tree itself. Those of them that are next to the ground are the *barkī* and those higher up are

the *shakī*. The former are sweeter and better-flavoured; the latter resemble large gourds and have a skin like ox-hide. When it yellows in the season of autumn they gather it and split it in half; inside each fruit there are from one to two hundred pods resembling cucumbers, between each of which there is a thin yellow skin. Each pod has a kernel resembling a large bean and when these kernels are roasted or boiled they taste like beans, and take the place of them, since beans are not to be found in that country. They store up these kernels in red earth and they keep until the next year. This *shakī* and *barkī* is the best fruit in India.

‘Another is the *tandū* (*Diospyros melanoxydon*), the fruit of the ebony trees, of about the size and colour of an apricot and very sweet.

‘Then there is the *jamun* (*Syzygium cumini*), whose trees are of great age, and whose fruit resembles an olive; it is black in colour and has a single stone like the olive.

‘Also the sweet orange, which is very plentiful in their country, but the bitter orange is seldom found; there is a third kind between sweet and bitter, about the size of a lime, which has an excellent flavour and I used to enjoy eating it.

‘Another species is the *mahua* (*Madhuca indica*), long-lived trees, with leaves like those of the walnut except that there is red and yellow in them. Its fruit resembles a small pear and is very sweet. At the top of each fruit there is a smaller fruit of the size of a grape, but hollow; its taste is like that of grapes, but eating too many of them gives a splitting headache. A surprising thing is that when these fruits are dried in the sun they taste just like figs, and I used to eat them in place of figs, which are not to be found in India. They call this small fruit *angūr* which in their language means grapes.

‘Grapes themselves are very rare in India and are to be had only in certain districts, in the capital Dehli.

‘The *mahua* bears fruit twice a year and from its kernels they make oil, which they use for lamps.

‘Another of their fruits is one which they call *kasira* (*kaserū*; *Scirpus grossus*; syn. *S. kysoor*) and which they dig out of the ground; it is very sweet and resembles a chestnut. India has of the fruits of our country the pomegranate, which bears fruit twice a year. I have seen some in the islands of Dhība al-Mahal which bore fruit continuously. The Indians call it *anār*. At Daulatabad, grapes and pomegranates were grown, and at Sagar on the Narmada, there were orchards of fruit-trees, and the lands were irrigated by water-wheels.

CEREALS WHICH THE PEOPLE OF INDIA SOW AND USE FOR FOOD

After describing the fruit-trees, Ibn Battuta gives a detailed account of cereals which Indians sow and use for food. ‘The Indians sow twice a year,’ states Ibn Battuta. ‘When the rain falls in their country in the hot season

they sow the autumn crop, and harvest it sixty days later. Among these autumn grains in their country are *kudhrū* (*Paspalum scrobiculatum*), a kind of millet, which is the commonest of the grains in their country; *qāl*, which resembles the type of millet called *anlī*; and *shāmākh*, which is smaller in the grain than *qāl*, and often grows without being sown. It is the food of the devotees and ascetics, and of the poor and needy. They go out to gather what has sprung up of this plant without cultivation; each of them holds a large basket in his left hand and has in his right a whip with which he beats the grain so that it falls into the basket. In this way they collect enough of it to supply them with food for the whole year. The seed of this *shāmākh* is very small; after gathering, it is put out in the sun, then pounded in wooden mortars; the husk flies off leaving its pith, a white substance, from which they make gruel. They cook this with buffalo's milk and it is pleasanter, prepared in this way, than baked as bread; I used often to eat it in India and enjoyed it.

Other grains are *māsh* (*Vigna radiata*), which is a kind of pea, and *mung* (*V. mungo*) which is a species of *māsh*, differing from it in having elongated grains and in its clear green colour. They cook *mung* with rice and eat it with *ghee*; this dish they call *khichri* and they breakfast on it every day. It takes the place with them of *harīrā* in the lands of the Maghrib.

Then there is *lūbiyā* (*Vigna unguiculata*), a kind of bean, and *mūt* (*Cyperus rotundus*), which resembles *kudhrū* but has smaller grains. It is used as fodder for draught animals in that country and fattens them; the barley in their country has no strength in it, and fodder for the animals is furnished by the *mūt* or else by chickpeas, which they pound and soak with water before feeding it to them. In place of green fodder, too, they feed them with *māsh* leaves, but first each animal is given *ghee* to drink for ten days, three to four pounds a day, and is not ridden during this time, and after that they feed it with *māsh* leaves, as we have said, for a month or so.

The cereals which we have mentioned are autumn crops. When they harvest these sixty days after sowing them, they sow the spring cereals, which are wheat, barley, chickpeas, and lentils. They are sown in the same ground where the autumn crops are sown for their land is generous and of good heart. As for rice, they sow it three times a year, and it is one of the principal cereals in their country. They sow also sesame and sugarcane along with the autumn grains that we have mentioned.¹

KERALA—PEPPER, GINGER, SUGARCANE, COCONUT AND PULSES

During the latter part of his stay at Dehli, Ibn Battuta lost the favour of Sultan Muhammad-bin-Tughlak as he paid visits to a Moslem Sufi faqeer, who courageously denounced the atrocities of the Sultan. Feeling appre-

¹Gibb, H.A.R. *The Travels of Ibn Battuta*, pp. 609-612

hensive about his safety, he asked permission of the Sultan to travel to China. The Sultan accepted his request, appointed him his ambassador to the Emperor of China and provided him an escort to Quilon in Kerala, from where he intended to set sail for China. Near Aligarh he fell into the hands of Hindu brigands who kept him in confinement as a prisoner. He escaped with great difficulty and resumed his journey to the south. At the end of his journey from Delhi he entered the land of Mulaybar (Malabar), as it was then known. His observations indicate that even in the fourteenth century, Kerala was densely populated and intensively cultivated. Houses were scattered in the cultivated area as they are now. He states, 'The land of Mulaybar extends for two months' journey along the coast from Sandabur (Goa) to Kawlam (Quilon, in Kerala). The road over the whole distance runs beneath the shade of trees, and at every half-mile (0.8 km) there is a wooden shed with benches on which all travellers, whether Muslims or infidels, may sit.... On this road, which, as we have said, extends for a two months' march, there is not a foot of ground but is cultivated. Every man has his own orchard, with his house in the middle and a wooden palisade all around it. The road runs through the orchards, and when it comes to a palisade there are wooden steps to go up by and another flight of steps down into the next orchard.... I have never seen a safer road than this for they put to death anyone who steals a single nut, and if any fruit falls no one picks it up but the owner.... The first town in the land of Mulaybar that we entered was the town of Abu-Sarur (Barcelore), a small place on a large inlet and abounding in coco-palms. Two days' journey brought us to Fakanur (Bacanor, now Barkur), a large town on an inlet; here there is a large quantity of sugarcanes, which are unexcelled in the rest of that country.... Three days after leaving Fakanur we reached Manjarur (Mangalore), a large town on the inlet called ad-Dumb, which is the largest inlet in the land of Mulaybar. This is the town at which most of the merchants from Fars and Yemen disembark, and pepper and ginger are exceedingly abundant there.'

The first European to describe pepper was John of Marignola, who travelled by the land route to China in A.D. 1338 as emissary of Pope Benedict XII. He returned by the sea route, and landed at Quilon or Columbum, as he calls it. He thus describes a visit to a pepper garden. 'On Palm Sunday A.D. 1357 I entered Columbum, the most famous city in the whole of India, where all the pepper in the world grows. It grows on creepers, which are planted exactly like vines and first produce wild grapes of a green colour. Thereupon a kind of grape forms containing red wine, which I have squeezed out on to the plate with my own hand as a condiment. Thereafter they ripen and dry on the trees. And when the immoderate heat of the sun has dried them hard, they are struck down with staves and collected on linen clothes spread out beneath. This I have seen with my own eyes and felt with my own hands throughout fourteen months.

Pepper is not burnt, as has been erroneously stated, nor does it grow in deserts, but in gardens.*

BETEL VINES

Ibn Battuta also saw betel vines in Kerala. He states, 'Betel-trees are grown like vines on cane trellises or else trained up coco-palms. They have no fruit and are grown only for their leaves. The Indians have a high opinion of betel, and if a man visits a friend and the latter gives him five leaves of it, you would think he had given him the world, especially if he is a prince or notable. A gift of betel is a far greater honour than a gift of gold and silver. It is used in this way. First one takes areca-nuts, which are like nutmegs, crushes them into small bits and chews them. Then the betel leaves are taken, a little chalk is put on them, and they are chewed with the areca-nuts. They sweeten the breath and aid digestion, prevent the disagreeable effects of drinking water on an empty stomach, and stimulate the faculties.'

COCONUT PALM IN MALDIVES

Ibn Battuta's stay in Kerala was prolonged due to the fact that the ship in which he was to sail for China was wrecked by a storm. From Kerala he reached Maldivian islands where he lived for a year and half. Apart from concubines he married four Muslim women. He mentions that from fish and coconuts the islanders gain incomparable erotic potency, and his own experience confirmed the prevalent notion. He gives a vivid description of the coconut-palm and its various products.

'The coco-palm is one of the strangest of trees, and looks exactly like a date-palm,' writes Ibn Battuta. 'The nut resembles a man's head, for it has marks like eyes and a mouth, and the contents, when it is green, are like the brain. It has fibre like hair, out of which they make ropes, which they use instead of nails to bind their ships together and also as cables. Amongst its properties are that it strengthens the body, fattens, and adds redness to the face. If it is cut open when it is green, it gives a liquid, deliciously sweet and fresh. After drinking this one takes a piece of the rind as a spoon and scoops out the pulp inside the nut. This tastes like an egg that has been boiled but not quite cooked, and is nourishing. I lived on it for a year and a half when I was in the Maldivian islands. One of its peculiarities is that oil, milk and honey are extracted from it. The honey is made in this fashion. They cut a stalk on which the fruit grows, leaving two fingers' length, and on this they tie a small bowl, into which the sap drips. If this has been done in the morning, a servant climbs up again in the evening with two bowls, one filled with water. He pours into the other the sap that has collected,

*Quoted by Paul Herman in *Conquest by Man*, p. 394

then washes the stalk, cuts off a small piece, and ties on another bowl. The same thing is repeated next morning until a good deal of the sap has been collected, when it is cooked until it thickens. It then makes an excellent honey, and the merchants of India, Yemen, and China buy it and take it to their own countries, where they manufacture sweetmeats from it. The milk is made by steeping the contents of the nut in water, which takes on the colour and taste of milk and is used along with food. To make the oil, the ripe nuts are peeled and the contents dried in the sun, then cooked in cauldrons and the oil extracted. They use it for lighting and dip bread in it, and the women put it on their hair.³

BENGAL—A HELL FULL OF GOOD THINGS

From Calicut in Kerala, Ibn Battuta reached Bengal. He was impressed by the prosperity of Bengal and the cheapness of commodities. He states, 'Bangala is a vast country, abounding in rice, and nowhere in the world have I seen any land where prices are lower than there; on the other hand it is a gloomy place, and the people of Khurasan call it "A hell full of good things" (*dozakh pūr niamat*). I have seen fat fowls sold there at the rate of eight for a single *dirham*, young pigeons at fifteen to the *dirham*, and a fat ram sold for two *dirhams*. I saw too a piece of fine cotton cloth, of excellent quality, thirty cubits long, sold for two *dinars*, and a beautiful slave-girl for a single gold *dinar*, that is, two and a half gold *dinars* in Moroccan money.'

ACCOUNT OF BENGAL BY MAHAUN, A CHINESE

Mahaun, a Chinaman, visited Bengal in A.D. 1406. He was attached as an interpreter to the suite of Cheng Ho, sent by the Chinese Emperor Yung-lo with a party of 30,000 soldiers in a fleet of 62 ships to the various kingdoms of the Western Ocean in order to show that China was rich and strong. Mahaun describes the language of the people as Bengāli and states that Persian also was spoken in Bengal. He states that 'not having any tea they offer their guests the betel-nut in its place.' He further records: 'The mulberry tree and silk worms are found there. Silk handkerchiefs and caps embroidered with gold, painted ware, basins, cups, steel, gurs, knives and scissors are all to be had there. They manufacture a white paper from the bark of a tree, which is smooth and glossy like a deer's skin.' People were Muhammadans with dark skin—some light-complexioned persons were also seen. They had shaved heads and white turbans, long loose robe with a broad coloured handkerchief tied round the waist. Their manufactures are: fine cotton fabrics of many varieties—six varieties described—silk industry and handkerchiefs. They have abundance of rice, wheat, sesamum, all kinds of pulses, millet, ginger, mustard, onions, hemp,

³Gibb, H.A.R. *The Travels of Ibn Battuta*, pp. 114, 115

squash, brinjals, and many kinds of vegetables. Their fruits are plantains, jack fruits, mangoes, and pomegranates. Sugarcane, white sugar, granulated sugar, various candied and preserved fruits are also common. Betel-nut was offered to the guests. Their amusements are : feasts and entertainments, music and dance, conjurers and display of a man fighting with a tiger given in the streets. The character of the people was that they were open and straightforward in their dealings.⁴

HORSE BREEDING IN TURKISTAN AND HORSE TRADE WITH INDIA

While describing the country of Turkistan, Ibn Battuta mentions how the horses were kept in Turkistan and describes horse trade with India. 'The horses in this country are very numerous and the price of them is negligible. A good one costs about a *dinar* of our money. The livelihood of the people depends on them, and they are as numerous as sheep in our country, or even more so. A single Turk will possess thousands of horses. They are exported to India in droves of six thousand or so, each merchant possessing one or two hundred of them or less or more. For each fifty they hire a keeper, who looks after their pasturage. He rides on one of them, carrying a long stick with a rope attached to it, and when he wishes to catch any horse he gets opposite it on the horse which he is riding, throws the rope over its neck and draws it towards him, mounts it and sets the other free to pasture. On reaching Sind the horses are fed with forage, because the vegetation of Sind will not take the place of barley, and the greater part of them die or are stolen. The owners pay a duty of seven silver *dinars* on entering Sind and a further duty at Multan. Formerly they were taxed a quarter of the value of their imports, but Sultan Muhammad abolished this tax and ordered that Muslim merchants should pay the legal tithe and infidel merchants a tenth. Nevertheless the merchants make a handsome profit, for the least that a horse fetches is a hundred *dinars* (that is twenty-five *dinars* in Moroccan money) and it often sells for twice or three times that amount. A good horse sells for five hundred or more. The Indians do not buy them as racehorses, for in battle they wear coats of mail and cover their horses with armour; what they prize in a horse is its strength and length of pace. Their racehorses are brought from Yemen, Oman and Fars, and they cost from a thousand to four thousand *dinars* each.'⁵

COINAGE

Copper *jitals* were in use as currency, stated Ashraf. 'The *jitals* continued to be used until they were replaced by the *bahloli*, instituted by Sultan Bahlul Lodi. Like the copper *jital*, the silver *tanka* introduced by Sultan

⁴Gode, P. K. *Studies in Indian Cultural History*, Vol. III, pp. 61, 62

⁵Gibb, H.A.R. *Rehla of Ibn Battuta, Travels in Asia and Africa*, pp. 267, 145-146

Itutmish was of a mint standard approaching 175 grains. The *tanka* held its place until it was succeeded by the *rupia* of Sher Shah and Akbar and the rupee of the present day. Taking the wages of the slaves of Muhammad Tughlak and Firoz Tughlak, at 10 *tankas* per month was about the minimum wage for an employee of the Sultan. The soldier was paid at 19½ *tankas* per month. The cost of living works out at 5 *tankas* per month for the average family. The Sultans divided the contents of a *tanka* into 64 *jitals*.⁶

WEIGHTS

The dealers of precious metals, the corn merchants, the dealers of scent, had their own standards of weight, which differed from one locality to another. The official weights under the Sultans of Delhi were fixed at an average of 28.78 lb avoirdupois (13.05 kg) to a maund.

Under Jalal-ud-din Khalji, when there was a famine, corn was sold at one *jital* per seer. Under Muhammad Tughlak, in exceptionally severe conditions, the price of corn rose to 16 and 17 *jitals* per seer. As a result, people began to die of starvation. When Firoz Tughlak attacked Sind and scarcity followed as a result, the price of corn rose to 2 and 3 *tankas* per maund (or 3.2 and 4.8 *jitals* respectively per seer). On his subsequent attack on the same province the corn rose to 8 and 10 *jitals* per 5 seers and the pulses to 4 and 5 *tankas* per maund (or 6.4 and 8 *jitals* per seer respectively).

'A comparison of prices of foodgrains etc. between the reigns of Ala-ud-din, Muhammad Tughlak and Firoz Tughlak', states Ashraf, 'show that as a whole the prices of most of these articles went up under Muhammad Tughlak but again dropped to the previous level of Ala-ud-din under Firoz Tughlak. Sugar, for some reasons, does not follow this pattern.

Commodities	Ala-ud-din	Muhammad Tughlak	Firoz Tughlak
	(Prices in <i>jitals</i> per maund)		
1 Wheat	7	12	8
2 Barley	4	8	4
3 Paddy	5	14	..
4 Pulses	5	..	4
5 Lentils	3	4	4
6 Sugar (white)	100	80	..
7 Sugar (soft)	60	64	120,140
8 Sheep (mutton)	10	64	..
9 Ghi (clarified butter)	16	..	100

'Muslins of Delhi cost 17 *tankas* a piece, of Koil (Aligarh) 6 *tankas*. The finest quality muslin cost 2 *tankas* a yard. Another variety called *Mushru* costs 3 *tankas* per piece.

'Blankets of coarse quality (usually with red borders) cost 6 *jitals* and those of finer quality 36 *jitals* each.'⁶

⁶Ashraf, K.M. *Life and Conditions of People in Hindustan*, pp. 161, 288, 290

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CHAPTER 10

FIROZ SHAH TUGHLAK

A.D. 1351-1388

PROSELYTISM TO ISLAM, REVERSION TO JAGIR SYSTEM,
FOUNDING OF HISSAR, DIGGING OF WESTERN JAMUNA CANAL
LAYING OUT OF GARDENS, PROSPERITY OF PEOPLE

THE death of Muhammad-bin-Tughlak on the banks of the Indus left the army without a leader. After prolonged consultations they selected Firoz Shah, son of Sipahsalar Rajab, brother of Ghias-ud-din Tughlak. Rajab had married a Rajput princess of Abohar, and hence Firoz Shah was half-Indian. Though he lacked the qualities of a military leader, he was a great builder and a promoter of agriculture. He was fond of study of history and patronized learned men. He is credited with the invention of a clock or bell (*tas-i-ghariyal*), which was placed on the top of the durbar of the Kushk in Firozabad. It attracted large crowds of idlers. The main interests of the Sultan were building, hunting and administration.

SHIKAR

Sultan Firoz spent much time in hunting. The shikar department was organized under an *Amir-i-shikar*. Under him were minor officers for the care and keeping of royal falcons and leopards. Under them were *Shikardars* who carried the animals and birds on the day of the chase. Following an old Persian tradition he built a great walled enclosure as royal preserve for wild animals on a piece of land extending to about 24 miles (38.6 km) near Delhi. Deer, nilgai and jungle fowl were the popular game. Rhinoceros and wolves were found in the hills of the Punjab. It was the privilege of the monarch to hunt lions.

Shams-i-Siraj states that when Firoz Tughlak used to go out for the chase, a big procession was formed. Forty to fifty special standards and two specially designed emblems, adorned with peacock feathers, were carried in front of the Sultan on both sides. Behind them were trained wild animals, e.g. cheetahs and lynxes, followed by hounds. Then followed the keepers of eagles and falcons on horse-back.

CONVERSION OF HINDUS

The Sultan encouraged proselytization to Islam. In his *Fatuhah* he states, 'I encouraged my infidel subjects to embrace the religion of the prophet, and I proclaimed that every one who repeated the creed and became a Musulman should be exempt from the *jizya*, or poll-tax. Information of this

came to the ears of the people at large, and great numbers of Hindus presented themselves, and were admitted to the honour of Islam. Thus they came forward day by day from every quarter, and, adopting the faith, were exonerated from the *jizya*, and were favoured with presents and honours.' This explains the origin of a large part of the existing Muslim population of India. *Jizya* was imposed even on Brahmanas, who were so far exempt from this type of taxation.

SLAVE-RAIDING

A method of proselytization to Islam adopted by the Turks was slavery. The Ottoman Turks adopted the systems of raising troops, the Janissaries, from the Christian boys of the conquered European territories like Bulgaria and Thrace. They were delivered up each year by their parents as a form of tribute. There was a tax on every Christian family of one boy in five. They were put into Muslim schools, separated from all home or family ties, brought up in the faith of Islam, and forbidden to marry. Imbued thus with an undivided allegiance to the Ottoman Sultan and religion of Islam, upon which all their aspirations hung, when their training was completed they entered the infantry or civil service.

In India the Turks adopted the system of slave-raiding. The slaves (or *bandagan*, as they were called) were all converted to Islam. Shams-i-Siraj describes in great detail, how the slaves were obtained. 'The Sultan was very diligent in providing slaves, and he carried his care so far as to command his great fief-holders and officers to capture slaves whenever they were at war, and to pick out and send the best for the service of the court. When the feudatories went to court, each one according to his ability took with him beautiful slaves, dressed and ornamented in the most splendid style. They also, when they paid their annual visit, brought other presents suited to their means and station—high-priced horses of the best breeds, fine elephants, valuable garments of every kind, vessels of gold and silver, arms, camels and mules—each man according to the extent of his fief, some as many as a hundred, some fifty, some twenty, and some eleven. They also brought slaves.

'Those chiefs who brought many slaves received the highest favour, and those who brought few received proportionately little consideration. When the chiefs perceived the Sultan's eagerness for slaves, and that their efforts to get them were highly appreciated, they exerted themselves in providing them, and the numbers brought every year exceed description. Great numbers of slaves were thus collected, and when they were found to be in excess, the Sultan sent them to Multan, Divalpur, Hisar-Firozah, Samana, Gujarat, and all the other feudal dependencies.

'Some of the slaves spent their time in reading and committing to

memory the holy book, others in religious studies, others in copying books. Some, with the Sultan's leave, went to the temple at Mecca. Some were placed under tradesmen and were taught mechanical arts, so that about 12,000 slaves became artisans (*kasib*) of various kinds. Forty thousand were every day in readiness to attend as guards in the Sultan's equipage or at the palace. Altogether, in the city and in the various fiefs there were 180,000 slaves, for whose maintenance and comfort the Sultan took especial care. The institution took root in the very centre of the land, and the Sultan looked upon its due regulation as one of his incumbent duties. To such an extent were matters carried that there was a distinct muster-master (*majmú-dar*) of the slaves, a separate treasury for the payment of their allowances, a separate *jao-shughuri*, and deputy *jao-shughuri*, and a distinct *diwan*, that is to say, the officers for administering the affairs of the slaves (*ashab-i' diwan-i bandagan*), were entirely distinct from those under the Prime Minister (*ashab-i diwan-i' ala-e wizarat*).

When the Sultan went out in State the slaves accompanied him in distinct corps—first the archers, fully armed, next the swordmen, thousands in number (*hazár hazár*), the fighting men (*bandagan-i award*), the *bandagan-i mahili* riding on male buffaloes, and slaves from the Hazara, mounted on Arab and Turki horses, bearing standards and axes. These all, thousands upon thousands, accompanied the royal retinue. The slaves increased to such a degree that they were employed in all sorts of domestic duties, as water coolers, butlers (*etc., etc.*). In fact there was no occupation in which the slaves of Firoz Shah were not employed.¹

TRANSPORTATION OF ASOKA PILLARS TO DELHI

The reign of Sultan Firoz is memorable for the installation of two Asoka pillars in Delhi. Neither the Sultan nor his subjects knew who was Asoka, nor what was inscribed on the pillars. They were thought to be the works of demons, and it was out of sheer curiosity that the Sultan transported them to Delhi. How were they discovered, and how they were brought to Delhi is thus described by Shams-i Siraj. 'After Sultan Firoz returned from his expedition against Thatta, he often made excursions in the neighbourhood of Delhi. In this part of the country there were two stone columns. One was in the village of Tobra, in the district (*shikk*) of Salaura and Khizrabad, in the hills (*koh-payah*); the other in the vicinity of the town of Mirat. These columns had stood in those places from the days of the Pandavas, but had never attracted the attention of any of the kings who sat upon the throne of Delhi, till Sultan Firoz noticed them, and with great exertion,

¹Shams-i-Siraj 'Afif. *Tarikh-i-Firoz Shahi*, in Elliot and Dowson, *The History of India...*, Vol. III, pp. 340, 341 and 342

brought them away. One was erected in the palace (*kushk*) at Firozabad, near the *Masjid-i-jama'*, and was called the *Minara-i zarin*, or Golden Column, and the other was erected in the *Kushk-i Shikar*, or Hunting Palace, with great labour and skill. The author has read in the works of good historians that these columns of stone had been the walking sticks of the accursed Bhim, a man of great stature and size.'

REMOVAL OF THE MINARA-I ZARIN

Khizrabad is ninety *kos* from Delhi, in the vicinity of the hills. When the Sultan visited that district, and saw the column in the village of Tobra, he resolved to remove it to Delhi and there erect it as a memorial to future generations. After thinking over the best means of lowering the column, orders were issued commanding the attendance of all the people dwelling in the neighbourhood, within and without the doab, and all soldiers, both on horse and foot. They were ordered to bring all implements and materials suitable for the work. Directions were issued for bringing parcels of the cotton of the *sembal* (silk-cotton tree). Quantities of this silk cotton were placed round the columns, and when the earth at its base was removed, it fell gently over on the bed prepared for it. The cotton was then removed by degrees, and after some days the pillar lay safe upon the ground. When the foundations of the pillar were examined, a large square stone was found as a base, which also was taken out. The pillar was then encased from top to bottom in reeds and raw skins, so that no damage might accrue to it. A carriage with forty-two wheels was constructed, and ropes were attached to each wheel. Thousands of men hauled at every rope, and after great labour and difficulty the pillar was raised on to the carriage. A strong rope was fastened to each wheel, and 200 men pulled at each of these ropes. By the simultaneous exertions of so many thousand men the carriage was moved, and was brought to the banks of the Jumna. Here the Sultan came to meet it. A number of large boats had been collected, some of which could carry 5,000 and 7,000 *mans* of grain, and the least of them 2,000 *mans*. The column was very ingeniously transferred to these boats, and was then conducted to Firozabad, where it was landed and conveyed into the *Kushk* with infinite labour and skill.²

REVENUE ADMINISTRATION—JAGIR SYSTEM

The Sultan restored to the original owners village lands confiscated by his predecessors. He also made fresh grants every day to the host of candidates present in the capital. Shams-i Siraj states, 'The Sultan showed great liberality in his grants of revenue, and excited the cupidity of a host of expect-

²Shams-i Shiraj 'Afif. *Tarikh-i-Firoz Shahi*, in Elliot and Dowson, *The History of India...*, Vol. III, pp: 350, 351

tants. To some he gave 10,000 *tankas*, to others 5,000, and to others 2,000, according to the respective ranks and claims of the different office-bearers. This method of paying officials was introduced by Sultan Firoz, and remains as a memorial of him. During the forty years of his reign he devoted himself to generosity and the benefit of Musulmans, by distributing villages and lands among his followers.'

HINDU CHIEFS UNDER FIROZ

Under Firoz we hear very little of the Hindu Chiefs, the Rais and Ranas, the other important class of intermediaries. The general averments of continued tranquility, taken with the absence of records of punitive expeditions, suggest that their relations with the Administration were normally friendly. There is record in regard to two chiefs belonging to the province of Avadh. 'When the King was marching through this province on an expedition to Bengal, the Chiefs (Rai) of Gorakhpur and Kharosa, who had formerly paid their revenue in Avadh, but for some years had been in "rebellion" and had withheld payments, came to make their submission and offered valuable presents. At the same time they paid into the Camp treasury "several lakhs" of *tankas* on account of the arrears of former years, and agreed to the sums to be paid in future, for which they gave formal engagements. They accompanied the King for some marches through their country; and, in recognition of their submission, orders were issued that not a single village of theirs was to be plundered, and that any animals which had been seized were to be restored.'

A GREAT BUILDER

Firoz was a great builder. He built cities, mosques, hospitals, public baths, bridges, dams, and irrigation reservoirs. He also restored the decaying buildings of his predecessors. He founded the cities of Jaunpur (to the north-west of Benares), and Hissar. Shams-i Siraj states, 'It was at this time that Hisar Firozah was founded.... In the place now occupied by the city two large and populous villages formerly stood, which were called Great Laras and Little Laras. There were fifty *kharaks* included in Great Laras, and forty in Little Laras. In this country there is no other village than the *kharak*. 'The neighbourhood of Great Laras greatly pleased Sultan Firoz, and he thought it would be well to build a city there, for it was very deficient in water, and during the hot season travellers who came from Irak and Khurasan had to pay as much as four *jitals* for a pitcher full. So the Sultan resolved to build a city, being filled with hope that if he built a town for the benefit of Musulmans, God would provide it with water. He, therefore, began the work, and persevered in it for several years, assisted by his nobles and great men. Hard stone was brought from the hills of Narsai, and was used with strong quicklime and burnt bricks. A fort of great extent

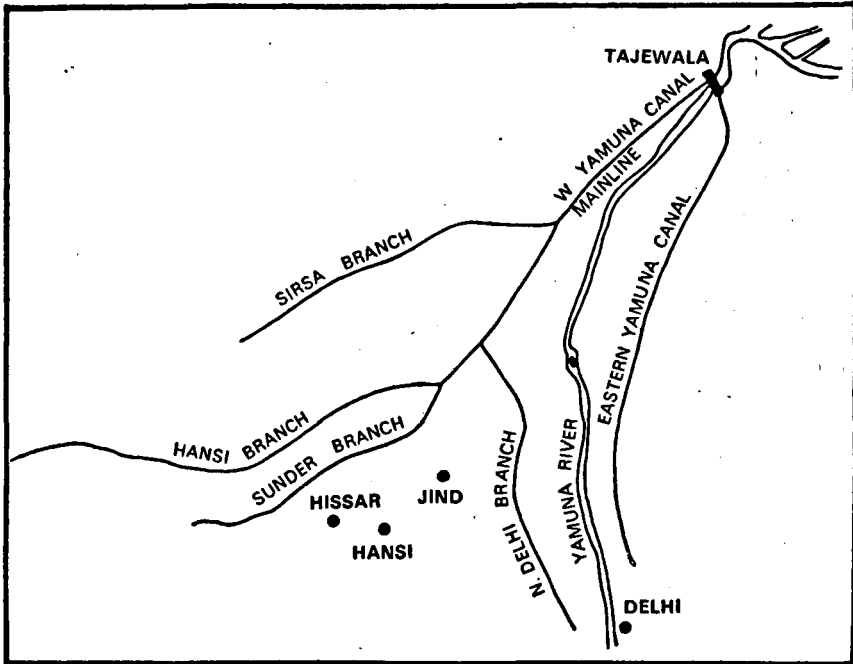


FIG. 5. The Western Jamuna Canal was constructed by Firoz Tughlak. It was aligned along the neglected beds of rivers.

and height was commenced.’³

When a city is built, the question of water-supply arises. In Hissar, which was founded in a desert, the problem was all the more acute. It was solved by the construction of an inundation canal, the famous Western Jamuna Canal, which brought ‘dead lands’ to life.

WESTERN JAMUNA CANAL

In harnessing the flood waters of the Jamuna and the Sutlej, by construction of the western Jamuna canal, Firoz Shah was a pioneer in the history of canal irrigation. This canal was constructed in A.D. 1355 to provide water to the newly constructed city of Hisar Firoza (Hissar) and his hunting grounds at Safidon. In aligning it, advantage was taken of natural depressions or drainage channels whose slope and direction were

³Shams-i-Shiraj 'Afif. *Tarikh-i Firoz Shahi*, in Elliot and Dowson, *The History of India...*, Vol. III, pp. 298, 299

found suitable. The channel thus took the form of a linked series of drainages and depressions rather than a canal as the word is understood today.

Shams-i Siraj thus provides the details about the construction of this canal, and its upkeep. "The Sultan, perceiving that there was a great scarcity of water, resolved in his munificence to bring a supply thither. He accordingly conducted two streams (*juī*) into the city from two rivers; one from the river Jamuna, the other from the Sutlej. That from the Jamuna was called Rajiwah, and (the other) Alaghkhani. Both these streams were conducted through the vicinity of Karnal, and, after a length of about eighty *kos*, discharged their waters by one channel into the town. The author's father was then in the service of the Court, and held the office of *Shab-navis*. He informed the author that Sultan Feroz was occupied two years and a half in building the town. When it was built he laid out many gardens and planted many trees, including all sorts of fruit-trees.... Previous to this time there had been an autumn harvest, but the spring harvest failed, because wheat would not grow without water. After the canals had been dug, both harvests came to maturity.

IRRIGATION CHARGES

Firoz Shah thus established two cities by land and by water—the city of Fath-abad, and the city of Hisar Firozah. Numerous water-courses were brought into these places, and an extent of from eighty to ninety *kos* in these districts was brought (under cultivation), in which there were many towns and villages, as the *kasbas* of Janid and Dahatarath, and the town of Hansi and its dependencies. In every town and village great advantage was derived from the supply of water. The king therefore convened a general assembly of judges, lawyers, and doctors, and demanded of them an opinion upon this question: "If a man with great labour and expenditure of money conducts water into certain districts, so that the inhabitants thereof realize a large profit, ought he or not to receive any return for his trouble and outlay?" They were unanimously of opinion that the benefactor was entitled to the right of *sharb*, that is to say, ten per cent. The Sultan accordingly realized his *sharb*, and included it in his rent-roll.

"The king's rental was thus increased from two sources, from the *sharb*, and secondly from the newly cultivated lands. A sum of about two *lacs* of *tankas* was in this way added to the king's revenue. No king of Dehli had ever been in the receipt of such an income as Sultan Firoz now enjoyed, and the sovereign's financial business had so greatly increased that separate officers were appointed for the control of the private income of the Sultan, and the public revenue of the State was kept distinct.

"When the rainy season came on, and the rains were at their height, officers were appointed to examine the banks of all the water-courses, and report how far the inundations extended. The author's father was several

times appointed on this duty. The Sultan was greatly pleased when he heard of the spread of the waters. If any village in his estate went to ruin, he dismissed the officers in disgrace, and so during his reign the country was thriving and prosperous.'

CHEAPNESS OF FOODGRAINS

The reign of Firoz Shah was marked by cheapness of foodgrains. Possibly it was due to good rainfall over a number of years, and irrigation of land by the Western Jumuna canal. Shams-i Siraj states, 'Grain was so cheap that, in the city of Dehli, wheat was eight *jitals* a *man*, and gram and barley four *jitals* a *man*. Fabrics of all kinds were cheap, and silk goods, both white and coloured, were of moderate price. Orders were given for the reduction of the price of sweet-meats, in unison with the general fall of prices.'

GARDENS

Firoz not only promoted agriculture by extending irrigation to barren lands, he also planted fruit-trees in gardens. Shams-i Siraj states, 'Sultan Firoz had a great liking for the laying out of gardens, which he took great pains to embellish. He formed 1,200 gardens in the vicinity of Dehli. Such of them as were private property, or were religious endowments, after due investigation of the titles, he settled for with their owners. All gardens received abundant proofs of his care, and he restored thirty gardens which had been commenced by Ala-ud-din. In the neighbourhood of Salaura he made eighty gardens, and in Chitur forty-four gardens. In every garden there were white and black grapes, of seven (*named*) varieties. They were sold at the rate of one *jital* per *sir*. Of the various articles grown in the gardens, the government share of the produce amounted to 80,000 *tankas*, without taking into account the dues of the owners and gardeners.'

CONDITION OF PEOPLE

There is little doubt that under the beneficent rule of Sultan Firoz the condition of the people improved. 'Formerly', according to Shams-i Siraj, 'the practice was to leave the *raiya* one cow and take away all the rest. Sultan Firoz made the laws of the Prophet his guide, acting zealously upon the principles they laid down, and prohibiting all that was inconsistent therewith. No demand in excess of the regular government dues was to be made, and the officer who made any such exaction was to make full reparation. Brocades, silks, and goods required for the royal establishments were to be purchased at the market price, and the money paid.... Such rules

⁵Shams-i Siraj 'Afif. *Tarikh-i Firoz Shahi*, in Elliot and Dowson, *The History of India...*, Vol. III, pp. 300-302, 345, 346

were made that the *raiya*s grew rich, and were satisfied.... Their homes were replete with grain, property, horses, and furniture; every one had plenty of gold and silver; no woman was without her ornaments, and no house was wanting in excellent beds and couches. Wealth abounded and comforts were general. The whole realm of Dehli was blessed with the bounties of the Almighty.' There is an element of exaggeration and courtly flattery in this statement, but there is no doubt that under the comparatively mild rule of Firoz, the peasants were relatively prosperous.

Sultan Firoz Shah died in September 1388, aged about eighty-three. After his death the government fell into utter confusion. As the central authority weakened, the governors of provinces became independent.

CHAPTER 11

SULTANATE OF DELHI

A.D. 1398–1526

INVASION OF TIMUR

SAYYIDS AND LODI AFGHAN DYNASTIES

SLUMP IN PRICES OF FOODGRAINS

AFTER the death of Firoz Shah in A.D. 1388, a period of anarchy followed. Sultan Mahmud, a grandson of Firoz Shah, was recognized king in Old Delhi; a few miles away at Ferozabad, Nusrat Shah claimed to be the Sultan.

THE MONGOLS

While the two Sultans were busy fighting each other, a new menace threatened India in the north. These were the Mongols again. Here it would be pertinent to recapitulate the history of Mongols. In the middle of the thirteenth century, the great Mongol Empire was founded by Chingiz Khan. It extended from China to Eastern Europe and included a good bit of Russia. Chingiz Khan died in A.D. 1227. His successor, Ogdai, had conquered northern China, and his nephew Batu had led the Western Mongols into Europe. By A.D. 1240 they had reached the Dnieper, and destroyed Kiev. "Princes, bishops, nuns, and children were slain with savage cruelty. It is impossible to describe the barbarities that prolonged the death of the unfortunate inhabitants. None remained to weep or to tell the tale of disaster." They moved on into eastern Europe in two columns, the northern against Poland and the southern against Hungary. In A.D. 1241 the whole of Silesia was devastated, while Batu destroyed an Hungarian army, took Pesth and Gran, and sent expeditions into the Balkans. Central and Western Europe was saved only by the death of Ogdai in that year, which compelled Batu and the other Mongol chieftains to go back to Karakorum in Mongolia for the election of a new khan. The Mongols later returned to Poland and Silesia, took Cracow and Beuthen, and drove away great numbers of slaves, but contented themselves with imposing their suzerainty on Russia.

The Yuan dynasty founded by Kublai Khan ruled China from A.D. 1280 to 1368. Hulagu, grandson of Chingiz Khan, captured Baghdad in A.D. 1258, thus bringing the Abbasid dynasty to an end. The above-mentioned Mongol rulers were not Muslims. Their religion was Shamanism.

AMIR TIMUR

The Mongols were again led by a military genius, Amir Timur. Timur was born in A.D. 1336 and became the Great Khan of Samarkand

in A.D. 1369. Timur, unlike Chingiz, was a Muslim. His father was one of the earliest converts to Islam.

TIMUR'S INVASION OF INDIA

When Timur started on his career of conquests the choice before him was China or India. Both these countries were inhabited by infidels.

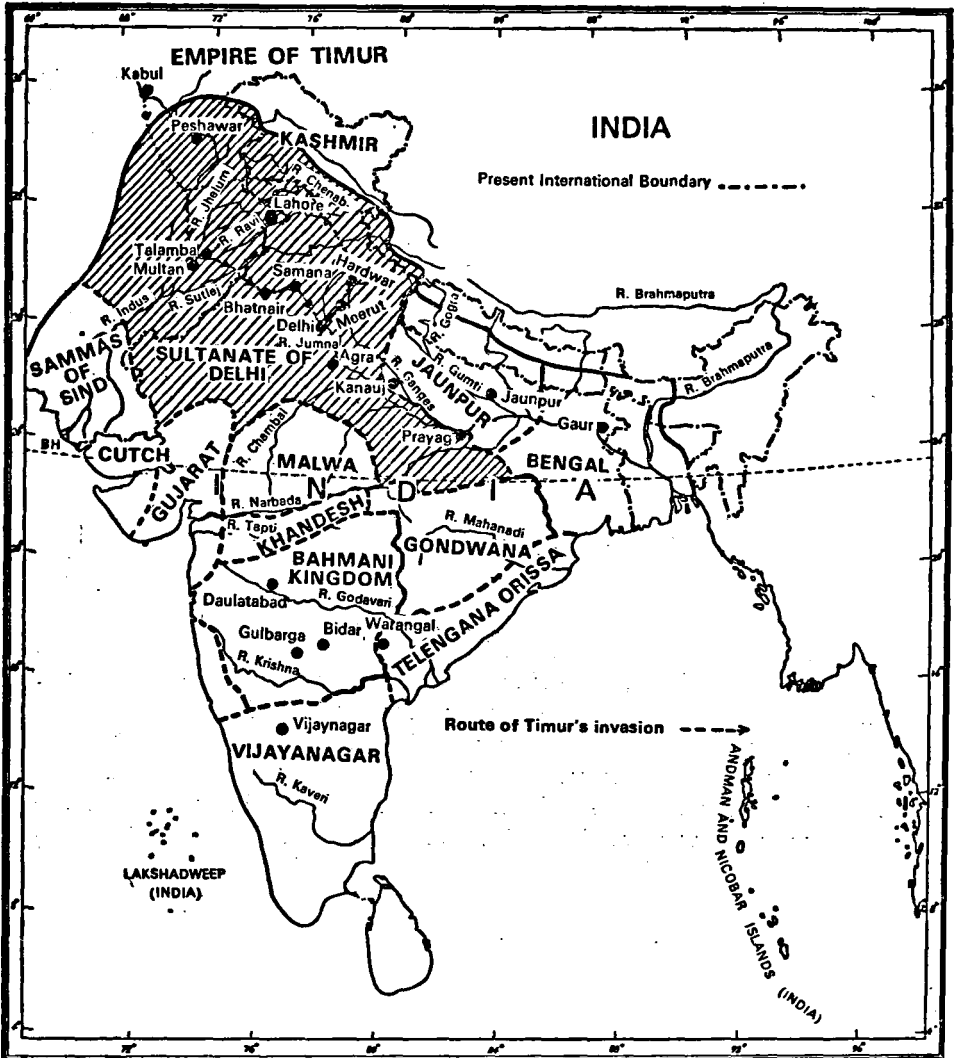


Fig. 6. The extent of the Sultanate of Delhi in 1398 and the route of Timur's invasion of northern India.

Why he chose to attack India is thus described in his autobiography. 'About this time there arose in my heart the desire to lead an expedition against the infidels, and to become a *ghazi*; for it had reached my ears that the slayer of infidels is a *ghazi* and if he is slain he becomes a martyr. It was on this account that I formed this resolution, but I was undetermined in my mind whether I should direct my expedition against the infidels of China or against the infidels and polytheists of India. In this matter I sought an omen from the Kuran, and the verse I opened upon was this, "O' Prophet, make war upon infidels and unbelievers, and treat them with severity."

'My great officers told me that the inhabitants of Hindustan were infidels and unbelievers. In obedience to the order of Almighty God, I determined on an expedition against them. Throwing themselves upon their knees they all wished me good fortune. I demanded of the warrior chieftains whether I should direct my expedition against the infidels of Hindustan or China. At first they repeated fables and wise sayings, and then said, in the country of Hindustan there are four defences, and if any one invading this extensive country breaks down these four defences, he becomes the conqueror of Hindustan.'¹

In the autumn of A.D. 1398 Timur crossed the Indus, the first defence of India, with a cavalry force of ninety thousand. He defeated Mahmud Tughlak at Loni and again near Delhi. Then he carried out his notorious massacre of the inhabitants of Delhi. The economic prosperity of the Delhi Sultanate was completely shattered by the catastrophe of Timur's invasion. All the four cities of Delhi were thoroughly and mercilessly sacked and an immense booty consisting of male and female slaves, precious stones and pearls, as well as gold and silver, was taken away from the unfortunate inhabitants of the capital. He also carried away skilled artisans whom he employed in construction of his monuments at Samarkand.

After his conquest of northern India, Timur conquered Iran and Syria. At Isfahan he massacred the entire population. He defeated Bayezid, Sultan of Turkey, at Angora in A.D. 1402. Tamerlane failed to take advantage of his victory. His empire was too loose and too far-flung, too much the product of marauding successes, to have any permanence. It began to disintegrate almost as soon as it was formed. Only in northern India it survived as a compact state. From Asia Minor, the Mongols soon disappeared, leaving the Turks in control.

Timur destroyed the cities of Islamic Iran and Turkey and Hindu India with equal impartiality. He slaughtered lakhs of men, burnt many cities, and laid waste one-half of the then civilized world. There was a strange blend of cruelty and artistic sensibility in this man; while he enjoy-

¹*Mal'uzat-i Timuri*, in Elliot and Dowson, *The History of India*. . . , Vol. III, pp. 394, 395

ed raising pyramids of skulls at Isfahan and Dehli, he also created gardens of great beauty at Samarkand, where he died in A.D. 1405 in the midst of his Chinese campaign.

SAYYID DYNASTY

A.D. 1414--1451

After the departure of Timur, the neighbourhood of Delhi, and all those territories over which his armies had passed, were visited with pestilence and famine. All semblance of government in northern India was destroyed. For fifteen years there was no regular government at Delhi. In A.D. 1414 Khizr Khan, governor of the Punjab, who claimed to be a Sayyid, became the Sultan of Delhi. Khizr Khan ruled for seven years. He was succeeded by Mubarak Shah in A.D. 1421. Mubarak Shah was assassinated in 1434. He was followed by Muhammad-bin-Farid, who proved to be a worthless ruler.

AFGHAN RULE

LODI DYNASTY

A.D. 1451--1526

BUHLOL LODI

A.D. 1451--1489

In A.D. 1451 Buhlol Khan, an Afghan of the Lodi tribe, who was governor of the Punjab, seized the throne. He restored the old frontiers of the Delhi kingdom as far as Bihar.

SIKANDER LODI

(A.D. 1489--1517)

Sikander Lodi was a bigot who destroyed Hindu temples recklessly. Abdulla states, 'He was so zealous a Musulman that he utterly destroyed diverse places of worship of the infidels, and left not a vestige remaining of them.'² His reign was marked by exceptionally low prices of foodgrains. He generally resided at Agra, which became a city in his time. Before that it was merely a large village. Sikandra, the suburb of Agra, is named after him. Under his orders, the *Argar-maha-bedak*, on the science of medicine and the treatment of disease, was translated, and received the name of *Tibbi Sikandari*. The book is the foundation of the practice of the physicians of Hind, and was thus brought into general use.

IBRAHIM LODI

1517--1526

Ibrahim Lodi was the last Lodi emperor. His tactless treatment of

²Abdulla, *Tarikh-i Daudi*, in Elliot and Dowson, *The History of India*. . . , Vol. IV, p. 447

Afghan nobles antagonized them, and ultimately led to treachery on a large scale. It was Daulat Khan Lodi who invited Babur, who defeated Ibrahim at Panipat on 21 April 1526.

LOW PRICES OF FOODGRAINS

Due to a series of abundant harvests on account of good rainfall over a number of years, the price of foodgrains slumped to a low level. Another reason for this slump was shortage of metal like gold and silver for coinage. It seems most of gold and silver was siphoned off by Timur from India. At the same time the seaports of Gujarat and Bengal were cut off from Delhi, both these provinces had become independent (Fig. 17). Adequate supplies of gold and silver on account of foreign trade and revenue thus failed to reach Delhi. Abdulla thus provides details of this phenomenon of low prices. 'One of the most extraordinary phenomena of Sultan Ibrahim's time was that corn, clothes, and every kind of merchandise were cheaper than they had ever been known to be in any other reign, except perhaps in the time of Sultan Ala-ud-din Khalji; but even that is doubtful. Moreover, in the time of the latter, the cheapness was occasioned by every kind of disgusting interference and oppression, and by a hundred thousand enforcements and punishments; whereas the cheapness of this reign was occasioned by abundant harvests. In the time of Sikander, also, the markets were very cheap, but still not so much so as in the time of Ibrahim. Ten *mans* of corn could be purchased for one *bahloli*; five *sirs* of clarified butter, and ten yards of cloth, could be purchased for the same coin. Everything else was in the same exuberance; the reason of all which was that rain fell in the exact quantity which was needed, and the crops were consequently luxuriant, and produce increased ten-fold beyond the usual proportion. The Sultan had likewise issued an edict that his chiefs and nobles of every degree should take nothing but corn in payment of rent, and no money was to be taken from the cultivators on any account. The consequence was that countless quantities of grain accumulated in the several *jagirs*, and as ready money only was necessary for maintaining the personal expenses of the nobles, they were eager to sell their grain at any price which was procurable. The abundance of God's blessings reached such a height, that ten *mans* of corn would sell for a *bahloli*. Gold and silver were only procurable with the greatest difficulty. A respectable man with a family dependent on him might obtain wages at the rate of five *tankas* a month. A horseman received from twenty to thirty as his monthly pay. If a traveller wished to proceed from Delhi to Agra, one *bahloli* would, with the greatest ease, suffice for the expenses of himself, his horse, and escort.'³

³Abdulla, *Tarikh-i Daudi*, in Elliot and Dowson, *The History of India. . .*, Vol. IV, p. 476

CHAPTER 12

HINDU REACTION TO ISLAMIC MONOTHEISM

RISE OF BHAKTI CULT

RAMANAND, VALLABHA, CHAITANYA AND KABIR

GURU NANAK, PROPHET AND FARMER

A.D. 1398-1538

THE monotheism of Islam had an impact on the Hindu religious thought. Islam declared that One Great God was the supporter of the world and helped the virtuous. The Hindu masses keenly felt the need of a personal God. Such personal God for them was Krishna, who was identified with Vishnu. Thus arose a doctrine of passionate personal devotion, *bhakti*, or faith in an incarnate deity in the form of Krishna. Krishna was a pastoral god who lived among Ahir herdsmen, grazed the cattle, and experienced the joys and sorrows of pastoral life (Fig. 7). His brother Balarama, also called Haldhar, was the bearer of the plough, a symbol of agriculture (Fig. 8).

The fifteenth and sixteenth centuries in India saw the rise of a number of poets, saints and *bhaktas*, viz. Ramanand, Vallabhacharya, Chaitanya, Kabir and Nanak, who were contemporaries.

Ramanand (A.D. 1398-1518), born at Melkote, in South India, was a great religious teacher. He settled at Benares, where he attracted a large number of devotees. He popularized the worship of Rama and Sita as incarnations of Vishnu and Lakshmi.

Vallabhacharya (born A.D. 1478), a Telugu Brahman, founded a school of poets in Vraja, the country around Mathura. Vallabha places *bhakti* (devotion) on a higher level than *jnana* (knowledge). He propagated the worship of Krishna as Srinathji. His doctrine of Krishna worship had a profound effect on the social life of Rajasthan.

Kabir (A.D. 1398-1516) was a disciple of Ramanand. According to tradition he was the abandoned child of a Brahmin widow, who was adopted by a Muslim weaver, Niru by name. In Indian miniature paintings Kabir is shown working on a loom (Fig. 9). This great mystic denounced the pretences of the Brahmin priests and the *mullahs* of Benares. Kabir had followers both among the Hindus and the Muslims. His writings, which form the cornerstone of Hindi literature, were compiled by one Dharam Das. When Kabir died, his corpse was claimed both by the Hindus and the Muslims. According to a legend, when the shroud was lifted only a heap of flowers was found, which both the parties divided among themselves. The Hindus cremated them and the Muslims buried them.

Eastern India, the provinces of Bihar and Bengal, became the home

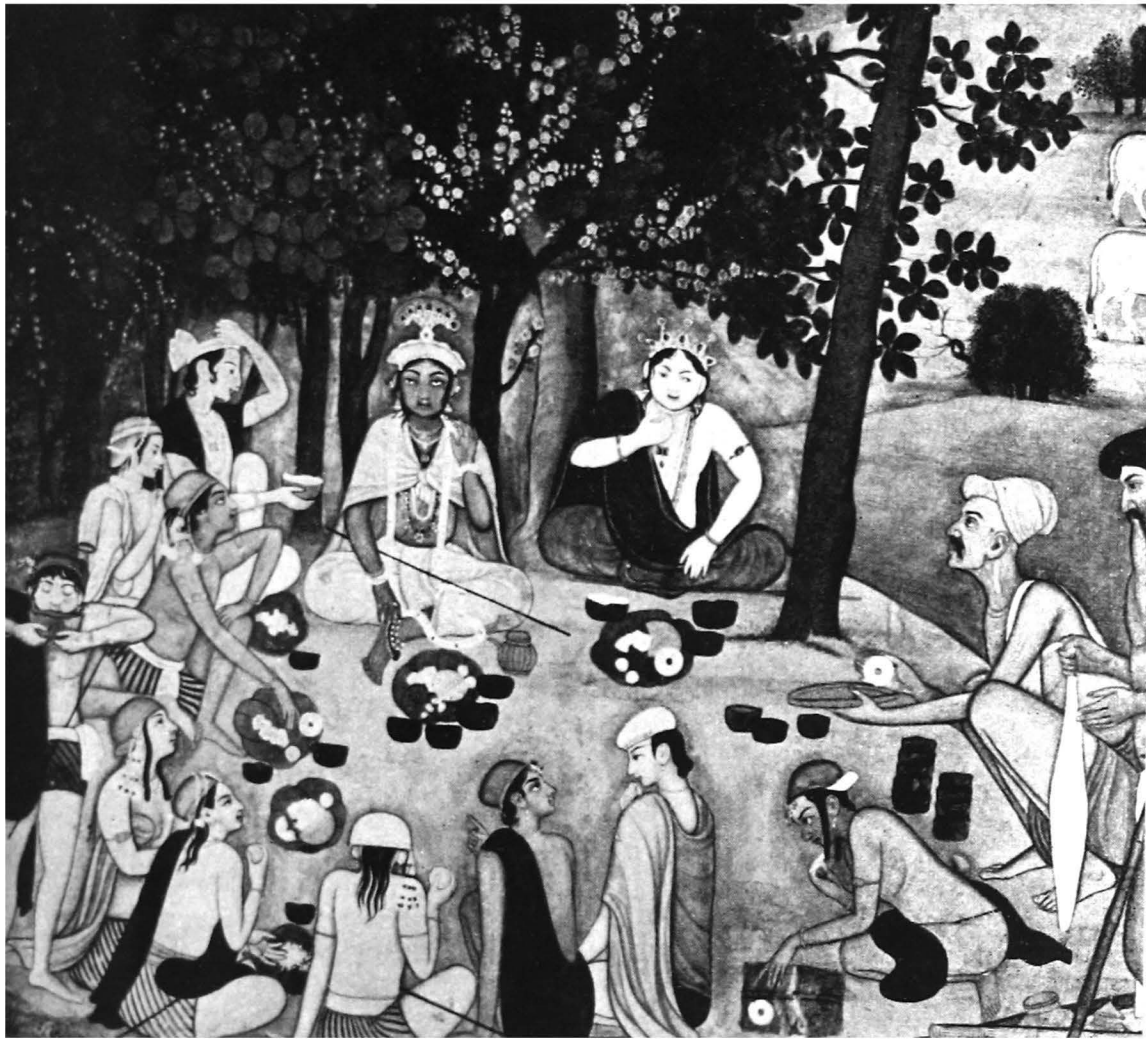


FIG. 7. Krishna and Balarama having a feast in the forest with cowherds. Food is served in leaf cups of *Bulea monosperma*. Kanga painting, 18th century.

(Courtesy: Chandigarh Museum)



FIG. 8. Balarama diverting the Jamuna with his plough. Balarama is also called Haldhar, or bearer of the plough. Kangra painting, 18th century.

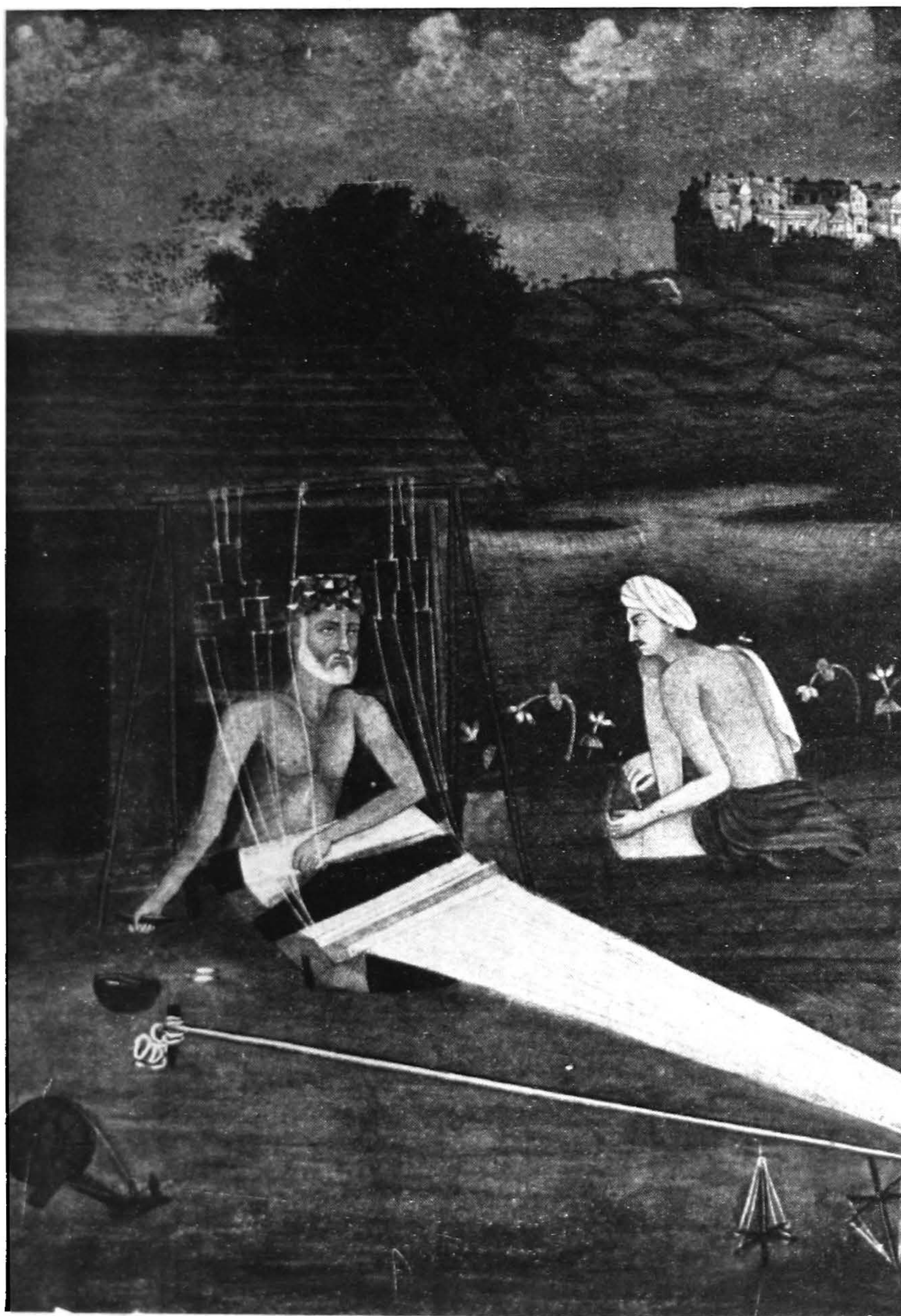


FIG. 9. Kabir working on a loom. Mughal, 17th century.



FIG. 10. 'As rotate the buckets hung on the chain of the Persian wheel, one being emptied and the other being filled, so is the play of God', said Guru Nanak. Guler, 181
(Courtesy: Chandigarh Museum)

of the Radha-Krishna cult in the 15th century. Vidyapati (fl. A.D. 1400-1470), the poet of Bihar, wrote in the Maithili dialect on the Radha and Krishna theme. He was the most famous of the Vaishnava poets of Eastern India.

Chaitanya (A.D. 1486-1533) was the high priest of Krishna cult in Bengal. Nimai, as his original name was, belonged to a Brahmin family of Nadia. While still a young man he felt the urge for renunciation of worldly ties and left his home and a young wife. He reached Puri, and Prataparudradeva, the Raja of Orissa, became his disciple. From there he wandered into South India, where he discoursed to people in Tamil. He taught loving devotion to Krishna. He lays stress on our capacity of realizing God as lover, the soul being his bride. Radha is the soul, which seeks Krishna, the God.

GURU NANAK, PROPHET AND FARMER (A.D. 1469-1538)

The leading factor in human progress in the historical period is the advent of men who pass beyond the accepted ideas of their day and become the discoverers of truths hitherto unknown or imperfectly known. They are the prophets, the men on whom the transformation of the spiritual life of mankind depends. One such person was Guru Nanak.

Nanak was born in A.D. 1469 when Bahlul Lodi was the Sultan of India. It is necessary to examine his career and teachings in greater detail, as they led to the rise of a farming community which played, in due course, a significant role in India's Green Revolution. Nanak's father, Mehta Kalian Das Bedi, was the accountant of village Talwandi Rai Bhoie, about forty miles from Lahore. At the age of twelve he was married to Sulakhni, daughter of Mool Chand Chona of Batala. Two sons, Lakhmi Das and Sri Chand, were born to them. His sister Nanaki was married to one Jai Ram Uppal in Sultanpur Lodi, now in the present Kapurthala district. Jai Ram got Nanak employed as an accountant in the service of Nawab Daulat Khan Lodi.

It was at Sultanpur that Nanak had his first mystic experience. He realized that the division of people according to their religions was arbitrary, and humanity was one. He declared, 'There is no Hindu, there is no Mussalman.' To make such a declaration in Lodi rule, when there was no freedom of thought and expression, was indeed courageous. This happened in A.D. 1499. Thereafter he travelled extensively, visiting different parts of India.

During his travels, he went to Saidpur (now called Emenabad in the present Gujranwala district in Pakistan). There, he accepted the hospitality of an humble carpenter, Lalo, and declined the sumptuous feast of a corrupt official, Malik Bhago. When Bhago protested that he had been insulted, Nanak told him that his food was soaked with the blood of the

poor and oppressed, while the food of Lalo, who earned his livelihood with hard labour, tasted like milk.

Another anecdote concerns a millionaire, Duni Chand, who was making an ostentatious display of his wealth by planting flags on the roof of his house. Each flag represented a lac of rupees. Guru Nanak sent him a needle with the message that he should deliver it to him in the next world. Duni Chand replied that it was not possible. The Guru told him that if he could not take even a needle to the next world, how did he expect his millions to accompany him? Duni Chand realized the folly of hoarding wealth, and gave some of it in charity to the poor.

On a visit to Hardwar, Nanak saw the Pandas, the Brahman priests, offering water to the dead relations of their clients, the Hindu pilgrims, by throwing it towards the East. Nanak started throwing water towards the West. When asked why he was doing so, he replied that he was irrigating his fields in the village of Kartarpur in the Punjab. The Pandas asked him how he expected water to reach his fields four hundred miles away? He replied that if water could reach the souls of their clients millions of miles away in other planets, why could his water not reach Punjab? It was with such simple examples that he taught the truth to the people whose minds were clouded with superstition.

Similarly, when he reached Mecca, he reclined with his feet towards the Ka'baa'. This was an act of daring. When an infuriated mullah protested that he was committing a sacrilege by reclining with his feet towards the house of God, Nanak asked him to turn his feet in the direction where God was not. The mullah became speechless and realized the truth that God is everywhere.

Nanak realized that the prevalent Islamic notion of the Universe comprising only of seven heavens and seven underworlds was limited. According to him space was limitless and there were unlimited numbers of planets and stars. He also taught people that God who was all-pervading and revealed Himself in His creation and could not be confined to the four walls of the temples or the mosques. When he visited Jagannath Puri, he saw the Brahman priests performing *ārti* by waving lights in silver salvers and offering flowers and incense to the idol. He told them that the sun, the moon and the stars were the lights placed on the salver of heaven, and fragrant mountain breezes were the incense, and the entire blossoming vegetation was the flower-offering to God, who is pervading the Universe.

The followers of Nanak were humble workers and peasants. Cobblers, tanners, weavers, carpenters, blacksmiths, and farmers flocked to him. He freed them from the shackles of the caste-system and gave them social equality. The bulk of his followers were the Jats, the farmers of the Punjab, who are known for their expertise in agriculture. Khushwant Singh states, 'The Jat was born the worker and the warrior. He tilled his land with

his sword girded round his waist. He fought more battles for the defence of his homestead than the Kshatriya, for unlike the martial Kshatriya the Jat seldom fled from his village when the invaders came. And if the Jat was mal-treated or if his women were molested by the conqueror on his way to Hindustan, he settled his score by looting the invaders' caravans on their return journey and freeing the women he was taking back. The Punjabi Jat developed an attitude of indifference to worldly possessions and an instinct for gambling with his life against odds. At the same time he became conscious of his role in the defence of Hindustan. His brand of patriotism was at once hostile towards the foreigner and benign, even contemptuous, towards his own countrymen whose fate depended so much on his courage and fortitude.¹

It was in the company of such people that Nanak settled around A.D. 1520 on the right bank of the Ravi, and there founded the village of Kartarpur. The land for the farm was donated by a Jat devotee, Ajita Randhawa. A young boy named Ram Das, also of Randhawa clan, about seven years of age, who was grazing cattle, met him in the pasture-land of village Kathu Nangal. He told the Guru that he was very much afraid of death. When the Guru asked him why a person so young be afraid of death, the boy replied, 'I saw my mother lighting a fire. It is the small sticks which burned first.' Guru Nanak told him that he was wise beyond his years, and would live long. He came to be known as Bhai Budha (A.D. 1518-1631). He lived with the Guru at Kartarpur and served him devotedly. He was installed the first Granthi of Harimandar (or the Golden Temple, as it is now known) by the fifth Guru, Arjan.

An anecdote illustrates the character of the Punjabi Jat farmers who lived in the vicinity of Kartarpur. One morning, Guru Nanak was passing by on his way to his home when he saw a farmer with two heaps of wheat grains in front of him. One heap was larger than the other. He asked the farmer about the significance of two unequal heaps. The farmer replied that he was carrying on joint cultivation of land with his younger brother and they were dividing the produce. The larger heap he had allocated to his younger brother while the smaller heap was his. On Guru Nanak asking the reason for this, he replied that his younger brother had a larger family and hence he deserved a larger share. In the evening when Guru Nanak again passed by that spot, he saw that the elder brother had gone home and the younger one, who was present, was transferring wheat grains from the heap allocated to him to that of his elder brother. Guru Nanak asked why was he doing that. He replied that his elder brother was a very hospitable person and he entertained lots of guests and hence he deserved a larger share. Guru Nanak blessed both of them for their large-

¹Khushwant Singh, *A History of the Sikhs*, Vol. I, pp. 15, 16

heartedness, fairness and generosity. It was this type of peasantry which became the followers of Guru Nanak *en masse* and became the backbone of the Sikh community.

At Kartarpur, Guru Nanak started the cultivation of land. He himself participated in the ploughing of the land and in other agricultural chores. His wife looked after the *langar* (the community kitchen). 'The combination of piety and practical activity which Guru Nanak manifested in his own life he bequeathed to his followers', states McLeod, 'and it remains characteristic of many who own him as Guru today. At its best it is a piety devoid of superstition and a practical activity compounded with determination and an immense generosity. It explained much that has happened in the Punjab during the last four centuries and it explains much that can be witnessed there today.'² The food produced was donated to the *langar*, the community kitchen, in which all visitors irrespective of caste and creed ate together. People belonging to all castes participated in cooking and serving food. High and low, they ate together sitting in a row. This was the first experiment in socialism in rural India. Even now in this commercial age free food is provided to all visitors in Sikh gurdwaras.

Guru Nanak by his personal example laid down the rule that his followers must earn their livelihood by manual labour and share the produce with others. '*Kirat karo, wand chhako*'. What Guru Nanak preached he also practised. *Kirtan* was held in the early morning and in the evening after the day's work.

When Guru Nanak met the recluses, the *Siddhas*, he told them that salvation was not attained by abandoning the world and in ascetic practices. One should live actively in the world and yet remaining detached from its impurities, just as a lotus has its roots in the mire of the pond, but the beauty of its flowers is not marred by the water which surrounds it. True religion, he said, is to be found not in external practices, but in the inward discipline of love, faith and compassion expressed in righteous deeds.

Most of the similes which Guru Nanak gave are derived from agricultural practices. How should a man achieve salvation? Thus spoke Guru Nanak, 'Regard your body as a field, your mind the plough, your actions the ploughing, and effort the irrigation.' 'The body is the farm, thy actions the seed, it is watered by the Name of God, in whose hands is the whole earth. The mind is the farmer.'

How life should be lived is thus laid out: 'Let Love be the farm, Purity the water, and Truth and Contentment the two bullocks; and Humility the plough and Consciousness the tiller, and God's Remembrance the right soil, and the season, Union with God, and the seed be of the Name, and the crop of Grace; then before it the whole world seems an illusion.

²McLeod, W. H. *Guru Nanak and the Sikh Religion*, pp. 231, 232

...if such be one's deeds, by the Lord's Grace, then one is separated not from God.'

Guru Nanak thus describes the play of God in men's lives. 'As rotate the buckets hung on the chain of the Persian wheel, one being emptied and the other being filled, so is the play of God; He acteth as is His wondrous glory...' (Fig. 10).

Guru Nanak died in A.D. 1538, when Humayun was reigning in Delhi. His remains were claimed by both the Hindus and the Muslims. The Hindus regarded him as their Guru and the Muslims as their Pir. A few years after his death, the Ravi washed off the colony at Kartarpur. The landowners provided land to his son Lakhmidas on the opposite bank. It has grown into a small township and is known as Dera Baba Nanak. Kartarpur, later rebuilt, is now in Pakistan.

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CHAPTER 13

THE HINDU EMPIRE OF VIJAYANAGAR

A.D. 1336-1646

IRRIGATION WORKS, CROPS AND DOMESTIC ANIMALS

WITH the weakening of the Tughlak empire and loosening of its control over distant provinces, two kingdoms arose in the south, viz. the Hindu empire of Vijayanagar with River Krishna as its northern boundary, and the Muslim Bahmani kingdom to its north flanked by Gondwana and Telingana.

HARIHARA I (A.D. 1336-1355)

Harihara I, the founder of Vijayanagar kingdom, was crowned in A.D. 1336. On the same day he laid the foundation of Vijayanagar on the southern bank of the Tungabhadra. His reign marks the beginning of an era of conquest and territorial expansion. The small kingdom which at the beginning comprised a few Telugu and Kannada districts had grown considerably in size and was fast developing into an empire during the last years of his reign. The ports of Goa, Chaul and Dabul were taken from the Muslims. Harihara successfully resisted the attacks of Ala-ud-din Bahman Shah, the first Bahmani Sultan. He organized the kingdom into new subdivisions of villages and *sthala*, each under a *karnam*. He promoted agriculture by giving rewards to those who reclaimed land by clearing jungles.

BUKKA I (A.D. 1355-1377)

Bukka I succeeded Harihara I in A.D. 1355 and ruled till A.D. 1377. He took an active interest in the revival of the Hindu *dharma*. He also encouraged Telugu literature and was a patron of Nachana Soma, the greatest Telugu poet of the age. He was repeatedly attacked by the Bahmani Sultan Muhammad I. The Hindu bankers and money-changers started the practice of selling to the mints of Vijayanagar gold coins of Muhammad, which were finer than those of the Hindu mints. As a result of this practice, following Gresham's law, the gold coins of the Sultan disappeared, and the Hindu coins became the gold currency of the entire south. To safeguard the economy of his kingdom Muhammad murdered such of the Hindu bankers and money-changers who were residing in his kingdom. This was followed by a war against Vijayanagar in which the Hindus suffered heavy casualties and over four lacs were killed by the Sultan's armies.

IRRIGATION, CONSTRUCTION OF ANANTARAJA SAGAR OR PORUMAMILLA TANK, CUDDAPAH DISTRICT

✓ This tank was built about A.D. 1367, during the reign of Bukka I. An

inscription dated A.D. 1369 on two stone slabs in a temple nearby states that the work of construction of the reservoir took two years, that one thousand labourers were employed, and a hundred carts were engaged in carrying stones to the site. This tank is situated about 3.2 km to the east of the village Porumamilla in Cuddapah District, in Andhra Pradesh. Its water-spread is about 41.4 km². It is a natural site for a reservoir. The earth dam that was constructed to form the reservoir is about 1,372 m in length. Its total length inclusive of the hills is 267 m. It is 45.7 m wide at the base, 3.7 m at the top, and is 10.0 m in height. It has two sources of supply, viz. the River Maldevi, and the other an artificial channel constructed recently. It was provided with four sluices, and the front slope was revetted with Cuddapah stone slabs.

The inscription also gives general specifications for the selection of a tank site and its construction. It enumerates the following twelve requisites for a good tank. Firstly, a righteous king, wealthy, happy and desirous of acquiring fame. A person well versed in '*pathas shastra*' (hydrology). Hard soil in the bed of the tank. A river with sweet water with a course of about 38.6 km. Two projecting portions of hills. Between these projecting portions of hills a dam built of compact stone, not too long but firm. The two extremities of the hills should be devoid of fruit-bearing trees. The bed of the tank should be extensive and deep. Presence of a quarry nearby, containing straight and long stones. Fertile, low and level land in the neighbourhood to be irrigated. A watercourse with strong eddies in the mountain region. Lastly, masons, skilled in the art of tank construction.

The inscription also enjoins that the following six faults should be avoided: oozing of water from the dam; saline soil; location of site at the boundary of two kingdoms; high ground in the middle of the tank; scanty water supply and too extensive area to be irrigated, and too little land to be irrigated and excessive supply of water.¹

DEVARAYA I (A.D. 1406-1422)

During the rule of Devaraya I, Sultan Firuz conquered several districts of Vijayanagar and he also invaded the capital. Devaraya sued for peace, but the Sultan demanded, in addition to gold, his daughter in marriage, and the fort of Bankapur. Taking advantage of Devaraya's predicament, the Reddis of Kondavidu liberated their territory.

Devaraya I realized the value of cavalry in warfare. By purchasing large number of horses from Arabia and Persia and recruiting troopers to man them, he improved the fighting capacity of his army. He was also the first ruler of Vijayanagar to employ Turkish bowmen whom he attracted by liberal grants of land and money. Under his fostering care the Vijaya-

¹*Development of Irrigation in India*, pp. 38, 39

nagar army became an efficient tool of war, and enabled him to withstand the long-drawn contest with the Bahmani Sultan Firuz Shah.

An ardent Shaivite, Devaraya I was a devotee of the Goddess Pampa of the Tampi-tirtha. He built several temples at Vijayanagar. During his rule Vijayanagar became the chief centre of learning in South India to which scholars seeking fame and recognition came in large numbers.

During the rule of Devaraya I an Italian, Nicolo Conti, visited Vijayanagar. Describing the capital he states, 'The great city of Bizenegalia is situated near very steep mountains. The circumference of the city is sixty miles (96.5 km); its walls are carried up to the mountains and enclose the valleys at their foot, so that its extent is thereby increased. In this city there are estimated to be ninety thousand men fit to bear arms.' Regarding Devaraya I, Nicolo states, 'Their king is more powerful than all the other kings of India. He takes to himself 12,000 wives of whom 4,000 follow him on foot wherever he may go, and are employed solely in the service of the kitchen. A like number, more handsomely equipped, ride on horse-back. The remainder are carried by men in litters, of whom 2,000 or 3,000 are selected as his wives on condition that at his death they should voluntarily burn themselves with him, which is considered to be a great honour for them.'

DEVARAYA II (A.D. 1425-1446)

Devaraya II conquered the Reddi lands of Kondavidu, and thus established River Krishna as his north-east boundary. Devaraya II was a great monarch, who was the master of an extensive empire which extended from River Krishna to Ceylon and from the Arabian Sea to the Bay of Bengal. Besides the taxes collected from his dominions, he collected revenue from the numerous ports of his empire. His fleet scoured the seas, and levied tribute from Quilon, Ceylon and Pegu. It was during his reign in A.D. 1443 that Abdur-Razzak of Herat, who was sent by Sultan Shahrukh of Samarkand, son of Timur, as ambassador to the Zamorin of Calicut, came to Vijayanagar. Abdur-Razzak thus describes Devaraya II. 'The king was dressed in a robe of green satin; around his neck he wore a collar, composed of pearls of beautiful water, and other splendid gems. He had an olive complexion, his frame was thin, and he was rather tall; on his cheeks might be seen a slight down, but there was no beard on his chin. The expression of his countenance was extremely pleasing.'

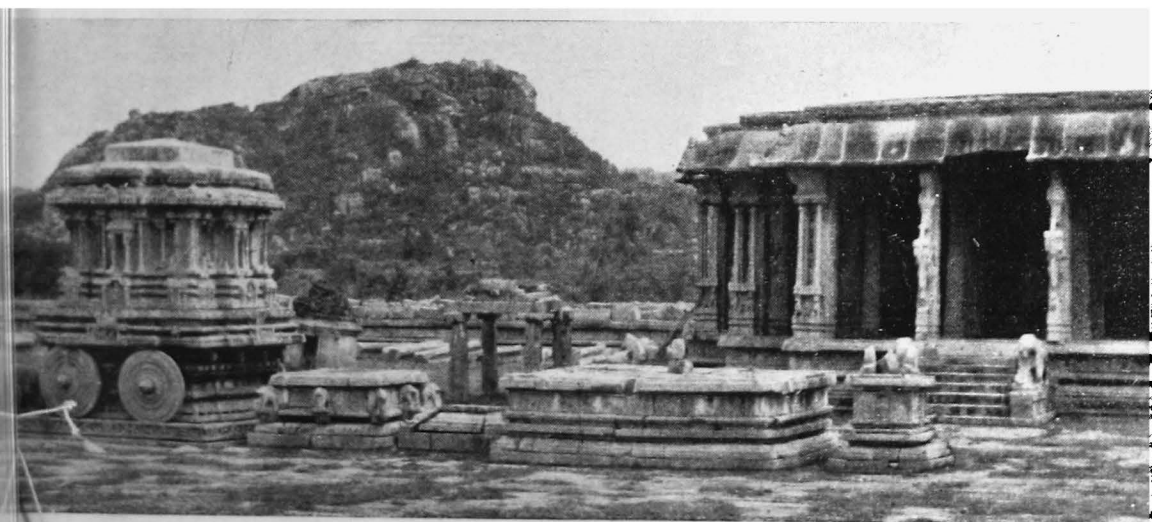
USE OF PALM-LEAVES FOR WRITING

In Vijayanagar Abdur-Razzak saw that palm-leaves were used for writing and paper was not known. He observes, 'The inhabitants of Cambay alone use paper. All other Indians write on the leaves of trees.'



FIG. 11. Village of Hampi at the site of the ancient city of Vijayanagar.

FIG. 12. Vitthalasvami temple at Hampi. *Mandapa* and stone processional car, Vijayanagar, 16th century.



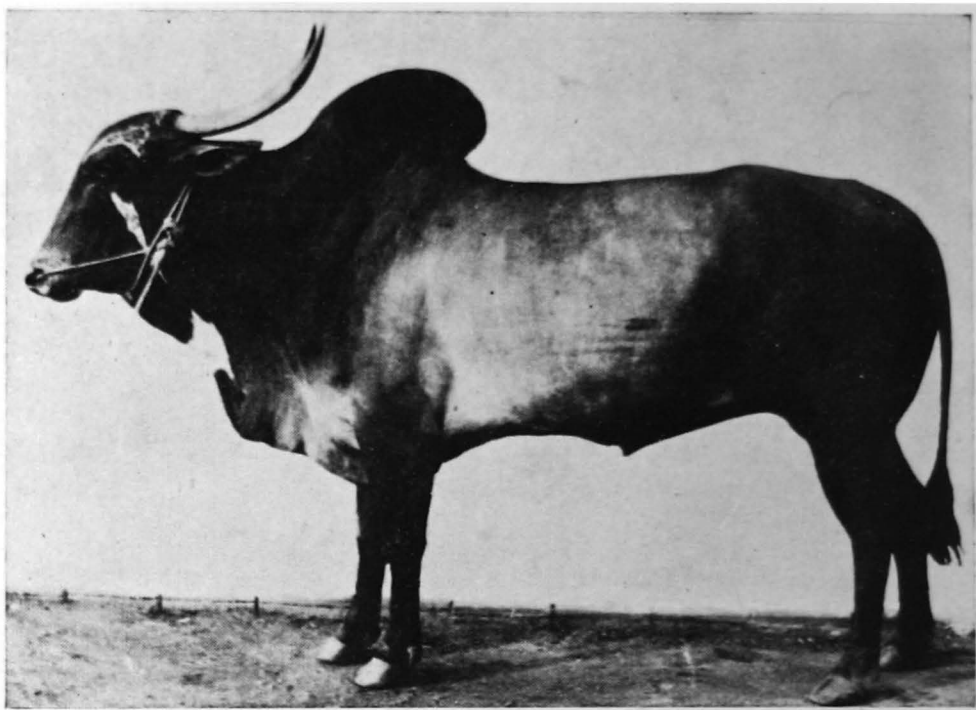


FIG. 13. A Hallikar bull. Hallikar is the best draft breed in India and it enjoyed patronage of the rulers of Vijayanagar.

FIG. 14. A Nellore ram from Andhra Pradesh. The Nellore is the tallest breed of sheep in India.



LOVE FOR FLOWERS

Abdur Razzak also observed that the people of Vijayanagar had great love for flowers. He states, 'Roses are sold everywhere. These people could not live without roses, and they look upon them as quite as necessary as food....' Even at present there is great love for flowers among South Indians, who use them for personal adornment and worship. Abdur-Razzak continues, 'Each class of men belonging to each profession has shops contiguous, the one to the other; the jewellers sell publicly in the bazars pearls, rubies, emeralds, and diamonds. In this agreeable locality, as well as in the king's palace, one sees numerous running streams and canals formed of chiselled stone, polished and smooth.'

THE COUNTRY

Describing the country, Abdur-Razzak states, 'The Country is for the most part well cultivated and fertile, and about three hundred good seaports belong to it. There are more than 1,000 elephants, lofty as the hills and gigantic as demons. The army consists of eleven *lacs* of men. The city of Bijanagar is such that eye has not seen nor ear heard of any place resembling it upon the whole earth. It is so built that it has seven fortified walls, one within the other. Between the first, second, and third walls, there are cultivated fields, gardens, and houses. From the third to the seventh, fortress, shops and bazars are closely crowded together. The bazars are very broad and long, so that the sellers of flowers, notwithstanding that they place high stands before their shops, are yet able to sell flowers from both sides. Sweet-scented flowers are always procurable fresh in that city, and they are considered as even necessary sustenance, seeing that without them they could not exist. This country is so well populated that it is impossible in a reasonable space to convey an idea of it. In the king's treasury there are chambers, with excavations in them, filled with molten gold, forming one mass. All the inhabitants of the country, whether high or low, even down to the artificers of the bazar, wear jewels and gilt ornaments in their ears and around their necks, arms, wrists, and fingers.

COURTESANS

Prostitution was under state control and served as a source of revenue. Prostitutes were also informers, and when an outsider came and visited them, they passed on information which they could gather to policemen. Abdur-Razzak, who seems to have been impressed by the charms of these women, states, 'Opposite the mint is the office of the Prefect of the City, to which it is said 12,000 policemen are attached; and their pay, which equals each day 12,000 *fanams*, is derived from the proceeds of the brothels. The splendour of those houses, the beauty of the heart-ravishers, their blandishments and ogles, are beyond all description. It is best to be brief on the

matter. Behind the mint there is a bazar, which is more than 300 yards long and 20 broad (274.32 m × 18.29 m). On two sides of it there are houses (*khanaha*) and fore-courts (*safhaha*), and in front of the houses, instead of benches (*kursi*), lofty seats are built of excellent stone, and on each side of the avenue formed by the houses there are figures of lions, panthers, tigers, and other animals, so well painted as to seem alive. After the time of mid-day prayers, they place at the doors of these houses, which are beautifully decorated, chairs and settees, on which the courtesans seat themselves. Every one is covered with pearls, precious stones, and costly garments. They are all exceedingly young and beautiful. Each has one or two slave girls standing before her, who invite and allure to indulgence and pleasure.'

PAN (BETEL-LEAF) AND ITS STIMULATING EFFECT

Abdur-Razzak observed that chewing of *pān* (betel-leaf) was a common practice at Vijayanagar, and he attributes virility of the king to its stimulating properties. He states, 'This betel is a leaf which resembles that of an orange, but is longer. It is held in great esteem in Hindustan, in the many parts of Arabia, and the kingdom of Hormuz; and indeed it deserves its reputation. It is eaten in this way: they bruise a piece of areca-nut, which they also call *supari*, and place it in the mouth; and moistening a leaf of betel (or *pān*) together with a grain of quick-lime, they rub one on the other, roll them up together, and place them in the mouth. Thus they place as many as four leaves together in their mouths, and chew them. Sometimes they mix camphor with it, and from time to time discharge their spittle, which becomes red from the use of the betel.

'This masticatory lightens up the countenance and excites an intoxication like that caused by wine. It relieves hunger, stimulates the organs of digestion, disinfects the breath, and strengthens the teeth. It is impossible to describe, and delicacy forbids me to expatiate on its invigorating and aphrodisiac virtues.

'It is probably owing to the stimulating properties of this leaf, and to the aid of this plant, that the king of that country is enabled to entertain so large a seraglio; for it is said that it contains as many as 700 princesses and concubines.'

KING'S WHITE ELEPHANT AND METHOD OF CATCHING ELEPHANTS

Abdur-Razzak observed that Devaraya II had many elephants. He thus describes the king's white elephant, its daily diet, and how elephants were caught, and the story of a clever elephant. 'Opposite the minister's office are the elephant sheds. The king has many elephants in the country, but the large ones are specially reserved for the palace. Between the first and second *enceinte* of the city, and between the northern and western faces, the breeding of elephants takes place, and it is there the young ones are

produced. The king has a white elephant, exceedingly large, with here and there as many as thirty spots of colours.

‘Every morning this animal is brought into the presence of the monarch; for to cast eye upon him is thought a favourable omen. The palace elephants are fed on *kichu*, which, after being cooked, is turned out from the cauldron before the elephant, and after being sprinkled with salt and moist sugar, is made into a mass, and then balls of about two *mans* each are dipped in butter, and are then placed by the keepers in the mouths of the animals. If any of these ingredients is forgotten, the elephant is ready to kill his keeper, and the king also severely punishes his negligence. They are fed twice a day in this way. Each has a separate stall; the walls are very strong and high, and are covered with strong wood. The chains on the necks and backs of the elephants are firmly attached to the beams above; if the chains were bound any other way, the elephants would easily detach themselves. Chains are also bound upon the fore-legs.

‘The manner in which they catch elephants is this: they dig a pit in the way by which the animal usually goes to drink, which they cover over lightly. When an elephant falls into it, no man is allowed to go near the animal for two or three days; at the end of that period, a man comes up and strikes him several hard blows with a bludgeon, when suddenly another man appears who drives off the striker, and seizing the bludgeon, throws it away. He then retires, after placing some forage before the elephant. This practice is repeated for several days; the first lays on the blows, and the second drives him away, until the animal begins to have a liking for his protector, who by degrees approaches the animal, and places before it the fruits which elephants are partial to, and scratches and rubs the animal, until by this kind of treatment, he becomes tame, and submits his neck to the chain.

‘They tell the following story of an elephant that fled from his bondage, and absconded to the deserts and the jungles. His keeper, in pursuit of him, dug pits in the paths which he was likely to frequent. The elephant, apprehensive of his artifices, seizing a club, and holding it like a staff in his trunk, kept feeling and sounding the earth with great caution as he advanced; and so arrived at the drinking ford. The elephant-drivers despaired of taking him, but as the king was very anxious to have him caught, one of the keepers mounted a tree under which the elephant was likely to go, and there lay hid, till at the moment of his passing underneath, he threw himself down on the back of the animal, and seizing the strong cord which they strap over the back and chest of those animals, and which had not yet been detached, he held it fast within his grasp. In spite of all the turnings and motions which the elephant made to escape, and in spite of his lashing with his trunk, it was all of no avail. When he began rolling upon his side, the keeper leapt upon the flank which remained uppermost, and meanwhile struck the animal several sharp blows upon the head, so that, being at last exhausted, the beast

gave in, and submitted his body to the bonds, and his neck to the fetters. The keeper brought the elephant into the presence of the king, who bestowed a handsome reward upon him.

'The kings of Hindustan go out hunting elephants, and remain a month or more in the jungles, and when they capture elephants they rejoice at their success. Sometimes they order criminals to be cast down before the feet of an elephant, that they may be killed by its knees, trunk, and tusks. Merchants carry elephants from Silan to different countries, and sell them according to their height, so much more being demanded for each additional yard'.²

KRISHNADEVARAYA (A.D. 1509-1529)—ADMINISTRATOR, STATESMAN, BUILDER AND SCHOLAR

Krishnadevaraya was the greatest of the Vijayanagar kings. He brought entire South India under his rule. Within six months of his accession he had met the attack of Sultan Mahmud of Bidar and had thrown him back wounded. Yusuf 'Adil Khan, attempting to stem his advance, was defeated and killed. In A.D. 1510 he again advanced north, besieging Raichur, Gulburga and Bidar.

With the north secure, Krishnadevaraya was able to turn south, and there he overthrew the rebels of Ummattur, whose territory was made into a new province with Sriringapattanam as its capital. Thereafter he turned against the Oriya ruler, Prataparudra, from whom he wrested Kondavidu and the lands up to the Krishna. From Bezwada he pushed westwards into Telingana, and then, in A.D. 1516-17, to beyond the Godavari. His most famous battle took place on 19 May 1520, and resulted in the recovery of the fortress of Raichur from Ismail 'Adil Shah of Bijapur.

Local administration was entrusted to three chiefs, the most distinguished among whom was Kempa Gauda of Bangalura (Bangalore).

Domingo Paes, a Portuguese merchant, who visited Vijayanagar in A.D. 1520, gives the following description of Krishnadevaraya. 'This king is of medium height, and of fair complexion and good figure, rather fat than thin; he has on his face signs of small-pox. He is the most feared and perfect king that could possibly be, cheerful of disposition and very merry; he is one that seeks to honour foreigners, and receives them kindly, asking about all their affairs whatever their condition may be. He is a great ruler and a man of much justice, but subject to sudden fits of rage, and this is his title: 'Crisnarao Macacão, king of kings, lord of the greater lords of India, lord of the three seas and of the land.'

'Krishna Raya's kindness to the fallen enemy, his acts of mercy and charity towards the residents of captured cities, his great military prowess

²Abdur Razzak, *Malla'u-s Sa'dain*, in Elliot and Dowson, *The History of India...*, Vol. IV, pp. 105-114

which endeared him alike to his feudatory chiefs and to his subjects, the royal reception and kindness that he invariably bestowed upon foreign embassies, his imposing personal appearance, his genial look and polite conversation which distinguished a pure and dignified life, his love for literature and for religion, and his solicitude for the welfare of his people, and, above all, the almost fabulous wealth that he conferred as endowments on temples and Brahmans, mark him out indeed as the greatest of the South Indian monarchs,³ states Krishna Sastri.

PATRONAGE TO LITERATURE, ART AND TEMPLE BUILDING

Krishnadevaraya was a poet and author and a patron of art and literature. Scholars, poets and philosophers came to his court in search of patronage. He gave great encouragement to the development of Telugu literature. His poet laureate, Alasani Peddana, is regarded as an author of the first rank in Telugu.

Spectacles are associated with scholarship. The use of spectacles in Europe is dated to about A.D. 1250. We learn about the use of spectacles by Vyasarayya, guru of Krishnadevaraya, about A.D. 1520. These were presented to him by a Portuguese.⁴

Krishnadevaraya's reign witnessed activity in temple-building rivalling those of Chola kings. A prominent feature of Vijayanagar temples is the *Kalyanamandapa*, a large hall with ornate pillars. Another feature is the towering gate-way. Goddesses were provided with separate shrines. At the beginning of his reign he built a *gopura* and repaired another, at the Hampi temple, which had been built by the early kings in honour of Madhavacharya, the founder of the fortunes of Vijayanagar. The great Krishnasvami temple was built by him in A.D. 1513, after his return from a successful campaign in the east. In the same year he commenced the temple of Hazāra Ramā-svami. This temple is studded with panels narrating the *Ramayana* story. Its *prakara* walls are decorated with friezes depicting dance, music and folk festivals. The Vitthala temple, which is one of the largest, was commenced by Krishnadevaraya in A.D. 1513 and was still not complete when the Empire fell in A.D. 1565. Immense towers called *Raya-gopurams* were added to the outermost procession paths of pre-existing temple-complexes of importance, e.g. the Ekamranatha at Kanchi, the Arunachala at Tiruvannamalai (North Arcot district), and the Shiva temple at Kalahasti (Chittoor district). Construction of pillared halls with prancing horses as decoration on the columns became a favourite device. Such equine decoration can be seen at its best in the temple at Srirangam.

³Krishna Sastri, *Ann. Rep. A. S. India for 1908-9*, p. 186

⁴Gode, P. K. *Studies in Indian Cultural History*, Vol. III, p. 108

THE CITY OF VIJAYANAGAR

Domingo Paes was greatly impressed by the city of Vijayanagar. 'The size of this city I do not write here,' states Paes, 'because it cannot all be seen from any one spot, but I climbed a hill whence I could see a great part of it; I could not see it all because it lies between several ranges of hills. What I saw from thence seemed to me as large as Rome, and very beautiful to the sight; there are many groves of trees within it, in the gardens of the houses, and many conduits of water which flow into the midst of it, and in places there are lakes; and the king has close to his palace a palm-grove and other rich-bearing fruit-trees. Below the Moorish quarter is a little river, and on this side are many orchards and gardens with many fruit-trees, for the most part mangoes and areca-palms and jack-trees, and also many lime and orange-trees, growing so closely one to another that it appears like a thick forest; and there are also white grapes. All the water which is in the city comes from the two tanks of which I have spoken, outside the first enclosing wall.

'Going forward, you have a broad and beautiful street, full of rows of fine houses and streets of the sort I have described, and 'it is to be understood that the houses belong to men rich enough to afford such. In this street live many merchants, and there you will find all sorts of rubies, and diamonds, and emeralds, and pearls, and seed-pearls, and cloths, and every other sort of thing there is on earth and that you may wish to buy. Then you have there every evening a fair where they sell many common horses and nags, and also many citrons, and limes, and oranges, and grapes, and every other kind of garden stuff, and wood.

'On every Friday you have a fair there, with many pigs and fowls and dried fish from the sea, and other things, the produce of the country.'

THE COUNTRY-SIDE

Domingo Paes thus describes the country-side. 'It is a country sparsely wooded except along this *serra* on the east, but in places you walk for two or three leagues under groves of trees; and behind cities and towns and villages they have plantations of mangoes, and jack-fruit trees, and tamarinds and other very large trees, which form resting-places where merchants halt with their merchandise. I saw in the city of Recalem a tree under which we lodged three hundred and twenty horses, standing in order as in their stables, and all over the country you may see many small trees. These dominions are very well cultivated and very fertile, and are provided with quantities of cattle, such as cows, buffaloes, and sheep; also of birds, both those belonging to the hills and those reared at home, and this in greater abundance than in our tracts. The land has plenty of rice and *jowar*, grains, beans, and other kind of crops which are not sown in our parts; also an infinity of cotton. Of the grain there is a great quantity, because,

besides being used as food for men, it is also used for horses, since there is no other kind of barley; and this country has also much wheat, and that good. The whole country is thickly populated with cities and towns and villages.’⁵

LAND REVENUE ASSESSMENT

‘The assessment varied according to the type of land under cultivation—whether wet, dry, or garden land. The revenue was taken either in cash or kind as it suited the ruler at the time, but the burden on the peasant was in any case crushingly heavy. Nuniz states that they ‘pay nine-tenths to their lord.’ Such a proportion of the gross produce seems improbable, but what is clear is that to the observer the demand seemed inordinately high. Evidence of village revolt against the burden and the observations of later travellers tend to confirm Nuniz. All agree that while the nobles lived in luxury, the mass of the people went all but naked and lived in hovels. The cultivators were not allowed to retain the fruits of their labour, and their lives were miserable. This was the inevitable result of maintenance of a large army which consumed most of the revenue.

Wilks and later authorities also refer to the multitude of vexatious cesses levied upon peasant and merchant alike. Trade was hampered by heavy city dues and by the existence of numerous toll-stations upon the roads. ‘At the end of the century, too, the missionaries insist on the need for passports in this part of India in order to avoid infinite trouble regarding dues and taxes.’⁶

CONSTRUCTION OF VIJAYANAGAR DAM

Later in his reign Krishnadevaraya busied himself in improving the irrigation of the dry lands about Vijayanagar. He constructed in A.D. 1521 the great dam and channel at Korragal, and the Basavanna channel, both of which are still in use and of great value to the country.

Another great work of his was the construction of an enormous tank of dammed-up lake at the capital, which he carried out with the aid of Joao de la Ponte, a Portuguese engineer, whose services were lent to him by the governor-general of Goa. Both Paes and Nuniz mention this lake, and as the former actually saw it under construction it may have been begun in A.D. 1520. This is the large lake, now dry, to be seen at the north-western mouth of the valley entering into the Sandur hills south-west of Hospet.

Describing how the Vijayanagar dam was built, Paes writes, ‘This king

⁵Sewell, R. *A Forgotten Empire, Vijayanagar*, p. 230

⁶Smith, V.A. *The Oxford History of India*, pp. 313-314

also made in his time a lake for water, which lies between two very lofty *serras*. But since he had no means in the country for making it, nor any one who could do it, he sent to Goa to ask the Governor to send some Portuguese masons, and the Governor sent him Joao de la Ponte, a great worker in stone, to whom the King told how he wanted the tank built. Though it seemed to this man (*mestre*, modern *maistry*) impossible to be made, he told the King he would do it and asked him to have lime prepared, at which the King laughed much, for in his country when they build a house they do not understand how to use lime. The King commanded to throw down quantities of stone and cast down many great rocks into the valley, but everything fell to pieces, so that all the work done in the day was destroyed each night, and the King, amazed at this, sent to call his wise men and sorcerers and asked them what they thought of this thing. They told him that his idols were not pleased with this work, it being so great and he giving them nothing, and that unless he spilled there the blood of men or women or buffaloes that work would never be finished. So the King sent to bring hither all the men who were his prisoners, and who deserved death, and ordered them there to be beheaded; and with this the work advanced. He made a bank across the middle of the valley so lofty and wide that it was a cross-bow shot in breadth and length, and had large sluices; and below it he put pipes by which the water escaped, and when they wish so to do they close these. By means of this water they made many improvements in the city, and many channels by which they irrigated rice-fields and gardens, and in order that they might improve their lands he gave the people the lands which are irrigated by this water free for nine years, until they had made their improvements, so that the revenue already amounts to 20,000 *pardaos*.⁷

CROPS, FRUITS AND VEGETABLES

'This is the best provided city in the world', states Paes, 'and is stocked with provisions such as rice, wheat, grains, *jowar* and a certain amount of barley and beans, *moong*, pulses, horse-gram, and many other seeds which grow in this country which are the food of the people, and there is large store of these and very cheap; but wheat is not so common as the other grains, since no one eats it except the Moors. The streets and markets are full of laden oxen without count.'

'Then to see the many loads of limes that come each day, such that those of Povos are of no account, and also loads of sweet and sour oranges, and wild brinjals, and other garden stuff in such abundance as to stupefy one. There are many pomegranates also; grapes are sold at three bunches a *fanam*, and pomegranates ten a *fanam*.'

⁷Sewell, R. *A Forgotten Empire, Vijayanagar*, pp. 345-347.



FIG. 15. Sculpture reliefs on the plinth of Vitthalaswami temple, Hampi, showing hunting scenes. Hunters are shooting arrows at flocks of deer. In the third panel a man on horse-back is fighting a lion. The fifth panel depicts dancers.

(Courtesy: Archaeological Survey of India)

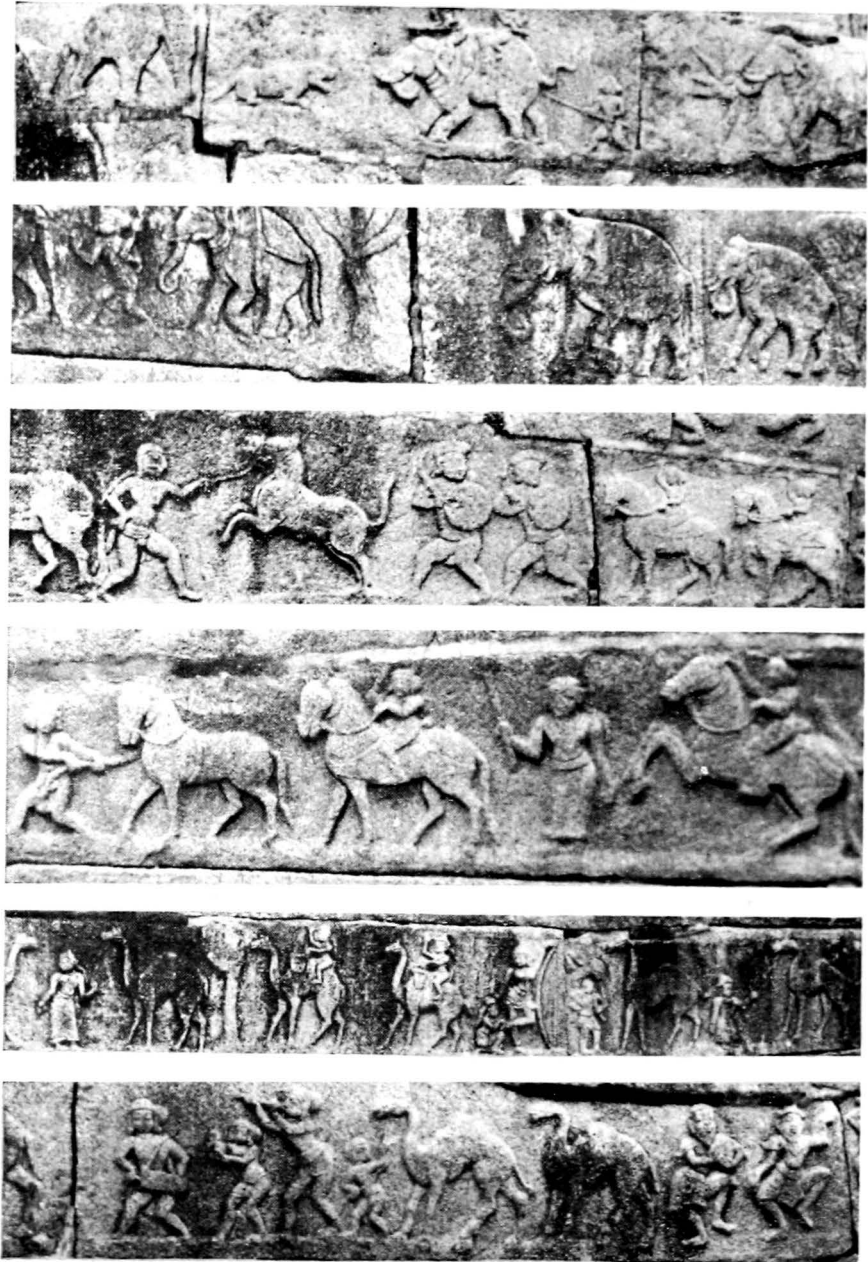


FIG. 16. Throne platform reliefs, Vijayanagar, 16th century. Elephants are shown in the first two panels. The first panel shows an encounter between a lion and an elephant. The fourth panel shows horses being led by grooms, walking, prancing and galloping. The last two panels showing camels are from the plinth of Vitthalaswami temple.

(Courtesy: Archaeological Survey of India)

OBSERVATIONS OF FERNAO NUNIZ

Vijayanagar was visited by another Portuguese, Fernao Nuniz, in A.D. 1535. 'By means of this water they made round about the city,' observed Nuniz, 'a quantity of gardens and orchards and great groves of trees and vineyards, of which this country has many, and many plantations of lemons and oranges and roses, and other trees which in this country bear very good fruit.'

Nuniz further observes, 'In both these cities there is no provision or merchandise whatever, for all comes from outside on pack-oxen, since in this country they always use beasts for burden; and every day there enter by these gates 2,000 oxen, and every one of these pays three *vintees*, except certain polled oxen without horns, which never pay anything in any part of the realm.

'Outside these two cities are fields and places richly cultivated with wheat and gram and rice and millet, for this last is the grain which is most consumed in the land; and next to it betel, which is a thing that in the greater part of the country they always eat and carry in the mouth.

'Everything has to be sold alive so that each one may know what he buys—this at least so far as concerns game—and there are fish from the rivers in large quantities. The markets are always overflowing with abundance of fruits, grapes, oranges, limes, pomegranates, jack-fruit, and mangoes, and all very cheap. It is said that in the markets they give twelve live sheep for a *pardao*, and in the hills they give fourteen or fifteen for a *pardao*.'

DOMESTIC ANIMALS

'In this land they do not slaughter oxen or cows,' states Paes. 'The oxen are beasts of burden and are like sumpter-mules; these carry all their goods. They worship the cows, and have them in their pagodas made in stone, and also bulls; they have many bulls that they present to these pagodas, and these bulls go about the city without any one causing them any harm or loss. Further, there are asses in this country, but they are small, and they use them only for little things; those that wash clothes lay the clothes on them, and use them for this more than for anything else.' Even at present washermen use asses for carrying clothes to rivers in India.

'There are also in this city places where they sell live sheep; you will see the fields round the city full of them, and also of cows and buffaloes—it is a very pretty sight to see—and also the many she-goats and kids, and the he-goats so large that they are bridled and saddled. Many sheep are like that also and boys ride them.' The reference is to Nellore breed which is the tallest breed of sheep in India. Rams are horned and have long hair on the dewlap and brisket (Fig. 14).

'Then the sheep that they kill every day are countless, one could not

number them, for in every street there are men who will sell you mutton, so clean and so fat that it looks like pork; and you also have pigs in some streets of butchers' houses so white and clean that you could never see better in any country; a pig is worth four or five *fanams*.

'For the state of this city is not like that of other cities, which often fail of supplies and provisions, for in this one everything abounds; and also the quantity of butter and oil and milk sold every day, that is a thing I cannot refrain from mentioning; and as for the rearing of cows and buffaloes which goes on in the city, there is so much that you will go very far before you find another like it.'

HALLIKAR CATTLE

Here a mention may be made of Hallikar breed of cattle, which is characteristic of South India. Hallikar cows are poor milkers, but the bullocks are excellent draft animals. Joshi and Phillips state, 'The Hallikar is one of the best all-round draft types that is available in southern India. It is strong, spirited and quick. Thirty to forty miles (48 to 64 km) a day on rough road is a common day's work. In the field it is a fast and yet a steady worker, being useful for all types of cultivation. Males are castrated when they are 3 to 4 years old and then gradually broken to yoke. Prior to this period, living in a semi-wild state, they are extremely unruly and vicious. It requires several months of kind treatment and patient training to develop them into fine bullocks (Fig. 13). Hallikar bullocks attracted great attention during the nineteenth century on account of their power of endurance and the speed with which they could move army equipment. It is claimed that they could manoeuvre a march of 100 miles (161 km) in two and a half days.

Kristnasamiengar and Pease, from a study of historical records, state that between A.D. 1572 and 1600 a state herd establishment consisted of Hallikar cows was imported in Mysore from the State of Vijayanagar. This very herd was later transferred to the rulers of Mysore State and was eventually known as Amrit Mahal. Kristnasamiengar and Pease further mention that cattle of Amrit Mahal establishment originally comprised three distinct varieties: Hallikar, Hagalvadi and Chitaldroog. Prior to A.D. 1860, it seems that these three varieties were maintained separate from each other. In A.D. 1860, the whole establishment was liquidated for reasons of economy. In A.D. 1866, it was realized that an establishment for the supply of cattle was a necessity, and a herd was re-established. Thus, the foundation cattle from which the Amrit Mahal breed was developed were of the Hallikar and closely related types.

Amrit Mahal literally means the department of milk. Originally the rulers of Mysore State had started an establishment of cattle collected from the prevalent types of cattle within the area for the supply of milk and milk

products to the palace; simultaneously the bullocks from this establishment were utilized for the movement of army equipage.⁸

ANIMALS DEPICTED IN SCULPTURE RELIEFS

On the throne platform and the plinth of Vitthala temple are sculptures in relief which depict the life of the people. They tell us in a realistic manner about the activities of the people at Vijayanagar which no book on history can convey. Among them are hunting scenes. Hunters armed with long bows are depicted shooting arrows at deer. Warriors armed with lances are shown fighting lions. At the bottom are female dancers depicted in seductive poses (Fig. 15). Long rows of camels are carved. Some of the camels are ridden and others are being led. The presence of so many camels in these friezes indicates that they were used for transport of goods for the army of Vijayanagar rulers (Fig. 16). The greatest favourites of the Vijayanagar sculptors were horses. They are depicted slowly walking, prancing and galloping. On the top are majestic elephants ambling along, conscious of their dignity. Another panel shows a confrontation between a lion and an elephant (Fig.16).

BIRDS

Paes also describes the birds and poultry. 'In this country there are many partridges, but they are not of the same sort or quality as ours; they are like the *estarnas* of Italy. There are three sorts of these: one class has only a small spur such as those of Portugal have; another class has on each foot two very sharp spurs, almost as long and thick as one's finger; the other class is painted, and of these you will find the markets full; as also of quails. and hares, and all kinds of wild fowl, and other birds which live in the lakes and which look like geese. All these birds and game animals they sell alive, and they are very cheap, for they give six or eight partridges for a *vintem*, and of hares they give two and sometimes one. Of other birds they give so many that you would hardly pay any attention to the little ones they give you, such as doves and pigeons, and the common birds of the country. The doves are of two kinds; some are like those in Portugal, others are as large as thrushes; of the doves they give twelve or fourteen for a *favao*.

POULTRY

'There is much poultry; they give three fowls in the city for a coin worth a *vintem* (1 $\frac{7}{20}$ of penny), which coins are called *favaos*; outside the city they give four fowls for a *vintem*.⁹

⁸ Joshi, N. R. and Phillips, R. W. *Zebu Cattle of India and Pakistan*, p. 209

⁹ Sewell, R. A. *Forgotten Empire, Vijayanagar*, pp. 347-350

RUIN OF VIJAYANAGAR

Sadasiva was the nominal ruler of Vijayanagar in A.D. 1542, while Ramaraja, the minister wielded all the power. Ramaraja played off the Sultans, one against the other. In A.D. 1564 the Sultans of Bijapur, Golkonda, Ahmadnagar, and Bidar combined against Vijayanagar. Ramaraja was defeated at Talikota in 23 January 1565. The royal family and their followers fled towards the fortress of Penukonda. Later on the capital was shifted to Chandragiri and finally to Vellore. The fate of Vijayanagar is thus described by Sewell. 'Then a panic seized the city. The truth became at last apparent. This was not a defeat merely, it was a cataclysm. All hope was gone. The myriad dwellers in the city were left defenceless. No retreat, no flight was possible except to few for the pack-oxen and carts had almost all followed the forces to the war, and they had not returned. Nothing could be done but to bury all treasures, to arm the younger men, and to wait. Next day the place became a prey to the robber tribes and jungle people of the neighbourhood. Hordes of Brinjaris, Lambadis, Kurubas, and the like, pounced down on the hapless city and looted the stores and shops, carrying off great quantities of riches. Couto states that there were six concerted attacks by these people during the day.

'The third day saw the beginning of the end. The victorious Mussulmans had halted on the field of battle for rest and refreshment, but now they had reached the capital, and from that time forward for a space of five months Vijayanagar knew no rest. The enemy had come to destroy, and they carried out their object relentlessly. They slaughtered the people without mercy; broke down the temples and palaces; and wreaked such savage vengeance on the abode of the kings that, with the exception of a few great stone-built temples and walls, nothing now remains but a heap of ruins to mark the spot where once the stately buildings stood. They demolished the statues, and even succeeded in breaking the limbs of the huge Narasimha monolith. Nothing seemed to escape them. They broke up the pavilions standing on the huge platform from which the kings used to watch the festivals, and overthrew all the carved work. They lit huge fires in the magnificently decorated buildings forming the temple of Vitthala-svami near the river, and smashed its exquisite stone sculptures. With fire and sword, with crowbars and axes, they carried on day after day their work of destruction. Never perhaps in the history of the world has such havoc been wrought, and wrought so suddenly, on so splendid a city; teeming with a wealthy and industrious population in the full plenitude of prosperity one day, and on the next seized, pillaged, and reduced to ruins, amid scenes of savage massacre and horrors begging description.'

Vijayanagar became the haunt of tigers and other wild beasts. It never recovered, and remained for ever a scene of desolation and ruin.

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CHAPTER 14

THE BAHMANI KINGDOM OF THE DECCAN

THE SULTANATES OF DECCAN, BENGAL, GUJARAT,

MALWA AND KASHMIR

CANAL IRRIGATION SCHEMES OF ZAIN-UL-ABIDIN IN KASHMIR VALLEY

A.D. 1338-1687

A YEAR after the foundation of the Vijayanagar kingdom in A.D. 1347, Hasan, an officer of Tughlak Sultan of Delhi, occupied Daulatabad in the Deccan, and proclaimed his independence. He is known as Sultan Ala-ud-din I. He claimed descent from the Persian king Bahman Shah. Most of South India between the Lodi Sultanate and Gondwana in the north and Vijayanagar kingdom in the south was included in Bahmani kingdom. It also included the ports of Goa and Dabhol on the West Coast (Fig. 17). Ala-ud-din I established his capital at Gulburga. During the eighty years (A.D. 1347-1428) that Gulburga was the capital, it was adorned with many buildings, including a great mosque, in which the entire central area was roofed.

Ala-ud-din I was followed by thirteen successors, who ruled from A.D. 1338 to 1482. Their favourite pastime was war with Vijayanagar.

FIRUZ (A.D. 1397-1422)

The eighth Sultan Firuz defeated the Hindus and married a Vijayanagar princess. This marriage was contracted to enhance his prestige and to humiliate the ruler of Vijayanagar. Firuz had a large harem with women from many countries, including Europe, and was reputed to be able to talk with each lady in her own language. This was possible not because he was a linguist, but the subject-matter of conversation was limited, and a brief vocabulary sufficed.

CONTRIBUTION TO AGRICULTURE AND CONDITION OF PEASANTS

✓ Meadows Taylor states, 'The Bahmanis constructed irrigation works in the eastern provinces, which incidentally did good to the peasantry while primarily securing the crown revenue.' Vincent Smith points out that those items to their credit weigh lightly against the wholesale devastation wrought by their wars, massacres, and burnings.¹ Their rule was harsh and showed little regard for the welfare of Hindu peasants, who were seldom allowed to retain the fruits of their labour much more than would suffice to keep body and soul together.

¹Smith, V. A. *The Oxford History of India*, p. 288

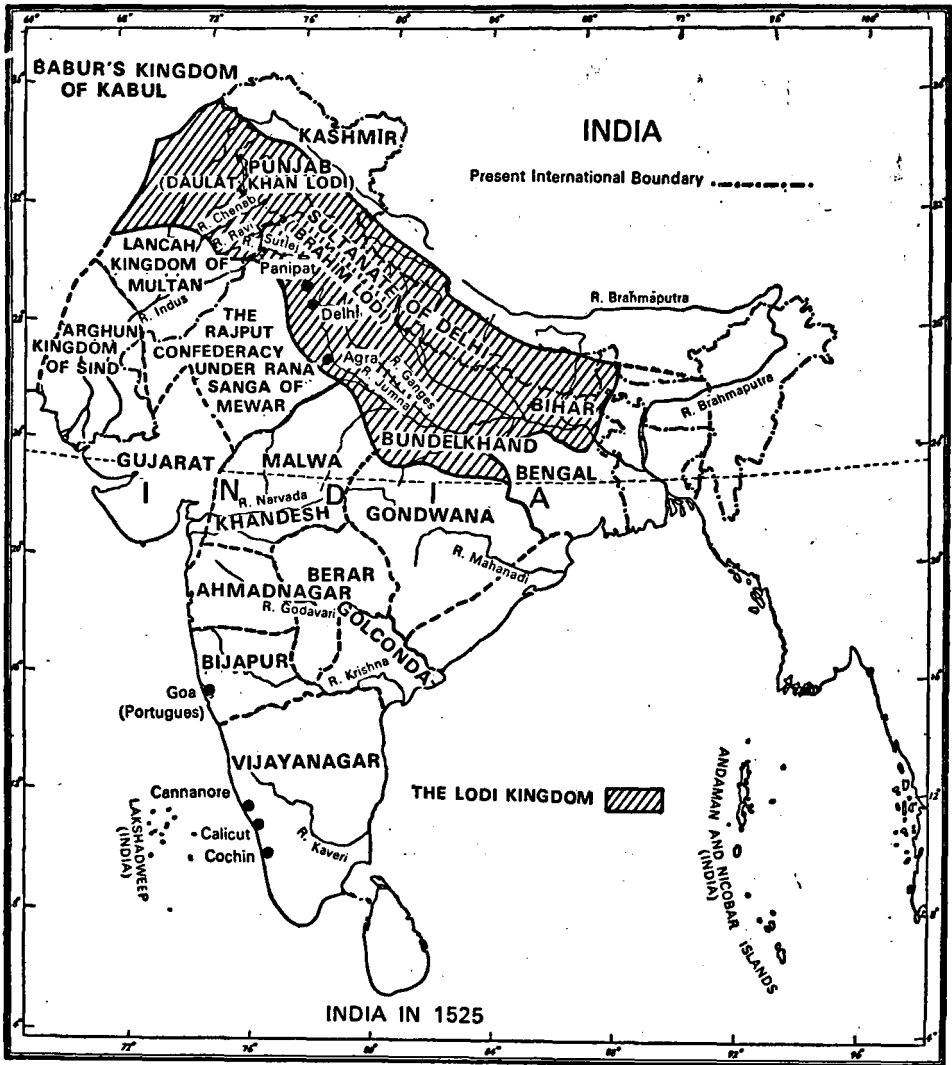


FIG. 17. India in 1525. The Lodi Empire embraced the Indo-Gangetic plain. In the south was the Hindu kingdom of Vijayanagar. The Deccan was ruled by five Sultans. Bengal, Malwa, Gujarat and Kashmir were independent Sultanates.

MUHAMMAD SHAH III (A.D. 1463-1482)

Athanasius Nikitin, a Russian merchant, happened to reside for a long time at Bidar and to travel in the Bahmani dominions between the years

A.D. 1470 and 1474 in the reign of Muhammad Shah III. He observes, 'The land is overstocked with people; but those in the country are very miserable, whilst the nobles are extremely opulent and delight in luxury. They are wont to be carried on their silver beds, preceded by some twenty chargers caparisoned in gold, and followed by 300 men on horseback, and by 500 on foot, and by horn-men, ten torch-bearers, and ten musicians.

'The Sultan goes out hunting with his mother and his lady, and a train of 10,000 men on horseback, 50,000 on foot; 200 elephants adorned in gilded armour, and in front 100 horsemen, 100 dancers, and 300 common horses in golden clothing; 100 monkeys, and 100 concubines, all foreign.'

DISSOLUTION OF BAHMANI KINGDOM AND THE RISE OF SULTANATES

During the reign of Mahmud Shah (A.D. 1482-1518) the provincial governors of Bahmani kingdom declared their independence, and set up five Sultanates, viz. the Imad Shahi dynasty of Berar, the Nizam Shahi of Ahmadnagar, the Adil Shahi of Bijapur, the Barid Shahi of Bidar, and the Qutb Shahi of Golkonda.

GOLKONDA-QUTB SHAHI DYNASTY

Golkonda kingdom was founded in A.D. 1518 by a Turki officer, who assumed the title of Sultan Quli Qutb Shah. Golkonda fort was constructed by the Hindu Raja of Warangal, who ceded it in A.D. 1364 to Muhammad Shah Bahmani. In A.D. 1512 it passed from Bahmanis to the Qutb Shahis. It is surrounded by a strong crenellated stone wall, over 3 miles (4.8 km) in circumference, with 87 bastions at the angles. The river Musi flows south of the fort. In A.D. 1589 the capital was shifted to Bhagnagar, now called Hyderabad. The Sultans left a number of tombs with fantastic domes at Golkonda.

BIJAPUR-ADIL SHAHI DYNASTY

The Adil Shahi dynasty of Bijapur was founded by Yusuf Adil Shah, a Shia, in A.D. 1489. Firishta describes him as 'a wise and handsome prince, a good judge of human nature, eloquent, well-read and an accomplished musician.' He was a broad-minded monarch, who employed Hindus in responsible posts, and encouraged use of Marathi language for accounts and State business. He invited scholars and artists from Iran, Turkistan and Rum to his court.

IBRAHIM ADIL SHAH (A.D. 1584-1626)

Ibrahim Adil Shah was the patron of the historian Firishta, whose real name was Kasim Hindu Shah. Ibrahim was an able administrator and a broad-minded person who enjoyed the confidence of his Hindu subjects. He also encouraged painting. Meadows Taylor thus describes his interest

in revenue administration, and art and architecture: 'Ibrahim Adil Shah died in A.D. 1626, in the fifty-sixth year of his age. He was the greatest of all the Adil Shahi dynasty, and in most respects, except its founder, the most able and popular.

'Without the distraction of war, he applied himself to civil affairs with much care; and the land settlements of the provinces of his kingdom, many of which are still extant among district records, show an admirable and efficient system of registration of property and its valuation. In this respect the system of Todar Mull introduced by the Emperor Akbar seems to have been followed with the necessary local modifications.

'Although he changed the profession of the State religion immediately upon assuming the direction of State affairs from Shia to Sunni, Ibrahim was yet extremely tolerant of all creeds and faiths. Hindus not only suffered no persecution at his hands, but many of his chief civil and military officers were Brahmans and Marathas. With the Portuguese of Goa he seems to have kept up a friendly intercourse. Portuguese painters decorated his palaces, and their merchants traded freely in his dominions. To their missionaries also he extended his protection; and there are many anecdotes current in the country that his tolerance of Christians equalled, if it did not exceed, that of his contemporary Akbar. He allowed the preaching of Christianity freely among his people, and there are still existent several Catholic churches, one at Chitapur, one at Mudgal, and one at Raichur, and others, endowed by the king with lands and other sources of revenue, which have survived the changes and revolutions of more than 300 years. Each of these churches now consists of several hundred members and remains under the spiritual jurisdiction of the Archbishop of Goa.'²

Asad Beg, an officer at the Court of Emperor Akbar, who paid a visit to the city of Bijapur, thus describes its bazar, shops, merchandise and people. While the countryside was poor, towns were prosperous. 'All round the gate of my residence were lofty buildings with houses and porticos; the situation was very healthy and airy,' states Asad Beg. 'It lies in an open space in the city. Its northern portico is to the east of a *bazar* of great extent, as much as thirty yards wide and about two *kos* long. Before each shop was a beautiful green tree, and the whole *bazar* was extremely clean and pure. It was filled with rare goods, such as are not seen or heard of in any other town. There were shops of cloth-sellers, jewellers, armourers, vintners, bakers, fishmongers, and cooks. To give some idea of the whole *bazar*, I will describe a small section in detail.

'In the jewellers' shops were jewels of all sorts, wrought into a variety of articles, such as daggers, knives, mirrors, necklaces, and also into the form

²Meadows Taylor, *Manual of Indian History*, quoted by V. A. Smith in the *Oxford History of India*, p. 300

of birds, such as parrots, doves and peacocks, etc., all studded with valuable jewels, and arranged upon shelves, rising one above the other. By the side of this shop will be a baker's, with rare viands, placed in the same manner, upon tiers of shelves. Further on a linendraper's, with all kinds of cloths, shelved in like manner. Then a clothier's. Then a spirit-merchant's, with various sorts of valuable china vessels, crystal bottles, and costly cups, filled with choice and rare essences, arrayed on shelves, while in front of the shop were jars of double-distilled spirits. Besides that shop will be a fruiterer's, filled with all kinds of fruit and sweetmeats, such as pistachio-nuts, and relishes, and sugar-candy, and almonds.

'On another side may be a wine-merchant's shop, and an establishment of singers and dancers, beautiful women adorned with various kinds of jewels, and fair-faced choristers, all ready to perform whatever may be desired of them. In short, the whole *bazar* was filled with wine and beauty, dancers, perfumes, jewels of all sorts, palaces, and viands. In one street were a thousand bands of people drinking, and dancers, lovers, and pleasure-seekers assembled; none quarrelled or disputed with another, and this state of things was perpetual. Perhaps no place in the wide world could present a more wonderful spectacle to the eye of the traveller.'³

The Golgumbaz or great tomb of Muhammed Adil Shah (A.D. 1626-1656) has an enormous dome covering an area of 2,500 square feet (232 m²). Thrusts are provided for the dome by use of massive pendentives, hanging the weight, inside. Its internal height is 178 feet (54.26 m). An ornamental gate-way called Mihtar Mahal, Gagan Mahal (A.D. 1561), Asar Mahal and Ibrahim *rauza* and mosque (A.D. 1580-1627) are other notable buildings.

THE END OF THE DECCAN SULTANATES

The Sultanates of Deccan disappeared in the course of a century from A.D. 1574 to 1687. In A.D. 1574 the kingdom of Ahmadnagar absorbed that of Berar, and in A.D. 1619 the kingdom of Bijapur that of Bidar. Between A.D. 1596 and 1600 Akbar annexed the greater part of the kingdom of Ahmadnagar, and after thirty years of intermittent warfare his grandson, Shahjahan, finally annexed it in A.D. 1633. Bijapur was annexed by Aurangzeb in A.D. 1686 and Golconda in the following year.

BENGAL

A.D. 1338-1576

Bengal became an independent kingdom in A.D. 1338 when Fakhr-uddin, the Governor revolted against Muhammad-bin-Tughlak. The best-known rulers of Bengal were Jalal-ud-din (A.D. 1414-1431), Husain Shah

³Asad Beg, *Wikaya*, in Elliot and Dowson, *The History of India...*, Vol. VI, pp. 163, 164

(A.D. 1493-1519) and Nusrat Shah. Jalal-ud-din was a Hindu convert to Islam and bulk of the Hindu population embraced Islam in his reign.

HUSAIN SHAH

The greatest Moslem king of Bengal was Husain Shah. He was a patron of Bengali literature and he was held in esteem by his Hindu subjects. He constructed many buildings in his capital city Gaur, also called Lakhnauti. These include the Kadam Rasul Masjid, which contains a stone bearing the supposed impression of Muhammad's footprint brought from Madina by Husain Shah. He extended the limits of his kingdom to the borders of Orissa.

NUSRAT SHAH

Nusrat Shah married a daughter of Ibrahim Lodi. He added Tirhut to his kingdom. A Bengali version of the *Mahabharata* was prepared under his patronage.

So far as agriculture is concerned nothing of significance was achieved in Bengal under the Sultan's rule.

GUJARAT

A.D. 1401-1537

Zafar Khan, a Rajput convert to Islam, who was appointed governor of Gujarat in A.D. 1391, became independent in A.D. 1401 and assumed the title of Muzaffar Shah.

AHMAD SHAH (A.D. 1411-1441)

The most celebrated of the Sultans of Gujarat was Ahmad Shah. He built the city of Ahmadabad, which he named after himself and made it his capital.

MAHMUD BIGARHA (A.D. 1459-1511)

Another famous Sultan of Gujarat was Mahmud Bigarha who ruled for fifty-two years. He had long moustaches which he tied over his head, and a beard that reached his girdle. He was reported to be so immune to poison that if a fly sat on any part, it dropped down dead.

BAHADUR SHAH (A.D. 1526-1537)

The last Sultan of Gujarat was Bahadur Shah. He annexed Malwa and stormed Chitor in A.D. 1534. He was killed by Portuguese in A.D. 1537. Gujarat was annexed to the Mughal empire in A.D. 1572.

Under the patronage of Sultans, an elegant style of architecture developed at Ahmadabad. The mosque of Sidi Sayyid and the Jama Masjid are decorated with stone lattices, with foliate and geometric designs. These

are the works of stone-cutters whose ancestors decorated Jain temples. Ahmadabad became a centre for the manufacture of textiles and wood-carving. Some of the old houses of merchants at Ahmadabad have beautifully carved doors and windows.

MALWA

A.D. 1401-1531

Malwa covers the territory now included in Madhya Pradesh. In A.D. 1401 Dilawar Khan Ghuri, governor of Malwa under Firoz Tughlak, became independent. He is known as Sultan Shihab-ud-din Ghuri and made Dhar his capital.

HOSHANG SHAH (A.D. 1405-1435)

Hoshang Shah, the second king, moved his court to Mandu, where he erected many massive buildings. Mandu stands 2,079 feet (633.68 m) high on a plateau of the Vindhya range overlooking the valley of the Narmada. Its walls were 37 miles (59.5 km) in circumference and enclosed an area of 20 square miles (51.8 km²). Hoshang Shah also founded the city of Hoshangabad on the Narmada.

GHIYAS-UD-DIN (A.D. 1469-1501)

The third Ghuri king Mahmud was poisoned by his minister Mahmud Khan, a Khalji Turk, who founded the Khalji dynasty. The next Sultan was Ghiyas-ud-din. When he ascended the throne he gave a feast to his nobles, and told them that he was tired of war and intended to spend the rest of his life in ease and enjoyment. He collected 15,000 women in his harem. Women were the artificers, qazis and kotwals. He taught them all kinds of arts and crafts. He made a deer park, in which he used to hunt with his women. He also encouraged painting, and a volume on cookery, termed the *Niamat-nama*, with superb illustrations, was painted in A.D. 1500. In Mandu paintings, we see the mingling of Jain and Persian styles. Thus Mandu made an important contribution to pre-Mughal Indian painting.

BAZ BAHADUR (A.D. 1531-1561)

The last king of Malwa was Bazid Khan, who is better known as Baz Bahadur, and is celebrated for his love of a songstress Rupmati. Mandu was conquered by Adham Khan, general of Akbar, who appropriated the spoils of Mandu, including the beauties from the harem of Baz Bahadur. For these crimes he paid with his own life. He was thrown in a ditch from parapet walls of the Agra fort under the orders of Akbar. Malwa was annexed by Akbar in A.D. 1562, and Baz Bahadur became a *mansabdar* of the Mughal emperor.

So far as agriculture is concerned the Sultans of Mandu did not take

any special interest. The Moslem historians hardly mention the condition of Hindu peasants, nor any irrigation works.

KASHMIR

A.D. 1089-1586

The name Kashmir refers only to the valley on the upper course of the Jhelum. Many of the Hindu Rajas of Kashmir were tyrants. Harsa (A.D. 1089-1101) melted gold and silver images of gods and goddesses for the sake of metal required for minting coins. In A.D. 1099, Kashmir was ravaged by plague and a disastrous flood.

During the reign of Jayasimha (A.D. 1128-1155) the feudal landlords, the Damaras who had built fortresses were practically in control of the countryside.

KOTA RANI (A.D. 1318-1330)

The last Hindu ruler of Kashmir was a lady known as Kota Rani. During this period Rinchin, a Tibetan prince, came to Kashmir as a refugee from Ladakh with an escort of several hundred armed men. He eventually became the ruler of Kashmir and paramour of Kota Rani. Kota Rani urged him to embrace Hinduism, but he was not acceptable to the Brahmans. In disgust Rinchin embraced Islam and thus became the first Moslem ruler of Kashmir. Rinchin died in A.D. 1320. Shah Mir, a Moslem adventurer from Swat, seized the throne in A.D. 1342 and also married Kota Rani. He is known as Sultan Shams-ud-din and ruled Kashmir up to A.D. 1342.

SULTAN SIKANDER (A.D. 1393-1416)

Skipping over three insignificant Sultans, we come across Sultan Sikander. Sikander acquired notoriety as an idol breaker, and he destroyed the famous temples of Martand, Vijayeshwari and Sureshwari. He compensated for this by building mosques. He conquered Ladakh.

SULTAN ZAIN-UL-ABIDIN (A.D. 1420-1470)

Of the Sultans of Kashmir, Zain-ul-abidin was the greatest and noblest. He was a scholar, an administrator and a builder. Above all, he adopted the policy of universal toleration like Akbar. The Kashmiri Brahmans, who had left the valley due to oppression by Sikander, were recalled and were entrusted with responsible posts in the administration. He got the *Mahabharata* translated into Persian. 'Hindus looked upon him as their best protector during the dark period of religious bigotry,' states Bamzai. 'Many of the temples which had been demolished in the preceding reign were rebuilt and permission was granted to erect new temples. The king remitted the poll tax and granted *jagirs* to deserving Hindus. He penalized the killing of cows and himself abstained from eating meat during the holy

festivals of the Hindus. The *Rajatarangini* gives a detailed account of how the king took part in the annual Nagayatra festival, when he would don the robes of a Hindu mendicant and perform the pilgrimage in company with other pilgrims. On the way he fed thousands of ascetics and Brahmins. To expiate for the wrongs done to the Hindus by his father he built numerous homes for the widows of the Brahmins killed in the preceding reigns.'

DISPENSARIES

Many famous physicians from Central Asia and India came to Zain-ul-abidin's court, and he opened dispensaries in various parts of the kingdom where free medicines were given to the patients.

PATRONAGE OF LEARNING

Zain-ul-abidin was also a scholar and patron of learning. He collected books, and had a magnificent library. He patronized poets and scholars. Jonaraja, the historian, observes, 'Even women, cooks and porters were poets; and the books composed by them exist to this day in every house. If the king be a sea of learning and partial to merit, the people too become so. Zain-ul-abidin for the purpose of earning merit built extensive lodging houses for students and the voices of students studying logic and grammar arose from these houses. The king helped the students by providing teachers, books, houses, food and money, and he extended the limits of learning in all branches.'

ARTS AND CRAFTS

Zain-ul-abidin invited craftsmen from Samarkand to train Kashmiris. It was thus that cottage industries like papier-maché, paper-making, and silk and carpet weaving were introduced in Kashmir. The Kashmiri workers soon acquired skill in these crafts and made Kashmir famous for these products.

LANGAR AND FREE FOOD FOR THE POOR

Jonaraja records that in various towns food was distributed free to the poor and infirm. At special festivals which were frequently held, feeding of the poor was a regular feature. The Sultan built rest houses for travellers at the outskirts of villages.

AGRICULTURE

Zain-ul-abidin revised the land assessment and reduced it to one-fourth of the gross produce in some places, and to one-seventh in others. The revenue officers were ordered not to accept gifts from cultivators. Registration of documents was introduced to prevent fraud in sale of land. Law and order was enforced and lawlessness curbed. A good deal of land which

had gone out of cultivation due to insecurity of life was brought under the plough.

CONSTRUCTION OF CANALS AND PLANTING OF GARDENS

Banzai thus describes the contribution of Zain-ul-abidin to irrigation. 'To increase agricultural production, he constructed several canals. Noted among which were the Utpalapur, Nandashaila, Bijbihara, Advin, Amburher, Zainagir, and the Shahkul at Bawan. Many of these canals supplied water to the otherwise dry *karewa* lands.' During the past fifty years many of them have been repaired and reconstructed and put in use. 'The long and peaceful reign of Zain-ul-abidin,' says Stein, 'was productive of important irrigation works.' Jonaraja's and Srivara's chronicles give a considerable list of canals constructed under the Sultan.

GARDENS

Zain-ul-abidin planted gardens wherever he went, four of his well-known gardens being Baghi Zainagiri, Baghi Zaina Dab, Baghi Zainapur and Baghi Zainakut.

ROADS

Jonaraja mentions that one of his engineers, Damara Kach, paved a road with stones and thus made it fit for use even during the rainy season. Similarly he built the first wooden bridge in Kashmir which is known by the name of Zainkadal (Zain-ul-abidin's bridge).

FAMINE

Towards the end of Zain-ul-abidin's reign a severe famine occurred in Kashmir. The contemporary historian, Srivara, describes the sufferings of the people. The cause of the famine was an early fall of snow which destroyed the ripe paddy crop. The succeeding winter was also a severe one. The price of rice shot up enormously. Gold lost its value in comparison with paddy. 'A hungry man,' records the Chronicler, 'distressed with the thought of what he should eat entered a house at night, and discarding gold and other riches, stole rice from a pot. Feeble, emaciated men in the villages longed to obtain rice. A large number of people died. Famine-stricken people ate leaves, roots and even twigs of trees. Formerly one *khari* of paddy could be had for three hundred *dinaras* but owing to the famine the same *khari* of paddy could not be obtained even for 1500.'

FAMINE RELIEF

'The king exerted every nerve to alleviate the sufferings of the people. He gave out paddy from government stores free to the hungry people. Fortunately the following year's crop was a bumper one which relieved the

distress of the people. It goes to the credit of Zain-ul-abidin that after normal conditions were restored the black marketeers and hoarders, who had swindled the people by selling foodstuffs at abnormal rates, were brought to book and made to return the excess of the prices charged by them. He also, by a royal decree, cancelled all the debts incurred by needy people in their hour of distress when unscrupulous money-lenders and banyas had taken undue advantage of the sufferings of the people.⁴

Out of all the Sultans of India, Zain-ul-abidin stands out as a man liberal in spirit, creative and innovative, whose work has left an impress on the art, culture and agriculture of the Kashmir Valley.

YUSUF SHAH CHAK (A.D. 1529-1586)

The last Sultan of Kashmir was Yusuf Shah Chak. He was fond of music and married a peasant girl by the name of Zooni, also known as Habba Khatun, who was a poetess and a singer. Yusuf Shah was a lover of nature and he discovered the natural beauty of Gulmarg and Sonamarg, which became holiday resorts. The Mughal army of Akbar occupied Kashmir in A.D. 1586, and thus ended the Sultanate.

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⁴Bamzai, P.N.K. *A History of Kashmir*, pp. 303-307

CHAPTER 15

THE RULE OF THE MUGHALS

CAREER OF ZEHIR-UD-DIN MUHAMMAD BABUR

CONQUEST OF KABUL AND INDIA

OBSERVATIONS ON THE COUNTRY, VILLAGES AND PEASANTS OF INDIA

IN THE *BABUR-NAMA*

A.D. 1483-1530

TURMOIL in Central Asia resulted in the expulsion of an adventurer, Babur, who laid the foundation of 'Mughal' dynasty in India. Babur was a Barlas Turk and not a Mughal. He hated the Mughals, who were responsible for his exile from his homeland. Mughal is the same word as Mongol and it was applied by Indians to all Moslems from Central Asia in India. It was further popularized by the Europeans who gave the title of the Great Mughal to the Emperors of the House of Timur. Thus this name, though incorrect, has stuck.

Zehir-ud-din Muhammad Babur was born on 14 February 1483 in Andijan in Farghānā. Farghānā is like Kashmir Valley, with flowing water, and orchards of apples, peaches and pomegranates. It also grows muskmelons and watermelons of high quality. The roads are lined with avenues of poplars and *chinars*. This valley is in Uzbekistan, a Central Asian republic of the Union of Soviet Socialist Republics. Babur's father, Umar Sheikh Mirza, a Turk and a descendent of Timur, was the ruler of Fargāhnā. His mother, Khutlugh Nigar Khanum, a Mongol, was descendant of Chingiz Khan. So both from the father's and mother's sides he could claim an ancestry of unique distinction.

Babur spent the first eleven years and a quarter of his life at Farghānā while his father was busy extending the frontiers of his small principality. He learnt his mother-tongue, Turki, as well as Persian and also practised archery and horse riding. His father died in A.D. 1494 in the fort of Akshi due to the collapse of a pigeon house where he was feeding his pigeons.

Babur succeeded his father as ruler of Farghānā at the age of twelve. His rule of Farghānā for twenty-one years was a period of turmoil. His chief ambition in this period was to conquer the prestigious city of Samarkand built by his ancestor Timur, which was a great cultural centre of the Islamic world. This brought him into conflict with his own uncles, Ahmad Miranshahi and Mahmud Chaghatai, and later on with Shaibani Khan, the leader of Mongolo-Turkish tribe called the Uzbegs. Samarkand was a city of gardens dotted with mausoleums, including Gur-Amir, the tomb of Timur, ornamented with magnificent blue tiles. It also had the observatory of Ulugh Beg, which contained a gigantic quadrant with which he

compiled his famous astronomical tables.

Babur undertook two campaigns to conquer Samarkand. In A.D. 1497 after a siege of seven months he captured Samarkand. During his stay in Samarkand the nobles in Farghānā taking advantage of his absence handed over a part of the state territory to his younger brother Jahangir. In February 1498 Babur left Samarkand to conquer Farghānā. He could not retrieve the lost territory and also lost Samarkand. He was forced to spend the winter in the fort of Khujand, and supported himself as well as his soldiers by raiding the neighbouring villages. This was a period of great misery for him, but he kept up his courage.

In A.D. 1500 Babur again attacked Samarkand. Shaibani Khan, who was then the ruler of Samarkand, was camping in one of the gardens outside the city walls. Babur's soldiers scaled the city walls and with the co-operation of the inhabitants, who were disgusted with the savage rule of Shaibani Khan, occupied the city. After some months Shaibani Khan returned with a large force and besieged the city. Supplies were cut off, the garrison was starved and Babur was forced to surrender. He was also compelled to give his elder sister Khanzada in marriage to Shaibani Khan. One night accompanied by his mother and a few loyal followers Babur escaped from Samarkand.

CONQUEST OF KABUL

This was another dark period for Babur and he sought refuge with his uncles in the area around Tashkent. Shaibani Khan not only had Samarkand, but had also captured a large slice of the territory of Farghānā. In A.D. 1504 Babur was in a desperate situation, and only a handful of loyal soldiers remained with him. When everything appeared to have been lost, Babur with his three hundred and odd followers crossed the Hindu Kush in a snow storm, stumbled into Kabul and made himself the master of a principality named after that city. Thus began the second phase of his career. For the next twenty-two years, he was the king of Kabul, which roughly corresponded to the modern Afghanistan and included Badakshan. From A.D. 1504 to 1513, with Kabul as his base, Babur again tried to conquer Samarkand. This ambition was fulfilled almost absolutely in October 1511, when he entered that city 'in the midst of such pomp and splendour as no one has ever heard of before or ever since.' Babur's dominions now reached their widest extent: from Tashkent and Sairam on the borders of the deserts of Tartary, to Kabul and Ghazni near the Indian frontier. It included within its boundaries Samarkand, Bokhara, Hissar, Kunduz and Farghānā. But this glory was as short-lived as it was great. Uzbek chiefs from whom Babur had snatched Samarkand in October 1511 returned to attack the city in June 1512 and inflicted a crushing defeat on Babur. Babur was forced to flee from one part of his dominions to another.

He lost everywhere and finally returned to Kabul early in A.D. 1513.

The reason for Babur's discomfiture in the second half of 1512 lay in his understanding with Shah Ismael Safavi of Persia for the capture of Samarkand. For the Shah's support Babur had agreed to hold the Samarkand kingdom as his vassal, become a convert to the Shia faith, adopt all its symbols, and to impose the Shia creed on the orthodox Sunni subjects of the conquered kingdoms. This unprincipled compromise made Babur extremely unpopular with his Sunni subjects and enabled the Uzbek chiefs to stage a come back at Samarkand.

THREE EXPEDITIONS INTO INDIA

Babur now diverted his restless ambition to India. To be sure of success he took one of the most important steps of his life. Profiting from the example of Shah Ismael, he began building up an effective artillery and some time between A.D. 1514 and 1519 secured the services of an Ottoman Turk, named Ustad Ali, who became his master of ordnance.

Having, thus, strengthened his fighting machine a great deal, Babur started his probe into Hindustan. Early in A.D. 1519, he went in for what is called his first expedition in India. He stormed Bajaur, which offered a spirited resistance but was ultimately forced to accept defeat before Babur's artillery. Babur massacred the population of the city to avenge the losses he had suffered as a result of the unexpected resistance of the people of Bajaur, but more so to warn the people of other cities of the fate awaiting them if they chose to resist his army. His purpose was well served. When he reached Bhera on the Jhelum, no resistance was offered. That encouraged him to claim for the first time entire north-western India on the plea that it once formed part of Timur's empire. Perhaps he would have followed this claim with a deeper penetration in the interior of the Punjab if he was not told that back home a conspiracy was being hatched against him.

In September 1519 Babur invaded Hindustan again. This was his second expedition to Hindustan. He marched through Khyber, subdued the turbulent Yusufzai tribe and provisioned the Peshawar fort for future operations. He was forced to give up his ambition of going further at this stage because of disturbing news from Badakshan.

After taking possession of Badakshan, Babur marched into India on his third expedition early in A.D. 1520. As in his first expedition, now also he first went to Bajaur and from there proceeded to Bhera. But this time he did not stop at Bhera. Subduing the recalcitrant Afghan tribes, he proceeded to Sialkot, which submitted without striking a blow. When he moved on to Saiyidpur, he met a tough resistance but ultimately succeeded in subduing the place. Perhaps with the same object in view that has motivated his massacre of the people of Bajaur two years ago, he mercilessly

massacred the people of Saiyidpur. That could have been a prelude to his moving into Lahore but on hearing that the ruler of Kandahar, Shah Beg Khan, was marching on Kabul, he hastily returned to Kabul.

Babur did not invade India for the next four years. Between A.D. 1520 and 1522 he was busy subduing Shah Beg. In the following two years he strengthened his position in Kandahar. But he had by no means given up the Indian project. He further improved his artillery by securing the services of Mustafa, another Turkish expert.

Babur embarked on his fourth expedition to India in A.D. 1524 on the invitation of Daulat Khan Lodi, the powerful Wazir of the Punjab. He marched into the valleys of the Jhelum and the Chenab, and became the master of both Lahore and Dipalpur. Much to the disappointment of Daulat Khan, who had invited Babur to serve his political ends, Babur now proclaimed the major part of what subsequently became the Lahore and Multan *subas* of the Mughal Empire as part of his Kabul kingdom. He appointed his own governors over these areas and offered Daulat Khan the petty governorship of the Jullundur doab. Little wonder that no sooner Babur went back, Daulat Khan raised a big army to fight him.

THE FIRST BATTLE OF PANIPAT

Babur invaded India again in November 1525. This was his fifth invasion of India. Because he anticipated a tough resistance from Daulat Khan and also a sharp conflict with Sultan Ibrahim Lodhi, he now went to India with 'the largest army he had ever led into Hindustan.' Daulat Khan's army melted away at his approach but with Ibrahim, Babur had to fight the most crucial battle of his life on 21 April 1526, the first battle of Panipat.

The first battle of Panipat began the last phase of Babur's life. It is well known in all its details to the students of Indian history and may be briefly told. Babur states, 'I placed my foot in the stirrup of resolution, and my hand on the reins of confidence in God, and marched against Sultan Ibrahim, the son of Sultan Sikandar, the son of Sultan Bahlol Lodi Afghan, in whose possession the throne of Delhi and the dominions of Hindustan at that time were; whose army in the field was said to amount to a hundred thousand men, and who, including those of his Amirs, had nearly a thousand elephants. For the first time in the history of India artillery was used in warfare. Ustad Kuli Khan was the master gunner of Babur. Indian elephants fled in terror on hearing the sound of artillery, trampling Ibrahim's soldiers. By mid-day the battle was over. Ibrahim Lodi lay dead with 30,000 of his soldiers.

Soon after the battle of Panipat, Babur proclaimed himself the *Padshah* of Hindustan with his headquarters at Agra. At Agra he laid a garden near the Jumna. During the heat of summer he sought refuge in this garden.

THE BATTLE OF KHANUA

Babur defeated Rana Sangha in the battle of Khanua on 16 March 1527, captured the fort of Chanderi on 29 January 1528, and humbled the Afghans in the battle of Gogra on 6 May 1529. Now he was master of northern India. He died on 26 December 1530 at the age of forty-seven years, ten months and eleven days after an illness of more than six months. Thus ended a stormy career which culminated in the founding of Mughal dynasty which enormously enriched the cultural life of India. The Mughals gave India new architecture, terraced gardens with flowing water, and a new style of painting.

BABUR-NAMA—AN AUTOBIOGRAPHY AND A BOOK ON NATURAL HISTORY

Babur-nama reflects the character and interests of the author, Zehirudin Muhammad Babur. Babur, the founder of the Mughal dynasty in India, is regarded as one of the most romantic and interesting personalities of Asian history. He was a man of indomitable will, a great soldier, and an inspiring leader. But unlike most men of action he was also a man of letters with fine literary taste and fastidious critical perception. In Persian, he was an accomplished poet, and in his mother-tongue, the Turki, he was master of a simple forceful style.

He was conscious of his own importance and kept a record of his daily activities in the form of brief notes. He made use of these notes when, soon after the capture of Chanderi on 29 January 1528, he decided to dictate his memoirs. He chose one of the many gardens around Agra that he had been creating ever since he had proclaimed himself the *Padshah* of Hindustan and dictated his memoirs, almost continuously till his death on 26 December 1530. In less than three years, he succeeded in giving final form to his autobiography.

Babur's autobiography, to which he had perhaps himself given the title of *Babur-nama*, was written 'in the purest dialect of the Turki language.' It is reckoned among the most enthralling and romantic works in the literature of all times. It makes a delightful reading and 'deservedly holds a high place in the history of human literature.'

It appears that in spite of a brilliant translation in Persian available since A.D. 1589 it was the Turki *Babur-nama* that held the place of honour in the Royal Library of the Mughal Emperor. It seems something of an irony, therefore, that its original should have been lost and unlike the Persian *Waqiat-i-Baburi* should have been unavailable even in copy to the European scholars when they started taking interest in Babur's autobiography. It is surmised that the original of the *Babur-nama* was either destroyed in the sack of Delhi by Nadir Shah in A.D. 1739 or burnt during the Mutiny in that city in A.D. 1857. The Persian *Waqiat-i-Baburi*, however, escaped either of those two fates and attracted the attention of the European Indologists.

As was only natural, the first European Indologists to be interested in Babur, as in other personalities of Mughal period of Indian history, were almost all Scots, e.g. Dr Leyden, William Erskine, John Malcolm and Mountstuart Elphinstone.

It was left to Mrs A. S. Beveridge to do the translation into English from a genuine copy of Turki *Babur-nama*. What made it possible for her to do that was firstly the discovery of a genuine Turki copy of the *Babur-nama* in Hyderabad and secondly her success in not only procuring it for herself for some time but also have a number of facsimiles made of it by the E. J. Wilkinson Gibb Trust. These facsimiles enabled Mrs Beveridge to prove to scholars that the Hyderabad *Babur-nama* surpassed, both in volume and quality, all other *Babur-namas*.

As a picture of the life of an Eastern sovereign in court and camp, the book stands unrivalled among Oriental autobiographies. 'It is almost the only specimen of real history in Asia. . . In Babur, the figures, dresses, habits, and tastes, of each individual introduced are described with such minuteness and reality that we seem to live among them, and to know their persons as well as we do their characters. His descriptions of the countries visited, their scenery, climate, productions, and works of art are more full and accurate than will, perhaps, be found in equal space in any modern traveller.'

To Lane-Poole 'Babur's Memoirs are no rough soldier's chronicles of marches, saps, wines, blinds, zabions, palisades, revelings, half-moons and such trumpery; they contain the personal impressions and acute reflections of a cultivated man of the world, well read in Eastern literature, a close and curious observer, quick in perception, discerning judge of men who was well able to express his thoughts and observations—in clear and vigorous language.'

Apart from its value as a source book of history, the importance of the *Babur-nama* lies in the fact that it is the first book on Natural History of India. Babur had keen sense of observation and he describes the physical features of the country, its animals, birds, and vegetation with precision and brevity. The *Babur-nama* was illustrated during the reign of Akbar. Two illustrated copies of the *Babur-nama* are complete. One of these is in the British Museum, London. The other, in the National Museum, New Delhi, was illustrated in A.D. 1605. The value of the illustrations of the *Babur-nama* lies in the fact that these are the first natural history paintings in India.

THE COUNTRY AND PEOPLE

Commenting on the country, its climate and people, Babur observed, 'Hindustan is situated in the first, second, and third climates. No part of it is in the fourth. It is a remarkably fine country. It is quite a different world, compared with our countries. Its hills and rivers, its forests and plains, its animals and plants, its inhabitants and their languages, its winds

and rains, are all of a different nature. Although the *garmsils* (or hot districts) in the territory of Kabul bear, in many respects, some resemblance to Hindustan, while in other particulars they differ, yet you have no sooner passed the river Sind than the country, the trees, the stones, the wandering tribes, the manners and customs of the people, are all entirely those of Hindustan.

'The chief excellency of Hindustan is that it is a large country, and has abundance of gold and silver. The climate during the rains is very pleasant. On some days it rains ten, fifteen, and even twenty times. During the rainy season inundations come pouring down all at once, and form rivers, even in places where, at other times, there is no water. While the rains continue on the ground, the air is singularly delightful, insomuch that nothing can surpass its soft and agreeable temperature.'¹

VILLAGES

Huts in villages were constructed with the use of bamboos and thatch. As such they could be rapidly constructed and easily dismantled. 'In Hindustan hamlets and villages are depopulated and set up in a moment,' states Babur. 'If the people of a large town, one inhabited for years even, flee from it, they do it in such a way that not a sign or trace of them remains in a day or a day and a half. On the other hand, if they fix their eyes on a place in which to settle, they need not dig water-courses or construct dams because their crops are all rain-grown, and as the population of Hindustan is unlimited, it swarms in. They make a tank or dig a well; they need not build houses or set up walls—*khas*-grass (*Vetiveria zizanioides*) abounds, wood is unlimited, huts are made, and straightaway there is a village or a town.

'In many parts of the plains thorny jungle grows, behind the good defence of which the people of the *pargana* become stubbornly rebellious and pay no taxes.'²

PEASANTS

Describing the appearance and dress of the peasants, Babur noted that they were not over-burdened with clothes. 'Their peasants and the lower classes all go about naked,' states Babur. 'They tie on a thing which they call a *langoti*, which is a piece of clout that hangs down two spans from the navel, as a cover to their nakedness. Below this pendent modesty-clout is another slip of cloth, one end of which they fasten before to a string that ties on the *langoti*, and then passing the slip of cloth between the two legs, bring it up and fix it to the string of the *langoti* behind. The women too,

¹*Memoirs of Zehir-ud-din Muhammad Babur*, translated by John Leyden and William Erskine, pp. 201, 243

²Beveridge, A.S. *Babur-nama (Memoirs of Babur)*, pp. 487, 488

have a lang—one end of it they tie about their waist, and the other they throw over their head.’³

IRRIGATION

Babur also made observations on the modes of irrigation prevalent in India. Two methods of irrigation from wells were with the aid of a wooden Persian wheel and a leather bucket drawn over a pulley, the *charsa*. Babur stated, ‘The greater part of the Hindustan country is situated on level land. Many though its towns and cultivated lands are, it nowhere has running waters. Rivers and, in some places, standing-waters are its ‘running-waters.’ Even where, as for some towns, it is practicable to convey water by digging channels, this is not done. For not doing it there may be several reasons, one being that water is not at all a necessity in cultivating crops and orchards. Autumn crops grow by the downpour of the rains themselves; and strange it is that spring crops grow even when no rain falls.’

PERSIAN WHEEL

‘To young trees water is made to flow by means of buckets or a wheel. They are given water constantly during two or three years; after which they need no more. Some vegetables are watered constantly.

‘In Lahor, Dibālpūr and those parts, people water by means of a wheel. They make two circles of ropes long enough to suit the depth of the well, fix strips of wood between them and on these fasten pitchers. The ropes with the wood and attached pitchers are put over the well-wheel. At one end of the wheel-axle a second wheel is fixed, and close to it another on an upright axle. This last wheel the bullock turns; its teeth catch in the teeth of the second, and thus the wheel with the pitchers is turned. A trough is set where the water empties from the pitchers and from this the water is conveyed everywhere.

CHARSA

‘In Agra, Chandwar, Biana and those parts, again, people water with a bucket; this is a laborious and filthy way. At the well-edge they set up a fork of wood, having a roller adjusted between the forks, tie a rope to a large bucket, put the rope over the roller, and tie its other end to the bullock. One person must drive the bullock, another empty the bucket. Every time the bullock turns after having drawn the bucket out of the well, that rope lies on the bullock-track, in pollution of urine and dung, before it descends again into the well. To some crops needing water, men and women carry it by repeated efforts in pitchers.’⁴

³ Beveridge, A.S. *Babur-nama*, pp. 446, 487, 488

GARDENS OF BABUR IN KABUL AND INDIA

OBSERVATIONS ON FRUITS AND FLOWERS IN THE *BABUR-NAMA*

In Kabul Babur found time and leisure to indulge in his favourite hobby of gardening. Eleven gardens are mentioned as made by him, viz. the *Bagh-i-wafa*, *Shahr-ara* (Town-adorning), which contained very fine plane-trees, the *Char-bagh*, the *Bagh-i-jalau-khana*, the *Aurta-bagh* (Middle-garden), the *Saurat-bagh*, the *Bagh-i-mahtab* (Moonlight-garden), the *Bagh-i-ahukhana* (Garden-of-the-deer-house), and three smaller ones. In these gardens he held his feasts and drink parties.

Bagh-i-wafa was laid out in A.D. 1508 near Fort Adinapur, which he describes thus: 'The garden lies high, has running water close at hand, and a mild winter climate. In the middle of it, a one-mill stream flows constantly past the little hill on which are the four garden-plots. In the south-west part of it there is a reservoir, ten by ten, around which are orange trees and a few pomegranates, the whole encircled by a trefoil-meadow. This is the best part of the garden, a most beautiful sight when the oranges take colour. Truly that garden is admirably situated!'

Babur thus records a visit to *Bagh-i-wafa* in A.D. 1519. 'We dismounted in the *Bagh-i-wafa*; its oranges had yellowed beautifully; its spring bloom was well-advanced, and it was very charming.'

We see the *Bagh-i-wafa* in a painting of the *Babur-nama* in the collection of the National Museum, New Delhi. On the top of the painting is Koh-i-Safed, the snow-covered mountain. Below is the *Char-Bagh*, divided into four plots in which oranges are growing. A plantain and two cypresses grow in one of the plots. Water is supplied by a Persian wheel which is painted on the top of the picture (Fig. 21). In another version of the same theme from the British Museum *Babur-nama*, sugarcane and plantains are depicted (top of Fig. 20). These were introduced by Babur from Lahore.

GARDENS AT AGRA

On settling down at Agra, Babur's first concern was to raise a garden where he could take refuge from heat and dust. He was disgusted with the disagreeable aspect of the country, the flat monotonous dusty plains of Agra. He not only laid a garden for himself but also encouraged his nobles to follow his example. He thus describes in his memoirs how he set about laying the garden on the bank of the Jumna, now called *Ram-bagh*.

'It always appears to me that one of the chief defects of Hindustan is the want of artificial water-courses. I had intended, wherever I might fix my residence, to construct water-wheels, to produce an artificial stream,

and to lay out an elegant and regularly planned pleasure-ground. Shortly after coming to Agra, I passed the Jumna with this object in view, and examined the country, to pitch upon a fit spot for a garden. The whole was so ugly and detestable that I repassed the river quite repulsed and disgusted. In consequence of the want of beauty, and of the disagreeable aspect of the country, I gave up my intention of making a *char-bagh*; but as no better situation presented itself near Agra, I was finally compelled to make the best of this same spot. I first of all began to sink the large well which supplies the baths with water; I next fell to work on that piece of ground on which are the *ambli* (or Indian tamarind) trees, and the octangular tank; I then proceeded to form the large tank and its enclosure; and afterwards the tank and *tālār* (or grand hall of audience) that are in front of the stone palace. I next finished the garden of the private apartments, and the apartments themselves, after which I completed the baths. In this way, going on without neatness and without order, in the Hindu fashion, I, however, produced edifices and gardens which possessed considerable regularity. In every corner I planted suitable gardens; in every garden I sowed roses and narcissuses regularly, and in beds corresponding to each other.

‘Khalifeh, Sheikh Zen, Yunis Ali, and several others who procured situations on the banks of the river, made regular and elegant gardens and tanks, and constructed wheels after the fashion of Lahore and Debalpur, by means of which they procured a supply of water. . The men of Hind, who had never before seen places formed on such a plan, or laid out with so much elegance, gave the name of Kabul to the side of the Jumna on which these palaces were built.’¹

CHAR-BAGH AT DHOLPUR

After consolidating his power in the North, he thought of conquering Gwalior fort.

On his way to Gwalior, Babur camped at Dholpur. He was struck by the beauty of the hills, and ordered the construction of a *char-bagh*. Babur records, ‘North of the tank, the ground is thick with trees, mangoes, jaman, all sorts of trees; amongst them I had ordered a well made 10’×10’ (3 m×3 m). Its water goes to the above-named tank. To the north of this tank, Sultan Sikander’s dam is flying across the valley; on it houses have been built, and above it the waters of the rains gather into a great lake. On the east of this lake is a garden. I ordered a seat and a four-pillared platform to be cut out in solid rock on that same side.’

Babur died on 26 December 1530 at the age of about forty-seven, after prolonged illness of more than six months. He was buried in Bagh Gul-

¹*Memoirs of Zehir-ud-din Muhammed Babur*, Vol. II, pp. 257-258

i-Afshan, later on renamed *Aram-bagh*, on the banks of the Jumna at Agra. Between A.D. 1540 and A.D. 1544, when India was ruled by Sher Shah Suri, his body was transported to Kabul and buried in *Bagh-e-Kalan*, where he had rested during his stay in Kabul under the shade of planes and oaks, and admired the mauve blossoms of *arghwān*.

FRUITS AND FLOWERS

Babur mentions in his Memoirs the plants which he saw in India. His record of fruit and ornamental plants is important in the sense that we know in an authentic manner what plants were grown in India in the early sixteenth century. Among the fruits he mentions, mango, plantain, tamarind, *mahua*, *jaman*, *chironji*, jack, *khirni*, *karonda*, *paniala*, *ber*, *amla*, *kamrak*, lime, citron, *galgal* and santra orange. He also records the presence of date, coconut and toddy palms.

FRUITS

The Mango. The mango (*ambah*) is one of the fruits peculiar to Hindustan. Hindustanis pronounce the *b* in its name as though no vowel followed it; this being awkward to utter, some people call the fruit (P) *naghsak* as Khwaja Khusrau does:

Naghsak-i-mā (var. *khwash*) *naghs-kun-i-būstān*,

Naghstarin mewa (var. *na' mat*)-*i-Hindustan*

'Mangoes when good are very good; but many as are eaten, few are first-rate. They are usually plucked unripe and ripened in the house. Unripe they make excellent condiments, are good also preserved in syrup. Taking it altogether, the mango is the best fruit of Hindustan. Some so praise it as to give it preference over all fruits except the musk-melon, but such praise outmatches it. It resembles the *kārdī* peach. It ripens in the rains. It is eaten in two ways: one is to squeeze it to a pulp, make a hole in it, and suck out the juice, —the other, to peel and eat it like the *kārdī* peach. Its tree grows very large and has a leaf somewhat resembling the peach-tree's. The trunk is ill-looking and ill-shaped, but in Bengāl and Gujrāt is heard of as growing handsome.

The Plantain. 'The plantain (Sans. *kela*; *Musa paradisiaca*) is another. Its tree is not very tall, indeed is not to be called a tree, since it is something between a grass and a tree. Its leaf is a little like that of the *amān-garā* but grows about two yards long and nearly one broad (1.8 m × 0.9 m). Out of the middle of its leaves rises, heart-like, a bud which resembles a sheep's heart. As each petal of this bud expands, there grows at its base a row of 6 or 7 flowers which become the plantains. These flowers become visible with the lengthening of the heart-like shoot and the opening of the petals of the bud. The tree is understood to flower once only. The fruit has two pleasant qualities: one that it peels easily, the other that it has neither stone

nor fibre. It is rather longer and thinner than the egg-plant (*Solanum melongena*). It is not very sweet; the Bengāl plantain (i.e. *chini-champa*) is, however, said to be very sweet. The plantain is a very good-looking tree, its broad, broad, leaves of beautiful green having an excellent appearance.

The Tamarind. 'The *anbli* (H. *imli*, *Tamarindus indica*, the tamarind) is another. It has finely-cut leaves (leaflets), precisely like those of the (T) *būiā*, except that they are not so finely-cut. It is a very good-looking tree, giving dense shade. It grows wild in masses too.

The Mahua. 'The (Beng.) *mahua* (*Madhuca indica*) is another. This also is a very large tree. Most of the wood in the houses of Hindustanis is from it. Spirit is distilled from its flowers; not only so, but they are dried and eaten like raisins, and from them, thus dried, spirit is also extracted. The dried flowers taste just like *kishmish*; they have an ill-flavour. The flowers are not bad in their natural state; they are eatable. The *mahua* grows wild also. Its fruit is tasteless, has rather a large seed with a thin husk, and from this seed, again, oil is extracted.

The Khirni. 'The *mimusops* (Sans. *khirni*; *Manilkara kauki*) is another. Its tree, though not very large, is not small. The fruit is yellow and thinner than the red jujube (*Elaeagnus angustifolia*). It has just the grape's flavour, but a rather bad after-taste; it is not bad, however, and is eatable. The husk of its stone is thin.

The Jaman. 'The (Sans.) *jāman* (*Syzygium cumini*) is another. Its leaf, except for being thicker and greener, is quite like the willow's. The tree does not want for beauty. Its fruit is like a black grape, is sourish, and not very good (Fig. 22).

The Kamrak. 'The *kamrak* (*Averrhoa carambola*) is another. Its fruit is five-sided, about as large as the 'ain-ālū and some 3 inches (7.6 cm) long. It ripens to yellow; gathered unripe, it is very bitter: gathered ripe, its bitterness has become sub-acid, not bad, not wanting in pleasantness (Fig. 22).

The Jack-fruit. 'The jack-fruit (*Artocarpus heterophyllus*) is another. This is a fruit of singular form and flavour; it looks like a sheep's stomach stuffed and made into a haggis and it is sickeningly sweet. Inside it are filbert-like stones which, on the whole, resemble dates, but are round, not long, and have softer substance; these are eaten. The jack-fruit is very adhesive; for this reason people are said to oil mouth and hands before eating it. It is heard of also as growing not only on the branches of its tree, but on trunk and root too. One would say that the tree was all hung round with haggises (Fig. 25).

The Burhal. 'The monkey-jack (*Artocarpus lakoocha*) is another. The fruit may be of the size of a quince (var. apple). Its smell is not bad. Unripe it is singularly tasteless and empty thing; when ripe, it is not so bad. It ripens soft, can be pulled to pieces and eaten anywhere, tastes very much like a rotten quince, and has an excellent little austere flavour.

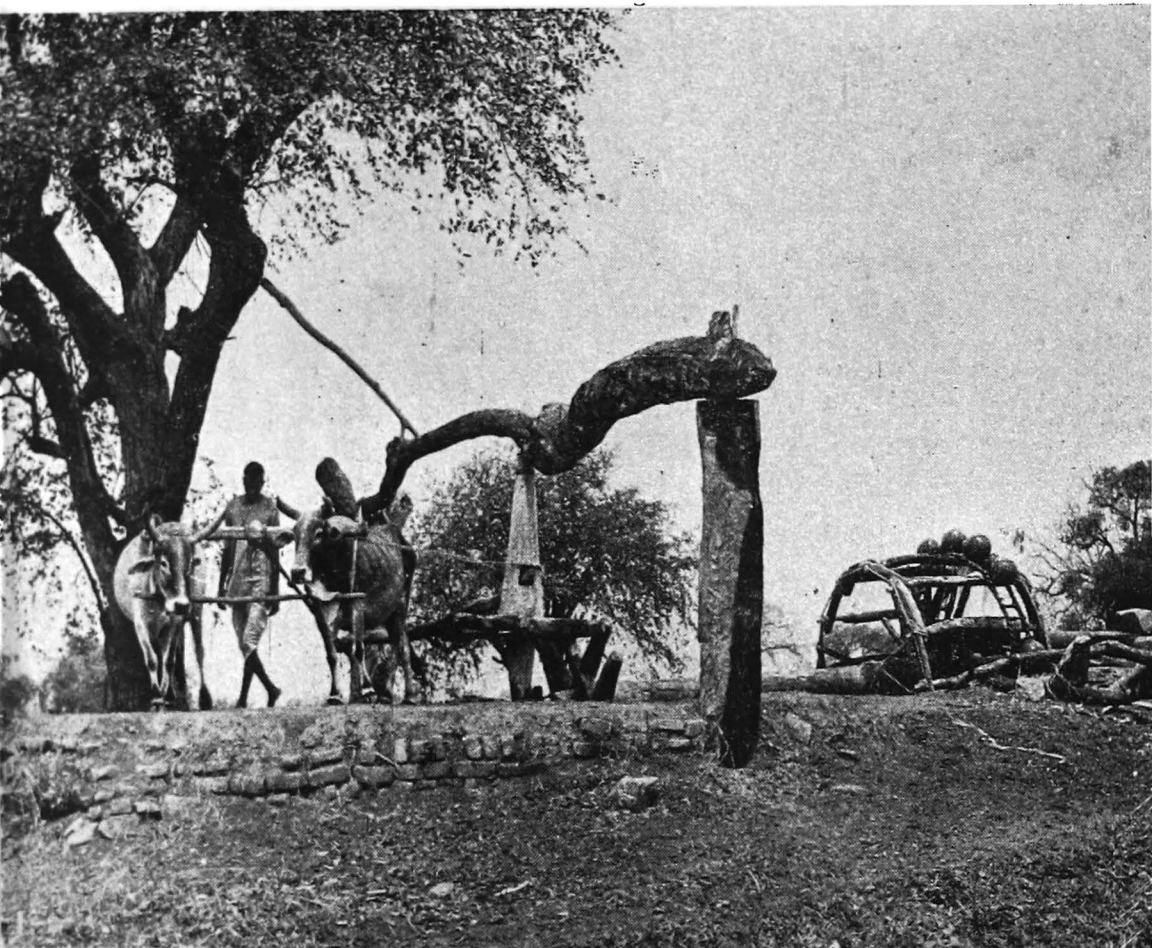


FIG. 18. The wooden Persian wheels with baked earthen water pots are still in use in Rajasthan and Madhya Pradesh. This photograph shows a Persian wheel near Khajuraho, Chhattarpur District, Madhya Pradesh, 1978.



FIG. 19. *Charsa*, a leather bucket pulled by bullocks with the aid of a pulley, is still in use for irrigation in Gurgaon District of Haryana, 1978.

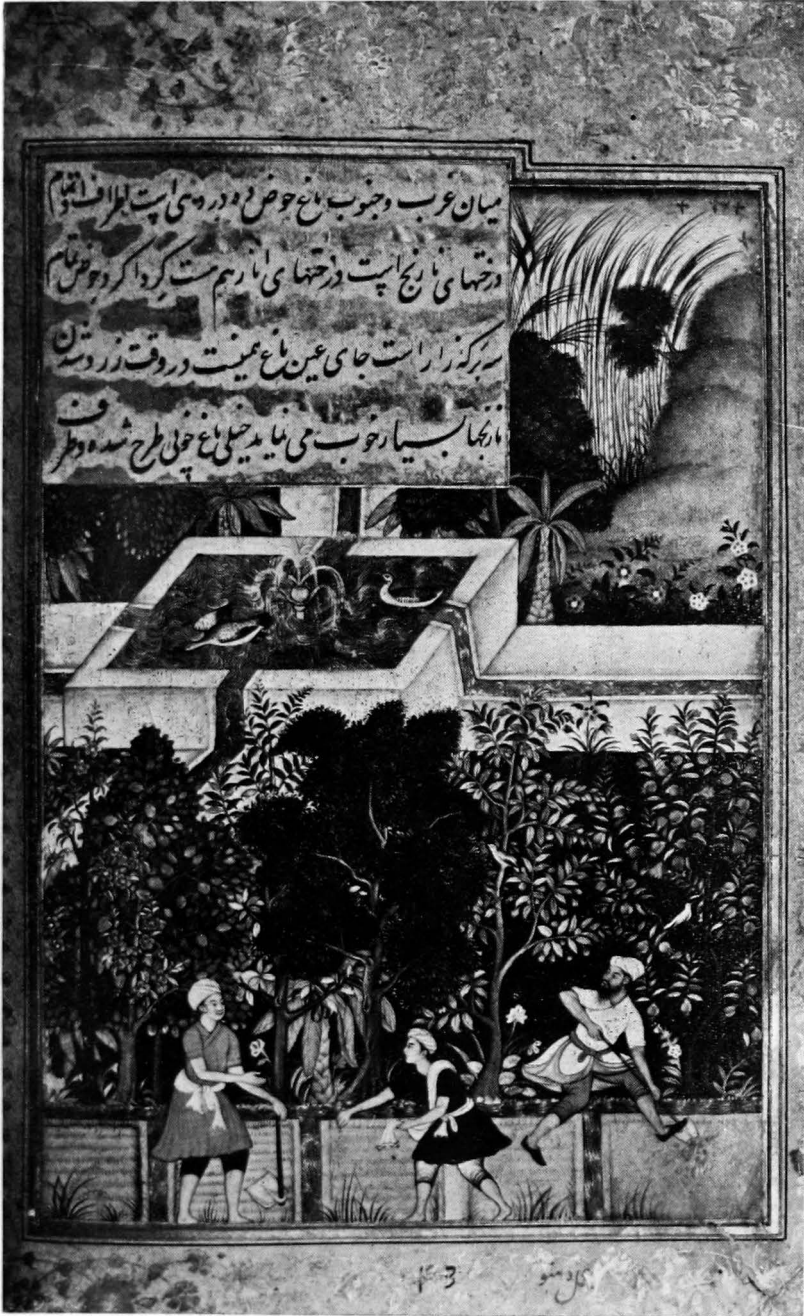


FIG. 20. *Bagh-e-wafa*, the garden planted by Babur near Kabul in which he planted oranges and pomegranates. On the top sugarcanes and plantains are depicted. These were introduced by Babur from Lahore. From the *Babur-nama*.

(Courtesy; British Museum, London)

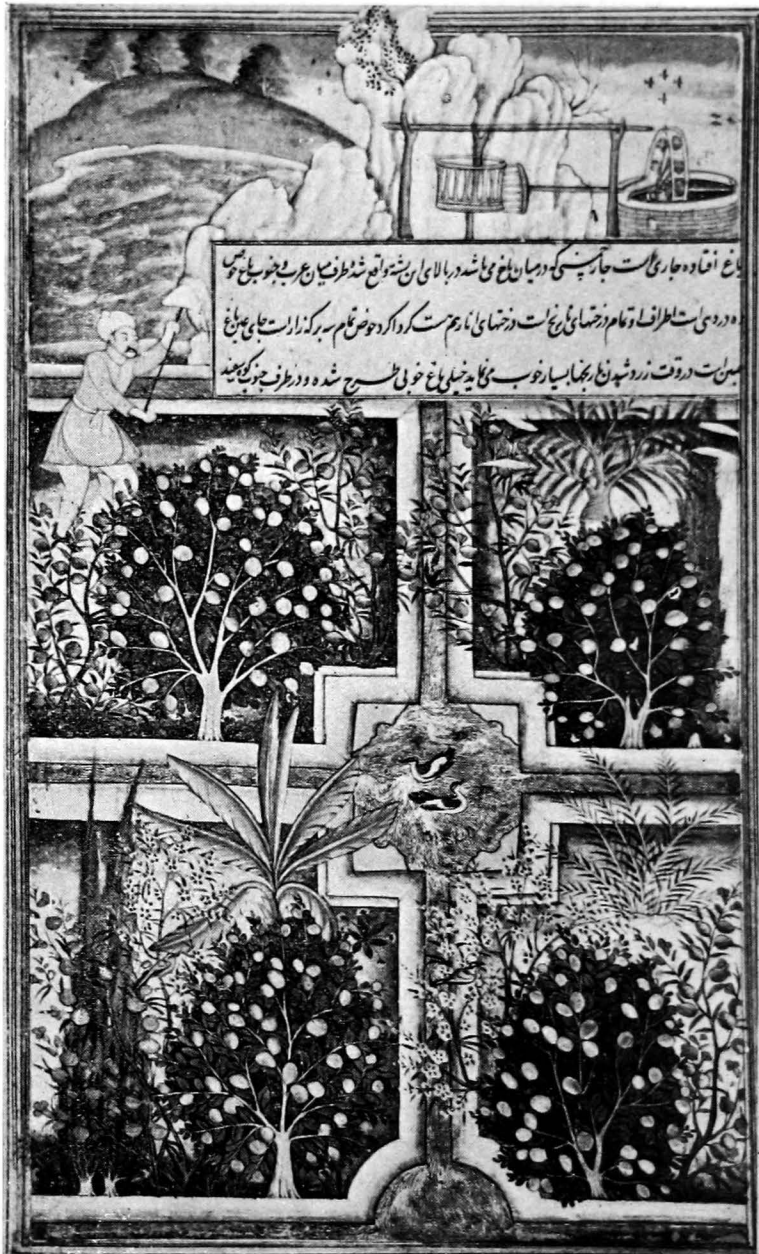


FIG. 21. *Bagh-e-wafa*. On the top a wooden Persian wheel is shown. In the garden oranges, pomegranates, plantains, cypresses and keora are depicted. An illustration to the *Babur-nama*. Mughal, 1597. Artist: Bhagwan.
 (Courtesy: National Museum, New Delhi)

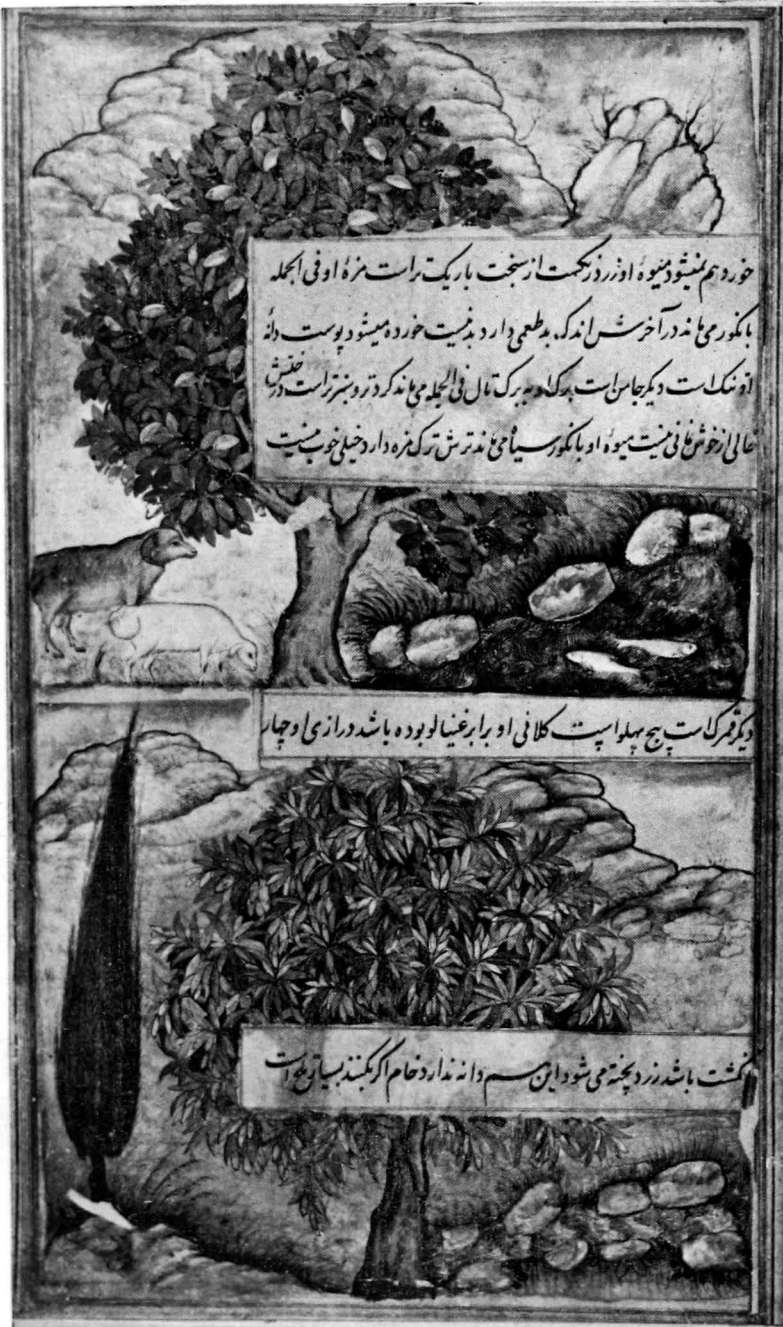


FIG. 22. An illustration of *jaman* (*Syzygium cumini*) and *kamrak* (*Averrhoa ca-ambola*) from the *Babur-nama*. Mughal, 1597.

(Courtesy: National Museum, New Delhi)



FIG. 23. *Paniala* (*Flacourtia jangomas*) and *chironji* (*Buchanania lanzan*) trees. From the *Babur-nama*. Mughal, 1597.

(Courtesy: National Museum, New Delhi)

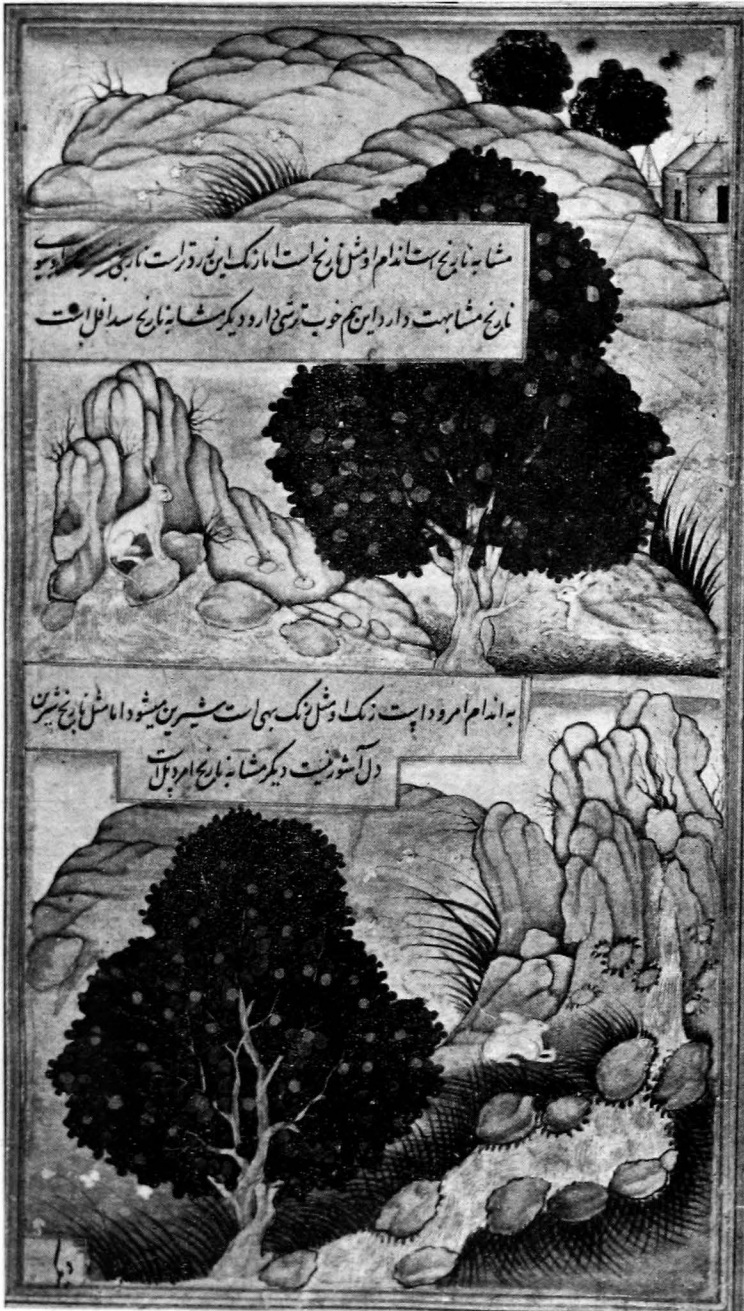


FIG. 24. *Sadaphal* (*Citrus maxima*) or *chakotra* on the top. Below is *amarphal* (*C. aurantium*). From the *Babur-nama*. Mughal, 1597.

(Courtesy: National Museum, New Delhi)



FIG. 25. Illustrations of jack-fruit (*Artocarpus heterophyllus*), keora (*Pandanus odoratissimus*) and oleander (*Nerium indicum*). From the *Babur-nama*, Mughal, 1597. (Courtesy: National Museum, New Delhi)

The Ber. 'The lote-fruit (Sans. *ber*, *Ziziphus mauritiana*) is another. It is of several kinds: of one the fruit is larger than the plum; another is shaped like the Husaini grape. Most of them are not very good; we saw one in Bandir (Gualiar) that was really good. The lote-tree sheds its leaves under the Signs *Saur* and *Jauza* (Bull and Twins), burgeons under *Saratan* and *Asad* (Crab and Lion) which are the true rainy-season,—then becoming fresh and green, and it ripens its fruit under *Dalu* and *Haut* (Bucket, i.e. Aquarius, and Fish).

The Karaunda. 'The *karaunda* (*Carissa carandas*) is another. It grows in bushes after the fashion of the *chika* of our country, but the *chika* grows on mountains, the *karaunda* on the plains. In flavour it is like the rhubarb itself, but is sweeter and less juicy.

The Pāniyālā. 'The *pāniyālā* (*Flacourtia jangomas*) is another. It is larger than the plum and like the red-apple unripe. It is a little austere and is good. The tree is taller than the pomegranate's; its leaf is like that of the almond-tree but smaller (Fig. 23).

The Gular. 'The (H) *gūlar* (*Ficus glomerata*) is another. The fruit grows out of the tree-trunk and resembles the fig, but is singularly tasteless.

The Amla. 'The *āmlā* (*Embllica officinalis*, the myrobalan-tree) is another. This also is a five-sided fruit. It looks like the unblown cotton-pod. It is an astringent and ill-flavoured thing, but confiture made of it is not bad. It is a wholesome fruit. Its tree is of excellent form and has very minute leaves.

The Chirūnjī. 'The (H) *chirūnjī* (*Buchanania lanzan*) is another (Fig. 23). This tree had been understood to grow in the hills, but I knew later about it, because there were three or four clumps of it in our gardens. It is much like the *mahuā*. Its kernel is not bad, a thing between the walnut and the almond, not bad! rather smaller than the pistachio and round; people put it in custards and sweetmeats.

The Date-palm. 'The date-palm (*Phoenix dactylifera*) is another. This is not peculiar to Hindustan, but is here described because it is not in those countries (Tramontana). It grows in Lamghan also. Its branches (i.e. leaves) grow from just one place at its top; its leaves (i.e. leaflets) grow on both sides of the branches (midribs) from neck to tip; its trunk is rough and ill-coloured; its fruit is like a bunch of grapes, but much larger. People say that the date-palm amongst vegetables resembles an animal in two respects; one is that, as, if an animal's head be cut off, its life is taken, so it is with the date-palm; if its head is cut off, it dries off; the other is that, as the offspring of animals is not produced without the male, so too with the date-palm, it gives no good fruit unless a branch of the male-tree be brought into touch with the female-tree. The truth of this last matter is not known to me. The above-mentioned head of the date-palm is called its cheese. The tree so grows that where its leaves come out is cheese-white, the leaves

becoming green as they lengthen. This white part, the so-called cheese, is tolerable eating, not bad, much like the walnut. People make a wound in the cheese, and into this wound insert a leaflet, in such a way that all liquid flowing from the wound runs down it. The tip of the leaflet is set over the mouth of a pot suspended to the tree in such a way that it collects whatever liquor is yielded by the wound. This liquor is rather pleasant if drunk at once; if drunk after two or three days, people say it is quite exhilarating. Once when I had gone to visit Bari, and made an excursion to the villages on the bank of the Chambal-river, we met with people collecting this date-liquor in the valley-bottom. A good deal was drunk; no hilarity was felt; much must be drunk seemingly, to produce a little cheer.

The Coconut Palm. "The coconut palm (*Cocos nucifera*) is another. An Arab gives it Arabic form and says *nārjīl*; Hindustan people say *nālir*, seemingly by popular error. Its fruit is the Hindinut from which black spoons are made and the larger ones of which serve for guitar-bodies. The coco-palm has general resemblance to the date-palm, but has more, and more glistening leaves. Like the walnut the coconut has a green outer husk; but its husk is of fibre on fibre. All ropes for ships and boats and also cord for sewing boat-seams are heard of as made from these husks. The nut, when stripped of its husk, near one end shews a triangle of hollows, two of which are solid, the third, a nothing, easily pierced. Before the kernel forms, there is fluid inside; people pierce the soft hollow and drink this; it tastes like date-palm cheese in solution, and is not bad.

The Toddy Palm. "The (Sans.) *tār* (*Borassus flabellifer*), the palmyra-palm, is another. Its branches (i.e. leaves) also are quite at its top. Just as with the date-palm, people hang a pot on it, take its juice and drink it. They call this liquor *tārī*, it is said to be more exhilarating than date liquor. For about a yard (0.9 m) along its branches (i.e. leaf-stems) there are no leaves; above this, at the tip of the branch (stem), 30 or 40 open out like the spread palm of the hand, all from one place. These leaves approach a yard in length. People often write Hindi characters on them after the fashion of account rolls.

Citrus Fruits. "The orange (Ar. *nāranj*, *Citrus aurantium*) and orange-like fruits are others of Hindustan. Oranges grow well in the Lamghanat, Bajaur and Sawad. The Lamghanat one is smallish, has a navel, is very agreeable, fragile and juicy. It is not at all like the orange of Khurasan and those parts, being so fragile that many spoil before reaching Kabul from the Lamghanat, which may be 13-14 *yīghāch* (65-70 miles; 105-113 km) while the Astarabad orange, by reason of its thick skin and scant juice, carries with less damage from there to Samarkand, some 270-280 *yīghāch*. The Bajaur orange is about as large as a quince, very juicy and more acid than other oranges. Khwaja Kalan once said to me, "We counted the oranges gathered from a single tree of this sort in Bajaur and it mounted up to

7,000." It had been always in my mind that the word *nāranj* was an Arabic form; it would seem to be really so, since every-one in Bajaur and Sawad says *nārang*.

"The lime (Beng. *limū*; *C. aurantiifolia*) is another. It is very plentiful, about the size of a hen's egg, and of the same shape. If a person poisoned drink the water in which its fibres have been boiled, danger is averted.

"The citron (H. *turunj*; *C. medica*) is another of the fruits resembling the orange. Bajauris and Swadis call it *bālang* and hence give the name *bālang marabbā* to its maramlade (*marabbā*) confiture. In Hindustan people call the *turunj bajauri*. There are two kinds of *turunj*: one is sweet, flavourless and nauseating, of no use for eating but with peel that may be good for marmalade; it has the same sickening sweetness as the Lamghanat; the other, that of Hindustan and Bajaur, is acid, quite deliciously acid, and makes excellent sherbet, well-flavoured, and wholesome drinking. Its size may be that of the Khusrawi melon; it has a thick skin, wrinkled and uneven, with one end thinner and beaked. It is of a deeper yellow than the orange. Its tree has no trunk, is rather low, grows in bushes, and has a larger leaf than the orange.

"The *sangtāra* (*C. reticulata*) is another fruit resembling the orange (*naranj*).

"The large lime which they call (H) *gal-gal* in Hindustan is another fruit resembling the orange. It has the shape of a goose's egg, but unlike that egg does not taper to the ends. Its skin is smooth like the *sangtāra's*; it is remarkably juicy.

"The (H) *jānbīri* lime (*Citrus limon*) is another orange-like fruit. It is orange-shaped and, though yellow, not orange-yellow. It smells like the citron (*turunj*); it too is deliciously acid.

"The (Sans.) *sadā-fal* (*phal*) (*C. paradisi*) is another orange-like fruit (Fig. 24). This is pear-shaped, colours like the quince, ripens sweet, but not to the sickly-sweetness of the orange (*nāranj*).

"The *amrd-fal* (Sans. *amrit-phal*) (*C. aurantium*) is another orange-like fruit (Fig. 24).

"The lemon (H, *karnā*; *C. limon*) is another fruit resembling the orange (*nāranj*); it may be as large as the *gal-gal* and is also acid.

"The (Sans.) *amal-bīd* is another fruit resembling the orange. After three years (in Hindustan), it was first seen today. They say a needle melts away if put inside it, either from its acidity or some other property. It is as acid, perhaps, as the citron and lemon (*turunj* and *limū*).

FLOWERS

Among the flowers Babur mentions hibiscus, oleander, *keora*, *chambeli* or white jasmine in the *Babur-nama*. These are all indigenous flowering

plants of India. Babur is also credited with the introduction of the scented Persian rose in India.

Gurhal. 'In Hindustan there is great variety of flowers. One is the (D.) *jāsūn* (*Hibiscus rosa-sinensis*), which some Hindustanis call (Hindi) *gurhal*. It is not a grass; its tree is in stems like the bush of the red-rose; it is rather taller than the bush of the red-rose. The flower of the *jāsūn* is fuller in colour than that of the pomegranate, and may be of the size of the red-rose; but the red-rose, when its bud has grown, opens simply, whereas when the *jāsūn*-bud opens a stem on which other petals grow is seen like a heart amongst its expanded petals. Though the two are parts of the one flower, yet the outcome of the lengthening and thinning of that stem-like heart of the first-opened petals gives the semblance of two flowers. It is not a common matter. The beautifully coloured flowers look very well on the tree, but they do not last long; they fade in just one day. The *jāsūn* blossoms very well through the four months of the rains; it seems indeed to flower all through the year; with this profusion, however, it gives no perfume.

The Oleander. 'The (H.) *kanir* (*Nerium indicum*, the oleander) is another (Fig. 25). It grows both red and white. Like the peach-flower, it is five-petalled. It is like the peach-bloom in colour, but opens 14 or 15 flowers from one place, so that, seen from a distance, they look like one great flower. The oleander-bush is taller than the rose-bush. The red oleander has a sort of scent, faint and agreeable. Like the *jāsūn* it also blooms well and profusely in the rains.

The Keora. 'The (H.) *kīūrā* (*Pandanus odoratissimus*, the screw-pine) is another (Fig. 25). It has a very agreeable perfume. Musk has the defect of being dry; this may be called moist musk—a very agreeable perfume. The tree's singular appearance notwithstanding, it has flowers perhaps 13½ to 18 inches (35.3 to 45.7 cm) long. It has long leaves having the character of the reed (P) *gharau* and having spines. Of these leaves, while pressed together bud-like, the outer ones are the greener and more spiny; the inner ones are soft and white. In amongst these inner leaves grow things like what belongs to the middle of a flower, and from these things comes the excellent perfume. When the tree first comes up not yet shewing any trunk, it is like the bush of the male-reed, but with wider and more spiny leaves. What serves it for a trunk is very shapeless, its roots remaining shewn.

The Jasmine. 'The (P.) *yāsman* (jasmine) is another; the white they call *chamṭa*. It is larger and more strongly scented than our *yāsman*-flower.³

³The *Babur-nama*, pp. 503-515

OBSERVATIONS OF BABUR
ON THE ANIMALS AND BIRDS OF INDIA

BABUR observed the following quadrupeds in India: the elephant, rhinoceros, wild buffalo, *nilgai*, Kotah-paicheh, antelope, deer, gaugini, monkey, mongoose and squirrel.

‘The elephant, which Hindustanis call *hāt(h)i*, is one of the wild animals peculiar to Hindustan. It inhabits the (western?) borders of the Kālpi country, and becomes more numerous in its wild state the farther east one goes (in Kālpi?). From this tract it is that captured elephants are brought; in Kārrah and Mānikpūr elephant-catching is the work of 30 or 40 villages. People answer for them direct to the exchequer. The elephant is an immense animal and very sagacious. If people speak to it, it understands; if they command anything from it, it does it. Its value is according to its size; it is sold by measure, the larger it is, the higher its price. People rumour that it is heard of in some islands as 10 *qārī* high, but in this tract it is not seen above 4 or 5. It eats and drinks entirely with its trunk; if it lose the trunk, it cannot live. It has two great teeth (tusks) in its upper jaw, one on each side of its trunk; by setting these against walls and trees, it brings them down, with these it fights and does whatever hard tasks fall to it. People call these ivory; they are highly valued by Hindustanis. The elephant has no hair. It is much relied on by Hindustanis, accompanying every troop of their armies. It has some useful qualities:—it crosses great rivers with ease, carrying a mass of baggage, and three or four have gone dragging without trouble the cart of the mortar it takes four or five hundred men to haul. But its stomach is large; one elephant eats the corn of two strings of camel.

‘The rhinoceros is another. This also is a large animal, equal in bulk to perhaps three buffaloes. The opinion current in those countries (Tramontana) that it can lift an elephant on its horn seems mistaken. It has a single horn on its nose, more than nine inches (23 cm) long; one of two *qārīsh* is not seen. Out of one large horn were made a drinking-vessel and a dice-box, leaving over (the thickness of) 3 or 4 hands. The rhinoceros’s hide is very thick; an arrow shot from a stiff bow, drawn with full strength right up to the arm-pit, if it pierce at all, might penetrate 4 inches (10 cm). From the sides of its fore and hind legs, folds hang which from a distance look like housings thrown over it. It resembles the horse more than it does any other animal. As the horse has a small stomach so has the rhinoceros; as in the horse a piece of bone (pastern?) grows in place of small bones, so one grows in the rhinoceros. It is more ferocious than the

elephant and cannot be made obedient and submissive. There are masses of it in the Parashāwar and Hashnagar jungles, so too between the Sind-river and the jungles of the Bhira country. Masses there are also on the banks of the Sāru-river in Hindustan. Some were killed in the Parashāwar and Hashnagar jungles in our moves on Hindustan (Fig. 26). It strikes powerfully with its horn; men and horses enough have been horned in those hunts. In one of them the horse of a brave named Maqṣūd was tossed a spear's-length, for which reason the man was nick-named the rhino's aim.

'The wild-buffalo is another. It is much larger than the (domestic) buffalo and its horns do not turn back in the same way. It is a mightily destructive and ferocious animal.

'The *nīla-gaū* (blue-bull) is another. It may stand as high as a horse but is somewhat lighter in build. The male is bluish-gray; hence, seemingly, people call it *nīla-gaū*. It has two rather small horns. On its throat is a tuft of hair, nine inches (23 cm) long; in this it resembles the yak. Its hoof is cleft like the hoof of cattle. The doe is of the colour of the *būghū-marāl*; she, for her part, has no horns and is plumper than the male.

'The hog-deer is another. It may be of the size of the white deer. It has short legs; hence its name, little-legged. Its horns are like a *būghū's* but smaller; like the *būghū* it casts them every year. Being rather a poor runner, it does not leave the jungle.

'Another is a deer (*kiyik*) after the fashion of the male deer (*airkāki hūna*) of the jīrān. Its back is black, its belly white, its horns longer than the *huna's*, but more crooked. The Hindustani calls it *kalahara*, a word which may have been originally *kālā-haran*, black-buck, and which has been softened in pronunciation to *kalahara*. The doe is light-coloured (Fig.27). By means of this *kalahara* people catch deer; they fasten a noose on its horns, hang a stone as large as a ball on one of its feet, so as to keep it from getting far away after it has brought about the capture of a deer, and set it opposite wild deer when these are seen. As these (*kalahara*) deer are singularly combative, advance to fight is made at once. The two deer strike with their horns and push one another backwards and forwards, during which the wild one's horns become entangled in the net that is fast to the tame one's. If the wild one would run away, the tame one does not go; it is impeded also by the stone on its foot. People take many deer in this way; after capture they tame them and use them in their turn to take others; they also set them to fight at home; the deer fight very well.

'There is a smaller deer (*kiyik*) on the Hindustan hill-skirts, as large may-be as the one year's lamb of the *arqārghalcha* (*Ovis ammon polii*).

'The *gini*-cow is another, a very small one, perhaps as large as the ram of those countries (Tramontana). Its flesh is very tender and savoury.

'The monkey is another. The Hindustani calls it *bandar*. Of this too there are many kinds, one being what people take to those countries. The

jugglers teach them tricks. This kind is in the mountains of Nūrdara, in the skirt-hills of Safid-koh neighbouring on Khaibar, and from there downwards all through Hindustan. It is not found higher up. Its hair is yellow, its face white, its tail not very long. Another kind, not found in Bajaur, Sawād and those parts, is much larger than is the one taken to those countries (Tramontana). Its tail is very long, its hair whitish, its face quite black. It is in the mountains and jungles of Hindustan. Yet another kind is distinguished, quite black in hair, face and limbs.

'The *nawal* is another. It may be somewhat smaller than the *kish*. It climbs trees. Some call it the *mūsh-i-khūrma* (palm-rat). It is thought lucky.

'A mouse people call *galāhrī* (squirrel) is another. It is just always in trees, running up and down with amazing alertness and speed (Fig.28).

AQUATIC ANIMALS

Alligator, water-hog, *gharial*, fish and frogs.

One is the water-tiger (*P. shūr-ābī*, *Crocodilus palustris*). This is in the standing-waters. It is like a lizard. People say it carries off men and even buffaloes.

'The *siyāh-sār* (black-head) is another. This also is like a lizard. It is in all rivers of Hindustan. One that was taken and brought in was about 4-5 *qārī* (c. 13 feet; 4 m) long and as thick perhaps as a sheep. It is said to grow still larger. Its snout is over half a yard (45 cm) long. It has rows of small teeth in its upper and lower jaws. It comes out of the water and sinks into the mud.

'The *gharial* (*Gavialis gangeticus*) is another. It is said to grow large; many in the army saw it in the Saru (Gogra) river. It is said to take people; while we were on that river's banks, it took one or two slave-women and it took three or four camp-followers between Ghazipur and Banaras. In that neighbourhood I saw one but from a distance only and not quite clearly.

'The water-hog (*Platanista gangetica*, the porpoise) is another. This also is in all Hindustan rivers. It comes up suddenly out of the water; its head appears and disappears; it dives again and stays below, shewing its tail. Its snout is as long as the *siyāh-sār*'s and it has the same rows of small teeth. Its head and the rest of its body are fish-like. When at play in the water, it looks like a water-carrier's bag (*mashak*). Water-hogs, playing in the Saru, leap right out of the water; like fish, they never leave it.

'Again there is the *kalah* (or *galah*)-fish (*bāligh*). Two bones each about 3 inches (7.6 cm) when taken, produce an extraordinary noise; whence, seemingly, people have called it *kalah*.

'The flesh of Hindustan fishes is very savoury; they have no odour. They are surprisingly active. On one occasion, when people coming had flung a net across a stream, leaving its two edges half a yard (45 cm) above

the water, most fish passed by leaping a yard (90 cm) above it. In many rivers are little fish which fling themselves a yard or more out of the water if there be harsh noise or sound of feet.

'The frogs of Hindustan, though otherwise like those of other countries, run 6 or 7 yards (5.5 to 6.4 m) on the face of the water.'¹

BIRDS

Babur describes the following birds in *Babur-nama*: Peacock, parrot, *sharak*, *lujeh*, *durraj* (or black partridge), *pulpeikar*, *murgh-e-sahra* (or fowl of the wild), *chelsi*, *sham*, *budineh* or quail, *kharchal* (or bustard), *charz* (or floriken), *baghri-kara* (or rock-pigeon), water-fowl, *dig* (or adjutant), *sāras*, *minkisa*, *yak ding*, *buzek* (or curlew), *gheret-pai*, *shahmurgh*, *zumej*, starling, *ala-kurgheh* (or magpie), crowpheasant, *chamgidri* (or flying fox, *aakeh*, *kār-cheh*, or *koel*). The flying fox is a mammal and not a bird, and it was included by Babur among birds by mistake.

'The peacock (Ar. *ḥaus*) is one. It is a beautifully coloured and splendid animal (Fig. 28). Its form is not equal to its colouring and beauty. Its body may be as large as the crane's but it is not so tall. On the head of both cock and hen are 20 to 30 feathers rising some 2 or 3 inches (5 to 7.6) cm high. The hen has neither colour nor beauty. The head of the cock has an iridescent collar; its neck is of a beautiful blue; below the neck, its back is painted in yellow, parrot-green, blue and violet colours. The flowers on its back are much the smaller; below the back as far as the tail-tips are (larger) flowers painted in the same colours. The tail of some peacocks grows to the length of a man's extended arms. It has a small tail under its flowered feathers, like the tail of other birds; this ordinary tail and its primaries are red. It is found in Bajaur and Sawad and below them; it is not in Kunur and Lamghanat or any place above them. Its flight is feebler than the pheasant's; it cannot do more than make one or two short flights. On account of its feeble flight, it frequents the hills or jungles, which is curious, since jackals abound in the jungles it frequents. What damage might these jackals not do to birds that trail from jungle to jungle, tails as long as man's stretch! Hindustanis call the peacock *mor*. Its flesh is lawful food, according to the doctrine of Imām Abū Hanifa; it is like that of the partridge and not unsavoury, but is eaten with instinctive aversion, in the way camel-flesh is.

'The parrot is another. This also is in Bajaur and countries lower down. It comes into Ningnahar and Lamghanat in the heats when mulberries ripen; it is not there at other times. It is of many, many kinds. One sort is that which people carry into those (Tramontana) countries. They make it speak words... Another sort is smaller; this also they make

¹*Babur-nama*, pp. 488-503



FIG. 26. Babur hunting rhinos near Peshawar. From the *Babur-nama*. Mughal, early 17th century A.D.

(Courtesy: British Museum, London)

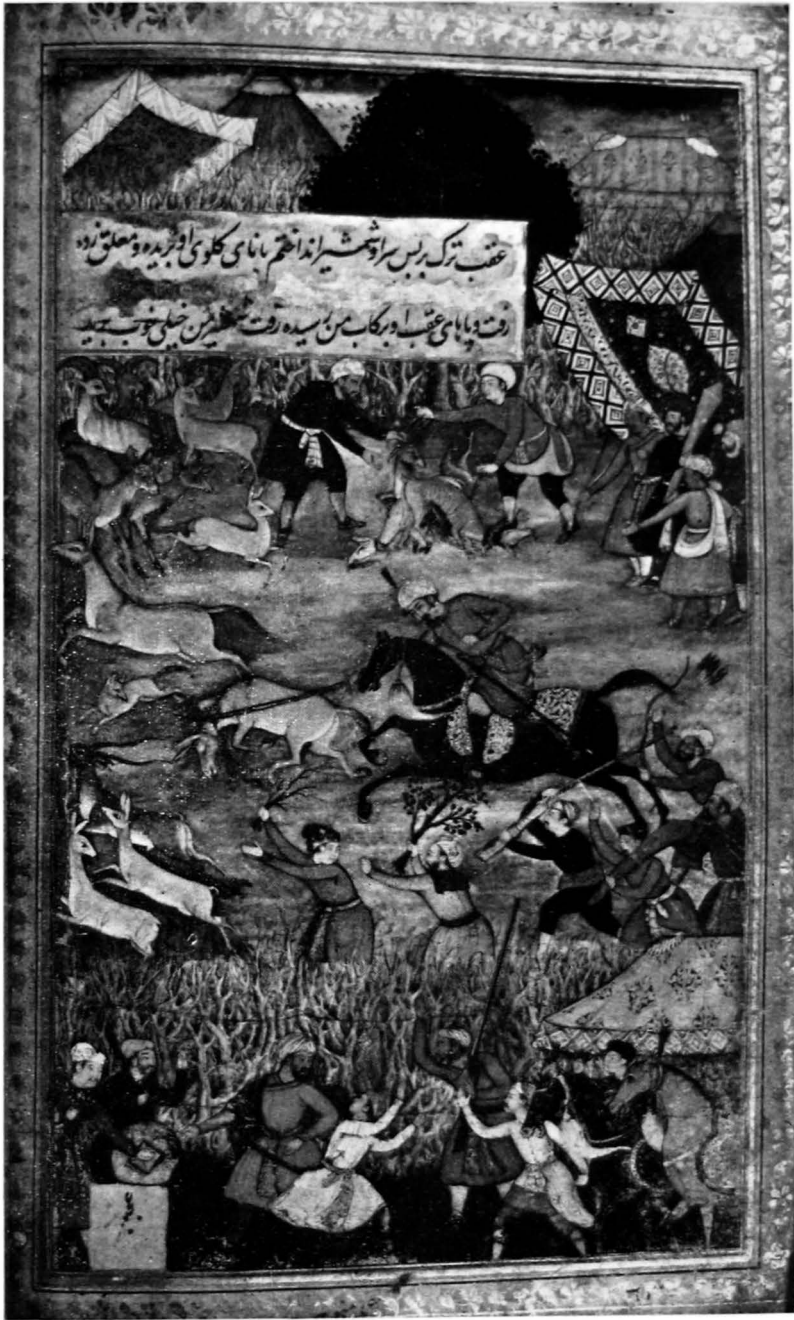


FIG. 27. Babur hunting. From the *Babur-nama*. Mughal, early 17th century A.D.
(Courtesy: British Museum, London)

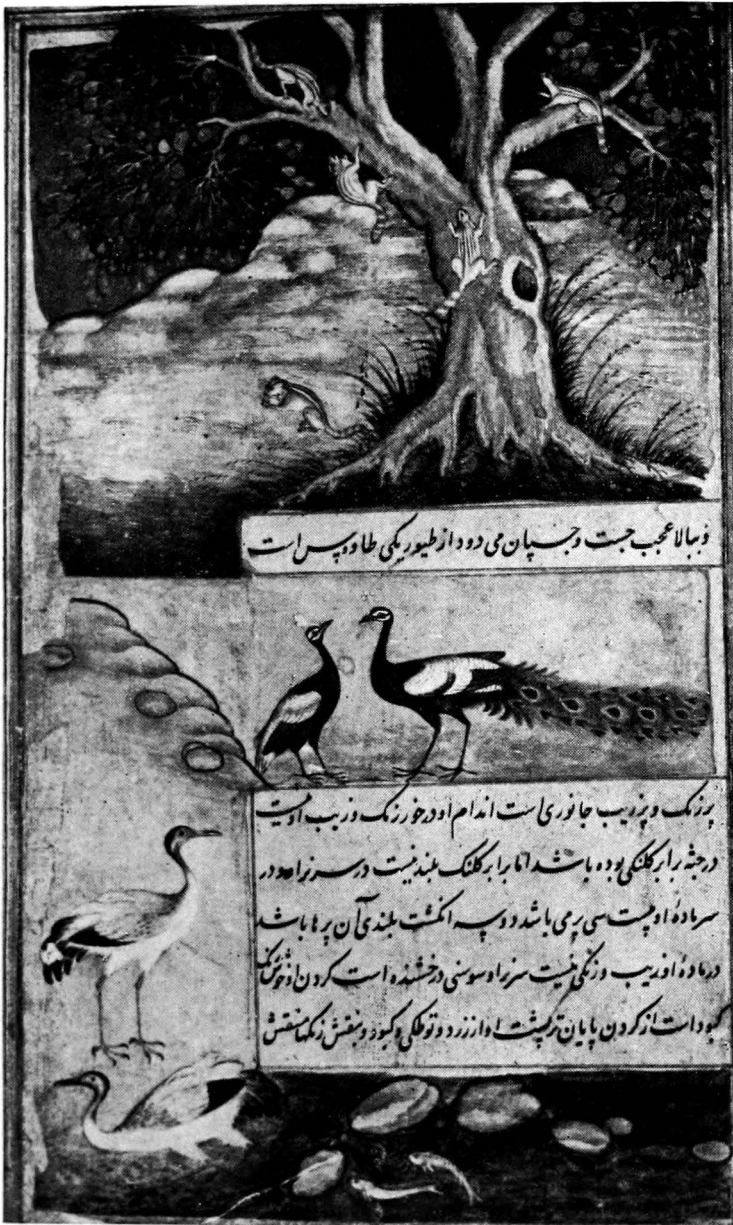


FIG. 28. Squirrels playing on a tree. Below a peacock and a hen, and sarus cranes. From the *Babur-nama*, Mughal, 1597.

(Courtesy: National Museum, New Delhi)



FIG. 29. A hunter netting birds. In the foreground are sarus cranes, pelicans and wild ducks. To the left a pair of hoopoes. In the net a falcon. From the *Babur-nama*. Mughal, 1597.

(Courtesy: National Museum, New Delhi)

speak words. They call it the jungle-parrot. It is numerous in Bajaur, Sawad and that neighbourhood, so much so that 5 or 6,000 fly in one flock. Between it and the one first-named the difference is in bulk; in colouring they are just one and the same. Another sort is still smaller than the jungle-parrot. Its head is quite red, the top of its wings (i.e. the primaries) is red also; the tip of its tail for two hands'-thickness is lustrous. The head of some parrots of this kind is iridescent. It does not become a talker. People call it the Kashmir parrot. Another sort is rather smaller than the jungle-parrot; its beak is black; round its neck is a wide black collar; its primaries are red. It is an excellent learner of words. We used to think that whatever a parrot or a *shārak* might say of words people had taught it, it could not speak of any matter out of its own head. At this juncture one of my immediate servants Abū-l-qāsim Jalāir, reported a singular thing to me. A parrot of this sort whose cage must have been covered up, said, "Uncover my face; I am stifling." And another time when palkī bearers sat down to take breath, this parrot, presumably on hearing wayfarers pass by, said, "Men are going past, are you not going on?" Let credit rest with the narrator, but, never-the-less, so long as a person has not heard with his own ears, he may not believe!—Another kind is of a beautiful full red; it has other colours also, but, as nothing is distinctly remembered about them, no description is made. It is a very beautiful bird, both in colour and form. People are understood to make this also speak words. Its defect is a most unpleasant, sharp voice, like the drawing of broken china on a copper plate.

"The *shārak* is another. It is numerous in the Lamghanat and abounds lower down, all over Hindustan. Like the parrot, it is of many kinds.—The kind that is numerous in the Lamghanat has a black head; its primaries (*qānāt*) are spotted, its body rather larger and thicker than that of the *chūghūr-chūq* (*Sturnus vulgaris indicus*; syn. *S. humii*). People teach it to speak words.—Another kind they call *pindāwalī*, they bring it from Bengal; it is black all over and of much greater bulk than the *shārak* (here, house-*mina*). Its bill and foot are yellow and on each ear are yellow wattles which hang down and have a bad appearance. It learns to speak well and clearly.—Another kind of *shārak* is slenderer than the last and is red round the eyes. It does not learn to speak. People call it the wood-*shārak*. Again, at the time when (934 AH.) I had made a bridge over Gang, crossed it, and put my adversaries to flight, a kind of *shārak* was seen, in the neighbourhood of Laknau and Oude for the first time, which had a white breast, piebald head, and black back. This kind does not learn to speak.

"The *lūja* is another. This bird they call (Ar.) *bū-qalamūn* (chameleon) because, between head and tail, it has five or six changing colours, resplendent like a pigeon's throat. It is about as large as the *kabg-i-dari* and seems to be the *kabg-i-dari* (monal) of Hindustan. As the *kabg-i-dari* moves on

the heads of mountains, so does this. It is in the Nijr-aū mountains of the countries of Kabul and in the mountains lower down, but it is not found higher up. People tell this wonderful thing about it:—When the birds, at the onset of winter, descend to the hill-skirts, if they come over a vineyard, they can fly no further and are taken. God knows the truth! The flesh of this bird is very savoury.

‘The partridge (*dūrraj*) is another. This is not peculiar to Hindustan but is also in the *Garm-sir* countries; however, some kinds are only in Hindustan; particulars of them are given here. The *dūrraj* (*Francolinus franco-linus*) may be of the same bulk as the *kiklik*; the cock’s back is the colour of the hen-pheasant; its throat and breast are black, with quite white spots. A red line comes down on both sides of both eyes. It is named from its cry which is something like *Shir daram shakrak*. It pronounces *shir* short; *daram shakrak* it says distinctly. Astarabad partridges are said to cry *Bat mīnī tūtilar* (Quick! they have caught me). The partridge of Arabia and those parts is understood to cry, *Bi’l shakar tadawin al ni’am* (with sugar pleasure endures)! The hen-bird has the colour of the young pheasant. These birds are found below *Nijr-aū*.—Another kind is called *kanjāl*. Its bulk may be that of the one already described. Its voice is very like that of the *kiklik* but much shriller. There is little difference in colour between the cock and hen. It is found in Parashawar, Hashnagar and countries lower down, but not higher up.

‘The *p(h) ūl-paikar* (*Tragopan melanocephalus*) is another. Its size may be that of the *kabgi-dari*; its shape is that of the house-cock, its colour that of the hen. From forehead (*tūmāgh*) to throat it is of a beautiful colour, quite red. It is in the Hindustan mountains.

‘The wild-fowl (*Gallus gallus*; syn. *G. ferrugineus*) is another. It flies like a pheasant, and is not of all colours as house-fowl are. It is in the mountains of Bajaur and lower down, but not higher up.

‘The *chīlsī* (or *jīlsi*) is another. In bulk it equals the *p(h) ūl-paikār* but the latter has the finer colouring. It is in the mountains of Bajaur.

‘The *sham* is another. It is about as large as a house-fowl; its colour is unique. It also is in the mountains of Bajaur.

‘The quail (*Coturnix coturnix*) is another. It is not peculiar to Hindustan but four or five kinds are so.—One is that which goes to our countries (Tramontana), larger and more spreading than the (Hindustan) quail.—Another kind is smaller than the one first named. Its primaries and tail are reddish. It flies in flocks like the *chir* [*Catreus (Phasianus) wallichii*].—Another kind is smaller than that which goes to our countries and is darker on throat and breast.—Another kind goes in small numbers to Kabul; it is very small, perhaps a little larger than the yellow wag-tail; they call it *qūrā’ū* in Kabul.

‘The Indian bustard is another. It is about as large as the great

bustard (*Otis tarda*). Its flesh is delicious; of some birds the leg is good; of others, the wing; of the bustard all the meat is delicious and excellent.

'The florican (?*Sypheotides indica*; ?*Eupodotis bengalensis*) is another. It is rather less than the *tūghdīrī*; the cock's back is like the *tūghdīrī*'s, and its breast is black. The hen is of one colour.

'The Hindustan sand-grouse (*Pterocles exustus*) is another. It is smaller and slenderer than the *bāghrī-qarā* (*Pterocles arenarius*) of those countries (Tramontana). Also its cry is sharper.

'Of the birds that frequent water and the banks of rivers, one is the *ding* (*Leptoptilus dubius*), of great bulk, each wing measuring a *qūlāch* (fathom). It has no plumage on head or neck; a thing like a bag hangs from its neck; its back is black; its breast is white. It goes sometimes to Kabul; one year people brought one they had caught. It became very tame; if meat were thrown to it, it never failed to catch it in its bill. Once it swallowed a six-nailed shoe, another time a whole fowl, wings and feathers, all right down.

'The *sāras* (*Grus antigone*) is another (Fig. 29). It may be smaller than the *ding* but its neck is longer. Its head is quite red. People keep this bird at their houses; it becomes very tame.

'The *manek* (?*Ciconia leucocephala*) is another. In stature it approaches the *sāras*, but its bulk is less. It resembles the *lag-lag* (*Ciconia ciconia ciconia*; syn. *C. alba*, the white stork) but is much larger; its bill is larger and is black. [These are the field characteristics that differentiate the eastern white stork, *Ciconia ciconia boyciana*, from the white stork, *Ciconia ciconia ciconia*.] Its head is iridescent, its neck white, its wings partly-coloured; the tips and border-feathers and under parts of the wings are white, their middle black.

'Another stork (*lag-lag*) has a white neck and all other parts black. [The reference is probably to the white-necked stork, *Ciconia episcopus episcopus*.] It goes to those countries (Tramontana). It is rather smaller than the *lag-lag* [*Ciconia ciconia*; syn. *C. alba*].

'Another bird resembles the grey heron and the *lag-lag*; but its bill is longer than the heron's and its body smaller than the white stork's.

'Another is the large *buzak* (black ibis, *Pseudibis papillosa papillosa*). In bulk it may equal the buzzard. The back of its wings is white. It has a loud cry.

'The white *buzak* [*Threskiionis (ibis) melanocephala*] is another. Its head and bill are black. It is much larger than the one that goes to those countries, but smaller than the Hindustan *buzak*.

'The *gharm-pāī* (*Anas poecilorhyncha poecilorhyncha*; spotted billed duck) is another. It is larger than the *sūna burchīn* (mallard). The drake and duck are of one colour. It is in Hashnagar at all seasons; sometimes it goes into the Lamghanat. Its flesh is very savoury.

'The *shah-murgh* (*Sarcidiornis melanonotus melanotus*, comb duck or *nukta*) is another. It may be a little smaller than a goose. It has a swelling on its bill; its back is black; its flesh is excellent eating.

'The *zummaj* is another. It is about as large as the *burgut* (*Aquila chrysaetos daphanea*, the golden eagle).

'The (T.) *ālā-qārgħa* of Hindustan is another. This is slenderer and smaller than the *ālā-qārgħa* of those countries (Tramontana). Its neck is partly white.

'Another Hindustan bird resembles the crow (*Corvus splendens splendens*) and the magpie. In Lamghanat people call it the jungle-bird (*Centropus sinensis sinensis*; crow-pheasant). Its head and breast are black; its wings and tail reddish; its eye quite red. Having a feeble flight, it does not come out of the jungle, whence its name.

'The great bat is another. People call it (Hindi) *chumgādur*. It is about as large as the owl, and has a head like a puppy's. When it is thinking of lodging for the night on a tree, it takes hold of a branch, turns head-downwards, and so remains. It has much singularity.

'The magpie is another. People call it *matā* (*Dendrocitta vagabunda*, the Indian tree-pie). It may be somewhat less than the 'aqqa, which moreover is pied black and white, while the *matā* is pied brown and black.

'Another is a small bird, perhaps of the size of the (T.) *sāndūlāch*. It is of a beautiful red with a little black on its wings.

'The *karcha* is another; it is after the fashion of a swallow, but much larger and quite black.

'The *kuil* (*Eudynamys scolopacea*, the koel) is another. It may be as large as the crow but is much slenderer. It has a kind of song and is understood to be the bulbul of Hindustan. Its honour with Hindustanis is as great as is the bulbul's. It always stays in closely-wooded gardens.

'Another bird is after the fashion of the (Ar.) *shiqarrak* [*Kitta* (*Cissa chinensis*, the green-magpie)]. It clings to trees, is perhaps as large as the green-magpie, and is parrot-green [? *Picus xanthopygaes*; syn. *Gecinus striolatus*; the little green-woodpecker].²

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²*Babur-nama*, pp. 493-501

CHAPTER 18

THE RULE OF THE MUGHALS

HUMAYUN

A.D. 1530-1540 and A.D. 1555-1556

ADMINISTRATION, THE FOUNDING OF DINPANAH
EXILE IN IRAN AND IMPORT OF IRANI ARTISTS

THE Moslem kings did not follow the law of primogeniture. As a result, when a king died, a period of uncertainty followed and his sons fought one another, till one of them emerged as the victor and claimed the throne. Babur had four sons—Humayun, Kamran, Hindal and Askari. Humayun, who was the eldest, succeeded Babur in A.D. 1530. At that time he was twenty-three years old and had served as the governor of Badakshan. His brothers created great trouble for him. Kamran, who was the governor of Kabul, added Punjab and Sind to his domain, thus cutting off Humayun from the recruitment area of his army. His bitterest enemy, however, was the Afghan, Sher Khan, who defeated him at Chausa in June 1539, and finally at Kanauj in May 1540.

CLASSIFICATION OF MEN

Humayun was a poet, and was also interested in mathematics and astronomy. Khondamir states that Humayun had classified people who came into contact with him into three categories, viz. *Ahl-i Daulat* or men of power, *mushaikh*s or intelligentsia, and thirdly entertainers or people of pleasure, the *Ahl-i Murad*. 'When the auspicious throne of royalty was filled by this dignified and brave monarch,' states Khondamir, 'all the officers of the State and inhabitants of the kingdom were divided into three classes. The brothers and relations of the king, the nobles and ministers, as well as the military men, were called *Ahl-i Daulat* (officers of the State), because it is evident that—according to the words, "There can be no dominion without men"—no degree of wealth and prosperity can be attained without the assistance of this class of brave and courageous people; and no one can obtain the throne and power without the aid of warriors and heroes.

'The holy persons, the great *mushaikh*s (religious men), the respectable *saiyids*, the literati, the law officers, the scientific persons, poets, besides other great and respectable men, formed the second class, and were denominated *Ahl-i Sa'adat* (good men), because to observe, honour, and regard these people, and to associate with such men, secures eternal prosperity, and enables men to rise to high dignities and ranks.

'Those who possessed beauty and elegance, those who were young and most lovely, also clever musicians and sweet singers, composed the third

class, and the appellation of *Ahl-i Murad* (people of pleasure) was conferred on them, because most people take great delight in the company of such young-looking men, of rosy cheeks and sweet voices, and are pleased by hearing their songs, and the pleasing sound of the musical instruments, such as the harp, the sackbut, and the lute.

'According to this classification, the wise King also divided the days of the week and appointed one day for each of these three classes.

'Another invention of this King was that he got three arrows of gold made, and called them each after the name of the three classes above mentioned. Each of these was given to one of the most confidential persons of the respective classes, and this person was to manage all the affairs of that class.¹

DEPARTMENTS

Humayan divided all the affairs of the government into four departments, viz. the *Atashi*, *Hawai*, *Khaki* and *Abi*, each under a minister. The *Sharbat-khana*, *Suji-khana*, the digging of canals, and all the works which related to water and rivers, belonged the *A'bi* department, and its superintendent was Khwaja Hasan. Agriculture, erection of buildings, resumption of *Khalisa* lands, and some household affairs formed a department which was called *Khaki*, and this was placed under the management of Khawaja Jalalu-d din Mirza Beg. What was the actual performance of the *A'bi* department is not known. In the field of irrigation no noteworthy scheme can be ascribed to this department. .

DINPANAH

In A.D. 1533, Humayun expressed an intention to found near the capital Delhi, a large city, the Dinpanah. 'It was his desire that in this city a magnificent palace of seven storeys should be erected, surrounded by delightful gardens and orchards, of such elegance and beauty that its fame might draw people from the remotest corners of the world for its inspection. That the city should be the asylum of wise and intelligent persons. For this city he selected a rising ground adjacent to the River Jumna, about three *kos* from the city, where Humayun laid the foundation of Dinpanah. Khondamir states that in A.D. 1534 the walls, bastions, ramparts and the gates of the city of Dinpanah were completed.

EXILE

After his defeat at Kanauj, Humayun became a homeless wanderer, whom nobody agreed to support. During this period he married Hamida

¹Khondamir, *Humayun-nama*, in Elliot and Dowson, *The History of India...*, Vol. V, pp. 119-122, 124

Banu, who gave birth to Akbar on 23 November 1542 at Amarkot.

Ultimately, Humayun proceeded to Iran and was hospitably received by Shah Tahmasp at Herat. At the court of the Shah, he saw the paintings of the celebrated Persian artists, Aga Mirak, Sultan Muhammad and Muzaffar Ali, pupils of Bihzad, 'Raphael of the East'. Later at Tabriz he met the painter, Mir Sayyid Ali. Then, in A.D. 1550 at Kabul, Mir Sayyid Ali and Abdus Samad from Shiraz joined Humayun. When Humayun regained his throne, both the artists accompanied him to India. It is these two artists who, under the patronage of Akbar, participated in the development of Mughal painting, which combines Persian technique with Indian naturalism. It was thus that a great school of painting was born which has an honoured place in the culture of India.

RESTORATION OF HUMAYUN

Early in A.D. 1555, Humayun defeated Sikandar Suri near Sirhind. Humayun occupied Delhi and Agra. He could not consolidate his conquest nor establish a regular civil government. His second reign lasted for only seven months. In January 1556, he fell from the staircase of his library in Purana Qila and died. 'His end was of a piece with his character. If there was a possibility of falling Humayun was not the man to miss it. He tumbled through life, and he tumbled out of it.' He lies buried in a magnificent tomb at Delhi, built by his widow in A.D. 1565-1569 during the reign of Akbar. It is generally considered that this splendid monument was the prototype of the Taj Mahal.

CHAPTER 19

AN AFGHAN INTERLUDE

RULE OF SHER SHAH SURI

A.D. 1540-1545

REFORM OF LAND REVENUE ADMINISTRATION

PROTECTION OF CULTIVATORS

CONSTRUCTION OF ROAD AND SARAIS

THE ancestors of Farid Khan, as Sher Shah was originally known, came from Afghanistan and entered the service of Bahlul Lodi. His father, Hasan Khan, an Afghan soldier of fortune, was a jagirdar of 500 horses in the pargana of Sasaram in Jaunpur in Bihar. Neglected by his father, Farid went to Jamal Khan at Jaunpur, where he studied Arabic and Persian. He had taste for history and literature and memorized Saadi's *Gulistan* and *Bostan*, and the epic *Sikandar-nama*. He was very fond of the histories of the kings of the past.

Farid entered the service of Bihar Khan Lohani, governor of Bihar in A.D. 1522, when he was 36 years of age. He killed a tiger in a hunt, and impressed by his bravery Bihar Khan conferred upon him the title of Sher Khan.

After some time, Sher Khan left the service of Bihar Khan and came to Agra, where he was introduced to Babur, who admitted him to his court. Babur undertook a campaign for the subjugation of the Afghans in the east, and Sher Khan rendered him great assistance and received in return his father's jagir.

Sher Khan never reconciled himself to the loss of Afghan sovereignty over India to the Mughals. Abbas Khan, the Afghan historian, states, 'Sher Khan was present during the affair of Chanderi, and remained for sometime amongst the Mughals, and acquainted himself with their military arrangements, their modes of governing, and the character of their nobles. He often said among the Afghans, "If luck aided me, and fortune stood my friend, I could easily oust the Mughals from Hindustan. They are not superior to the Afghans in battle or single combat; but the Afghans have let the empire of Hind slip from their hands, on account of their internal dissensions."

'After sometime, Sher Khan waited upon the Emperor one day at an entertainment, when it happened that they placed before him a solid dish, of which he did not know the customary mode of eating. So he cut it into small pieces with his dagger, and putting them into his spoon easily disposed of them. The Emperor Babar remarked this, and wondered at Sher Khan's ingenuity, and said to Khalifa, his minister, who was at his elbow,

“Keep an eye on Sher Khan; he is a clever man, and the marks of royalty are visible on his forehead. I have seen many Afghan nobles, greater men than he, but they never made any impression on me; but as soon as I saw this man, it entered into my mind that he ought to be arrested, for I find in him the qualities of greatness and the marks of mightiness.”

“When Sher Khan got to his own quarters, he said to his men: “The Emperor today looked much at me, and said something to the minister; and cast evil glances towards me. This is not a fit place for me to remain—I shall go away”.”¹

Sher Khan left Agra and came to his jagir in Bihar. He consolidated his power in South Bihar. He also captured Gaur. In A.D. 1537, Humayun moved against him, but Sher Khan defeated him at Chausa on the Ganges. In May 1540, Sher Khan again defeated Humayun opposite Kanauj and pursued him to Lahore. Sher Khan proclaimed himself Emperor of India in A.D. 1540 and came to be known as Sher Shah Suri. Sher Shah was killed in A.D. 1545, while standing near a store of gunpowder, which got accidentally ignited while he was directing the siege of Kalanjar in Bundelkhand. He died at the age of fifty-nine.

SHER SHAH'S REGRETS

As a military strategist Sher Shah very much wished to destroy Lahore and to depopulate northern Punjab. Nimatu-lla, the author of *Tarikh-i Khan-Jahan Lodi*, states, ‘On being remonstrated with for giving way to low spirits, when he had done so much for the good of the people during his short reign, after urgent solicitation, he said, “I have had three or four desires in my heart, which still remain without accomplishment, and cannot be eradicated except by death. One is, I wished to have depopulated the country of Roh, and to have transferred its inhabitants to the tract between the Nilab and Lahore, including the hills below Ninduna, as far as the Siwalik; that they might have been constantly on the alert for the arrival of the Mughals, and not allow any one to pass from Kabul to Hind, and that they might also keep the *zamindars* of the hills under control and subjection. Another is to have entirely destroyed Lahore, that so large a city might not exist on the very road of an invader, where, immediately after capturing it on his arrival, he could collect his supplies and organize his resources.”² It was fortunate that Sher Shah died before he could carry out this scheme.

MANAGEMENT OF THE JAGIR

‘Sher Shah is known for his revenue administrative reforms and system

¹Abbas Khan, *Tarikh-i Sher Shahi*, in Elliot and Dowson, *The History of India...*, Vol. IV, pp. 329-331

²Niamatu-lla, *Tarikh-i Khan-Jahan Lodi*, in Elliot and Dowson, *The History of India...*, Vol. V, pp. 107, 108

of land-revenue assessment based on the measurement of the land, and for his genuine concern for the welfare of the cultivators. He acquired experience of these matters by the management of his jagir. When entrusted with his assignment, he thus spoke to his father Hasan Khan. "To please you I accept the management of the two districts. I will not fail to do my duty to the best of my power." Hasan Khan wished to send Farid to the parganas; but Farid representing to Hasan Khan that he wished first to speak with him, he obtained leave to do so, and thus began: "Many soldiers and subordinates, our kinsmen, have jagirs in these parganas. I shall devote myself to increase the prosperity of the district, and that depends on a just administration." When Hasan Khan heard his son's speech he was much gratified, and said, "I will give you the power both to grant and to resume the soldier's jagirs, and I will not reverse anything you may do." He accordingly sent Farid Khan to his two parganas, with every mark of favour.

"When he got to his jagirs, he said, "Let all the head men (*mukaddamān*) and the cultivators (*muzariān*) on whose labour the prosperity of the district depends, and all the village accountants (*patwāris*), attend my presence. When they came he summoned also the soldiery, and thus addressed them:—"My father has committed to me the power of appointing and dismissing you. I have set my heart on improving the prosperity of the district, in which object also your own interests are concerned; and by this means I hope to establish my reputation."... When he had finished exhorting the soldiery, he turned to the peasantry, and said, "This day I give you your choice as to your mode of payment. Do whatever is most advantageous to your own interests in every possible way."

"Some of the head-men asked for written agreements for a fixed money rent; others preferred payment in kind (*kismat-i ghallā*). Accordingly he gave leases and took agreements, and fixed the payments for measuring the fields (*jaribānā*), and the fees for the tax-collectors and measures (*muhassilānā*), and he said to the *chaudharis* and head-men, "I know well that the cultivation depends on the humble peasants, for if they be ill off they will produce nothing, but if prosperous they will produce much. I know the oppressions and exactions of which you have been guilty towards the cultivators; and for this reason I have fixed the payments for measurements, and the tax-gatherers' fees,—that if you exact from the cultivators more on this account than is fixed, it may not be credited to you in making up your accounts. Be it known to you that I will take the accounts of the fees in my own presence. Whatever dues are rightly taken I will sanction, and compel the cultivators to pay them; and I will also collect the Government dues for the autumn harvest in autumn, and for the spring harvest in spring; for balances of Government dues are the ruin of a pargana, and the cause of quarrels between the cultivators and the Government officers. It is right

for a ruler to show leniency to the cultivators at the period of measurement and to have a regard to the actual produce; but when the time of payment comes he should show no leniency, but collect the revenue with all strictness. If he perceives the cultivators are evading payment, he should so chastise them as to be an example to others not to act in the same way." He then said to the peasantry, "Whatever matter you have to represent, bring it always yourselves to me. I will suffer no one to oppress you."

'Having thus addressed them, he dismissed them with honorary dresses to carry on their cultivation. After dismissing the cultivators, he said to his father's officers, "The cultivators are the source of prosperity. I have encouraged them and sent them away, and shall always watch over their condition, that no man may oppress and injure them; for if a ruler cannot protect humble peasantry from the lawless, it is tyranny to exact revenue from them".

LAND REVENUE ADMINISTRATION

When Sher Shah became the Emperor of India, he made new rules for the assessment of land revenue based on the measurement of the land, thus forestalling Todar Mal, the Revenue Minister of Akbar. Abbas Khan thus describes his land revenue administration. "The rules for the collection of revenue from the people, and for the prosperity of the kingdom, were after this wise: There was appointed in every pargana, one *amir*, one God-fearing *shikkdar*, one treasurer, one *karkun* to write Hindi, and one to write Persian; and he ordered his governors to measure the land every harvest, to collect the revenue according to the measurement, and, in proportion to the produce, giving one share to the cultivator, and half a share to the *mukaddam*; and fixing the assessment with regard to the kind of grain, in order that the *mukaddams*, and *chaudharis*, and '*amils* should not oppress the cultivators, who are the support of the prosperity of the kingdom. Before his time it was not the custom to measure the land, but there was a *kanungo* in every pargana, from whom was ascertained the present, past, and probable future state of the pargana. In every *sarkar* he appointed a chief *shikkdar* and a chief *munsif*, that they might watch the conduct both of the '*amils* and the people; that the '*amils* should not oppress or injure the people, or embezzle the king's revenue; and if any quarrel arose among the king's '*amils* regarding the boundaries of the parganas, they were to settle it, that no confusion might find its way amongst the king's affairs. If the people, from any lawlessness or rebellious spirit, created a disturbance regarding the collection of the revenue, they were so to eradicate and destroy them with punishment and chastisement that their wickedness and rebellion should not spread to others.

'Every year, or second year, he changed his '*amils*, and sent new ones, for he said, "I have examined much, and accurately ascertained that there is no such income and advantage in other employments as in the govern-

ment of a district. Therefore I send my good old loyal experienced servants to take charge of district, that the salaries, profits, and advantages, may accrue to them in preference to others; and after two years I change them, and send other servants like to them, that they also may prosper, and that under my rule all my old servants may enjoy these profits and advantages, and that the gates of comfort and ease may be opened to them”.’

Under Sher Shah, State demand was fixed at one-third of the expected produce. It was payable in cash or kind. When there was a drought or other natural calamity, advances were made to the cultivators to relieve distress.

PROTECTION OF CULTIVATORS

Sher Shah had genuine concern for the welfare of the peasantry and safety of their crops. Abbas Khan states, ‘One of the regulations Sher Shah made was this: That his victorious standards should cause no injury to the cultivation of the people; and when he marched he personally examined into the state of the cultivation, and stationed horsemen round it to prevent people from trespassing on any one’s field. I have heard from Khan-i ’Azam Muzaffar Khan, who said he often accompanied Sher Shah, that he used to look out right and left, and (which God forbid!) if he saw any man injuring a field, he would cut off his ears with his own hand, and hanging the corn (which he had plucked off) round his neck, would have him to be paraded through the camp. And if from the narrowness of the road any cultivation was unavoidably destroyed, he would send *amirs*, with a surveyor, to measure the cultivation so destroyed and give compensation in money to the cultivators. If he entered an enemy’s country, he did not enslave or plunder the peasantry of that country, nor destroy their cultivation. “For,” said he, “the cultivators are blameless, they submit to those in power; and if I oppress them they will abandon their villages, and the country will be ruined and deserted, and it will be a long time before it again becomes prosperous”.’

BUILDING OF SARAIS

Sher Shah built roads, planted avenues of shady trees and provided *sarais* and wells for the convenience of travellers. Akbar Khan thus provides the details. ‘For the convenience in travelling of poor travellers, on every road, at a distance of two *kos*, he made a *sarai*; and one road with *sarais* he made from the fort which he built in the Panjab to the city of Sunargaon which is situated in the kingdom of Bengal, on the shore of the ocean. Another road he made from the city of Agra to Burhanpur, which is on the borders of the kingdom of the Dekhin, and he made one from the city of Agra to Jodhpur and Chitor; and one road with *sarais* from the city of Lahore to Multan. Altogether he built 1,700 *sarais* on various roads; and

in every *sarai* he built separate lodgings, both for Hindus and Musulmans, and at the gate of every *sarai* he had placed pots full of water, that any one might drink; and in every *sarai* he settled Brahmans for the entertainment of Hindus, to provide hot and cold water, and beds and food, and grain for their horses; and it was a rule in these *sarais* that whoever entered them received provision suitable to his rank, and food and litter for his cattle, from Government. Villages were established all round the *sarais*. In the middle of every *sarai* was a well and a *masjid* of burnt brick; and he placed an *imam* and a *muazzin* in every *masjid*, together with a custodian (*shahna*), and several watchmen; and all these were maintained from the land near the *sarai*. In every *sarai* two horses were kept, that they might quickly carry news. On both sides of the highway Sher Shah planted fruit-bearing trees, such as also gave much shade, that in the hot wind travellers might go along under the trees; and if they should stop by the way, might rest and take repose. If they put up at a *sarai*, they bound their horses under the trees.

'3,400 horses were always kept ready in the *sarais* to bring intelligence every day from every quarter. 113,000 villages of Hind were included in the royal fisc. He sent a *shikddar* to each of his parganas, which were all prosperous and tranquil, and there was not one place which was contumacious or desolated; the whole country was settled and happy; corn was very cheap, nor during his time was there anywhere scarcity or famine.'³

ARCHITECTURE AND BUILDINGS

Like most persons with creative imagination, Sher Shah encouraged architecture. He built a splendid mosque, a clever blending of richness and refinement, in the Purana Qila of Delhi. At Fatehabad in the Hissar District of Haryana, he built a mosque, which is decorated with tiles. His tomb stands on a high platform in the middle of a lake at Sahasram in the Shahpur District of Bihar.

ROADS

Shaikh Nuru-l Hakk states, 'Sher Khan made the road which now runs from Delhi to Agra, by cutting through jungles, removing obstacles, and building *sarais*. Before that time, people had to travel through the Doab between those two places. There was so much security in travelling during his reign that if a lone woman were to sleep in a desert with silver and gold about her person, no one would dare to commit theft upon her; and if it ever did so happen that any one lost any property, the *mukaddams* of the village which was the scene of the robbery were subject to fine, and for fear

³Abbas Khan, *Tarikh-i Sher Shah*, in Elliot and Dowson, *The History of India...*, Vol. IV, pp. 414, 417, 418, 422, 424 and 425.

of its infliction, the *zamindars* used to patrol the roads at night.⁴

According to Mushtaki, 'From Gaur to the confines of Oudh, a road was made having *sarais*, gardens, and shady and fruit-bearing trees. Another road with gardens and *sarais* from Benares to the country of Mandu near to Burhanpur. Another road with gardens and *sarais* from Agra to Jodhpur. Another from Bayana to Jaunpur and to Ajmir. There were 1,700 *sarais*, and at every *sarai* there were pairs of horses ready, so that news travelled 300 *kos* in one day.'⁵

By building roads and *sarais*, and by abolishing a number of inland custom duties, Sher Shah gave a great impetus to trade.

FREE KITCHENS

Sher Shah is also credited with the institution of *langar*, free kitchen. According to Abbas Khan, 'His kitchen was very extensive, for several thousand horsemen and private followers, who in the Afghan tongue are called "Fiahi", fed there; and there was a general order, that if any soldier or religious personage, or any cultivator, should be in need of food, he should feed at the king's kitchen, and should not be allowed to famish.' He himself used to take his meals with learned men and Shaikhs.

POOR HOUSES

'He settled allowances upon the blind and helpless of every place and village and city. Two institutions were kept up during his reign without any interruption; one, the religious establishments (*'imarat khanah*), and the other the houses for the poor; for these two institutions confer a general benefit.'

Considering the fact that Sher Shah ruled only for five years, his chievement is remarkable. He built *sarais* and wells and laid out roads flanked by avenues of trees. He improved the coinage and his coins are excellent in fineness and execution. Assessing his character and achievements, the authors of *The Cambridge Shorter History of India* observe, 'He was one of the greatest rulers who ever sat upon the throne of Delhi. No other, from Aibak to Aurangzeb, possessed such intimate knowledge of the details of administration, or was able to examine and control public business so minutely and effectively as he. He restrained the turbulence and quelled the tribal jealousies of the Afghan chiefs, he reformed the land revenue administration, he introduced a system of great trunk-road, furnished with caravanserais, wells and every convenience for the comfort and safety of the

⁴Shaikh Nuru-l Hakk, *Zubdatu-t Tawarikh*, in Elliot and Dowson, *The History of India...*, Vol. VI, pp. 188, 189

⁵Shaikh Rizku-lla Mushtaki, *Wakiat-i Mushtaki*, in Elliot and Dowson, *The History of India...*, Vol. IV, p. 549

traveller, and he maintained throughout his dominions such order that "none dared to turn the eye of dishonesty upon another's goods". Himself a pious Muslim, he suffered none to be persecuted in the name of religion, made no attempt to assume spiritual power, but left each to seek God after his own fashion. Budauni, the orthodox Muslim historian, thanks God that he was born in the reign of so just a king. Of his wise and judicious measures of administration many were adopted or imitated by Akbar without acknowledgement, and he was far more successful than any who followed him in checking corruption, peculation, and frauds on the public treasury. "It behoves the great," he said, "to be always active," and throughout his life he allowed himself no more rest than was necessary for his health and the preservation of his bodily and mental powers. "All this," says Mr Keene, "has an importance beyond the immediate time." After the Mughal restoration, Sher Shah's officials passed into Akbar's service; the faults imputed by Sher Shah to what he called Mughal administration—but which are common to all Turks—were prevented; and this far-sighted man, even after his death and the subversion of his dynasty, remained the originator of all that was done by mediaeval Indian rulers for the good of the people.⁶

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⁶Allan J., Haig, T. W., and Dodwell, H. H. *The Cambridge Shorter History of India*, pp. 334, 335

CHAPTER 20

QUEST FOR SPICES

PORTUGUESE ADVANCES IN NAVIGATION

DISCOVERY OF THE NEW WORLD

PORTUGUESE IN INDIA

INTRODUCTION OF THE NEW WORLD PLANTS INTO INDIA BY THE PORTUGUESE A.D. 1498-1580

THE confrontation of Christendom with Islam entered a new phase at the close of the fifteenth century. Mohammed II, Sultan of Turkey, took Constantinople on 29 May 1453, and this disposed of the last remnants of the Byzantine Empire. Bulgaria had already been conquered by the Turks much earlier, when they seized Sofia. Mohammed II completed the conquest of the Balkans by annexing Serbia and Greece. His successor Selim I defeated the Mamelukes and annexed Syria and Egypt in A.D. 1517. The conquest of Egypt by the Turks made them masters of trade routes from India, China and Africa. Now the Ottoman warships patrolled the whole of the Mediterranean. The Turks imposed heavy levies on Indian spices and other goods. Pepper, which came from Suez in 'the ships of Mecca', was sold in Cairo and Alexandria at very high prices. When the cost in India was equivalent to 2 or 3 *cruzados* a bale, there were occasions when the price in Egypt went up to 80 *cruzados*. To this were added the cost of transport to Italy, the customs duty in Venice and the profits of the importer. As a result, the Europeans had to pay extortionate prices for spices, particularly pepper, which not only made their food tasty, but was also used as a preservative for meat. Pepper was also used in wine and pastry. As the cultivation of root-crops had not started, and no fodder crop could be grown in winter, the practice in northern Europe was to slaughter all surplus cattle at the advent of winter and to salt their meat. Among the vegetables, cabbages were in common use, as tomatoes and potatoes had yet to come. Sugar was a luxury and was used as a drug. Fruit-juices and honey were the only means of sweetening. To make the monotonous diet of dried meat and cabbages palatable, spices, such as pepper, cardamom, cloves and nutmeg, were essential. One can imagine the hardship suffered by the Europeans due to the levies of the Turks.

PORTUGAL

Affonso Henriques set up Portugal as a separate kingdom in A.D. 1140, and thereafter it was free of Spanish control. Its capital is Lisbon, a seaport situated on the right bank of the Tagus. Lisbon succeeded Coimbra

as the capital of Portugal in A.D. 1260. Rising in white tiers on an amphitheatre of green hills, Lisbon has great scenic beauty.

SPAIN

At the fall of Constantinople in A.D. 1453 to the Turks, the Iberian Peninsula was split up into five kingdoms, viz. Castile, Aragon, Navarre, Portugal and Granada. All the Christian Spain was united by the marriage of Ferdinand of Aragon (A.D. 1479-1516) and Isabella of Castile. Thus came into existence the kingdom of Spain. In A.D. 1492, Ferdinand conquered Granada, the last foothold of the Arabs in western Europe.

ADVANCES IN NAVIGATION BY THE PORTUGUESE

In the latter half of the fifteenth century, the Portuguese showed extraordinary vigour in navigation and exploration and became leaders in nautical astronomy. This was entirely due to the leadership of their king, the Infante, Prince Henry (A.D. 1394-1460), who is remembered as Henry the Navigator. In A.D. 1415, at the age of twenty-one, he captured the Arab City of Ceuta, thereby gaining a springboard for expeditions to Africa. He was a strong believer in the fable of Prester John, whose co-operation was thought to be necessary for the encirclement and ultimate annihilation of the Moslems. He had read Marco Polo's *Travels*, and his imagination was fired by the account of Asian countries given by this indefatigable traveller.

Prince Henry established an observatory and a school for navigation at Sagre. He summoned learned mathematicians, astronomers, cartographers, and navigators from all parts of Europe. He engaged the most famous cosmographer of the age, Jafuda Cresques, a Catalan Jew from Majorca. He also collected most daring captains and mariners he could find. Charts were made, and the working of the mariner's compass was improved. He also realized that ships which were good enough for coastal trade were not suitable for sailing in open seas. He improved the caravel, and also the galleon, which carried batteries of cannon, and became a floating fortress.

'The Portuguese discoveries of the fifteenth century,' remarks Trend, 'were undertaken by methodical men, gifted with a cool, political intelligence and a lucid vision; precise in their view of the practical objectives, of which they had made an exact and detailed study. They had a far-reaching plan, prepared by men with an exceptional capacity for organization, and with nothing of the unconscious adventurousness attributed to them later. Every year ships went to Africa with orders to go as far south as they could without losing sight of the coast. The greatest obstacle was Cape Bojador, some way north of the Tropic of Cancer, and the subject of terrifying legends. There the land seemed to fall away in an immense

curve, and there was a wide stretch of white spray, giving the idea that the ocean from there onwards was always on the boil from the torrid heat of the sun. This cape was passed in A.D. 1434, and the commercial exploration of the West African coast led to the colonization of the Atlantic islands: Madeira (A.D. 1420), the Azores (A.D. 1437) and Cape Verde Islands (A.D. 1446). Plans for the first expeditions were prepared by the group of pilots, mathematicians and cartographers whom "the Navigator" gathered round him. Under John II, the later voyages were worked out by other expert groups, including the cosmographer Martin Behaim of Nuremberg. The second half of the fifteenth century brought fresh discoveries, including the mouth of the Congo (A.D. 1485). Bartolomeu Dias rounded the Cape of Good Hope (A.D. 1487) and Vasco da Gama finally reached the west coast of India in A.D. 1498.

'The Portuguese success in these maritime undertakings and adventures in navigation was due to science; and the science of the day, however rudimentary, had led to a series of technical improvements in ships and how to sail them.'¹

SLAVE TRADE

One result of these ventures in navigation was the development of the slave trade. The Negroes of the African coast were captured in large numbers and brought to Lisbon. They were purchased by the owners of estates. It was thus that the neglected agriculture of southern Portugal revived. Later on Negro slaves were transported to the West Indies and southern States of the USA.

DISCOVERY OF THE NEW WORLD—A NEW SOURCE OF PLANTS

Out of the Italian States, Venice had comparatively easy relations with the Turks. This was resented by Genoa, the rival of Venice. Genoese sailors and mariners, in search of employment and adventure, came to Spain and Portugal. Christopher Columbus, a Genoese, who had ideas of a new route to Asia, approached Ferdinand and Isabella of Spain. Helped by the merchants of Palos, Columbus got three ships, of which the biggest was *Santa Maria* of 100 tons burthen. Crossing the Atlantic, with eighty-eight men, Columbus struck Watling Island, one of the Bahamas, on 11 October 1492, and gave it the name San Salvador. As he thought he had reached India, he named the islands the West Indies, which, though wrong, has stuck. He brought cotton, strange birds and animals, and two painted Indians with him to Spain to be baptized.

These discoveries opened up a new source of plants which enriched the agriculture of the Old World. Apart from maize, the New World

¹Trend, J. B. *Portugal*, pp. 133, 134

had potato, sweet-potato, arrowroot, cassava (tapioca), beans, tomato, chillies, pumpkin, papaya, pineapple, guava, custard-apple, groundnut, cashewnut, tobacco, American cotton and rubber. It also had varieties of plums, red and white grapes, sunflower, squash, and sarsaparilla. Among the flowering annuals, it had morning-glory, nasturtium and marigolds.

DISCOVERY OF BRAZIL

Now we describe the discovery and colonization of Brazil by the Portuguese. On 24 April 1500, Admiral Pedro Alvares Cabral, commanding the fleet, which King Emmanuel had ordered to India, on receiving the news of the successful voyage of Vasco da Gama, caught sight of an unknown country towards the west. After passing the Cape Verde Islands, he had been driven out to sea by a storm and had not expected to see land at all, so that the discovery, which proved of the greatest value to Portugal, was the result of chance, and not of deliberate exploration. With great difficulty he was able to find a harbour, to which he gave the name of Porto Seguro or Safe Port. He landed and took possession of the new country in the name of the King of Portugal, and after erecting a cross, gave it the name of Santa Cruz, which remained its official name for many years. The popular name of Brazil was given to it later on after brazil-trees (*Guaiacum officinale*) which grow in that country and provide a red dye-wood. 'Two royal ships only for a long time were despatched to Brazil every year to take out and land there condemned convicts and women of bad character, and to bring back parrots and different varieties of wood, notably the brazil-wood.'²

Throughout the sixteenth century, a steady stream of Portuguese emigrants made their way to Brazil, either on account of the favourable report of its climate and resources, which they received from their friends or relations already settled there, or in order to escape the misfortunes impending on their own country, and more especially the heavy hand of the Inquisition.

Brazil became a wealthy colony by the middle of the sixteenth century, with many well-populated and well-cultivated districts upon the sea coast, surrounding the ports and harbours, where prosperous towns had sprung up, e.g. Pernambuco, Tamacara, Ilheos, Porto Seguro, and St Vincent.

The significance of Brazil to the Old World largely lies in the new plants which it contributed. The rubber plant, *Hevea brasiliensis*, originated in the tropical rain-forests of the Amazon Valley in Brazil. In A.D. 1876 its seeds were brought to Kew and from there were sent to Ceylon, Malaya and Java, which now supply most of the rubber, while the mother country Brazil supplies hardly two per cent of the world production. To India, Brazil gave two most beautiful ornamental plants, viz. *Jacaranda*

²Stephens, H. M. *Portugal*, p. 224

mimosifolia, with violet-blue flowers, and *Solanum macranthum*, the brinjal-tree with purple and white flowers.

PORTUGUESE IN INDIA

Vasco da Gama, A.D. 1498-1502. The news of the discoveries of Columbus spurred the Portuguese to reach India by the South African route. King Emmanuel selected Vasco da Gama, a nobleman, to find a direct route to India via the Cape of Good Hope. He was assisted by two able captains, Paul da Gama and Nicolas Coelho. With four ships they sailed from the Harbour of Belem on 8 July 1497. At the mouth of the Quelimane River they first saw signs of civilized life, and a little later they came to Mozambique, where Arab ships lay loading in the harbour. The Muslim sheik of the place first gave the Portuguese a good reception, but on learning that they were Christians he changed his attitude and Gama had to leave the port in haste. At the next Muslim city, Mombasa, the whole expedition was nearly destroyed, but managed to escape and reach Malindi, a city in the present Kenya. Here the local sultan treated the Portuguese well. He visited their ships in person, and they spent eleven days in his port before venturing across the Indian Ocean to Hindustan.

‘When Vasco da Gama started the last stage of his voyage, the fleet was piloted by an Indian from Gujarat named Malemo Cana, who had been engaged at Malindi to guide the Portuguese to Calicut on the Malabar coast.’³

Vasco da Gama reached Calicut on 20 May 1498, after a voyage of nearly eleven months. There he met Zamorin, the Hindu Raja. When asked what he sought so far away from home, he replied that he came in search of spices and Christians. His religious ardour was such that he mistook an image of Kali for that of Virgin Mary, and paintings of Hindu gods for those of saints. The news of his arrival in India reached Portugal on his return from that country. After visiting Cochin and Cannanore, Vasco da Gama turned for home and reached Lisbon in late August 1499. The success of Vasco da Gama thrilled the Portuguese, and Camoen, their poet, celebrated his exploits in the *Lusiad*.

When Vasco da Gama reached India, Sikander Lodi was the King of northern India; Ahmad Nizam Shah ruled Ahmadnagar and Yusuf Adil Shah was the King of Bijapur. The Portuguese were lucky to have established their commercial supremacy before Babur invaded India and established the Mughal Empire.

In A.D. 1502, Vasco da Gama arrived for the second time on the Malabar coast with twenty ships, and after cannonading Calicut, and

³Nowell, C. E. *A History of Portugal*, p. 71

destroying all the shipping in the port, he strengthened the factories at Cochin and Cannanore and returned to Portugal.

Albuquerque, A.D. 1506-1515. Albuquerque, the Portuguese Viceroy, conquered Malacca, the market-town for spices, in A.D. 1511. This firmly established the Portuguese mastery of the Indian ocean and also opened the way for expansion into the Pacific. Albuquerque developed Goa into a thriving metropolis. Camoens, the Portuguese poet, described Goa as the Babylon of the East as it had earned enough notoriety for its luxury and degeneracy. In A.D. 1515 Albuquerque occupied the island of Ormuz, in the Persian Gulf, and built a fortress there. Malabar, Malacca, and entrances to the sea in East Africa were already under their control. Thus the mastery of the Indian Ocean by the Portuguese was complete and effective, and their rivals, the Arabs, were at their mercy. No ship could sail in the Indian Ocean without a Portuguese *carta* (pass).

Albuquerque encouraged his soldiers to marry Indian women and thus built up a loyal hybrid population. Soldiers were recruited from among these people. Though he was neutral towards the Hindus, he was intensely hostile to the Muslim Moplas, the progeny of the Arabs who had settled in Malabar and married Hindu women. They were the chief rivals of the Portuguese in maritime trade.

PORTUGUESE TRADE

'The Portuguese were able to deprive the Muslim traders of the Indian Ocean of a large share of the trade in Indian textiles and piece-goods, Persian and Arabian horses, gold and ivory from East Africa, as well as spices from Indonesia, Ceylon, and Malabar. Moreover, they extended their carrying trade into the China Sea, where Arab merchants had not penetrated since mediaeval times, save in insignificant numbers. Voyages between the principal ports in these areas (Macau-Nagasaki; Malacca-Siam; Ormuz-Goa, for example) were much shorter and easier than the long haul round the Cape of Good Hope. Money and goods invested in such "ventures" brought in both quicker and safer returns than did cargoes shipped to Europe. The comparative value of gold and silver in India, China, and Japan varied in a fluctuating ratio which enabled the Portuguese at Goa and Macau to make a handsome profit by acting as bullion-brokers trading in these precious metals.'⁴

DECLINE OF THE PORTUGUESE

The destruction of Vijayanagar in A.D. 1565 dealt a serious blow to the prosperity of Goa. Moreover, the route to India no longer could be kept secret. There were more energetic competitors, the Dutch and

⁴Boxer, C. R. *Portugal and Brazil*, p. 222

the British, soon on the scene, and they broke the monopoly of the Portuguese in South-East Asian commerce. The Union of Crowns of Spain and Portugal under Philip II in A.D. 1580 further closed the chapter of Portuguese expansion. The Dutch ousted the Portuguese from the East Indies and thus acquired control over the trade in spices. The English concentrated on Indian trade in cotton textiles. Poor natural resources and a small population also proved limiting factors for the Portuguese.

INTRODUCTION OF NEW CROPS BY THE PORTUGUESE

In the sixteenth century, the great century of plant introduction, American and African plants began to spread in India along the Portuguese sea routes, from Portugal to Brazil, round the Cape of Good Hope to Goa (A.D. 1510), Malacca (A.D. 1511), the Moluccas (A.D. 1512), Canton (A.D. 1515), and Macao (A.D. 1557). Apart from American plants, many plants were introduced into India from the Malay Archipelago and the East Indies.

PORTUGUESE BOTANISTS IN INDIA

The Portuguese botanists who visited India in the sixteenth century were the first Europeans to describe Indian plants. Garcia da Orta's *Coloquios dos simples e Drogas e cousas medicineis da India* (A.D. 1563) includes descriptions of many Indian medicinal plants. Christophoras Acosta's *Aromaticum et medicamentorum in Orientali India nascentium liber* and *Historia Natural Y moral de las Indias Scuille* (Barcelona, A.D. 1591) are important works on medicinal plants of India.

Garcia da Orta spent thirty years of his life in India, where he was physician to a series of Viceroys. 'He also went on scientific and exploring journeys about the Deccan, being often the welcome guest of the Sultan of Ahmednagar. He exchanged medical knowledge with Hindu, Arab, and Persian physicians, collected specimens and data, and learned the origins and properties of the native drugs.'⁵

Now we will mention in detail some important crop, fruit and ornamental plants, which were introduced by the Portuguese.

GROUNDNUT

Groundnut (*Arachis hypogaea*) is probably a native of Brazil, from where it was introduced by the Portuguese into West Africa. From there it was introduced into India, China and Indonesia. Now it covers over 4.85 million hectares in India, with a pod yield of about three-and-a-half million tonnes. Groundnut is the main source of edible oil for Indians.

⁵Nowell, C. E. *A History of Portugal*, pp. 118, 119

TOBACCO

Tobacco was introduced by the Portuguese into India during the closing years of the reign of Akbar. It seems that they first introduced it into Goa and then into Bijapur. Asad Beg, an officer of the court of Emperor, used to bring unusual articles to the Emperor. He gives a detailed account in his *Wikaya* how he presented tobacco to the Emperor.

'In Bijapur I had found some tobacco,' states Asad Beg. 'Never having seen the like in India, I brought some with me, and prepared a handsome pipe of jewel work. The stem, the finest to be procured at Achin, was three cubits in length, beautifully dried and coloured, both ends being adorned with jewels and enamel. I happened to come across a very handsome mouthpiece of Yaman cornelian, oval-shaped, which I set to the stem; the whole was very handsome. There was also a golden burner for lighting it, as a proper accompaniment. 'Adil Khan had given me a betel bag, of very superior workmanship; this I filled with fine tobacco, such that if one leaf be lit the whole will continue burning. I arranged all elegantly on a silver tray. I had a silver tube made to keep the stem in, and that too was covered with purple velvet.

'His Majesty was enjoying himself, after receiving my presents, and asking me how I had collected so many strange things in so short a time, when his eye fell upon the tray with the pipe and its appurtenances; he expressed great surprise, and examined the tobacco, which was made up in pipefuls; he inquired what it was, and where I had got it. The Nawab Khan-i 'Azam replied: "This is tobacco, which is well known in Mecca and Medina, and this doctor has brought it as a medicine for Your Majesty. His Majesty looked at it, and ordered me to prepare and take him a pipeful. He began to smoke it, when his physician approached and forbade his doing so. But His Majesty was graciously pleased to say he must smoke a little to gratify me, and taking the mouthpiece into his sacred mouth, drew two or three breaths. The physician was in great trouble, and would not let him do more. He took two or three puffs. He then sent for his druggist, and asked what were its peculiar qualities. He replied that there was no mention of it in his books; but that it was a new invention, and the stems were imported from China, and the European doctors had written much in its praise. The first physician said, "In fact, this is an untried medicine, about which the doctors have written nothing. How can we describe to Your Majesty the qualities of such unknown things? It is not fitting that Your Majesty should try it." I said to the first physician, "The Europeans are not so foolish as not to know all about it; there are wise men among them who seldom err or commit mistakes. How can you, before you have tried a thing and found out all its qualities, pass a judgment on it that can be depended on by the physicians, kings, great men, and nobles? Things must be judged of according to their good or bad qualities, and the decision

must be according to the facts of the case." The physician replied, "We do not want to follow the Europeans, and adopt a custom which is not sanctioned by our own wise men, without trial." I said, "It is a strange thing, for every custom in the world has been new at one time or other; from the days of Adam till now, they have gradually been invented. When a new thing is introduced among a people, and becomes well known in the world, every one adopts it; wise men and physicians should determine according to the good or bad qualities of a thing; the good qualities may not appear at once. Thus the China root, not known anciently, has been newly discovered, and is useful in many diseases." When the Emperor heard me dispute and reason with the physician, he was astonished, and being much pleased, gave me his blessing, and then said to Khan-i 'Azam "Did you hear how wisely Asad spoke? Truly, we must not reject a thing that has been adopted by the wise men of other nations merely because we cannot find it in our books; or how shall we progress?" The physician was going to say more, when His Majesty stopped him and called for the priest. The priest ascribed many good qualities to it, but no one could persuade the physician; nevertheless, he was a good physician.

'As I had brought a large supply of tobacco and pipes, I sent some to several of the nobles, while others sent to ask for some; indeed, all, without exception, wanted some, and the practice was introduced. After that the merchants began to sell it, so the custom of smoking spread rapidly. His Majesty, however, did not adopt it.'⁶

POTATO

The potato (*Solanum tuberosum*), a native of highlands of Chile and Peru, was imported into Europe between A.D. 1580 and 1585, first by the Spaniards and afterwards by the English at the time of Raleigh's voyages to Virginia. It was introduced into India by the Portuguese in the seventeenth century. The first mention of potato in India occurs in Terry's account of a banquet given by Asaf Khan to Sir Thomas Roe in A.D. 1615 at Ajmer. Now there are 400,000 hectares under potato cultivation in India.

AMARANTH

Amaranth (*Amaranthus caudatus*) was introduced by the Portuguese into Malabar from Brazil. Now this colourful crop is grown along the whole length of the Himalayas from Kashmir to Bhutan and its orange and red plants lend a gay note to the mountains. Fig. 30 shows the crops introduced by the Portuguese.

⁶Asad Beg, *Wikaya*, in Elliot and Dowson, *The History of India...*, Vol. VI, pp. 165-167



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FIG. 30. Crops introduced by the Portuguese into India. 1. Tobacco (*Nicotiana tabacum*); 2. Chillies (*Capsicum annum*); 3. Potato (*Solanum tuberosum*); 4. Groundnut (*Arachis hypogaea*); 5. Amaranth (*Amaranthus caudatus*).



1



2



3

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FIG. 31. Fruit plants introduced by the Portuguese into India. 1. Chiku (*Manilkara kauçi*; syn. *Achras zapota*); 2. Custard apple (*Annona squamosa*); 3. Pineapple (*Ananas comosus*); 4. Cashewnut (*Anacardium occidentale*); 5. Chiku, showing fruits.

CASHEWNUT

Cashewnut (*Anacardium occidentale*) is a native of Brazil. Its red fruit, the so-called apple, is acrid and to it is appended the nut like a bud. It is certainly a Portuguese introduction into India. Its earliest mention is by Acosta (A.D. 1578), who found it in gardens in the City of Santa Cruz in the kingdom of Cochin. Now it covers over 120,000 hectares in the coastal districts of southern India, with a production of about 6,000 tonnes of nuts, the largest in the world. Production in Brazil, the home of the cashewnut tree, is much smaller.

GUAVA

Guava (*Psidium guajava*), so rich in vitamin C, is the poor man's fruit in India. It grows wild in Brazil, Venezuela, Guiana, Peru, Central America and Mexico. It is also a Portuguese introduction into India, possibly from Brazil. Now it is widely grown in India.

SHARIFA

Annona squamosa (*sharifa*) or custard-apple, as it is called, was introduced by the Portuguese into India in the sixteenth century. It grows wild in the Deccan Plateau, but that does not mean that it is an indigenous Indian plant. Possibly it is an escape from a garden. By the early seventeenth century it had spread into the north, and Mundy, who reached Agra in A.D. 1632, saw its fruit being sold in the bazar.

Another cousin of the custard-apple is the bullock's-heart (*Annona cherimola*), a delicious fruit which grows in Karnataka and Bengal.

CHIKU

Chiku (*Manilkara kauki*; syn. *Archras zapota*) is a native of Mexico and its cultivation is spreading in India. *Chiku* is also a gift of the Portuguese to India.

PINEAPPLE

Pineapple (*Ananas comosus*) is indigenous to Brazil. The Portuguese introduced it into India in the middle of the sixteenth century. In A.D. 1578, Acosta mentioned that this fruit was grown profusely in western India. Abul Fazl states that it was regularly served at the table of Akbar, and the fruits came from the seaports in the possession of the Portuguese. Edward Terry, Chaplain to Sir Thomas Roe, the first British Ambassador to Jahangir, describes the taste of the fruit as 'a most pleasing compound made of strawberries, claret-wine, rose-water, and sugar well tempered together.' Manucci describes the pineapples grown in Bengal as large and fine. Pineapple is extensively grown in Assam and Bengal.

Khafi Khan, who paid a visit to Goa, mentions the cultivation of pine-apples by the Portuguese.

'In the 'Adil-Shahi Kokan, close to the sea, in the fine and famous fort of Goa, their governor resides; and there is a captain there who exercises full powers on the part of Portugal. They have also established some other ports and flourishing villages. Besides this, the Portuguese occupy the country from fourteen or fifteen *kos* south of Surat to the boundaries of the fort of Bombay, which belongs to the English, and to the borders of the territories of the Habshis, which is called the Nizam Shahi Kokan. In the rear of the hills of Baglana, and in strong positions, difficult to access, near the fort of Gulshanabad, they have built seven or eight other forts, small and great. Two of these, by name Daman and Basi, which they obtained by fraud from Sultan Bahadur of Gujarat, they have made very strong, and the villages around are flourishing. Their possessions measure in length about forty or fifty *kos*; but they are not more than a *kos* or a *kos* and a half in width. They cultivate the skirts of the hills, and grow the best products, such as sugarcane, pine-apples, and rice, and cocoa-nut trees, and betel-nut vines, in vast numbers, from which they derive a very large revenue.'

The fruit plants introduced by the Portuguese are shown in Fig. 31.

CHILLIES

No account of plants introduced by the Portuguese into India can be regarded as complete without mentioning chillies. They are the ornament of Indian gardens, and an insurance for domestic happiness. A good housewife must know their proper use. They flavour our *kormas*, *kababs*, *pulaos* and vegetables. They are the souls of our pickles and chutneys. To imagine that they are not Indian would be regarded as a sacrilege. They vary in size from a pea to a pear. The smaller their size, the sharper and more pungent they are. It is not without reason that the small ones are called atom bombs. The original home of *Capsicum annuum* is probably Brazil or Peru, and it was introduced by the Portuguese into India in the sixteenth century. India produces about 340,000 tonnes of chillies from about 6 million hectares. Andhra Pradesh in South India is well-known for its chillies, and the curries and pickles of Andhra Pradesh are the hottest in the world. If you eat their pickles and survive, it is an act of valour.

AGAVE AND ALLAMANDA

For our gardens, the Portuguese gave us the agave and allamanda. *Agave americana*, or the century-plant, as it is called, has now become natura-

*Khafi Khan, *Muntakhabu-l Lubab*, in Elliot and Dowson, *The History of India...*, Vol. VII, p. 345

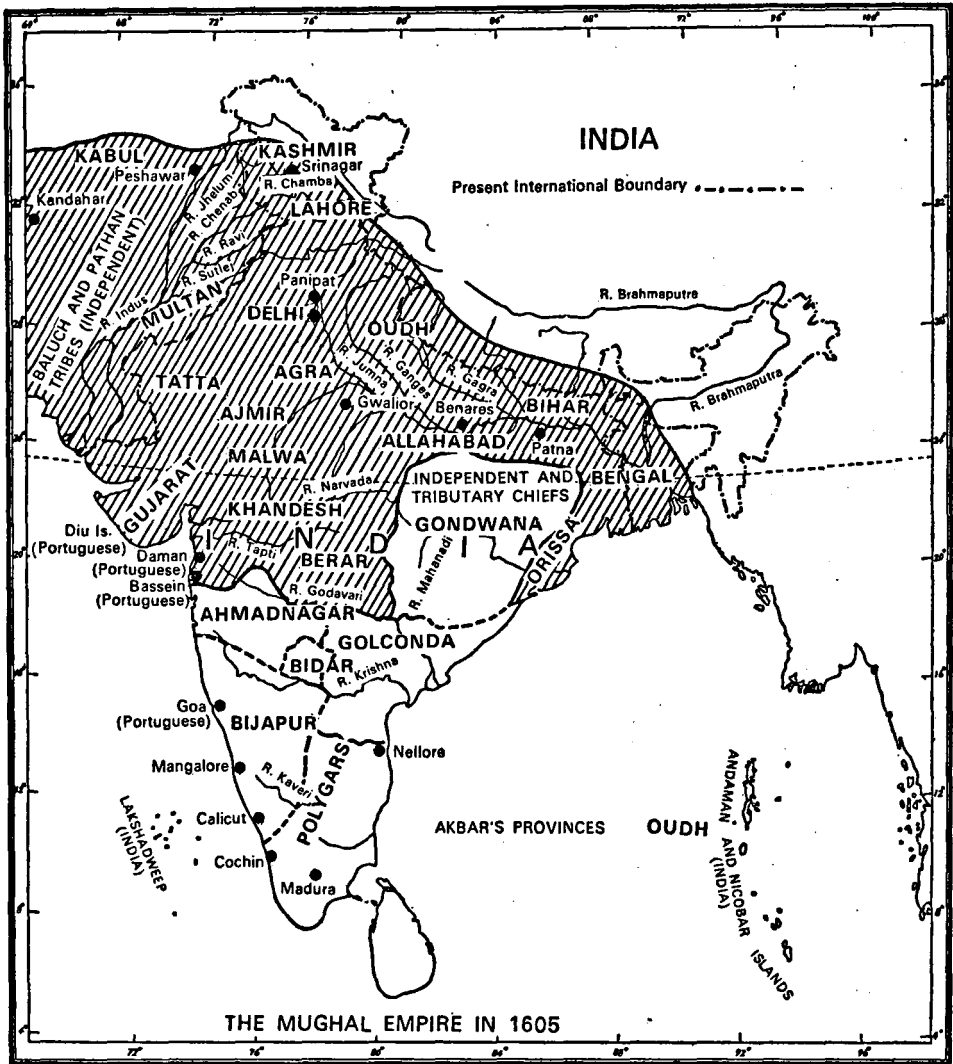


FIG. 32. The Mughal Empire on the death of Akbar in 1605.

lized throughout India. Its panicles of white flowers are highly ornamental, and its sword-like leaves protect our gardens. *Allamanda cathartica* is a climber with beautiful yellow flowers. It was introduced into India from Brazil.

THE TECHNIQUE OF GRAFTING

‘The technique of grafting was also introduced into Indian horticulture

about A.D. 1550 by the Portuguese. It was confined to Goa for about two centuries, and about A.D. 1790 spread into the rest of India.*

It is surprising that the natives of an insignificant country, with poor natural resources, and whose only privilege was its situation on the Atlantic, could influence horticulture and agriculture in India and many other countries so significantly. Though it is not recognized, the greatest benefactors of India are the Portuguese, who, by their introduction of new crops and fruit plants, enriched the agriculture of India.

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CHAPTER 21

AKBAR THE GREAT

A.D. 1555-1605

COMPANIONS AND ADVISERS OF AKBAR—FAIZI AND ABU-L-FAZL
LIBERAL TREATMENT OF HINDÚS, BUILDING OF FATEHPUR SIKRI
RISE OF A NEW ARCHITECTURE AND MUGHAL PAINTING
A SCIENTIFIC ENQUIRY INTO RELIGIONS

WHEN Humayun died, Akbar was in the Punjab engaged in the pursuit of Sikandar Sur, a nephew of Sher Shah. Akbar was enthroned at Kalanaur, in the Gurdaspur District, on 14 February 1556. On 5 November 1556 Akbar defeated Hemu, the general of Adali Sur, another claimant for the throne of India, at Panipat. This is known as the Second Battle of Panipat. After defeating Hemu, Akbar pressed on and occupied Delhi and Agra. From A.D. 1558 to 1560, Gwalior and Ajmer were occupied. After this Chitor was occupied in A.D. 1568 and from A.D. 1572 to 1576 Gujarat and Bengal were conquered. The extent of Akbar's empire in A.D. 1605 is shown in Fig. 32. It included the whole of Hindustan down to the Narbada. Expansion of the empire went hand in hand with orderly administration. According to Lane-Pool, 'Much of the improvement was due to his employment of Hindus, who at that time were better men of business than the uneducated and mercenary adventurers who formed a large proportion of the Mohammedan invaders.'

PERSONAL APPEARANCE OF AKBAR

Jahangir thus describes his father's personal appearance. 'In his august personal appearance he was of middle height, but inclining to be tall; he was of the hue of wheat; his eyes and eyebrows black, and his complexion rather dark than fair; he was lion-bodied, with a broad chest, and hands and arms long. On the left side of his nose he had a fleshy mole, very agreeable in appearance, of the size of half a pea. Those skilled in the science of physiognomy considered the mole a sign of great prosperity and exceeding good fortune. His august voice was very loud and in speaking and explaining had a peculiar richness. In his actions and movements he was not like the people of the world, and the glory of God manifested itself in him.' A seventeenth-century portrait, copy of an earlier one, reveals his character (Fig. 33). He has a robust physique and dignified bearing.

AKBAR'S CAMP

Akbar's camp equipage consisted of tents and portable houses, in an enclosure formed by a high wall of canvas screens, and containing great

halls for public receptions, apartments for feasting, galleries for exercise, and chambers for retirement; all framed of the most costly materials, and adapted to the most luxurious enjoyment.

“The enclosure was 1,530 yards square (1,279 m²). The tents and wall were of various colours and patterns within, but all red on the outside, and crowned with gilded globes and pinnacles, forming a sort of castle in the midst of the camp. The camp itself showed like a beautiful city of tents, of many colours, disposed in streets without the least disorder, covering a space of about five miles (8 km) across, and affording a glorious spectacle seen at once from a height.

“The greatest displays of his grandeur were at the annual feasts of the vernal equinox, and the king’s birthday. They lasted for several days, during which there was a general fair and many processions and other pompous shows. The king’s usual place was in a rich tent, in the midst of awnings to keep off the sun. At least two acres (0.8 ha) were thus spread with silk and gold carpets and hangings, as rich as velvet, embroidered with gold, pearl, and precious stones could make them. The nobility had similar pavilions, where they received visits from each other, and sometimes from the king; dresses, jewels, horses, and elephants were bestowed on the nobility; the king was weighed in golden scales against silver, gold, perfumes, and other substances in succession, which were distributed among the spectators. Almonds and other fruits, of gold and silver, were scattered by the king’s own hand, and eagerly caught up by the courtiers, though of little intrinsic value. On the great day of each festival, the king was seated on his throne, in a marble palace, surrounded by nobles wearing high heron plumes and “sparkling with diamonds like the firmament.” Many hundred elephants passed before him in companies, all most richly adorned, and the leading elephant of each company with gold plates on its head and breast, set with rubies and emeralds.

“Trains of caparisoned horses followed; and, after them, rhinoceroses, lions, tigers, and panthers, hunting leopards, hounds, and hawks; the whole concluding with an innumerable host of cavalry glittering with cloth of gold.

“In the midst of all this splendour, Akbar appeared with as much simplicity as dignity. He is thus described by two European eye-witnesses: “After remarking that he had less show or state than other Asiatic princes, they say, that ‘he is affable and majestic, merciful and severe’; that he is skilful in mechanical arts, as ‘making guns, casting ordinance, etc.; of sparing diet, sleeps but three hours a day, curiously industrious, affable to the vulgar, seeming to grace them and their presents with more respective ceremonies than the grandees; loved and feared of his own, terrible to his enemies’.”¹

¹Elphinstone, Hon. M. *The History of India—the Hindu and Mahometan Periods*, pp. 548-549

FAIZI AND ABU-L-FAZL—COMPANIONS AND ADVISERS OF AKBAR

Akbar was greatly influenced by two brothers Faizi and Abu-l-Fazl, sons of Shaikh Mubarak, Sufi scholar, who was known for his learning and liberal opinions on religious matters. Faizi was the first Muslim who applied himself to a diligent study of Hindu literature and science. Besides Sanskrit works in poetry and philosophy, he made a version of Bhaskara's *Bija Ganita* and *Lilavati*, the best Hindu books on algebra and arithmetic.

He likewise superintended translations made from Sanskrit by other learned men, including one, at least, of the Vedas, and the *Mahabharata* and the *Ramayana* and the *History of Kashmir*. Faizi was first presented to Akbar in the twelfth year of his reign, and he introduced Abu-l-Fazl to Akbar six years later, in A.D. 1574.

Abu-l-Fazl was the second son of Shaikh Mubarak and was born on the 14 January 1551. He was educated under his father's care, and was a devoted student. His abilities were immediately recognized by Akbar and every year he grew in favour and in power, until he rose to the office of Prime Minister, and became a *mansabdar* of 4,000.

The greatest of Abu-l-Fazl's production was the *Akbar-nama*, in two volumes, and the *Ain-i-Akbari* or Institutes, which is a distinct work. The encyclopaedic learning of Abu-l-Fazl rivalled that of Alberuni. The *Ain* is also the fore-runner of the *British Imperial Gazetteers*. The history of the reign of Akbar is given in full in the *Akbar-nama*, year by year, from the accession of the Emperor to the end of the forty-sixth year of the reign, A.D. 1602. Those brothers soon became the intimate friends and inseparable companions of their sovereign. They were the confidants of all his new opinions in religion, and his advisers in his patronage of literature. They were also consulted and employed in the most important affairs of the government.

LIBERAL TREATMENT OF THE HINDUS

When Akbar felt he was firmly established, he started analysing the political situation in India. He soon realized that the failure of the Turk and Pathan kings as rulers was due to the fact that they regarded themselves as aliens and lived as colonists in India, always thinking of their ancestral land. They had no sympathy with the Hindus who were seldom employed by them in positions of trust and responsibility. Their bureaucracy was recruited from the Islamic lands of Persia, Arabia and Afghanistan. Among the aliens who prided themselves on their pale skin, a type of colour prejudice prevailed against the dark people of India. To ensure employment for their sons, nobles and officers married women from Kashmir so that their progeny would pass on as genuine white central Asians and Persians. Akbar took steps to correct the situation. Firstly he won over the Rajputs who had earlier offered him brave resistance. He employed them in his

army, and his bravest and most trusted general was Man Singh of Amber. He consolidated his relations with the Rajputs by having matrimonial alliances with the royal house of Amber and Jodhpur. The Rajputs were practically partners in the empire and Rajput rajahs governed provinces and commanded armies. Thus Akbar established a truly Indian empire under his leadership, which the Hindus accepted without reserve.

Akbar was a discerning judge of the qualities of men, and collected men of talent around him, ignoring considerations of colour and creed. His trusted courtiers included men like Todar Mal, who organized the revenue system, Birbal, known for his wit and humour, and Tansen, the singer, who were all Hindus. As a concession to the Hindu sentiment he used to paint the Hindu sectarian mark on his forehead once a week and thus appear in the audience hall to the great annoyance of orthodox Muslims.

In the seventh year of his reign Akbar abolished the *jizya* or capitation tax on infidels, an odious impost which served to keep up animosity between the ruling race and those under them. About the same time he abolished all taxes on pilgrims, observing that, "although the tax fell on a vain superstition, yet, as all modes of worship were designed for one great Being, it was wrong to throw an obstacle in the way of the devout, and to cut them off from their mode of intercourse with their Maker."

Another humane edict, issued still earlier (A.D. 1561) was a prohibition against making slaves of persons taken in war. The victims of this practice were mainly Hindus. In the previous reigns this abuse had been carried to such a height that not only was it practised towards the wives and children of garrisons who stood a storm, but even peaceable inhabitants were seized and sold as slaves. All this was positively prohibited.

BUILDING THE CITY OF FATEHPUR SIKRI

BIRTH OF A NEW ARCHITECTURE

After he had consolidated his power Akbar built the City of Fatehpur Sikri with its numerous palaces, mosques, baths, schools, library and mints in A.D. 1569. In the architecture of Fatehpur Sikri there is a true synthesis of Rajput Hindu and Muslim architecture. Hindu art motifs such as lotus medallions, bells and chains, hanging balconies, latticed windows and airy pavilions are gracefully harmonized with Islamic arches and domes. Among the red sandstone buildings is the exquisite tomb of the saint Shaikh Salim Chishti, whose lattice screens are an embroidery in marble. The Panch Mahal, a building of five storeys borne by open colonnades and topped by numerous pavilions, appears like a fairy palace. The palaces of Akbar's wives, Miriam, daughter of Raja Bhar Mal of Amber, Jodha Bai from Jodhpur, and the Turkish queen, are interesting buildings. The last one is decorated with sculptured panels representing forest views and animal

life. To the west is the Ankh Michauli, where Akbar used to play hide-and-seek with his ladies.

BIRTH OF THE MUGHAL PAINTINGS

At Fatehpur Sikri, Akbar collected architects, writers, poets, musicians, philosophers, painters and calligraphers. As Laurence Binyon remarks, 'Fatehpur Sikri rivalled or surpassed Herat in the time of Baisunqur and the feverish intellectual and creative activity of the cities of Italy in the heyday of the Renaissance. . . . As the barren ledges of rock had been transformed into palaces and gardens with stretches of shining water, and as the flowers had been sown in the gardens, and trees planted in the alleys, so artists had been collected from all quarters and settled in the palaces and workshops, and bidden to flourish and create.' Never before in the history of India did men of talent receive such encouragement. It was thus that Mughal painting, which represents the synthesis of Persian and Indian art forms, was created under the patronage of Akbar.

SARAI AND ALMSHOUSES

Almshouses were established throughout the Imperial dominions. Caravanserais for travellers were built at every stage, and food was prepared and held in readiness at all times for the way-worn travellers, who were usually too fatigued to be equal to the exertion of cooking their own repast.

EUROPEAN NOVELTIES

It was not only in the religion of the Europeans that Akbar took interest. He was also keen to know about their inventions, including musical instruments. Abu-I-Fazl mentions that 'one Haji Habib was sent to the port of Goa, with a large sum of money and intelligent artisans, to examine and bring to the Emperor's knowledge the various productions of art and skill to be found in that town. He returned to the Court along with a number of men clad in Christian garb, and beating drums and playing European instruments. He presented fabrics which he had selected. The artisans who had gone there to acquire knowledge exhibited their skill, and received applause. Musicians of that country played upon various instruments, especially upon the organ, and gave great delight to all who heard them.'²

A SCIENTIFIC ENQUIRY INTO RELIGIONS

In A.D. 1575 Akbar built the House of Worship (*Ibadat Khana*) at Fatehpur Sikri. Representatives of all religions, viz. Islam, Hinduism, Jainism, Christianity and Zoroastrianism, were invited and their views were put to the test of reason.

²Abu-I-Fazl, *Akbar-nama*, in Elliot and Dowson, *The History of India...*, Vol. VI, p. 57

'Each one fearlessly brought forward his assertions and arguments, and the disputations and contentions were long and heated,' states Abu-l-Fazl. 'Every sect, in its vanity and conceit, attacked and endeavoured to refute the statements of their antagonists. . . . One night the *Ibadat-Khana* was brightened by the presence of Padre Radalf (Padre Rodolpho Aquaviva), who for intelligence and wisdom was unrivalled among Christian doctors. Several carping and bigoted men attacked him, and this afforded an opportunity for a display of the calm judgement and justice of the assembly.' These men brought forward the old received assertions, and did not attempt to arrive at truth by reasoning. Their statements were torn to pieces, and they were nearly put to shame; and then they began to attack the contradictions in the Gospel, but they could not prove their assertions. With perfect calmness and earnest conviction of the truth, the Padre replied to their arguments, and then he went on to say, "If these men have such an opinion of our Book, and if they believe the Kuran to be the true word of God, then let a furnace be lighted, and let me with the Gospel in my hand, and the *'ulama* with their holy book in their hands, walk into that testing place of truth, and the right will be manifest." The black-hearted mean-spirited disputants shrank from this proposal, and answered only with angry words. This prejudice and violence greatly annoyed the impartial mind of the Emperor, and, with great discrimination and enlightenment, he said: 'Man's outward profession and the mere letter of Muhammadanism, without a heartfelt conviction, can avail nothing. I have forced many Brahmans, by fear of my power, to adopt the religion of my ancestors; but now that my mind has been enlightened with the beams of truth, I have become convinced that the dark clouds of conceit and the mist of self-opinion have gathered round you, and that not a step can be made in advance without the torch of proof. That course only can be beneficial which we select with clear judgment. To repeat the words of the Creed, to perform circumcision, or to lie prostrate on the ground from dread of kingly power, can avail nothing in the sight of God'.³

Out of the priests and scholars who met him, he was impressed by Dastur Meharji Rana, a Parsi priest from Gujarat, who explained to him the Zoroastrian doctrine of Sun and fire worship.

Akbar also came in contact with the newly developing Sikh faith. Guru Arjan, the fifth Sikh Guru, was accused of treating with contempt Hindu gods and Muslim prophets. Akbar examined his writings and found nothing but love and devotion to God and he said they were worthy of reverence.

The net result of all these contacts with major religions was that he felt none could satisfy him, and he invented his own religion, which he called

³Abu-l-Fazl, *Akbar-nama*, in Elliot and Dowson, *The History of India* . . . , Vol. VI, pp. 60, 61

Din Ilahi or Divine Faith. He himself became its first Prophet and two of his courtiers, who were also scholars of eminence, the brothers Abu-l-Fazl and Faizi, became his chief disciples.

WORSHIP OF ENERGY

Akbar realized that it is the energy of the sun which is the source of all life. Abu-l-Fazl states, 'His Majesty maintains that it is a religious duty and divine praise to worship fire and light. There can be nothing improper in the veneration of that exalted element which is the source of man's existence, and of the duration of his life.

'Every flame is derived from that fountain of divine light (the sun), and bears the impression of its holy essence. If light and fire did not exist, we should be destitute of food and medicines; the power of sight would be of no avail to the eyes. The fire of the sun is the torch of God's sovereignty.

'And when the sun sets, the attendants light twelve white candles, on twelve candlesticks of gold and silver, and bring them before His Majesty, when a singer of sweet melodies, with a candle in his hand, sings a variety of delightful airs to the praise of God, beginning and concluding with a prayer for the continuance of this auspicious reign. His Majesty attaches the utmost importance to praise and prayer, and earnestly asks God for renewed light.

'A second order was given that the Sun should be worshipped four times a day, in the morning and evening, and at noon and midnight. His Majesty had also one thousand and one Sanskrit names of the Sun collected, and read them daily, devoutly turning towards the Sun. He used to wear the Hindu mark on his forehead, and ordered the band to play at midnight and at break of day. Mosques and prayer-rooms were changed into store rooms, or given to Hindu Chaukidars.'⁴

Akbar's religion was pure deism. In addition, some ceremonies were permitted in consideration of human infirmity. It maintained that we ought to reverence God according to the knowledge of Him derived from our own reason, by which His unity and benevolence are sufficiently established; that we ought to serve Him, and seek for our future happiness by subduing our bad passions, and practising such virtues as are beneficial to mankind; but that we should not adopt a creed, or practise a ritual, on the authority of *any* man, as all were liable to vice and error like ourselves. His fundamental doctrine was that there were no prophets; his appeal on all occasions was to human reason.

When Akbar died, he was buried at Sikandra, a suburb of Agra. His mausoleum lacks the conventional saracenic domes, and faces east towards the rising sun.

⁴Abu-l-Fazl Allami, *The Ain-i-Akbari*, p. 210

Akbar practised universal toleration and treated all his subjects alike, irrespective of their religious affiliation. He had a scientific mind and was rational in his approach to religion. He did not allow his mind to be clouded by superstition or authority of those who regarded religion as their special preserve. In an age of bigotry, he was a free-thinker. Though he himself was illiterate, he encouraged literature. The Mughal painting arose under his patronage as a visual aid to literature and history. A new type of architecture evolved, combining the beauty of the Hindu architecture with the grace of Muslim domes and arches. The administrative arrangements of Akbar were used by the British as foundation of their own. Vincent Smith was not exaggerating when he rated him as 'one of the greatest sovereigns known to history'—a claim which rests on his natural gifts, his free mind, and his magnificent achievements.

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FIG. 33. Portrait of Akbar. Mughal, 17th century.

(Courtesy: British Museum, London)

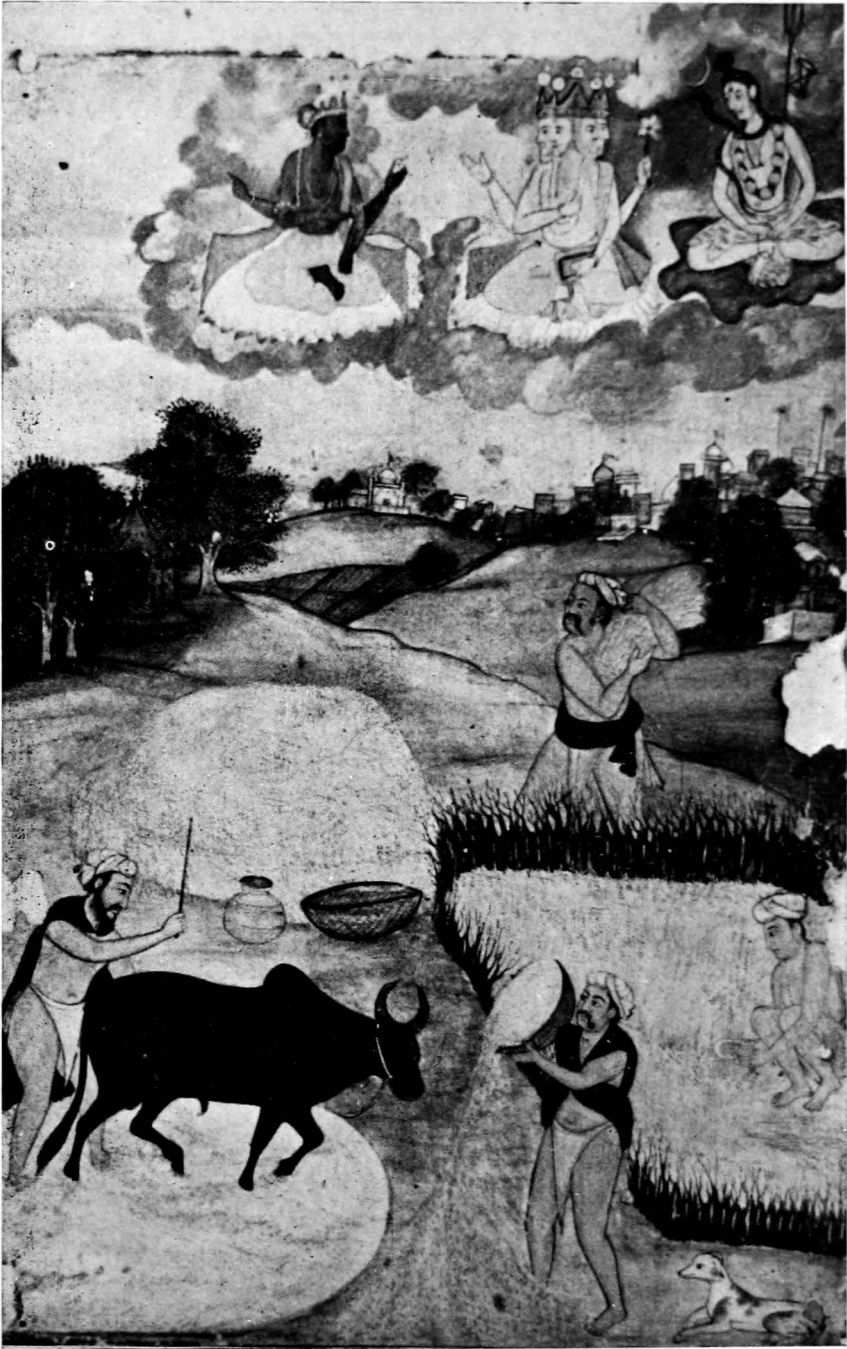


FIG. 34. Farmers threshing and winnowing grain. Mughal, c. 1600.

(Courtesy: Prince of Wales Museum, Bombay)

CHAPTER 22

ADMINISTRATIVE REFORMS OF AKBAR

TODAR MAL'S LAND REVENUE REGULATIONS ADMINISTRATIVE DIVISIONS, VILLAGE ADMINISTRATION NEEDY PEASANTS AND SMALL HOLDINGS

THE land-tax was the main source of revenue in Mughal India. After the abolition of *jizya*, and over fifty minor duties, land revenue became all the more important. As such reconstruction of the revenue system was imperative. This is the task which Akbar entrusted to Todar Mal. There is no name in mediaeval history of India more renowned than that of Todar Mal. 'Careful to keep himself from selfish ambition,' writes Abu-I-Fazl, he devoted himself to the service of the State, and earned an everlasting fame.'

Todar Mal was a Tandan Khatri, a native of Chunian, a small town near Lahore. He first served under Sher Shah and gained valuable experience in the management of lands and revenue. In 1573 he joined Akbar's service and assisted Muzaffar Khan, the Chancellor of Exchequer, in settling the newly acquired kingdom. After the conquest of Gujarat he was left there to assess that province. After settling several financial matters in Bengal and Orissa, Todar Mal went to Court, and was employed in revenue matters. In 1582 Todar Mal became Chief Finance Minister, and introduced his financial reforms which made him famous. The third book of the *Ain* contains his new rent-roll, or *Asl-i Jam-i Tumar*, which superseded Muzaffar's assessment.

The most important reform introduced by Todar Mal was the change in the language and the character used for the revenue accounts, which were kept in Hindi by Hindu *muharrirs*. Here it may be mentioned that Muslims had no aptitude for accounts and accounting, and that is why nearly all the appointments in the revenue department were filled by the Hindus. Todar Mal ordered that all government accounts should henceforth be written in Persian. He thus forced the Hindus to learn the court language of their rulers. As the study of Persian was necessary for its pecuniary advantages, the Hindu employees soon learnt it and became proficient in it. As a result they acquired an effective share in Government services.

TODAR MAL'S LAND REVENUE REGULATIONS

Abu-I-Fazl provides the following details about Todar Mal's revenue regulations.

'At the beginning of this year (37th year of the reign), His Majesty directed his attention to an improvement of the administration of his terri-

tories, and passed new laws for the management of civil and revenue business. Raja Todar Mal had, previous to this, been named *wazir*; but the dangers and difficulties of the post, and the opposition to be encountered, made him unwilling to accept the office. But this unambitious man, who was acquainted with all the mysteries of administration, was now elevated to the office of *diwan*, and in reality to the *wakalat*. His clear judgement soon set matters to right. Civil and revenue matters received his especial attention. He devoted his skill and powerful mind to simplify the laws of the State, and he allowed no grasping and intriguing men to obtain any influence over him. He now proposed several new laws calculated to give vigour and glory to the government.

‘That the collectors of the *khalisa* lands and the *jagirdars* should realize the *mal* and *jihat* (cesses) according to the *dasturu-l ’amal*; and if by fraud or oppression anything beyond the settled amount should be received from the cultivators, they were to account it in excess of the proper payment, and were to levy a fine upon those who had exacted it, and enter the amount in the monthly accounts. At every harvest they were to carefully guard the rights of the lower classes.

‘The *’amils* of the *khalisa* had two subordinates, a *karkun* (manager), and a *khass-navis* (accountant). These officers had been oppressors, and, leaguings with the rich, they had been a great source of evil to the poor. If, instead of these two infamous officials, one worthy and honest man should be appointed, the country would prosper, and the people would be contented.

‘It had been discovered that in the *khalisa* districts the cultivated lands decreased year by year; but if the lands capable of cultivation were once measured, they would increase year by year in proportion to the powers of the *raiya*s; and engagements should be made for them according to rule.

‘For lands which had lain waste four years, they were to receive a deduction of one-half for the first year, for the second year one-quarter, and for the third year they were to pay according to established rule. For lands which had lain untilled for two years they were to receive a deduction of one-fourth for the first year. For uncultivated lands, they were to receive a small allowance of grain, so as to make the lands capable of yielding revenue. When advances were made for the assistance of poor cultivators, engagements were to be taken from men of respectability, and part was to be repaid at the spring harvest, part at the autumnal harvest. By these arrangements, the country would in a short period become cultivated, the *raiya*s would be contented, and the treasury flourishing.

‘When a portion of cultivated land was fixed upon, some surveyors, in proportion to its extent, were to be appointed. They were first to measure the land, and were then to acquaint themselves with its quality and produce.

The collectors were to select a central spot for their residence. They were to carry out their duties everywhere diligently, and to inquire into the state of affairs. In seasons when a sufficient quantity of rain fell, and the lands received adequate irrigation, two and a half *biswas* in the *bigha* were to be left unassessed; in jungles and sandy lands, three *biswas* were to be left. Weekly accounts of sequestrations, and daily accounts of the collections, were to be sent monthly to the Imperial Exchequer. An Imperial order was issued that when lands suffered under any visitation of Providence, a description of them was to be drawn up, and a copy of it sent to Court, so that the Emperor might give directions appropriate to the case.

'Whatever was levied from the *raiya*s was to be paid over to the treasurers, and they were to give receipts to the *raiya*s. The collectors were to remit the payments four times a month, and at the end of this time no balance was to be left unrealized from the *raiya*s. The *raiya*s were to be so treated that they should be willing to make their payments to the treasury voluntarily.

'A descriptive account was to be drawn up of the assessment of each individual, according to his cultivation and labour, and the dates were not to be either postponed or anticipated. The *patwari* (accountant) of each village was to apportion the village, name by name, among the various subordinate agents, and the collectors were to send the cash under the seal of the *patwari* to the treasurer.

'Instead of the former expenses (*kharch*), the amount having been settled at one *dam* for each *bigha* of cultivated land, it was hoped that, upon this principle, 24 *dams* might be the estimated sum to be allowed for each cultivator.¹

Akbar's revenue system, though so celebrated for the benefits it conferred on India, presented no new invention. It only carried the previous system of Sher Shah into effect with greater precision and correctness.

The objects of Akbar's revenue system were—Firstly to obtain a correct measurement of the land. Secondly, to ascertain the amount of the produce of each *bigha* of land, and to fix the proportion of that amount that the cultivator should pay to the government. Thirdly, to settle an equivalent for the proportion so fixed, in money.

For the first purpose Akbar established a uniform standard to supersede the various measures formerly employed by public officers. The units of measurement were standardized. A yard, called a *gaz*, was adopted consisting of forty-one digits. An area of sixty yards square was called a *bigha*. To bring greater uniformity the old practice of measuring lengths with a rope was given up, because it shrank in wet season; instead bamboo rods joined together with iron rings were used. The Emperor then deputed

¹Abu-l-Fazl, *Akbar-nama*, in Elliot and Dowson, *The History of India...*, Vol. VI, pp. 61-65

persons to make a complete measurement of all the lands capable of cultivation within the empire.

The assessment was not so simple as the measurement. The land was divided into three classes, according to its fertility; the amount of each sort of produce that a *bigha* of each class would yield was ascertained; the average of the three was assumed as the produce of a *bigha*, and one-third of that produce formed the government demand. This assessment was designed to fix a maximum; for every cultivator who thought that the amount claimed was too high, he could insist on an actual measurement and division of the crop. Land which never required a fallow paid the full demand every harvest, called *polaj*. It was the best land which was cultivated every year. Land which required fallows only paid when under cultivation. It was called *parathi*. Land which had suffered from inundation, etc., or which had been three years out of cultivation, and required some expense to reclaim it, was called *chhakkar*. It paid only two-fifths for the first year, but went on increasing till the fifth year, when it paid the full demand. Land which had been for more than five years out of cultivation was called *banjar*. It enjoyed still more favourable terms for the first four years. The first two classes—*polaj* and *parathi*—were further classified into three categories—good, middling and bad. Then the law of averages was applied and the annual average for each category of land was worked out. This average was then standardized by taking the average for a period of ten years. One-third of the annual average, thus standardized, was fixed as the State demand for revenue.

It is not explained in the *Ain-i-Akbari* how the comparative fertility of fields was ascertained. It is probable that the three classes were formed for each village, in consultation with the inhabitants, and the process was facilitated by another classification made by the villagers for their own use, which seems to have subsisted from time immemorial. By that distribution, all the land of every village is divided into a great many classes, according to its qualities, as black mould, red mould, gravelly, sandy, loam, and mixed loam, etc. Other circumstances were also considered, such as command of water, vicinity to the village, etc., and great pains were taken so to apportion the different descriptions among the cultivators as to give equal advantages to all.

The quantity of produce due to the government being settled, it was next to be commuted for a money payment. For this purpose, statements of prices current for the nineteen years preceding the survey were called for from every town and village; and the produce was turned into money according to the average of the rates shown in those statements. The commutation was occasionally reconsidered, with reference to the actual market prices; and every husbandman was allowed to pay in kind if he thought the money rate was fixed too high.

All these settlements were at first made annually; but their continual recurrence being found to be vexatious, the settlement was afterwards made for ten years, on an average of the payments of the preceding ten.

The above measurements and classifications were all carefully recorded; the distribution of land, and increase or diminution of revenue, were all entered yearly into the village registers.

At the same time when Akbar made these improvements respecting the land tax, he abolished a vast number of vexatious taxes and fees paid to the officers.

Besides the regulation system described above, there were two other revenue systems, *galla baksh* (crop-sharing) and *nasq* (village assessment). The former was in use in far-off places where the measurement of land presented a difficult problem; whereas the latter assumed importance after Akbar's death, when the *zabti* system fell gradually into disuse.

The result of these measures was that though the amount of the public demand was reduced considerably, the profit to the State remained nearly the same due to prevention of defalcations. Abu-l-Fazl asserts that the assessment was lighter than that of Sher Shah, who professed to take only one-fourth of the produce, while Akbar took one-third.

Akbar's instructions to his revenue officers show his anxiety for the liberal administration of his system, and for the ease and comfort of his subjects. The collectors were enjoined, in their agreements and collections, to deal directly with individual cultivators, and not to depend implicitly on the headman and accountant of the village.

REVENUE DIVISIONS

Akbar also made a new revenue division of the country into portions, each yielding a *karor* (i.e. 10,000,000) of *dams*, equal to 250,000 rupees, the collector of each of which was called the *karori*. The primary duty of these officers was fostering extension of cultivation. This was not achieved as they furthered their own interests and great part of the country was laid waste, and wives and children of the cultivators were sold, and everything was thrown into confusion. The *karoris* were properly punished by Todar Mal.

PROVINCES UNDER THE REGULATION SYSTEM

The regulation system extended, broadly speaking, to the plains of northern India, excluding the areas left in the hands of the Hindu chiefs, that is to say, to the provinces of Multan, Lahore, Delhi (excluding the Kumaon hills), Agra, Allahabad, and the bulk of Bihar. The southern parts of Allahabad and Bihar bordering on the Gondwana and the hill-country lying between Bihar and Bengal were excluded from its operations. The system was in force also in those parts of Ajmer which were not left

to the chiefs and also in Malwa. In the outlying provinces, local practices were ordinarily continued.

Lane-Poole thus sums up the main features of Akbar's revenue regulations. 'Care was taken to provide easy means of complaint when undue collections were exacted and to punish severely the guilty exactors. The number of minor officials employed in realizing the recorded dues was diminished by one-half. The cultivators were to be made responsible, jointly as well as severally; the cultivators of fallow land were to be favoured for two years; advances of seed and money were to be made when necessary, arrears being remitted in the case of small holdings. Collectors were to make yearly reports on the conduct of their subordinates. Monthly returns were to be transmitted to the imperial exchequer. Special reports were to be sent up of any special calamities, hail, flood, or drought. The collectors were to see that the farmers get receipts for their payments, which were to be remitted four times in the year; at the end of that period no balance should be outstanding. Payments were if possible to be voluntary, but the standing crops were theoretically hypothecated and, where needful, were to be attached. Above all, there was to be an accurate and minute record of each man's holding and liabilities. The very successful land-revenue system of British India is little more than a modification of these principles.'²

TAX ON CATTLE

The two major objects of taxation in an ordinary village, apart from the cultivated fields, were the cattle and the orchards. The *Ain* lays down that if a man kept land otherwise liable to land-revenue (*kharaji*) under pasture, a tax of 6 *dams* per buffalo and 3 per cow or bullock should be imposed upon him. But a cultivator having up to four bullocks, two cows and one buffalo to each plough was to be exempted. Moreover, no tax was to be levied upon the *gaushalas*,³ or herds of cows kept for religious or charitable purposes.

TAX ON FRUIT GARDENS

Fruit gardens were treated in a special manner. A flat rate of Rs 2½ per *bigha* was charged, even if the trees did not bear fruit. Exception was made if the orchard was planted with grapes and almonds, in which case the demand was realized only when the plants bore fruit. Sometimes, if it were found that the orchard was not sufficiently productive, a fifth or a sixth of the net produce was claimed. If the maintenance of the orchard costed more than the value of the yield, no charge was made.³

²Lane-Poole, Stanley, *Mediaeval India—Under Mohammedan Rule*, A.D. 712-1764, Vol. II, p. 182

³Quعرashi, I. H. *Administration of the Mughal Empire*, p. 171

TAQAVI LOANS

Taqavi loans were given to cultivators in distressed circumstances for purchase of seed and cattle. These loans were advanced through the *chaudharis* and *muqaddams*, who stood surety for their repayment. Repayment was exacted in part at the first harvest and fully by the next.

ADMINISTRATIVE DIVISIONS

The empire was divided into fifteen *subahs* or provinces. The original fifteen were Allahabad, Agra, Oudh, Ajmer, Gujarat, Bihar, Bengal, Delhi, Kabul, Lahore, Multan, Malwa, Berar, Khandesh, and Ahmednagar. The three additional were Bidar, Hyderabad, and Bijapur. The chief officer in each was the viceroy (*sipah salar*), who had the complete control, civil and military, subject to the instructions of the king.

Under him were the revenue functionaries above districts (*foujdars*), whose authority extended over the local soldiery or militia, and over all military establishments and lands assigned to military purposes, as well as over the regular troops within their jurisdiction, and whose duty it was to suppress all disorders.

Justice was administered by a court composed of an officer named *mir-i-adl* (lord justice) and a *kazi*. The *kazi* conducted the trial and stated the law; the *mir-i-adl* passed judgment and seems to have been the superior authority.

Each *subah* was divided into a certain number of *sircars*, and each *sircar* into *paraganas* or *mahals*, and the *parganas* again were aggregated into *dasturs* or districts. The words used before Akbar's time to represent tracts of country larger than a *pargana* were *shakk*, *khitta*, *ursa*, *diyar*, *vilayat*, and *ikta*, but the latter was generally applied when the land was assigned for the support of the nobility or their contingents.

The police of towns was under an officer called the *kotwal*; in smaller places it was under the revenue officer; and in villages under the internal authorities.

VILLAGE ADMINISTRATION

The *muqaddam* and the *patwari* were the two principal village functionaries. The *muqaddam* was responsible for collection of land revenue. For that work, he was paid a commission, which was about 2.5 per cent of the total revenue collected. The *muqaddam's* jurisdiction over the village was not purely financial. He was held answerable for any crime committed within or near his village. Finally, the *muqaddam* possessed the right of allotting the land of the village to such as wished to till it. This right was implicitly recognized by the authorities when they entrusted the task of settling new villages to *muqaddams*. In any village not utterly ruined by the burden of land revenue, the position of the *muqaddam* was a profitable one.

Moneyed persons, therefore, were sometimes tempted to buy this office as a good investment.

NEEDY PEASANTS AND SMALL HOLDINGS

A question is often asked whether the agrarian system prevailing under Akbar's rule was *zamindari* or *ryatwari*. Moreland replies that it comprised both. There was a general recognition of the peasant's title to permanent and hereditary occupancy of the land he tilled. The inviolability of occupancy right of the peasants was recognized in regulations of Akbar. Akbar cautioned revenue officials against entering in their records 'peasant holdings' (*raiya-kashta*) as 'personally cultivated lands' (*khud-kashta*) of *madad-i-maash* holders.

The peasant's right to the permanent and hereditary occupancy of the land he tilled was saleable, though on occasion none might think it worth buying. The peasants could transmit their land to their heirs and could transfer it by sale or mortgage, but always subject to the condition that the revenue due was paid. But there was no question of really free alienation—the right to abandon or dispose of the land as its holders might choose—which is an essential feature of modern proprietary right. If in one sense the land belonged to the peasant, in another the peasant belonged to the land. He could not (unless, perhaps, he found a successor) leave it or refuse to cultivate it. The village officials bound themselves not to allow any cultivator to leave his place.

The readiness with which the authorities recognized the peasant's right of occupancy and the anxiety they showed to prevent him from leaving the land were both natural in an age when land was abundant and peasants scarce. In Mughal times, the area of land under cultivation was in many regions probably only half, and in others two-thirds to three-quarters, of the area of such land in 1920. There were, therefore, always stretches of virgin land beckoning the peasant, while with his low level of subsistence and primitive huts he had no immovable possessions to tie him to his old place of habitation.

The peasant of Mughal times enjoyed a right which in British India was conferred on some sections of the peasants in some provinces only by special tenancy legislation, viz. the permanent and hereditary right of occupancy. In certain circumstances this right could be considered proprietary in nature. But a proprietor must be a free agent and he must possess the right of free alienation. Since the peasant could not legally abandon his land, he was really a near-serf. If, therefore, the king was not the owner of the soil, neither was the peasant. This means in other words that in *raiya* areas, at least, a single owner cannot be located. There were different rights over the land and its produce, and not one exclusive right of property.

The position was different in the *zamindari* areas. There the *zamindars* sometimes possessed rights which were practically proprietary. 'There existed almost throughout the Mughal Empire,' states Irfan Habib, 'a fiscal claim of the *zamindar* upon land lying within his *zamindari*, the claim being met either through a separate rate on the peasants or through the holding of a portion of the land revenue-free or a cash allowance from the revenue collected from the entire land by the authorities. In the last two forms, it was known by the names of *malikana* and *do-biswi* in northern India and Bengal, and as *banth* in Gujarat and *chauth* in the Dakhin.'

THE ROLE OF THE ZAMINDARS

As regards the role of the *zamindars*, Moreland states that while some of them performed valuable economic functions in helping and supporting their peasants, others were parasites pure and simple. The political and social environment was unfavourable to the fruition of the idea of agricultural development. The high pitch of the revenue demand, approximating to the full economic rent, could be justified from Islamic texts by anyone who might care to take the trouble, but its actual motive was to be found in the needs of successive administrations and their officers; and its influence was necessarily increased by the miscellaneous exactions, prohibited from time to time but recurring regularly after each prohibition. The direct result was to take from the peasant whatever he could be made to pay, and thus to stereotype a low standard of living; but in addition there was the further effect of requiring the peasant who was making money to conceal his good fortune from everyone outside the village, and perhaps even from his neighbours. Thus the normal position was a contest between the administration and the peasants, the former endeavouring to discover and appropriate what the latter endeavoured to retain and conceal—an environment in which agricultural development could not be expected to make much headway.⁴

To sum up, the condition of the peasantry, who provided the surplus for construction of magnificent forts, palaces, mosques and mausoleums, was wretched. The bulk of them were small men with limited resources. Their holdings were small and there is no evidence that they could accumulate capital to make improvements. They were scantily dressed and their tools were primitive. In a rare painting relating to the reign of Akbar, farmers are shown harvesting wheat, threshing it by trampling under the feet of bullocks and winnowing. They wear turbans and tie a piece of cloth around the waist to cover their nudity (Fig. 34). Though they are well-built, they look far from affluent. It was on the toil of such people that the economy of the Mughal empire rested.

⁴Moreland, W. H. *India at the Death of Akbar...*, p. 207

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CROPS, AGRICULTURAL IMPLEMENTS, FORESTS AND FISHERIES IN THE SIXTEENTH CENTURY

INFORMATION regarding crops grown in India in the sixteenth century is given in the *Ain-i-Akbari* as well as in the travel accounts of the European travellers. Wheat was grown in the provinces of Lahore, Multan, Delhi, Agra, Allahabad, Oudh, Malwa and Ajmer. Barley was grown in almost all parts of the country, but not in Bengal and Orissa. *Chana* was grown practically in all the provinces.

Rice was the main crop in Bengal, Orissa, Bihar, Oudh, Allahabad, Agra, Delhi, Lahore, Khandesh, Berar and Kashmir. In Bengal, sometimes three crops of rice were grown in a year. Out of rice varieties grown in Bengal, *kar*, *sukhdas* and *shali* were superior. *Sukhdas* rice from the Awadh was regarded as the best. The author of *Mukhtasiru-t Twarikh* states, 'Its qualities and flavour are beyond all praise. It is equally palatable to kings and the common people. It is incomparable in tenderness and sweetness, and has a very agreeable smell and taste. The rich and great men, and those who are fond of good living, think that no other food is so excellent.'¹ Next to Bengal, Bihar produced quality rice in large quantities. Awadh produced large quantities of *sukhdas*, *madhkar* and *jhanwar* 'rice which for whiteness, delicacy, fragrance and wholesomeness are scarcely to be matched.' Abu-'l-Fazl remarks that the Bihar rice for its quality and quantity is rarely to be equalled.' Fine-quality rice was produced in Khandesh and Kashmir.

Millets, which included *jowar*, *bajra*, *kodon*, *sawan*, *mandua*, and formed the *kharif* crops, were cultivated in Malwa, Gujarat, Ajmer, Khandesh, Delhi, Lahore, Agra, Allahabad, Oudh, and Multan. *Bajra* is entered as *lahdara*, a name now obsolete. *Kudiri* (or *kuri*) and *barti* are both described as resembling *sawan*, and probably denote the lowest-grade millets such as *kutki* or *mijhri*; it is possible that some of these inferior crops may have gone out of cultivation.

Pulses included gram, lentil (*masur*), pea, *mung*, *urd*, *moth*, *lubiya*, *kulthi* and *arhar*. Two varieties of gram were assessed under the names *nakhud-i-Kabuli* and *nakhud-i-Hindi*.

Oilseeds included *til*, linseed, *toria*, and safflower.

Other crops were sugarcane, cotton, hemp, indigo, poppy and betel. The vegetables grown were melons, variety of gourds and pumpkins and *singhara*. The cultivation of tobacco had just started in Gujarat.

The following crops are mentioned as regards South India by Paes,

¹*Mukhtasiru-t Twarikh*, in Elliot and Dowson, *The History of India...*, Vol. VIII, p. 4

Nuniz, and Garcia da Orta: rice, wheat, *jowar*, *ragi*, millets, in general, and pulses like *mung* and horse-gram. Other crops were sugarcane, cotton, indigo, *til*, linseed, pepper, coconut, ginger, turmeric, betel, cardamom and arecanut.

RELATIVE VALUE OF CROPS

According to Moreland,² the statistics provided by Abu-l-Fazl in *Ain-i-Akbari* give us a rough idea of the relative value of the crops grown.

<i>Crop</i>	<i>Comparative value</i>	<i>Crop</i>	<i>Comparative value</i>
Wheat	100	Linseed	51
Barley	67	Rape	53
Gram (common)	60	Poppy	210
<i>Jowar</i>	59	Sugarcane (ordinary)	213
<i>Bajra</i>	42	Cotton	150
<i>Mandua</i>	44	Indigo	254
<i>Sawan</i>	22		

These figures are based on the average of the various assessment rates in force under Akbar in the provinces of Allahabad, Agra and Delhi. It will be noticed that the costliest crop was Indigo, followed by sugarcane and poppy.

SUGARCANE

During the reign of Akbar, Bengal occupied the first place in sugar production. Abu-l-Fazl mentions three kinds of sugarcane, viz. *paunda*, black and ordinary. These were grown in the provinces of Agra, Allahabad, Oudh, Lahore, Multan, Malwa and Ajmer.

'Sugarcane is of various kinds,' states Abu-l-Fazl. 'One species is so tender and so full of juice that a sparrow can make it flow out by pecking it; and it would break to pieces, if let fall. Sugarcane is either soft or hard. The latter is used for the preparation of brown sugarcandy, common sugar, white candy, and refined sugar, and thus becomes useful for all kinds of sweetmeats. It is cultivated as follows. They put some healthy sugarcane in a cool place, and sprinkle it daily with water. When the sun enters the sign of Aquarius, they cut off pieces, a cubit and upwards in length, put them into soft ground, and cover them up with earth. The harder the sugarcane is, the deeper they put it. Constant irrigation is required. After seven or eight months it will come up.

'Sugarcane is also used for the preparation of intoxicating liquor, but brown sugar is better for this purpose. There are various ways of prepa-

²Moreland, W. H. *India at the Death of Akbar—An Economic Study*, p. 103

ring it. One way is as follows. They pound *babul* bark mixing it at the rate of ten *sers* to one *man* of sugarcane, and put three times as much water over it. Then they take large jars, fill them with the mixture, and put them into the ground, surrounding them with dry horse-dung. From seven to ten days are required to produce fermentation. It is a sign of perfection when it has a sweet but a stringent taste. When the liquor is to be strong, they again put to the mixture some brown sugar, and sometimes even drugs and perfumes, as ambergris, camphor, etc. They also let meat dissolve in it. This beverage when strained may be used, but it is mostly employed for the preparation of arrack.

'They have several methods of distilling it; first, they put the above liquor into brass vessels, in the interior of which a cup is put, so as not to shake, nor must the liquid flow into it. The vessels are then covered with inverted lids which are fastened with clay. After pouring cold water on the lids, they kindle the fire, changing the water as often as it gets warm. As soon as the vapour inside reaches the cold lid, it condenses, and falls as arrack into the cup. Secondly, they close the same vessel with an earthen pot, fastened in the same manner with clay, and fix to it two pipes, the free ends of which have each a jar attached to them, which stands in cold water. The vapour through the pipes will enter the jars and condense. Thirdly, they fill an earthen vessel with the above-mentioned liquor, and fasten to it a large spoon with a hollow handle. The end of the handle they attach to a pipe, which leads into a jar. The vessel is covered with a lid, which is kept full with cold water. The arrack, when condensed, flows through the spoon into the jar. Some distil the arrack twice, when it is called *duatasha*, or twice-burned. It is very strong. If you wet your hands with it and hold them near the fire, the spirit will burn in flames of different colours without injuring the hands. It is remarkable that when a vessel containing arrack is set on fire you cannot put it out by any means; but if you cover the vessel, the fire gets extinguished at once.'

INDIGO AND SAFFLOWER

Indigo, used for dying cloth and for paints, was grown in the *subas* of Oudh, Allahabad, Agra, Lahore, Multan, Malwa, Delhi and Ajmer. The best indigo, however, was grown at Bayana, an important town in the present Bharatpur district of Rajasthan, and the second best at Sarkhej in Gujarat.

Safflower was cultivated in the provinces of Agra, Allahabad, Oudh, Delhi, Malwa, Lahore and Multan.

POPPY

Poppy, from which opium was extracted, was another important crop, and was taxed heavily in the time of Akbar. It was used as an intoxicant

and was grown in the provinces of Agra, Oudh, Allahabad, Delhi, Lahore, Multan, Malwa and Ajmer. It was also grown in the Deccan and in Ahmadnagar, Bijapur and Golconda. Malwa opium was considered very good. In some parts of that province children were given opium up to the age of three as a sedative.

SAFFRON

Saffron was cultivated in Kashmir. The ground was carefully prepared before planting the seed in March or April. At the close of September the plants reached their full growth. The saffron plant was about a quarter of a yard (22.8 cm) in height. The flower is on the top of the stalk, and consists of six petals and six stamens. Three of the six petals have a fresh lilac colour, and stand round about the remaining three petals. The stamens are similarly placed, three of a yellow colour standing round about the other three, which are red. The latter yield the saffron. The plants yielded flowers for six years continuously.

Saffron was cultivated in two villages: Pampur in the district of Mararaj, to the south of Srinagar, and Paraspur near Indrakot. The fields at Pampur extended over about 24 miles (39 km²) and those at Paraspur comprised an area of two square miles (5.18 km²). Saffron was used for colouring and flavouring good-quality rice. It was also used for imparting fragrance and agreeable yellow colour to dishes and for dyeing cloth.

PĀN (PIPER BETLE)

'The betel leaf is, properly speaking, a vegetable, but connoisseurs call it an excellent fruit,' states Abu-l-Fazl. 'The eating of the leaf renders the breath agreeable, and repasts odorous. It strengthens the gums, and makes the hungry satisfied, and the satisfied hungry. I shall describe some of the various kinds. 1. The leaf called *Bilahri* is white and shining, and does not make the tongue harsh and hard. It tastes best of all kinds. After it has been taken away from the creeper it turns white, with some care, after a month, or even after twenty days when greater efforts are made. 2. The *Kaker* leaf is white with spots, and full, and has hard veins. When much of it is eaten, the tongue gets hard. 3. The *Jaiswar* leaf does not get white, and is profitably sold mixed with other kinds. 4. The *Kapuri* leaf is yellowish, hard, and full of veins, but has a good taste and smell. 5. The *Kapurkant* leaf is yellowish-green, and pungent like pepper; it smells like camphor. You could not eat more than ten leaves. It is to be had at Banaras; but even there it does not thrive in every soil. 6. The *Bangla* leaf is broad, full, hard, plushy, hot, and pungent.

'The cultivation is as follows. In the month of March-April, about New Year's time, they take a part of a creeper four or five fingers long with *Karhanj* leaves on it, and put below the ground. From fifteen to

twenty days after, according as leaves and knots form, a new creeper will appear from a knot, and as soon as another knot forms, a leaf will grow up. The creepers and new leaves form for seven months, when the plant ceases to grow. No creeper has more than thirty leaves. As the plant grows, they prop it with canes, and cover it, on the top and the sides, with wood and straw, so as to rear it up in the shade. The plant requires continually to be watered, except during the rains. Sometimes they put milk, sesame oil and its dregs, etc., about the plant. There are several kinds of leaves known under different names: 1. The *Karhanj* leaf, which they separate for seedlings and call *Peri*. The new leaf is called *Gadauta*. 2. The *Nauti* leaf. 3. The *Bahuti* leaf. 4. The *Chhiw* leaf. 5. The *Adhinida* leaf. 6. The *Agahniya* or *Lewar* leaf. The *Karhanj* leaf itself. With the exception of the *Gadauta*, the leaves are taken away from the creeper when a month old. The last kind of leaf is eaten by some; others keep it for seeding: they consider it very excellent, but connoisseurs prefer the *Peri*.

'A bundle of 11,000 leaves was formerly called *Lahasa*, which name is now given to a bundle of 14,000. Bundles of 200 are called *Dholi*; a *Lahasa* is made up of *Dholis*. In winter they turn and arrange the leaves after four or five days; in summer every day. From 5 to 25 leaves, and sometimes more, are placed above each other, and displayed in various ways. They also put some betel nut and *kath* on one leaf, and some lime paste on another, and roll them up; this is called a *bira*. Some put camphor and musk into it, and tie both leaves with a silk thread. Others put single leaves on plates, and use them thus. They are also prepared as a dish.'

SPICES

The Malabar region was famous for its spices. The chief spices were cardamom, ginger, pepper, nutmeg, cloves and cinnamon. Cardamom was grown in Bijapur and ginger in all parts of India. Cardamom was an excellent but costly spice. Its price varied from 52 to 80 *dams* per seer and it was used by the nobles and princes in India and other countries of Asia. Pepper grew in Bijapur, Malabar, Cochin and many other places in Southern India, in Champaran district in Bihar, and in the forests of Mahmudabad district in Bengal and in Assam.

Stevens is famous as the first Englishman known to have set foot on Indian soil. Born in Wiltshire and educated in Winchester, he made his way to Rome and there entered the Jesuit order. Being desirous of serving in India, he obtained a passage at Lisbon in the spring of 1579 and reached Goa in October of that year. He was the first European to make a scientific study of Konkani, and he wrote two religious works, one of which was a long epic in Marathi. Describing a visit to Malabar he mentions a number

*Abu-l-Fazal, *Ain-i-Akbari*, pp. 68-77

of crops including pepper and coconut. 'Here grows the pepper; and it springs up by a tree or a pole, and is like our ivy berry, but something longer, and at the first the bunches are green, and as they wax ripe they cut them off and dry them. The leaf is much lesser than the ivy leaf and thinner. All the inhabitants here have very little houses covered with the leaves of the coco-trees. All the pepper of Calicut and coarse cinnamon grows here in this country. The best cinnamon comes from Ceylon, and is pilled from the young trees. Here are very many palm or coco-trees, which is their chief food; for it is their meat and drink, and yields many other necessary things.'⁴

AGRICULTURAL IMPLEMENTS

According to Moreland, implements used by the peasants during Akbar's rule are still in use in India. The ploughs, hoes, sickles—all bear their age upon their face. Economy in the use of iron is the most striking characteristics of these implements. This was due to the high cost of that metal.

FORESTS

There were extensive forests in the North-West Frontier Province, Punjab, Uttar Pradesh, Bihar, Bengal, Orissa, modern Madhya Pradesh, Rajasthan, Gujarat, and southern India. Ralph Fitch (1583-1591) in his travels through Bengal noticed large forests infested by wild animals, including tigers. Abu-l-Fazl says that one had to traverse a thick forest during a journey along the southern bank of the Ghagra. William Finch (1608-1611) found the road from Jaunpur to Allahabad through a continuous forest. He says that there were lions and tigers on the road to Jalaur. Due to lack of transport forests were mostly unexploited. According to Moreland, 'inaccessible forests can have yielded no income, and inaccessibility was more common than now, while forests within reach of towns or villages furnished the inhabitants with timber, fuel, and minor produce on a scale which, roughly speaking, varied inversely with the pressure of the population. Such instances as we get of particular forms of produce having acquired a reputation in the markets fall in with this view: the bamboos of Bengal, which were in demand for fitting out ships, could be transported cheaply by the waterways of the country, while the teak of the Western Ghats was within reach of the sea-coast where large vessels were built.'⁵

FISHERIES

The *Ain-i-Akbari* tells us that fish formed an important part of the people's food in Bengal and Orissa, and also in Sind. Travellers record that its use

⁴Foster, W. *Early Travels in India, 1583-1619*, p. 45

⁵Moreland, W. H. *India at the Death of Akbar—An Economic Study*, p. 144

was common in the south of India, and that it was sometimes dried and salted for provisioning ships. Fish-oil was prepared in Sind, the use of fish-manure was established in Gujarat when Thevenot visited Surat in 1666, and, speaking generally, it may be reasonably assumed that the fisheries were conducted very much on the familiar lines.

GARDENS OF AKBAR

FLOWERING TREES, SHRUBS AND CLIMBERS IN MUGHAL GARDENS

APART from his love of architecture and painting, Akbar was interested in gardens and plants. He was the first Mughal emperor to enter the Kashmir Valley. At Srinagar, close to the Dal Lake, he planned a large garden, Nasim Bagh. The walls, fountains and irrigation channels of this garden have disappeared, but the *chenars* still remain.

Evidence of the structure of the Mughal gardens and plants grown in them is in the Persian classics illustrated during the reign of Akbar. Among them is *Diwan-i-Anwari*, a collection of poems by the Persian poet Anwari, who flourished in the latter part of twelfth century. It contains some excellent paintings on gardens and gardening. A painting by Mahesh shows two gardeners at work. They have an exotic appearance and are possibly from Iran. (Abu-l-Fazl mentions that Akbar imported gardeners from Iran and Turan.) One of them is plucking flowers, whereas another is digging with a spade. In the foreground is a plantain and some flowering annuals, and in the background a pair of elegant cypresses, a mango and a palm. In the centre is a squarish tank with a fountain (Fig. 35). It provides a good idea of a small garden during the reign of Akbar.

Abu-l-Fazl provides a list of twenty-one fragrant flowering plants along with the colour of their flowers and the season of flowering in the *Ain-i-Akbari*. These are the *sewti*; the *bholsari*; the *chambeli*; *ray-bel*; the *mongra*; the *champa*; the *ketki*; the *kuza*; the *padal* the *juhi*; the *niwari*; the *nargis*; the *keora*; the *chalta*; the *gulal*; the *tasbih gulal*; the *singarhar*; the violet; the *karna*; the *kapur bel*; and the *gul-i zafran*.

It is followed by another list of twenty-nine plants with flowers notable for their beauty. These are, the *gul-i aftar*; the *gul-i Kawal*; the *jafari*; the *gudhal*; the *ratan-manjani*; the *kesu*; the *senbal*; the *ratan-mala*; the *sonzard*; the *gul-i-malti*; the *karnphul*; the *karih*; the *kaner*; the *kadam*; the *nag-kesar*; the *surpan*; the *siri khandi*; the *jait*; the *champala*; the *lahi*; the *gul-i karaunda*; the *dhanantar*; the *gul-i Hinna*; the *dupahriya*; the *bhun champa*; the *sudarsan*; the *kangla-i*; the *siras*; and the *san*.

Then follows a detailed description of forty-five plants including those already mentioned in the lists detailed above. In these descriptions, which are given in the following account, shape and colour of flowers, season of flowering and shape of the crown, etc., are mentioned.

'The *Sewti* resembles the *Gul-i Surkh*, but is smaller. It has in the middle golden stamens and from four to six petals. Habitat Gujarat and the Dakhin.

‘Of the *Chambeli* there are two kinds. The *Ray Chambeli* has from five to six petals, outside red. The *Chambeli proper* is smaller, and has on the top a red stripe. Its stem is one-and-a-half or two yards (137 to 183 cm) high, and trails over the ground. It has many long and broad branches. It flowers from the first year.

‘The *Raybel* resembles the jasmine. There are various kinds, single, double, etc. A quintuple is very common, so that each petal might be separated as a distant flower. Its stem grows a yard (91 cm) high. The leaves of the tree resemble those of the lime tree; but they are somewhat smaller and softer.

‘The *Mungra* resembles the *Raybel*. It is larger, but inferior in perfume. It has more than a hundred petals; the plants grows to a large tree.

‘The *Champa* flower has a conical shape, of the size of a finger and consists of ten petals and more, lying in folds one above the other. It has several stamens. The tree looks graceful, and resembles in leaf and trunk the nut tree. It flowers after seven years.

‘The *Ketki* has the form of spindle of the size of a quarter of a yard (23 cm), with twelve or more petals. Its smell is delicate and fragrant. It bears flowers in six or seven years.

‘The *Kewra* resembles the preceding, but is more than twice as big. The petals have thorns. As they grow on different places, they are not all equal. In the midst of the flower, there is a small branch with honey-coloured threads, not without smell. The flower smells even after it is withered. Hence people put it into clothes when the perfume remains for a long time. The stem of the tree is above four yards (3.6 m) high; the leaves are like those of the maize, only longer, and triangular, with three thorns in each corner. It flowers from the fourth year. Every year they put new earth round about the roots. The plant is chiefly found in the Dakhin, Gujarat, Malwa and Bihar.

‘The *Chalta* resembles a large tulip. It consists of eighteen petals, six green ones above, six others, some red, some green, some greyish yellow, and six white. In the midst of the flower, as in the flower called *Hamesha Bahar*, there are nearly two hundred little yellow leaves, with a red globule in the centre. The flower will remain quite fresh for five or six days after having been plucked. It smells like the violet. When withered, the flower is cooked and eaten. The tree resembles the pomegranate tree and its leaves look like those of the lime tree. It blooms in seven years.

‘The *Tasbih gular* has a fine smell. The petals have the form of a dagger. The stem of the plant is two yards (1.8 m) high. It flowers after four years. They make rosaries of flowers, which keep fresh for a week.

‘The *Bholsari* is smaller than the jasmine; its petals are indented. When dry the flower smells better. The tree resembles the walnut tree, and flowers in the tenth year.

'The *Singarhar* is shaped like a clove, and has an orange-coloured stalk. The stamens look like poppy seeds. The tree resembles the pomegranate tree, and the leaves are like the leaves of a peach tree. It flowers in five years.

'The *Kuza* looks like a *Gul-i surkh*; but the plant and the leaves are larger. It has five or a hundred petals and golden-coloured stamens in the middle. They make *Abirmaya* and an extract from it.

'The *Padal* has five or six long petals. It gives water an agreeable flavour and smell. It is on this account that people preserve the flowers, mixed with clay, for such times when the flower is out of season. The leaves and the stem are like those of a nut tree. It flowers in the twelfth year.

'The *Juhi* has small leaves, This creeper winds itself round about trees, and flowers in three years.

'The *Niwari* looks like a simple *Raybel*, but has larger petals. The flowers are often so numerous as to conceal the leaves and branches of the plant. It flowers in the first year.

'The *Kapur bel* has five petals, and resembles the saffron flower. This flower was brought during the present reign from Europe.

'The *Zafaran* (saffron). In the beginning of the month of *Urdibihisht*, the saffron seeds are put into the ground which has been carefully prepared and rendered soft. After this, the field is irrigated with rain-water. The seed itself is a bulb resembling garlic. The flower appears in the middle of the month of *Aban*; the plant is about a quarter of a yard (23 cm) long; but, according to the difference of the soil in which it stands, there are sometimes two-thirds of it above and sometimes two-thirds below the ground. The flower stands on the top of the stalk, and consists of six petals and six stamens. Three of the six petals have a fresh lilac colour, and stand round about the remaining three petals. The stamens are similarly placed, three of a yellow colour standing round about the other three, which are red. The latter yield the saffron. Yellow stamens are often cunningly intermixed. In former times saffron was collected by compulsory labour; they pressed men daily, and made them separate the saffron from the petals and the stamens, and gave them salt instead of wages, a man who cleaned two *pals* receiving two *pals* of salt. At the time of Ghazi Khan, the son of Khaji Chak, another custom became general; they gave the workmen eleven *tarks* of saffron flowers, of which one *tark* was given them as wages; and for the remaining ten they had to furnish two Akbarshahi *serts* of clean, dry saffron, i.e. for two Akbarshahi *mans* of saffron flowers they had to give two *serts* of cleaned saffron. This custom, however, was abolished by his Majesty on his third visit to Kashmir, to the great relief of the people.

'When the bulb has been put into the ground, it will produce flowers for six years, provided the soil be annually softened. For the first two years,



FIG. 35. A gardener digs with a spade. In the background is a reservoir flanked by irrigation channels. Mughal, 16th century, from *Diwan-i-Anwari*. (Courtesy: Fogg Art Museum, Harvard University, Cambridge, Massachusetts, USA)



FIG. 36. An illustration to a stanza in *Bihari Sat Sai* shows an eighteenth-century kitchen with brinjals (*Solanum melongena*), a favourite vegetable of India. Kangra, 18th century.

the flowers will grow sparingly; but in the third year the plant reaches its state of perfection. After six years the bulbs must be taken out; else they get rotten. They plant them again on some other place; and leave the old ground uncultivated for five years.

'Saffron comes chiefly from the place Pampur, which belongs to the district of Mararaj. The fields there extend over nearly twelve *kos*. Another place of cultivation is in the Parganah of Paraspur, near Indrakol, not far from Kamraj, where the fields extend about a *kos*.

'The *Astabi* (sunflower) is round, broad, and large, has a large number of petals, and turns continually to the sun. Its stem reaches a height of three yards (2.74 m).

'The *Kanwal*. There are two kinds. One opens when the sublime sun shines, turning wherever he goes, and closing at night. It resembles the *Shaqayiq*, but its red is paler. Its petals, which are never less than six in number, enclose yellow stamens, in the midst of which there is an excrescence of the form of a cone with the base upwards, which is the fruit, and contains the seeds. The other kind has four white petals, opens at night, and turns itself according to the moon, but does not close.

'The *Ja fari* is a pretty, round flower, and grows larger than the *Sadbarg*. One kind has five, another a hundred petals. The latter remains fresh for two months and upwards. The plant is of the size of man, and the leaves resemble those of the willow, but are indented. It flowers in two months.

'The *Gudhal* resembles the *Jaghasu* tulip, and has a great number of petals. Its stem reaches a height of two yards (1.83 m) and upwards; the leaves look like mulberry leaves. It flowers in two years.

'The *Ratanmanjani* has four petals, and is smaller than the jasmine. The tree and the leaves resemble the *raybel*. It flowers in two years.

'The *Kesu* has five petals resembling a tiger's claw. In their midst is a yellow stamen of the shape of a tongue. The plant is very large, and is found on every meadow; when it flowers, it is as if a beautiful fire surrounded the scenery.

'The *Kaner* remains a long time in bloom. It looks well, but it is poisonous. Whoever puts it on his head is sure to fall in battle. It has mostly five petals. The branches are full of the flowers; the plant itself grows to a height of two yards (1.83 m). It flowers in the first year.

'The *Kadam* resembles a *tumagha* (a royal cap). The leaves are like those of the walnut tree, which the whole tree resembles.

'The *Nag kesar*, like the *Gul-i surkh*, has five petals and is full of fine stamens. It resembles the walnut tree in the leaves and the stem; and flowers in seven years.

'The *Surpa* resembles the sesame flower, and has yellow stamens in the middle. The stem resembles the *Hinna* plant, and the leaves those of the willow.

'The *Srikandhi* is like the *Chambeli*, but smaller. It flowers in two years.

'The *Hinna* has four petals, and resembles the flower called *Nafarman*. Different plants have often flowers of a different colour.

'The *Dupahriya* is round and small, and looks like the flower called *Hamesha-bahar*. It opens at noon. The stem is about two yards (1.83 m) high.

'The *Bhun champa* resembles the *Nilufar*, and has five petals. The stem is about a span long. It grows on such places as are periodically under water. Occasionally a plant is found above the water.

'The *Sudarshan* resembles the *Raybel*, and has yellow threads inside. The stem looks like that of the *Susan* flower.

'*Senbal* has five petals, each ten fingers long, and three fingers broad.

'The *Ratanmala* is round and small. Its juice, boiled and mixed with vitriol and *mu'asfar*, furnishes a fast dye for stuffs. Butter and sesame oil are also boiled together with the root of the plant, when the mixture becomes a purple dye.

'The *Sun ard* resembles the jasmine, but is a little larger, and has from five to six petals. The stem is like that of the *Chambeli*. It flowers in two years.

'The *Malti* is like the *Chambeli*, but smaller. In the middle there are little stamens looking like poppyseed. It flowers in two years more less.

'The *Karil* has three small petals. It flowers luxuriantly, and looks very well. The flower is also boiled and eaten; they also make pickles of it.

'The *Jait* plant grows to a large tree; its leaves look like tamarind leaves.

'The *Chanpala* is like a nosegay. The leaves of the plant are like walnut leaves. It flowers in two years. The bark of the plant when boiled in water makes the water red. It grows chiefly in the hills; its wood burns bright like a candle.

'The *Lahi* has a stem one and a half yards (1.37 m) high. The branches before the flowers appear are made into a dish, which is eaten with bread. When camels feed on this plant they get fat and unruly.

'The *Karaunda* resembles the *Juhi* flower.

'The *Dhanantar* resembles the *Nilufar*, and looks very well. It is a creeper.

'The *Siras* flower consists of silk-like threads, and resembles a *tumagha*. It sends its fragrance to a great distance. It is the king of the trees, although the Hindus rather worship the *Pipal* and *Bar* trees. The tree grows very large; its wood is used in building. Within the stem the wood is black, and resists the stroke of the axe.

'The *Kangla-i* has five petals, each four fingers long, and looks very beautiful. Each branch produces only one flower.

'The *San* (hemp) looks like a nosegay. The leaves of the plant resemble

those of the *Chinar*. Of the bark of the plant strong ropes are made, called *Pat-san*. It makes a very soft rope.

FLOWERS OF IRAN AND TURAN

After describing the indigenous flowering trees and shrubs, Abu-l-Fazl mentions the names of those introduced from foreign countries. 'There are also found many flowers of Iran and Turan, as the *Gul-i surkh*, the *Nargis*, the violet, the *Yasman-i kabud*, the *Susan*, the *Rayhan*, the *Ra na*, the *Zeba*, the *Shaqayiq*, the *Taj-i khurus*, the *Qalgha*, the *Nafarman*, the *Khatmi*, etc. Garden and flower beds are everywhere to be found.'¹

¹Abu-l-Fazl, *Ain-i Akbari*, pp. 87-93

FRUITS AND VEGETABLES GROWN IN INDIA DURING THE REIGN OF AKBAR

ABU-L-FAZL provides a detailed account of fruits grown in India during the reign of Akbar in the *Ain-i-Akbari*. 'His Majesty looks upon fruits as one of the greatest gifts of the Creator, and pays much attention to them,' states Abu-l-Fazl. 'The horticulturists of Iran and Turan have, therefore, settled here, and the cultivation of trees is in a flourishing state.'

'Melons and grapes have become very plentiful and excellent; and water-melons, peaches, almonds, pistachios, pomegranates, etc., are everywhere to be found. Ever since the conquest of Kabul, Qandahar, and Kashmir, loads of fruit are imported; throughout the whole year the stores of the dealers are full, and the bazars well supplied. Musk-melons come in season, in Hindustan, in the months of February-March, and are plenty in March-April. They are delicious, tender, opening, sweet-smelling, especially the kinds called *nashpati*, *babashaykhi*, *alisheri*, *alcha*, *barg-i nay*, *dud-i chiragh*, etc. They continue in season for two months longer. In the beginning of August, they come from Kashmir, and before they are out of season plenty are brought from Kabul; during the month of November they are imported by the caravans from Badakhshan, and continue to be had during December. When they are in season in Zabulistan, good ones also are obtainable in the Punjab; and in Bhakkar and its vicinity they are plentiful in season, except during the forty cold days of winter. Various kinds of grapes are here to be had from May to July, whilst the markets are stocked with Kashmir grapes during August. Eight *seers* of grapes sell in Kashmir for one *dam*, and the cost of the transport is two rupees per *man*. The Kashmiris bring them on their backs in conical baskets. From September till *Urdibihist* grapes come from Kabul together with cherries, which his Majesty calls *shahalu*, seedless pomegranates, apples, pears, quinces, peaches, apricots, *girdalus*, and *aluchas*, etc., many of which fruits grow also in Hindustan. From Samarqand even they bring melons, pears and apples.

'Whenever his Majesty wishes to take wine, opium, or *kuknar*, the servants in charge place before him stands of fruits; he eats a little, but most is distributed. The fruits are marked according to their degree of excellence; melons of the first quality are marked with a line drawn round the top; those of the second, with two lines; and so on.

SWEET FRUITS

'Mulberries and *gulars* are in season during spring; pine-apples, oranges, sugarcane, *bers*, *usiras*, *bholsaris*, *gumbhis*, *dephals* during winter; jack-

fruits, *tarkuls*, figs, melons, *lahsauras*, *karahris*, *mahuwas*, *tendus*, *pilus*, *barautas*, during summer; and mangoes, plantains, dates, *delas*, *gulas*, pomegranates, guavas, water-melons, *paniyalas*, *bangas*, *khirnis*, *piyars*, during the rains.

THE MANGO

'The Persians call this fruit *Naghzak*, as appears from a verse of Khusraw. This fruit is unrivalled in colour, smell, and taste; and some of the gourmets of Turan and Iran place it above musk-melons and grapes. In shape it resembles an apricot, or a quince, or a pear, or a melon, and weighs even one *ser* and upwards. There are green, yellow, red, variegated, sweet, and subacid mangoes. The tree looks well, especially when young; it is larger than a walnut-tree, and its leaves resemble those of the willow, but are larger. The new leaves appear soon after the fall of the old ones in autumn, and look green and yellow, orange, peach-coloured, and bright red. The flower, which opens in spring, resembles that of the vine, has a good smell, and looks very curious. About a month after the leaves have made their appearance, the fruit is sour, and is used for preserves and pickles. It improves the taste of *qalyas*, as long as the stone has not become hard. If a fruit gets injured whilst on the tree, its good smell will increase. Such mangoes are called *koyilas*. The fruit is generally taken down when unripe, and kept in a particular manner. Mangoes ripened in this manner are much finer. They mostly commence to ripen during summer, and are fit to be eaten during the rains; others commence in the rainy season, and are ripe in the beginning of winter; the latter are called *bhadiyya*. Some trees bloom and yield fruit the whole year; but this is rare. Others commence to ripen, although they look unripe; they must be quickly taken down, else the sweetness would produce worms. Mangoes are to be found everywhere in India, especially in Bengal, Gujarat, Malwa, Khandesh, and the Dekhan. They are rarer in the Panjab, where their cultivation has, however, increased since his Majesty made Lahore his capital. A young tree will bear fruit after four years. They put milk and treacle round about the tree, which makes the fruits sweeter. Some trees yield in one year a rich harvest, and less in the next one; others yield for one year no fruit at all. When many mangoes are eaten, digestion is assisted by drinking milk with the kernels of the mango stones. The kernels of old stones are subacid, and taste well; when two or three years old they are used as medicine. If a half-ripe mango, together with its stalk to a length of about two fingers, be taken from the tree, and the broken end of its stalk be closed with warm wax, and kept in butter, or honey, the fruit will retain its taste for two or three months, whilst the colour will remain even for a year.

'The jackfruit has the shape of a black-pudding, looks greenish, and is sometimes a yard (91.4 cm) long, and half a yard (45.7 cm) broad. When small, it resembles a water-melon. Its peel is full of thorns. It grows out

of the branches, the trunk, and the roots. Those that grow below the ground are sweetest. On opening you see round clusters, so viscous that the fingers stick together when you take them out. The tree looks like a nut-tree, but is somewhat bigger and has larger leaves. The flower, like the fruit, has a good smell. The fruits are also taken down when unripe. They then apply lime, etc., when the fruits will get ripe.

'The Plantain tree looks straight like a spear; the leaves come out of the trunk thick and soft, and resemble an unsewn plaited sleeve, but are much larger and wider. Out of the middle rises something looking like a spindle, of a lilac colour; this is the bud. The fruit consists of a cluster of seventy to eighty plantains. In shape they resemble small cucumbers; the peel is easily removed. As plantains are very heavy, you cannot eat many. There are various kinds of plantains. The plant is every year cut down, and a stump only is left of it; if this is not done, it will no longer bear fruit. The vulgar believe that the plantain tree yields camphor, but this is wrong; for the camphor tree, as shall be hereafter explained, is a different tree, although it has the same name. They also say that pearls originate in plantain trees—another statement upon which the light of truth does not shine.

'The *Mahuwa* tree resembles the mango tree; its wood is used for building purposes. The fruit, which is also called *Gilaunda*, yields an intoxicating liquor.

'The *Bholsiri* tree is large and handsome; the fruit has an orange colour, and resembles the jujube.

'The *Tarkul* tree and its fruit resemble the coco-nut palm and its fruit. When the stalk of a new leaf comes out of a branch, they cut off its end and hang a vessel to it to receive the outflowing juice. The vessel fills twice or three times a day. The juice is called *tari*; when fresh it is sweet; when it is allowed to stand for some time it turns subacid and is inebriating.

'The *Paniyala* fruit resembles the *Zardalu*, and its tree the lime tree; the leaves are like those of the willow. When unripe the fruit is green, and red when ripe.

'The *Gumbhi* has a stem the branches of which are like creepers; its leaves and fruits, as those of the *Kunar*, come from below the roots.

'The *Tarri* forms at the root; it grows mostly in the mountains, and weighs a *man*, more or less, when the creeper is a year old; and two, when two years old. It looks like a millstone. When older it grows larger according to the same proportion. Its leaves resemble those of the water-melon.

SOUR FRUITS

'The *Kamraks* and the *Narangis* are in season during winter; the *Ambilis*, the *Badhals*, Mountain-grapes, the *Phalsas*, and the *Labhiras* during summer;

and the *Kaits*, the *Pakars*, the *Karnas*, the *Jamans*, the *Karaundas* and the *Jhan-bhiris* during the rains.

'The fruits of Hindustan are either sweet, or subacid, or sour; each kind is numerous. Some fruits also taste well when dry; others as above described are used when cooked.

'Oranges have the colour of saffron, and the shape of quinces. They belong to the best fruits to be had in Hindustan. The tree resembles the lime tree; its flower has a weak but fine smell.

DRIED FRUITS

'Dates, Walnuts, the *Chiraunchis*, and the *Kaulgattas* are in seasons during summer, and Coco-nuts, the *Makhanas*, and the *Supyaris* during winter.

'The coco-nut is called by the Persians *Jawz-i Hindi*: the tree resembles the date tree, but is larger; its wood, however, looks better, and the leaves are larger. The tree bears fruit throughout the whole year; the fruits ripen in three months. They are also taken down when unripe and green and kept for some time. Their inside contains a cup full of milk-like juice, which tastes well, and is very often drunk in summer, mixed with sugar. When ripe, the fruit looks brown. The juice has now become solid, and gets black when mixed with butter; it is sweet and greasy. When eaten with *pan*-leaves, it makes the tongue soft and fresh. The shell is used for spoons, cups, and *ghichaks* (a kind of violin). There are nuts having four, three, two, and one, holes or eyes; each kind is said to possess certain qualities, the last being considered the best. Another kind is used for the preparation of an antidote against poison. The nuts weigh sometimes twelve *seers* and upwards. The bark of the tree is used for ropes; the large ropes used on ships are made of it.

'Dates are called in Hindi *Pind-khajur*. The tree has a short stem, rising a little above the ground, and produces from four to five hundred fruits.

'The *Supyari*, or betel nut, is called in Persian *fufal*. The tree is graceful and slender, like the cypress. The wind often bends it, so that its crown touches the ground; but it rises up again. There are various kinds. The fruit when eaten raw tastes somewhat like an almond, but gets hard when ripe. It is eaten with betel leaves.

WATER PLANTS

'The *Singhara* is a triangular fruit; its creeper grows in tanks, and the fruit is on the surface of the water. It is eaten raw or roasted.

'The *Salak* grows in tanks under the earth. They go into the water and dig it up.

'The *Pindalu* is reared on lattice work, and grows about two yards (1.83 m) high. Its leaf resembles the betel leaf; they dig up the root.

‘The *Kaseru* grows in tanks. When the water gets low, they take it out of the ground and eat it, raw or boiled.

‘The *Siyali* root is long and conical; the plant is a creeper, to whose root the fruit is attached.’¹

VEGETABLES

Abu-l-Fazl mentions the names of eighteen vegetables and the seasons in which they were grown. He states, The *surans* and the *siyatis* are in season during summer; the *palwals*, gourds, the *tura*, the *is*, the *kachalus*, the *chachindas*, the *kanduris*, the *senbs*, the *peths*, the *karilas*, the *kakuras*, and the *singharas* during the rains; and carrots, the *salaks*, the *pindalus*, and the *kaserus* during winter. The *badinjans* are to be had throughout the year.¹ Some of the vegetables mentioned by Abu-l-Fazl, which are still grown in India, are shown in Figs. 37 and 38.

¹Abu-l-Fazl, *Ain-i-Akbari*, pp. 68-76



i



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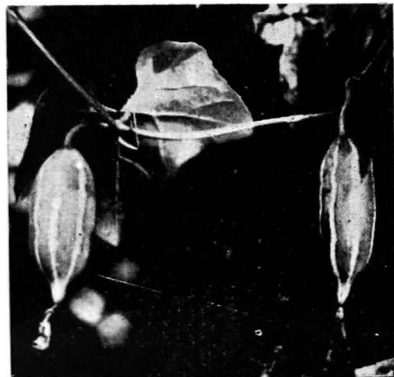
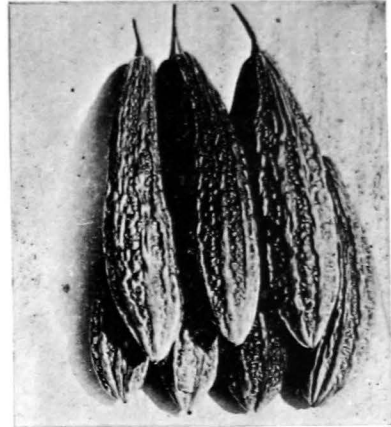


FIG. 37. Some of the vegetables grown in the reign of Akbar, mentioned in the *Ain-i-Akbari*.

i. *Surans*, *Zamin-kand* (*Amorphophallus campanulatus*), ii. *Kachalu* (*Colocasia esculenta*), iii. *Singhara* (*Trapa bispinosa*), iv. *Adrak*, ginger (*Zingiber officinale*), v. *Parval*, snake-gourd (*Trichosanthes anguina*)



i

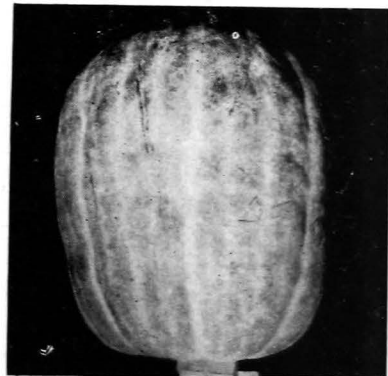


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FIG. 38. Some of the vegetables grown in the reign of Akbar mentioned in the *Ain-i-Akbari*
 i. *Baingan*, eggplant (*Solanum melongena*), ii. *Karela*, bitter-gourd (*Momordica charantia*),
 iii. *Khira*, cucumber (*Cucumis sativus*), iv. *Kaddu*, pumpkin (*Cucurbita maxima*), v. *Petha*
 (*Benincasa hispida*),
 Note the absence of cabbages and cauliflowers, which were introduced by the British
 in the eighteenth century

ANIMAL HUSBANDRY IN INDIA IN THE
SIXTEENTH CENTURY

ELEPHANTS

THE *Ain-i-Akbari* is an important source book for animal husbandry in India in the sixteenth century. It provides information on breeding and feeding of elephants, horses, mules, camels and cows. The chapter on elephants is however more detailed. It describes different kinds of elephants, the places where wild elephants were found, and how they were captured and tamed. It also describes how they were bred and fed, and what controls were evolved for the servants who looked after royal elephants.

Abu-l-Fazl states, 'Elephants are found in the Suba of Agra, in the forests of Bayawan and Narwar, as far as Berar, in the Suba of Allahabad, in the confines of Pannah (Bhath), Ghora, and Ratanpur, Nandanpur, Sirguja, and Bastar; in the Suba of Malwa, in Handiyah, Uchhod, Chanderi, Santwas, Bijagarh, Raisin, Hoshangabad, Garha, Haryagarh; in the Suba of Bihar, in the neighbourhood of Rahtas and Jharkhand; and in the Suba of Bengal, in Orisa, and Satgaw. The elephants from Pannah are the best. In the *Babur-nama*, Kalpi is mentioned as the place known for its elephants' (Fig. 39).

'A herd of elephants is called in Hindi *sahn*. They vary in number; sometimes a herd amounts to a thousand elephants. Wild elephants are very cautious. In winter and summer, they select a proper place, and break down a whole forest near their sleeping place. For the sake of pleasure, or for food and drink, they often travel over great distances. On the journey one runs far in front of the others, like a sentinel; a young female is generally selected for this purpose. When they go to sleep they send out to the four sides of the sleeping-place pickets of four female elephants, which relieve each other.

'Elephants will lift up their young ones, for three or four days after their birth, with their trunks and put them on their backs, or lay them over their tusks. They also prepare medicines for the females when they are sick or in labour pains and crowd round about them. When some of them get caught, the female elephants break through the nets, and pull down the elephant-drivers. And when a young elephant falls into a snare they hide themselves in an ambush, go at night to the place where the young one is, set it at liberty, and trample the hunters to death. Sometimes its mother slowly approaches alone, and frees it in some clever way. I have heard the following story from his Majesty: "Once a wild young one had fallen into a pit. As night had approached, we did not care to pull it out immediately,

and left it; but when we came next morning near the place, we saw that some wild elephants had filled the pit with broken logs and grass, and thus pulled out the young one." Again, "Once a female elephant played us a trick. She feigned to be dead. We passed her, and went onwards; but when at night we returned, we saw no trace left of her."

"There was once an elephant in the Imperial stables named *Ayaz*. For some reason it had got offended with the driver, and was for ever watching for an opportunity. Once at night, it found him asleep. It got hold of a long piece of wood, managed to pull off with it the man's turban, seized him by the hair, and tore him asunder.

ELEPHANT-CATCHING

1. '*Kheda*. The hunters are both on horseback and on foot. They go during summer to the grazing places of this wonderful animal, and commence to beat drums and blow pipes, the noise of which makes the elephants quite frightened. They commence to rush about, till from their heaviness and exertions no strength is left in them. They are then sure to run under a tree for shade, when some experienced hunters throw a rope made of hemp or bark round their feet or necks, and thus tie them to the trees. They are afterwards led off in company with some trained elephants, and gradually get tame. One-fourth of the value of an elephant thus caught is given to the hunters as wages. *Kheda* is illustrated in a painting from Jaipur in which how elephants were caught in the Terai is shown (Fig. 40).

2. '*Chor kheda*. They take a tame female elephant to the grazing place of wild elephants, the driver stretching himself on the back of the elephant, without moving or giving any other sign of his presence. The elephants then commence to fight, when the driver manages to secure one by throwing a rope round the foot.

3. '*Gād*. A deep pit is constructed in a place frequented by elephants, which is covered up with grass. As soon as the elephants come near it the hunters from their ambush commence to make a great noise. The elephants get confused, and losing their habitual cautiousness, they fall rapidly and noisily into the hole. They are then starved and kept without water, when they soon get tame.

4. '*Bār*. They dig a ditch round the resting-place of elephants, leaving only one road open, before which they put up a door, which is fastened with ropes. The door is left open, but closes when the rope is cut. The hunters then put both inside and outside the door such food as elephants like. The elephants eat it up greedily; the voraciousness makes them forget all cautiousness, and without fear they enter at the door. A fearless hunter who has been lying concealed then cuts the rope, and the door closes. The elephants start up, and in their fury try to break the door. They are all in commotion. The hunters then kindle fires and make much noise.

The elephants run about till they get tired, and no strength is left in them. Tame females are then brought to the place, by whose means the wild elephants are caught. They soon get tame.

From times of old, people have enjoyed elephant hunts by any of the above modes; His Majesty has invented a new manner, which admits of remarkable finesse. A wild herd of elephants is surrounded on three sides by drivers, one side alone being left open. At it several female elephants are stationed. From all sides, male elephants will approach to cover the females. The latter then go gradually into an enclosure, whither the males follow.

NATURE AND TEMPERAMENT OF ELEPHANTS

'This wonderful animal is in bulk and strength like a mountain; and in courage and ferocity like a lion. It adds materially to the pomp of a king and to the success of a conqueror, and is of the greatest use for the army. Experienced men of Hindustan put the value of a good elephant equal to five hundred horses; and they believe that, when guided by a few bold men armed with matchlocks, such an elephant alone is worth double that number. In vehemence on one side, and submissiveness to the reins on the other, the elephant is like an Arab, whilst in point of obedience and attentiveness to even the slightest signs it resembles an intelligent human being. In restiveness when full-blooded, and in vindictiveness, it surpasses man. An elephant never hurts the female, though she be the cause of his captivity; he never will fight with young elephants, nor does he think it proper to punish them. From a sense of gratitude, he does his keepers no harm, nor will he throw dust over his body when he is mounted, though he often does so at other times. Once an elephant during the rutting-season was fighting with another. When he was in the height of excitement a small elephant came in his way; he kindly lifted up the small one with his trunk, set him aside, and then renewed the combat. If a male elephant breaks loose during the rutting-season in order to have his own way, few people have the courage to approach him; and some bold and experienced man will have to get on a female elephant, and try to get near him and tie a rope round his foot. Female elephants, when mourning the loss of a young one, will often abstain from food and drink; they sometimes even die from grief.

'The elephant can be taught various feats. He learns to remember such melodies as can only be remembered by people acquainted with music; he will move his limbs to keep time, and exhibit his skill in various ways. He will shoot off an arrow from a bow, discharge a matchlock, and will learn to pick up things that have been dropped and hand them over to the keeper. Sometimes they get grain to eat wrapped up in hay; this they hide in the side of their mouth, and give it back to the keeper, when they are alone with him.

'The teats of a female elephant, and the womb, resemble those of a woman. The tongue is round like that of a parrot. The testicles are not visible. Elephants frequently with their trunks take water out of their stomachs, and sprinkle themselves with it. Such water has no offensive smell. They also take out of their stomach grass on the second day, without its having undergone any change.

'The price of an elephant varies from a lak to one hundred rupees; elephants worth five thousand and ten thousand rupees are pretty common.

KINDS OF ELEPHANT

'There are four kinds of elephants. 1. *Bhaddar*. It is well proportioned, has an erect head, a broad chest, large ears, a long tail, and is bold, and can bear fatigue. They take out of his forehead an excrescence resembling a large pearl, which they call in Hindi *Gaj manik*. Many properties are ascribed to it. 2. *Mand*. It is black, has yellow eyes, a uniformly sized belly, a long penis, and is wild and ungovernable. 3. *Mirg*. It has a whitish skin with black spots; the colour of its eyes is a mixture of red, yellow, black, and white. 4. *Mir*. It has a small head, and obeys readily. It gets frightened when it thunders.

'From a mixture of these four kinds are formed others of different names and properties. The colour of the skin of elephants is threefold; white, black, grey. Again, according to the threefold division of the dispositions assigned by the Hindus to the mind, namely, *sat* (benevolence), *raj* (love of sensual enjoyment), and *tam* (irascibility), elephants are divided into three classes. First, such in which *sat* predominates. They are well proportioned, good-looking, eat moderately, are very submissive, do not care for intercourse with the female, and live to a very old age. Secondly, such in whose disposition *raj* prevails. They are savage-looking, and proud, bold, ungovernable, and voracious. Lastly, such as are full of *tam*. They are self-willed, destructive, and given to sleep and voraciousness.

'The Hindi language has several words for an elephant, as *hasti*, *gaj*, *pil*, *kathi*, etc. Under the hands of an experienced keeper it will much improve, so that its value in a short time may rise from one hundred to ten thousand rupees.

'The time of gestation of the female is generally eighteen lunar months. For these months the fluida germinalia intermix in the womb of the female; when agitated the mass looks like quicksilver. Towards the fifth month the fluida settle and get gelatinous. In the seventh month, they get more solid, and draw to perfection towards the ninth month. In the eleventh, the outline of a body is visible; and in the twelfth, the veins, bones, hoofs, and hairs make their appearance. In the thirteenth month the genitalia become distinguishable.

'Female elephants have often for twelve days a red discharge, after which gestation commences. During that period they look startled, sprinkle themselves with water and earth, keep ears and tail upwards, and go rarely away from the male. They will rub themselves against the male, bend their heads below his tusks, smell at his urine and dung, and cannot bear to see another female near him. Sometimes, however, a female shows aversion to intercourse with the male; and must be forced to copulate, when other female elephants, at hearing her noise, will come to her rescue.

'In former times, people did not breed elephants, and thought it unlucky; but by the command of His Majesty, they now breed a very superior class of elephants, which has removed the old prejudice in the minds of men. A female elephant has generally one young one, but sometimes two. For five years the young ones content themselves with the milk of the mother; after that period they commence to eat herbs. In this state they are called *bāl*. When ten years old they are named *put*; when twenty years old *bikka*; when thirty years old, *kalba*. In fact, the animal changes appearance every year, and then gets a new name. When sixty years old, the elephant is full grown. The skull then looks like two halves of a ball, whilst the ears look like winnowing fans. White eyes mixed with yellow, black and red, are looked upon as a sign of excellence. The forehead must be flat without swellings or wrinkles. The trunk is the nose of the animal, and is so long as to touch the ground. With it, it takes up the food and puts it into the mouth; similarly, it sucks up water with it, and then throws it into the stomach. It has eighteen teeth; sixteen of them are inside the mouth, eight above and eight below, and two are the tusks outside. The latter are one and more yards long (91 cm or more), round, shining, very strong, white, or sometimes reddish and straight, the end slightly bent upwards. Some elephants have four tusks. With a view to usefulness as also to ornament, they cut off the top of the tusks, which grow again. With some elephants they have to cut the tusks annually; with others after two or three years; but they do not like to cut them when an elephant is ten and eighty years old. An elephant is perfect when it is eight *dast* high, nine *dast* long, and ten *dast* round the belly, and along the back, Again, nine limbs ought to touch the ground, namely, the fore feet, the hind feet, the trunk, the tusks, the penis, the tail. White spots on the forehead are considered lucky, whilst a thick neck is looked upon as a sign of beauty. Long hairs on and about the ears point to good origin.

'Some elephants rut in winter, some in summer, some in the rains. They are then very fierce, they pull down houses, throw down stone walls, and will lift up with their trunks a horse and its rider. But elephants differ very much in the amount of fierceness and boldness.

'When they are hot, a blackish discharge exudes from the soft parts between the ears and the temples, which has a most offensive smell; it is

sometimes whitish, mixed with red. They say that elephants have twelve holes in those soft parts, which likewise discharge the offensive fluid. The discharge is abundant in lively animals, but trickles drop by drop in slow ones. As soon as the discharge stops, the elephant gets fierce and looks grand; in this state he gets the name of *Tafti* or *Sarhari*. When the above discharge exudes from a place a little higher than the soft parts between the ears and the temples, the elephant is called *Singhadhal*; and when the fluid trickles from all three places, *Tal-jor*. When in heat, elephants get attached to particular living creatures, as men or horses; but some elephants to any animal.

'If the female during gestation gets stronger, the foetus is sure to be a male; but if she gets weak it is the sign of a female. During the sixteenth month the formation becomes still more perfect, and the life of the foetus becomes quite distinct. In the seventeenth month there is every chance of a premature birth on account of the efforts made by the foetus to move, till, in the eighteenth month, the young one is born.

'Elephant drivers have a drug which causes an artificial heat; but it often endangers the life of the beast. The noise of battle makes some superior elephants just as fierce as at the rutting-season; even a sudden start may have such an effect. Thus His Majesty's elephant *Gajmukta*: he gets brisk as soon as he hears the sound of the Imperial drum, and gets the above-mentioned discharge. This peculiar heat generally makes its first appearance when elephants have reached the age of thirty; sometimes, however, earlier, at an age of twenty-five. Sometimes the heat lasts for years, and some of the Imperial elephants have continued for five years in an uninterrupted alacrity. But it is mostly male elephants that get in heat. They then commence to throw up earth, and run after a female, or roll about in mud, and daub themselves all over with dirt. When in heat they are very irritable, and yawn a great deal, though they sleep but little. At last they even discontinue eating, and dislike the foot-chain: they try to get loose, and behave noisily.

'The elephant, like man, lives to an age of one hundred and twenty years.'

FOOD

Akbar laid down regulations fixing ration for different kinds of elephants varying from 2 *mans* and 24 *seers* of grains and grass for *mast* elephants, to 1 *m* and 4 *s* for small ones. The *Khasa* elephants which were used by Akbar were, in addition to above, given sugar, *ghi*, rice with chillies, cloves, etc. In the sugarcane season each elephant was given 300 sugarcanes.

SERVANTS OF THE ELEPHANT STABLES

Mast elephants. 'There are five and a half servants for each, viz. a

Mahawat, who sits on the neck of the animal and directs its movements. He must be acquainted with its good and bad properties, and thus contribute to its usefulness. He gets 200 *dams* per month; but if the elephant be *khutahar*, i.e. wicked and addicted to pulling down the driver, he gets 220 *d*. Secondly, a *Bhoi*, who sits behind, upon the rump of the elephant, and assists in battle and in quickening the speed of the animal; but he often performs the duties of the *Mahawat*. His monthly pay is 110 *d*. Thirdly, the *Meths*, of whom there are three and one-half, or only three in case of small elephants. A *Meth* fetches fodder, and assists in caparisoning the elephant. *Meths* of all classes get on the march four *dams* daily, and at other times three and a half.

‘In order to prevent laziness and to ensure attentiveness, His Majesty, has fixed a list of fines. On the death of a male or a female *khasa* elephant the *Bhois* are fined three months’ wages. If any part of the harness is lost, the *Bhois* and *Meths* are fined two-thirds of the value of the article; but in the case of a saddlecloth, the full price. When a female elephant dies from starvation, or through want of care, the *Bhois* have to pay the cost price of the animal.

‘Two experienced men are monthly dispatched to inquire into the fatness or leanness of the *khasa* elephants. If elephants are found by them out of flesh to the extent of a quarter, according to the scale fixed by the *Pagoshi* Regulation the grandees in charge are fined, and the *Bhois* are likewise liable to lose a month’s wages. In the case of *halqa* elephants, *Ahadis* are told off to examine them, and submit a report to His Majesty. If an elephant dies, the *Mahawat* and the *Bhoi* are fined three months’ wages. If part of an elephant’s tusk is broken, and the injury reaches as far as the *kali*—this is a place at the root of the tusks, which on being injured is apt to fester, when the tusks get hollow and become useless—a fine amounting to one-eighth of the elephant is exacted, the *Darogha* paying two-thirds, and the *Fawjdar* one-third. Should the injury not reach as far as the *kali*, the fine is only one-half of the former. But, at present, a fine of one per cent has become usual; in the case of *khasa* elephants, however, such punishment is inflicted as His Majesty may please to direct.¹

¹Abu-l-Fazl, *Ain-i-Akbari*, pp. 123-132, 295-296

CHAPTER 27

ANIMAL HUSBANDRY IN INDIA IN THE SIXTEENTH AND SEVENTEENTH CENTURIES

HORSES, MULES, ASSES, CAMELS, COWS, BUFFALOES, GOATS AND SHEEP

Horses were in great demand in the Mughal period on account of their speed and usefulness in warfare. They were brought to India by merchants from Iraq, Arabia, Turkey, Turkestan, Iran, Central Asia and Tibet. Akbar, who was fond of horses, had twelve thousand in his stables.

Horses in royal stables were classified into two categories: *khasa*, those that were not *khasa*. There were six stables of the *khasa* horses, each containing forty choice horses of Arabia and Persia for the Emperor's use.

The second-class horses were of three kinds, viz. *si-aspi*, *bist-aspi*, *dah-aspi*, i.e. belonging to the stables of thirty, twenty and ten.

BREEDING

Much attention was given to the breeding of horses in Mughal India. 'Skilful, experienced men have paid much attention to the breeding of this sensible animal, many of whose habits resemble those of man,' states Abu-l-Fazl, 'and after a short time Hindustan ranked higher in this respect than Arabia, whilst many Indian horses cannot be distinguished from the Arabian or from the *Iraqi* breed. There are fine horses bred in every part of the country; but those of Kachh excel, being equal to the Arabian. It is said that a long time ago an Arab ship was wrecked and driven to the shore of Kachh; and that it had seven choice horses, from which, according to the general belief, the breed of that country originated. In the Panjab, horses are bred resembling Iraqis, especially between the Indus and the Jhelum; they go by the name of Sanuji; so also in the district of Pati Haybatpur, Bajwaral, Tihara, in the Suba of Agra, Mewat, and in the Suba of Ajmer, where the horses have the name of *pachwariya*. In the northern mountainous district of Hindustan, a kind of small but strong horse is bred, which is called *gut*; and in the confine of Bengal, near Cooch Bihar, another kind of horses occurs, which rank between the *gut* and the Turkish horses, and are called *tanghan*; they are strong and powerful.'

FEED AND FODDER

Food and fodder for royal horses was standardized. Abu-l-Fazl states, 'In winter, they give boiled peas or vetch; in summer, grain. The daily allowance includes two *ser*s of flour and one and a half *ser*s of sugar. In winter, before the horse gets fresh grass, they give it half a *ser* of *ghi*. Two



FIG. 39. 'Elephant is one of the distinctive animals of India. Indians call it *hathi*. It is found in the province of Kalpi.' An illustration to the *Babur-nama*, 1597. (Courtesy: National Museum, New Delhi)

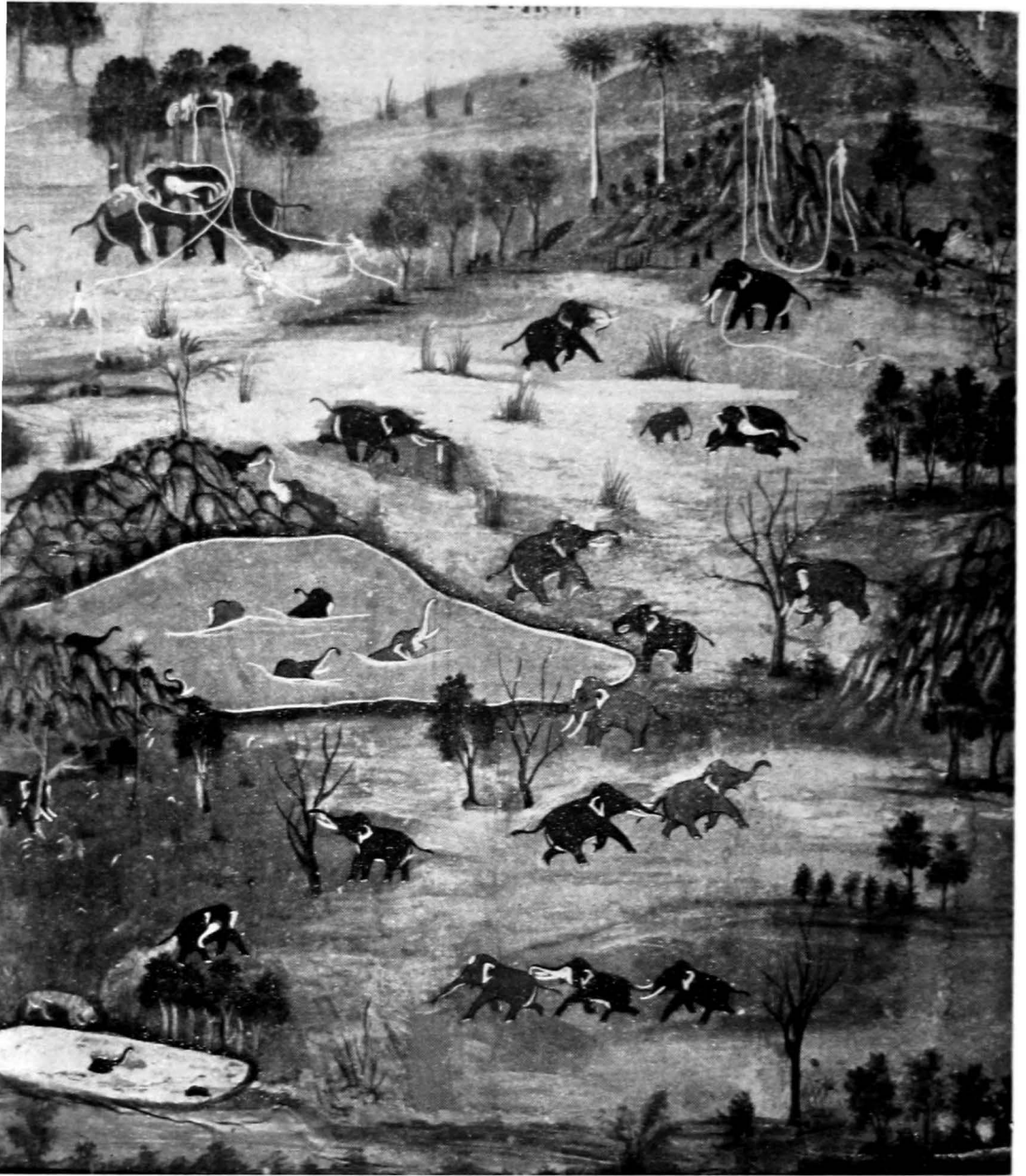


FIG. 40. Catching elephants in Terai. Frightened by the sound of drums and pipes, the elephants rush about till they are tired and rest under a tree. Hunters throw ropes round their feet and necks and tie them to trees. Jaipur Artist: Lal, 1750.

(Courtesy: Maharaja of Jaipur Museum)

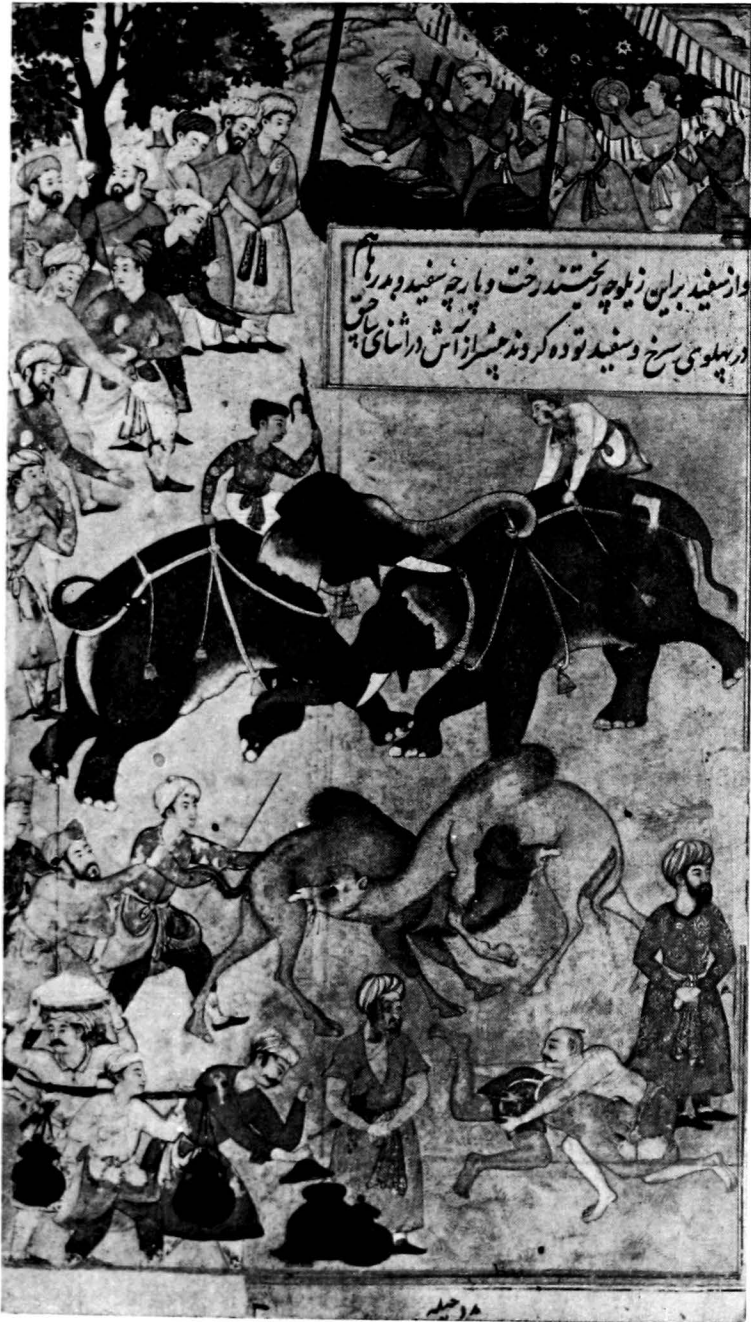


FIG. 41. A Mughal painting showing elephants and camels fighting and men wrestling. c. 1600.

(Courtesy: Victoria and Albert Museum, London)

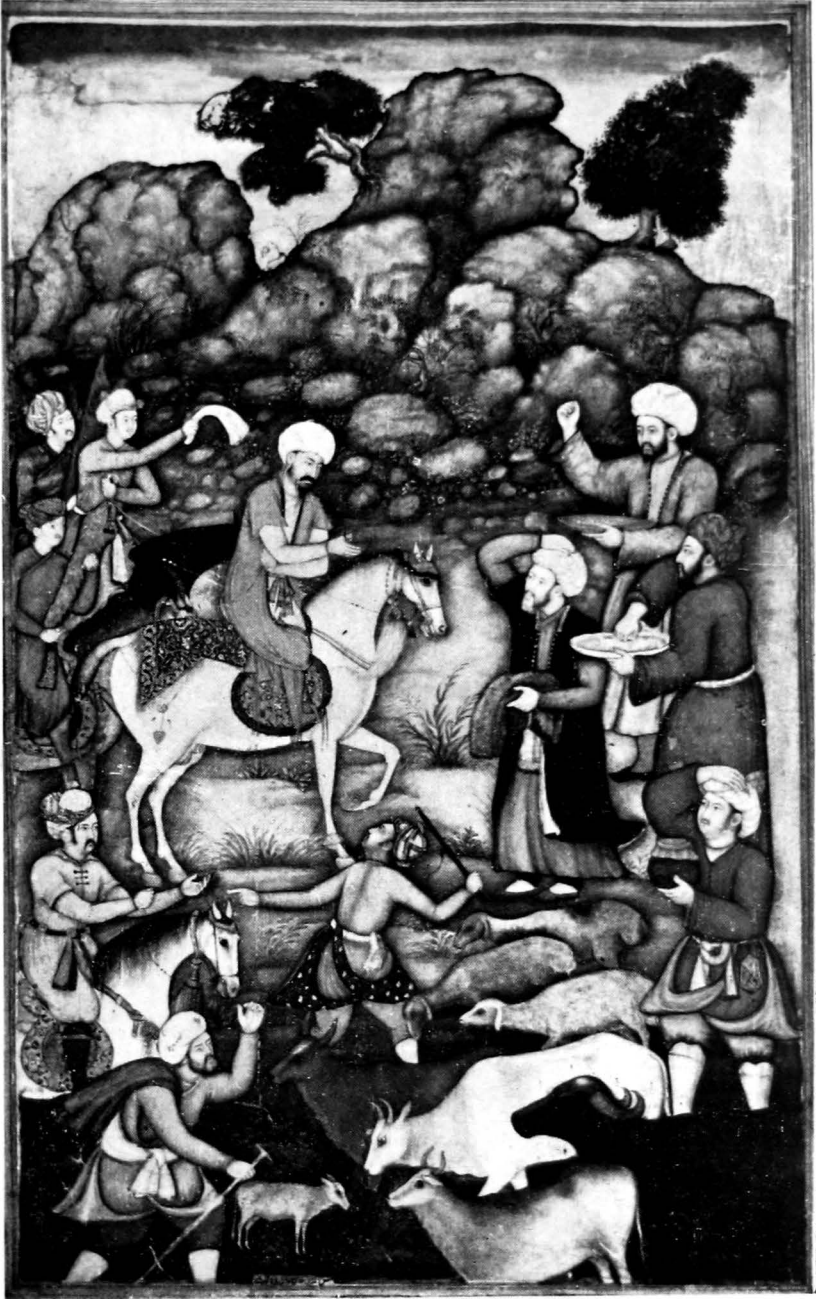


FIG. 42. Hazaras paying tribute to Babur. It includes sheep, a buffalo and *gaini* cows. An illustration to the *Babur-nama*, 1597.

(Courtesy: National Museum, New Delhi)

dams are daily allowed for hay; but hay is not given when fresh grass is available. About three *bighas* of land will yield sufficient fodder for a horse. When instead of sugar the horses get molasses, they stop the *ghi*; and when the season of fresh grass comes, they give no grain for the first three days, but allow afterwards six *fers* of grain and two *fers* of molasses *per diem*. In other Iraqi and Turki stables, they give seven and a half *fers* of grain. During the cool six months of the year, they give the grain boiled, an allowance of one *dam* being given for boiling one *man* of it. The horses also get once a week a quarter *ser* of salt. When *ghi* and fresh grass are given, each horse, provided its price be above thirty-one *muhurs*, gets also one *ser* of sugar; whilst such as are worth from twenty-one to thirty *muhurs* only get half a *ser*. Horses of less value get no sugar at all. Before green grass is given, horses of a value from twenty-one to upwards of one hundred *muhurs* get one *man* and ten *fers* of *ghi*; such as are worth from eleven to twenty *muhurs* thirty *fers*; but horses up to ten *muhurs* get neither *ghi*, brown sugar, nor green oats. Salt is given at the daily rate one-fiftieth of a *dam*, though it is mostly given in a lump. Iraqi and Turki horses which belong to the court are daily allowed two *d.* for grass; but such of them as are in the country only one and a half.'

MULES

Mules were used for transport and riding. They were imported from Arabia and Iraq. Their life-span is mentioned as fifty years. In India, mules were bred in Pakhali, the country between Attock and Kashmir. Superior mules were sold at Rs 1,000 per head.

Narrating the good qualities of mules and their breeding, Abu-I-Fazl states, 'The mule possesses the strength of a horse and the patience of an ass, and though it has not the intelligence of the former it has not the stupidity of the latter. It never forgets the road which it has once travelled. Hence it is liked by His Majesty, and its breeding is encouraged. It is the best animal for carrying burdens and travelling over uneven ground, and it has a very soft step. People generally believe that the male ass couples with a mare, but the opposite connexion also is known to take place. The mule resembles its dam. His Majesty had a young ass coupled with a mare, and they produced a very fine mule.'

FEED AND FODDER

The daily allowance of feed and fodder for mules was as follows: 'Such mules as were not country-bred were given 6 *s* of grain, and 2 *d* for grass; otherwise, only 1½ *d*. Country-bred mules were given 4 *s* of grain, and 1½ *d* of grass, when at court; otherwise, 1 *d* for grass. Each mule was allowed every week 3½ *jitals* for salt.

ASSES

Asses were employed for carrying loads and for fetching water. They were given three *ser*s of grain and grass per day.

CAMELS

On account of their usefulness as beasts of burden and their meagre food requirements, camels were in great demand for the Mughal army. Camels were bred in areas now in Rajasthan, Haryana and Sind. Abu-l-Fazl states, 'Camels are numerous near Ajmer, Jodhpur, Nagor, Bikaner, Jaisalmer, Bhatinda, and Bhatnir; the best are bred in the Suba of Gujarat, near Kachh. But in Sind is the greatest abundance; many inhabitants own ten thousand camels and upwards. The swiftest camels are those of Ajmer, the best for burden are bred in Thatha.' Their life-span is mentioned as about twenty-four years.

BREEDING

Camels are of two types, the two-humped camels from Central Asia, and one-humped from India. Describing their breeding, Abu-l-Fazl narrates, 'In every country they get hot in winter and couple. The male of two humps goes by the name of Buchur. The young ones of camels are called *nar* (male) and *maya* (female), as the case may be; but His Majesty has given to the *nar* the name of *bughdi*, and to the female that of *jammaza*. The *bughdi* is the better for carrying burdens and for fighting; the *jammaza* excels in swiftness. The Indian camel called *lok* and its female come close to them in swiftness, and even surpass them. The offspring of a *bughur* and a *jammaza* goes by the name of *ghurd*; the female is called *maya ghurd*. If a *bughdi* or a *lok* couples with a *jammaza*, the young one is called *bughdi* or *lok* respectively. But if a *bughdi* or a *lok* couples with an *arwana*, the young male is named after its sire and the young female after its dam. The *lok* is considered superior to the *ghurd* and the *maya ghurd*.'

FOOD

As regards food given to the camels, *Ain-i-Akbari* mentions, 'The following is the allowance of such *bughdis* as are to carry burdens. At the age of two and a half or three years, when they are taken from the herd of the stud dams, a *bughdi* gets 2 *s* of grain; when three and a half to four years old, 5 *s*; up to seven years, 9 *s*; at eight years, 10 *s*. The same rule applies to *bughurs*. Similarly in the case of *jammazas*, *ghurds*, *mayah ghurds*, and *loks*, up to four years of age; but from the fourth to the seventh year, they get 7 *s*, and at the age of eight years, 7½ *s*, at the rate of 28 *dams* per *ser*. As the *ser* has now 30 *dams*, a corresponding deduction is made in the allowance. When *bughdis* are in heat, they eat less. Hence also concession is made, if they get lean, to the extent of 10 *s*; and when the rutting season is over, the Daroghas give

out a corresponding extra allowance of grain to make up for the former deficiency.

'At court, camels are given grass by the government for eight months. Camels on duty inside the town are daily allowed grass at the rate of 2 *d* per head; and those outside the town, 1½ *d*. During the four rainy months, and on the march, no allowance is given, the drivers taking the camels to meadows to graze.'

OILING CAMELS

Oil was annually allowed for anointing camels and injecting into their nostrils. For each *bughdi* and *jammaza* 3¾ *ser*s of sesame oil was annually allowed, viz. three *ser*s for anointing, and ¼ *ser* for injection into the nose. So also ¾ *s* of brimstone, and 66 *s* of butter-milk. For other kinds of camels the allowance was ⅝ *s* of brimstone, 6½ *s* of butter-milk, and ¾ *s* of grease for injecting into the nose-holes.

CAMEL FIGHTS

Apart from wrestling, elephant and camel fights were popular pastimes. Abu-l-Fazl states, 'From a regard to the dignity of his court, and the diversion of others, His Majesty orders camel-fights, for which purpose several choice animals are always kept in readiness. The best of these *khasa* camels, which is named *Shahpasand*, is a country-bred, twelve years old; it overcomes all its antagonists, and exhibits in the manner in which it stoops down or gets up every finesse of the art of wrestling.' In a Mughal painting relating to the reign of Akbar, elephants, camels and men are shown wrestling. While elephants and men are trying holds on each other, the camels are viciously biting each other. To keep up their spirits drums are being lustily beaten, cymbals are clanged and a trumpet blown (Fig. 41).

COWS AND BUFFALOES

'Throughout the happy regions of Hindustan, the cow is considered auspicious, and held in great veneration; for by means of this animal, tillage is carried on, the sustenance of life is rendered possible, and the table of the inhabitant is filled with milk, butter-milk, and butter,' states Abu-l-Fazl. 'It is capable of carrying burdens and drawing wheeled carriages, and thus becomes an excellent assistant for the three branches of the government.'

'Though every part of the empire produces cattle of various kinds, those of Gujarat are the best.' The reference is to *Kankrej* breed (Fig. 41). Sometimes a pair of them are sold at 100 *muhurs*. They will travel 80 *kos* (120 miles) in 24 hours, and surpass even swift horses. Nor do they dung whilst running. The usual price is 20 and 10 *muhurs*. Good cattle are also found in Bengal and the Dakhin. They kneel down at the time of being loaded. The cows give upwards of half a *man* of milk. In the pro-

vince of Dehli again, cows are not worth more than 10 rupees. His Majesty once bought a pair of cows for two lacs of *dams* (5,000 rupees).

'A cow will live to the age of twenty-five.

'From his knowledge of the wonderful properties of the cow, His Majesty pays much attention to the improvement of cattle. He divided them into classes, and committed each to the charge of a merciful keeper. One hundred choice cattle were selected as *khasa* and called *kotal*. They are kept in readiness for any service, and forty of them are taken unladen on hunting expeditions. Fifty-one others nearly as good are called half-*kotal*, and fifty-one more, quarter-*kotal*. Any deficiency in the first class is made up from the second, and that of the middle from the third. But these three form the cow stables for His Majesty's use.

'There is also a species of oxen called *gaini*, small, like *gut*-horses, but very beautiful,' states Abu-l-Fazl. *Gaini* cows are shown in a painting illustrating an anecdote from the *Babur-nama* in which Babur on horse-back is receiving tribute in the form of live-stock from the Hazaras (Fig. 42).

FEED AND FODDER

'Every head of the first *khasa* class was allowed daily $6\frac{1}{2}$ *s* of grain, and $1\frac{1}{2}$ *d* of grass. The whole stable got daily 1 *man* 19 *s* of molasses, which was distributed by the Darogha. Cattle of the remaining *khasa* classes got daily 6 *s* of gram and grass, but no molasses. The oxen used for travelling carriages got 6 *s* of grain, and grass. First-class *gainis* got 3 *s* of grain, and 1 *d* of grass at court, otherwise only $\frac{3}{4}$ *d*.

BUFFALOES

'A male buffalo (called *arna*) got 8 *s* of wheat flour boiled, 2 *s* of *ghi*, $\frac{1}{2}$ *s* of molasses, $1\frac{1}{2}$ *s* of grain, and 2 *d* of grass. Abu-l-Fazl mentions, 'This animal, when young, fights astonishingly, and will tear a lion to pieces. When this peculiar strength is gone, it reaches the second stage, and is used for carrying water. It then gets 8 *s* of grain, and 2 *d* for grass. Female buffaloes used for carrying water got 6 *s* of grain and 2 *d* for grass.

'The milch-cows, and buffaloes were given grain in proportion to the quantity of milk they gave. A cow gave daily from 1 to 15 *ser*s of milk, and a buffalo from 2 to 30 *ser*s. The buffaloes of the Panjab were the best in this respect. As soon as the quantity of milk given by each cow had been ascertained, there was demanded two *dams* weight of *ghi* for every *ser* of milk.

SERVANTS EMPLOYED IN THE COW STABLES

'In the *khasa* stables, one man was appointed to look after four head of

Note: *s* is abbreviation of *ser* or *seer*; *d* is abbreviation of *dam*; *man* is maund in English.



FIG. 43. Kankrej bullocks are fast like horses. They were used for hauling supplies in the Mughal army.



FIG. 44. Sketches of goats and a Markhor. Mughal, 17th century.
(Collection of M. Demotte, Paris)

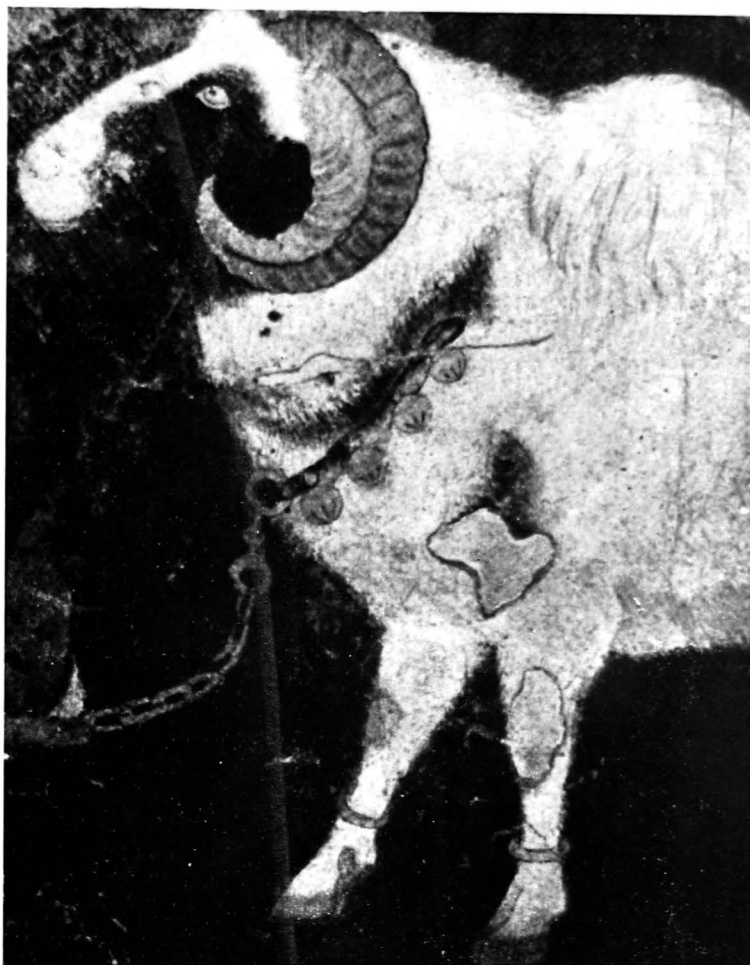


FIG. 45. A ram of Marwari breed of sheep, possibly by Mansur. Mughal, 17th century.

(Courtesy: Museum of Fine Arts, Boston)

cattle. Eighteen such keepers in the first stable got 5 *d per diem*, and the remaining keepers, 4 *d*.

'If a horn of an ox was broken, or the animal got blind, the Darogha was fined one-fourth of the price, or even more, according to the extent of the injury.'¹

GOATS

Goats were kept all over the country. Large herds were owned by nomadic shepherds who lived in the arid areas, and considerable number were maintained by individual families of landless people, who depended upon them for their milk supply. Kidding twice in fourteen months, goats had high fertility that ensured their popularity among rural people. Goats provided meat and skins. Goats' meat was popular with the Hindus who had aversion for beef.

Though the majority of goats were non-descript, there were some outstanding breeds reared in certain areas. We get an idea of the breeds prevalent in Mughal India from a painting which shows a Markhor and five different breeds of goats (Fig. 44). There were white-haired Himalayan goats kept by nomads. There were small short-haired Barbari goats with erect horns. White small-legged Surti goats were popular in Gujarat. The Bantam Bengal goats adapted to meagre feeding were found in the eastern region.

SHEEP

During the Mughal rule, large parts of the country were pastoral, and rearing of sheep was the occupation of many people in the Himalayas, Central India, Rajasthan and north Gujarat. The flocks in the arid areas of Punjab, Rajasthan and Gujarat put up remarkably with long treks and recurrent droughts. The main breeds were long-eared Lohi, brown-headed Bikaneri and black-faced Marwari yielding white wool. A ram of Marwari breed painted by the artist Mansur shows the care bestowed by its owner, who had tied bells around its neck and also provided it with anklets (Fig. 45).

Wool was mainly provided by sheep from Kashmir and Rajasthan in Mughal India. Akbar promoted the wool industry, particularly that concerned with manufacture of shawls and carpets. The '*tus*' animals supplied fine wool of red, black and white colours. Shawls made of it were famous for their lightness, warmth and softness. In the early days of Akbar's reign shawls and some other costly woollens came from Kashmir, but on account of Akbar's patronage these began to be manufactured in the Punjab. In Lahore alone more than a thousand workshops were established.

¹Abu-l-Fazal, *Ain-i-Akbari*, pp. 140-142, 151-161

CHAPTER 28

JAHANGIR, THE NATURALIST

PELSAERT'S ACCOUNT OF CITY OF AGRA

JAHANGIR'S OBSERVATIONS ON BIRDS AND ANIMALS

INTRODUCTION OF THE TURKEY (*MELEAGRIS GALLOPAVO*) IN INDIA

RAVAGES OF PLAGUE, 1616-1624

JAHANGIR was enthroned on 3 November 1605 at Agra. In April 1606 he suppressed a rebellion of his son Khusru, who on account of his gentleness and good looks was popular among the common people. In 1607 Jahangir sent his foster-brother Qutb-ud-din Koka to suppress Ali Quli surnamed Sher Afghan, who had a *jagir* in Burdwan. He was suspected of complicity with the Afghan rebels in Bengal. In an affray Sher Afghan was killed and his widow Mihr-un-Nisa was brought to court. Thus the real objective of Koka's mission was achieved. In 1611 Jahangir married her and gave her the name of Nur Jahan. Her father was given the title of Itimad-ud-Daulah and her brother Asaf Khan became the leading noble of the court.

Jahangir was a strange compound of opposites. While he claimed to be just, he was also capricious. While he had good sense he could also be childish. 'Wilful, indolent, and self-indulgent, he was too lazy and indifferent to be either actively good or powerfully evil,' observes Lane-Pool. In his last years he became a drunkard and an opium addict. He combined hedonism with cruelty and had no compunction in destroying his enemies by throwing them before *mast* elephants. He was also of a romantic temperament. In his early youth he fell in love with Sharf-un-Nisa, a beautiful slave girl, who is known to posterity as Anarkali or pomegranate bud, and after whom the main shopping centre of Lahore is named.

THE CITY OF AGRA

Agra was the capital of Mughal India during the reign of Jahangir. A graphic account of the city of Agra has been provided by a Dutchman, Francisco Pelsaert, in his report entitled *Remonstrantie*, written in 1626. Pelsaert was employed as a factor by the Dutch East India Company at Agra, which was the centre of indigo trade. This report sums up his experience of seven years' stay at Agra. Pelsaert wrote, 'The city of Agra is situated in 28° 45' latitude: The city is exceedingly large, but decayed, open land, unwalled. The streets and houses are built without any regular plan. There are, indeed, many palaces belonging to great princes and lords, but they are hidden away in alleys and corners. This is due to the sudden growth of the city, which was a mere village lying in the jurisdiction of Bayana, until King Akbar chose it for his residence in the year 1566, and



FIG. 46. Jahangir hunting a blue bull (*nilgai*). Mughal, c. 1610.
 (Courtesy: Indian Museum, Calcutta)

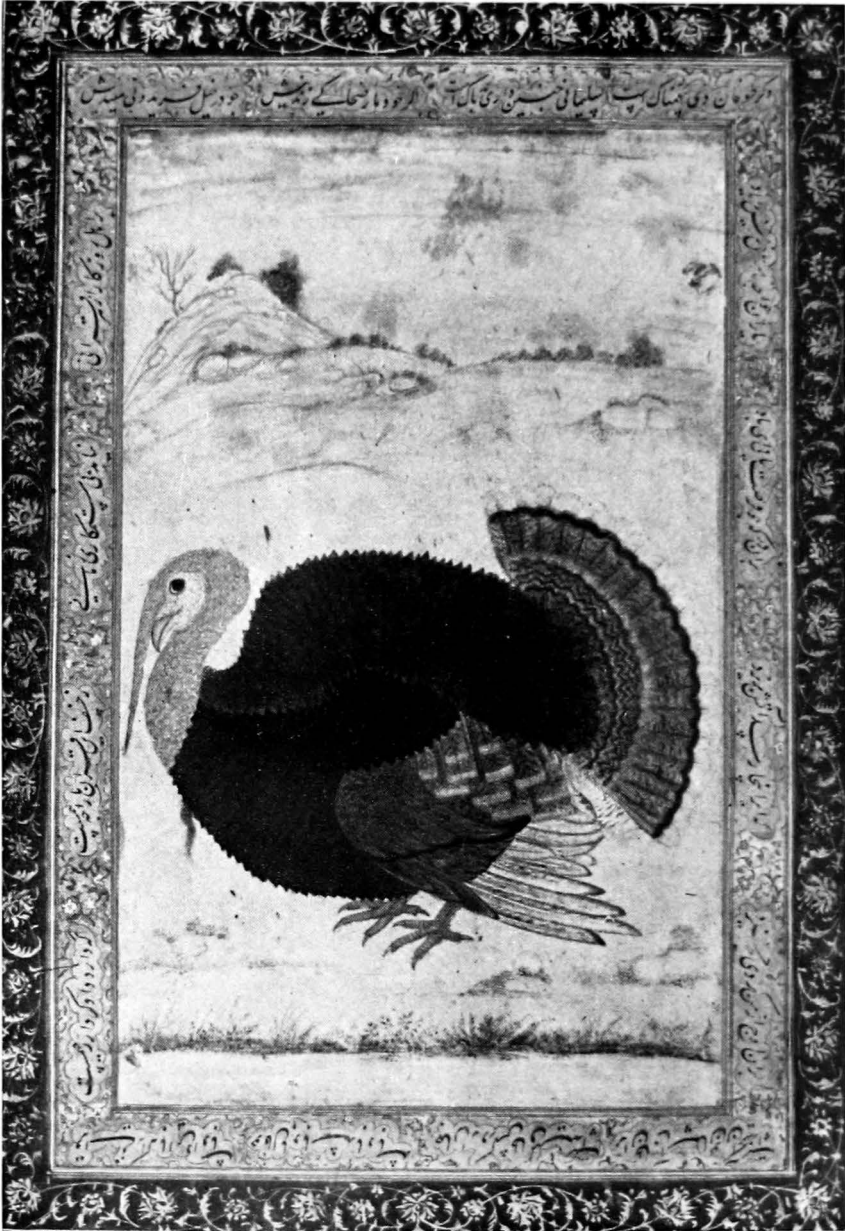


FIG. 47. A Turkey cock. Mughal, c. 1612.

(Courtesy: Indian Museum, Calcutta)

built the magnificent fort on the Jumna, which flows past the city, and is a musket-shot broad. The luxuriance of the groves all round makes it resemble a royal park rather than a city, and everyone acquired and purchased the plot of land which suited or pleased him best. Consequently there are no remarkable market-places, or bazars, as there are in Lahore, Burhanpur, Ahmadabad or other cities, but the whole place is closely built over and inhabited; Hindus mingled with Moslems, the rich with the poor; and if the present King (Jahangir) had fixed his residence here as his father did, the city would have become one of the wonders of the world, for the gates which Akbar built for its security (Madari darwaza, Chaharsu darwaza, Nim darwaza, Puttu (?) darwaza, Nuri darwaza) now stand in the middle of the city, and the area of buildings outside them is fully three times greater in extent.

'The breadth of the city is by no means so great as the length, because everyone has tried to be close to the river bank, and consequently the waterfront is occupied by the costly palaces of all the famous lords, which make it appear very gay and magnificent.

'Then begins the Shahburj, or royal bastion, of the Fort, the walls of which are built of red cut stone, 25 ells high, and 2 *kos* in perimeter; in appearance, as well as in cost, it surpasses many of the most famous structures in the world. It is situated on a moderate elevation with a pleasing prospect on all sides, but especially towards the river, where it is magnificently adorned with stone lattice work and gilded windows, and here the King was accustomed to sit when he made his elephants fight. A short distance within stands his Ghusalkhana, which is very richly decked with alabaster, and has four angles and raised seats, the domes over which are plated on the outside with gold, so that the look of it is not only royal on a close view but Imperial from a distance. Beyond this is a palace of Nurjahan Begam, the present Queen. There is little or no room within the Fort, it being occupied by various princely edifices and residences as well as *mahals*, or palaces for ladies. Among these is the palace of Maryam Makani, wife of Akbar and mother of Jahangir, as well as three other *mahals*, named respectively *Itwar* (Sunday), *Mangal* (Tuesday), and *Sanichar* (Saturday), in which the King used to sleep on the day denoted by the name, and a fifth, the Bengali Mahal, occupied by ladies of various nations. Internally then the Fort is built over like a city with streets and shops, and has very little resemblance to a fortress, but from the outside anyone would regard it as impregnable.

'After passing the Fort, there is the *Nakhas*, a great market, where in the morning horses, camels, oxen, tents, cotton goods, and many other things are sold.

'On the other side of the river is a city named Sikandra, well built and populated, but chiefly by merchants, for through it must pass all the merchandise brought from Porop, and Bengalen Purop and the Bhutan

mountains, namely, cotton goods from Bengal, raw silk from Patna, spikenard, borax, verdigris, ginger, fennel, and thousands of sorts of drugs, and also innumerable kinds of grain, butter, and other provisions, which are produced in the Eastern provinces, and imported thence. Here the great lords far surpass ours in magnificence, for their gardens serve for their enjoyment while they are alive, and after death for their tombs, which during their lifetime they build with great magnificence in the middle of the garden.’¹

Jahangir enjoyed a comparatively peaceful reign which enabled him to indulge in hunting and gardening. There are a number of paintings in which he is depicted hunting lions and antelopes. We reproduce one in which he is shown hunting a *nilgai*. In the background is a *cheeta* mauling a deer. In the foreground are carcasses of antelopes (Fig. 46). Jahangir was endowed with a keen sense of observation, and made accurate observations on animals, birds and plants in his memoirs, the *Tuzuk-i-Jahangiri*. He also maintained an aviary and a menagerie in which he carried out his tests and experiments, including weighing and measurements of birds and animals. Knowing the tastes of the Emperor, his nobles, traders and foreign visitors presented him rare birds and animals.

JAHANGIR'S OBSERVATIONS ON BIRDS

One of Jahangir's chief retainers was Muqarrab Khan. Jahangir deputed him to go to the port of Goa and buy rare birds and animals from the Portuguese, regardless of cost. One of these rareties was the turkey (*Meleagris gallopavo*). Describing it Jahangir states, 'It is larger than a peahen and smaller than a peacock. When it is in heat and displays itself, it spreads out its feathers like the peacock and dances about. Its beak and legs are like those of a cock. Its head and neck and the part under the throat are every minute of a different colour. When it is in heat it is quite red—one might say it had adorned itself with red coral—and after a while it becomes white in the same places, and looks like cotton. It sometimes looks of a turquoise colour. Like a chameleon it constantly changes colour. Two pieces of flesh it has on its head look like the comb of a cock. A strange thing is this, that when it is in heat the aforesaid piece of flesh hangs down to the length of a span from the top of its head like an elephant's trunk, and again when he raises it up it appears on its head like the horn of a rhinoceros, to the extent of two finger-breadths. Round its eyes it is always of a turquoise colour, and does not change. Its feathers appear to be of various colours, differing from the colours of the peacock's feathers.'²

¹W.H. Moreland and Geyl, P. (tr.), *Jahangir's India—the Remonstrantie Francisco Pelsaert*, pp. 2-5

²Rogers, Alexander (tr.), Beveridge, Henry (ed.), *The Tuzuk-i-Jahangiri or Memoirs of Jahangir*, pp. 215, 216

Jahangir not only recorded his observations on rare birds, animals and plants, but also got them painted. His most talented painter of plants, birds and animals was Mansur, who conveys in his paintings something of the spirit of plants and the character of the birds and animals. Mansur was a diligent worker and painted more than a hundred flowering plants of Kashmir and numerous pheasants, peacocks, ducks and herons. He also painted the turkey brought by Muqarrab Khan. It is a remarkable painting showing this bird dancing with its tail feathers spread like a fan (Fig. 47).

Among Mansur's other works is a painting of Dodo (*Raphus cuculatus*), a flightless bird of Madagascar, which was presented to Jahangir by the British factors of East India Company's factory in Surat. This bird became extinct in 1681.

Other paintings of birds by Mughal artists show a cassowary, a falcon, an *asil* cock and another fighting cock with large spurs (Fig. 48).

OBSERVATIONS ON ANIMALS

Jahangir also made observations on animals. Muqarrab Khan presented him a baby elephant from Abyssinia. Jahangir noted that its ears were larger than those of Indian elephants and its trunk and tail longer.

Another African animal presented to him was a zebra (*Equus zebra*). 'At this time I saw a wild ass (*gur-khar*), exceedingly strange in appearance,' observed Jahangir. 'From the tip of the nose to the end of the tail, and from the point of the ear to the top of the hoof, black markings, large or small, suitable to their position, were seen on it. Round the eyes there was an exceedingly fine black line. One might say the painter of fate, with a strange brush, had left it on the page of the world. As it was strange, some people imagined that it had been coloured. After minute inquiry into the truth, it became known that the Lord of the world was the Creator thereof. As it was a rarity, it was included among the royal gifts sent to my brother Shah 'Abbas.' The zebra also was painted by Mansur (Fig. 49).

Jahangir also made observations on Indian animals, including the mountain goat. 'I found the flesh of this animal more delicious than that of all wild animals, although its skin is exceedingly ill-odoured, so much so that even when tanned the scent is not destroyed,' observed Jahangir. He continues, 'I ordered one of the largest of the he-goats to be weighed; it was 2 *maunds* and 24 *ser*s, equal to 21 foreign *maunds* (Persian). I ordered a large ram to be weighed, and it came to 2 *maunds* and 3 *ser*s *Akbari*, equal to 17 Persian (*wilayati*) *maunds*. The largest and strongest of the wild asses weighed 9 *maunds* and 16 *ser*s equal to 76 Persian (*wilyati*) *maunds*. I have frequently heard from hunters and those fond of the chase that at a certain regular time a worm develops in the horns of the mountain ram, and that this worm causes an irritation which induces the ram to fight with his hind, and that if he finds no rival he strikes his head against a tree or a rock to

allay the irritation. After enquiry it seems that the same worm appears in the horn of the female sheep, and since the female does not fight the statement is clearly untrue. Though the flesh of the wild ass is lawful food and most men like to eat it, it was in no way suited to my taste.³

Jahangir also noted that the milk of female antelope was palatable. He observes, 'On this day a female antelope in milk was brought that allowed itself to be milked with ease, and gave every day four *seers* of milk. I had never seen or heard of anything of the kind before. The milk of the antelope, of the cow, and of the buffalo in no way differs. They say it is of great use in asthma.'

There is a painting of a yak (*Posephagus grunniens*) by Mansur (Fig. 50). Jahangir records, 'The yaks from among the presents given by the chief Zamindar of Tibet were seen by me. The yak has a face and built closely resembling the buffalo's. Its body is covered with a thick growth of long hair; and this is a peculiarity of the animals of cold climate.'

FIRST RECORD OF PLAGUE (1616)

In March 1616 north India was ravaged by plague. Jahangir states, 'In the tenth year of my reign, a dreadful plague (*waba*) broke out in many parts of Hindustan. It first appeared in the districts of the Punjab, and gradually came to Lahore. It destroyed the lives of a many Muhammadans and Hindus. It spread through Sirhind and the doab to Delhi and its dependent districts, and reduced them and the villages to a miserable condition. Now it has wholly subsided. It is said by old men, and it is also clear from the histories of former times, that this disease had never appeared before in this country.'⁴ This is the first mention of plague in the history of India. It spread to almost every locality in northern and western India and lasted for eight years. Another outbreak of this disease occurred in the Deccan in 1703 and 1704.

³Rogers, Alexander (tr.), Beveridge, Henry (ed.), *The Tuzuk-i-Jahangiri or Memoirs of Jahangir*, pp. 83, 84

⁴Emperor Jahangir, *Waki'at-i-Jahangiri* in Elliot and Dowson, *The History of India...*, Vol. VI, p. 346



FIG. 48. 1. A cock. Mughal, 17th century (Courtesy: Boston Museum). 2. Asil cock (Courtesy: Bharat Kala Bhavan, Benares); 3. Cassowary. Mughal, 17th century (Courtesy: Boston Museum; Artist, Mir Khore); 4. Falcon, by Ustad Mansur, c. 1619. Goloubew Collection

(Courtesy: Museum of Fine Arts, Boston.)

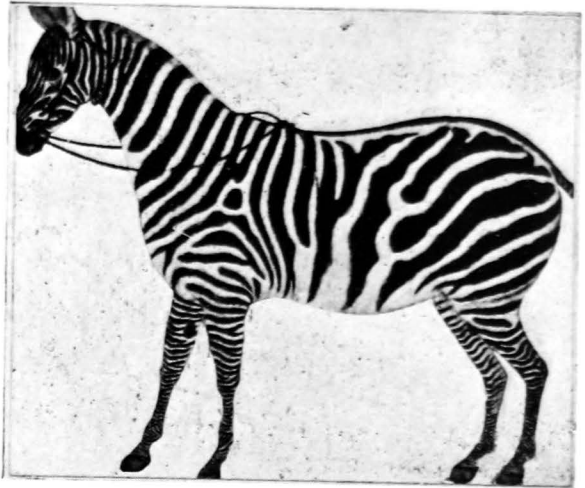


FIG. 49. A zebra, by Mansur, Mughal, 17th century.
(Courtesy: Museum of Fine Arts, Boston)



FIG. 50. A yak, painted probably by Mansur, the chief artist of Jahangir, who specialized in painting animals, birds and plants. Mughal, 17th century.
(Courtesy: Museum of Fine Arts, Boston)

CHAPTER 29

OBSERVATIONS OF JAHANGIR ON FRUITS AND FLOWERS

HORTICULTURAL PLANTS OF AGRA AND KASHMIR JAHANGIR'S GARDENS IN PUNJAB AND KASHMIR

JAHANGIR was the greatest builder of gardens in India. The famous gardens of Kashmir, Shalimar, Achhabal and Verinag owe their existence to him. The garden at Wah near Hasan Abdal in Pakistan was also created by him. He also built the garden tomb of Itimad-ud-Daulah (his father-in-law) at Agra, and the Dilkusha garden at Lahore.

As he spent most of his time in the Punjab, he improved the roads. On the road from Agra to Lahore, he set up a pillar at every three *kos* and a well at every *kos*. These pillars are called *kos-minars* and can still be seen along the Grand Trunk Road (Fig. 51). Shady trees were planted on both sides of the road. He also repaired the roads from Poonch to Kashmir. The stages on the roads were well provisioned and protected.¹

FRUITS AND FLOWERS OF AGRA

Describing the fruits and flowers of Agra, Jahangir observes, 'Melons, mangoes, and other fruits grow well in Agra and its neighbourhood. In the reign of my father many fruits of other countries, which till then were not to be had in India, were obtained there. Several sorts of grapes, such as the *sahibi* and the *habshi* and the *kishmishi*, became common in several towns; for instance, in the bazars of Lahore every kind and variety that may be desired can be had in the grape season. Among fruits, one which they call *ananas* (pineapple), which is grown in the Frank ports, is of excessive fragrance and fine flavour. Many thousands are produced every year now in the *Gul-afshan* garden at Agra.

'Of all the fruits I am very fond of mangoes,' states Jahangir. 'Mangoes used not to be in season in the country of Hindustan after the month of June-July (but Muqarrab Khan had established gardens in the parganah of Kairana, which is the native place of his ancestors, and looked after the mangoes there in such a manner as to prolong the season for more than two months, and sent them every day fresh into the special fruit store-house. As this was altogether an unusual thing to be accomplished, it has been recorded here).

'On the same day they had brought to my private fruit-house many mangoes from all parts of the province of the Deccan, Burhanpur, Gujarat,

¹Narang, K. S. and Gupta, H.R. *History of the Punjab*, 1496-1857, p. 179

and the parganahs of Malwa. Although this province is well known and celebrated for the sweetness, freedom from stringiness, and size of its mangoes, and there are few mangoes that equal its mangoes—so much so that I often ordered them to be weighed in my presence, when they were shown to come to a *ser* or $1\frac{1}{2}$ *ser* or even more—yet in sweetness of water and delicious flavour and digestibility the mangoes of Chapramau, in the province of Agra, are superior to all the mangoes of this province and of all other places in India.’

He also mentions a variety of grapes known as *fakhri*, grown in Ahmadnagar. ‘Although they are not as large as the Kabul *fakhri*, they do not yield to them in sweetness,’ he remarks.

IMPORTED FRUITS

Fruits were also imported from Afghanistan, Central Asia. Jahangir states, ‘At the same stage they brought many melons grown in Kariz near Herat. In former years they had never brought melons in such abundance. On one tray they brought many kinds of fruit—Kariz melons, melons from Badakhshan and Kabul, grapes from Samarkand and Badakhshan, apples from Samarkand, Kashmir, Kabul, and from Jalalabad, which is a dependency of Kabul, and pineapple, a fruit that comes from the European ports, plants of which have been set in Agra. Every year some thousands are gathered in the gardens there which appertain to the private domains. Together with these there came oranges (*kaunlā*) from Bengal, and though that place is 1,000 *kos* distant most of them arrived quite fresh. As this is a very delicate and pleasant fruit, runners bring by post as much as is necessary for private consumption, and pass it from hand to hand.’²

✓ Terry, an English traveller, writes, ‘The country was abounding with musk-melons. One could also find water-melons, pomegranates, lemons, oranges, dates, figs, grapes, coconuts, plantains, mangoes, pineapple, pears, apples, etc.’ Terry also mentions the use of coffee by some people. He writes, ‘Many religious people drank a “wholesome liquor” which they called coffee. Black seeds were boiled in water, which also became black. It altered the taste of water very little. It quickened the spirit and cleansed the blood.’³

FRAGRANT FLOWERS OF INDIA

In his preference for fragrant flowers, Jahangir was truly Indian in taste. The following passage from the *Tuzk* shows he was familiar with nearly all the important fragrant plants of India. ‘From the excellences

²Rogers, Alexander (tr.), Beveridge, Henry (ed.). *The Tuzk-i-Jahangiri or Memoirs of Jahangir*, pp. 350, 422, 423

³Ansari, Mohammad Azhar. *European Travellers under the Mughals, 1580-1627*, p. 175



FIG. 51. A *kes-minar* near Ludhiana, 1960. Such *minars* were constructed at a distance of a *kes* (about 3.2 kilometres, or 2 miles) along the Grand Trunk Road from Lahore to Delhi by Jahangir. In the niches oil lamps were lighted at night to guide the travellers.

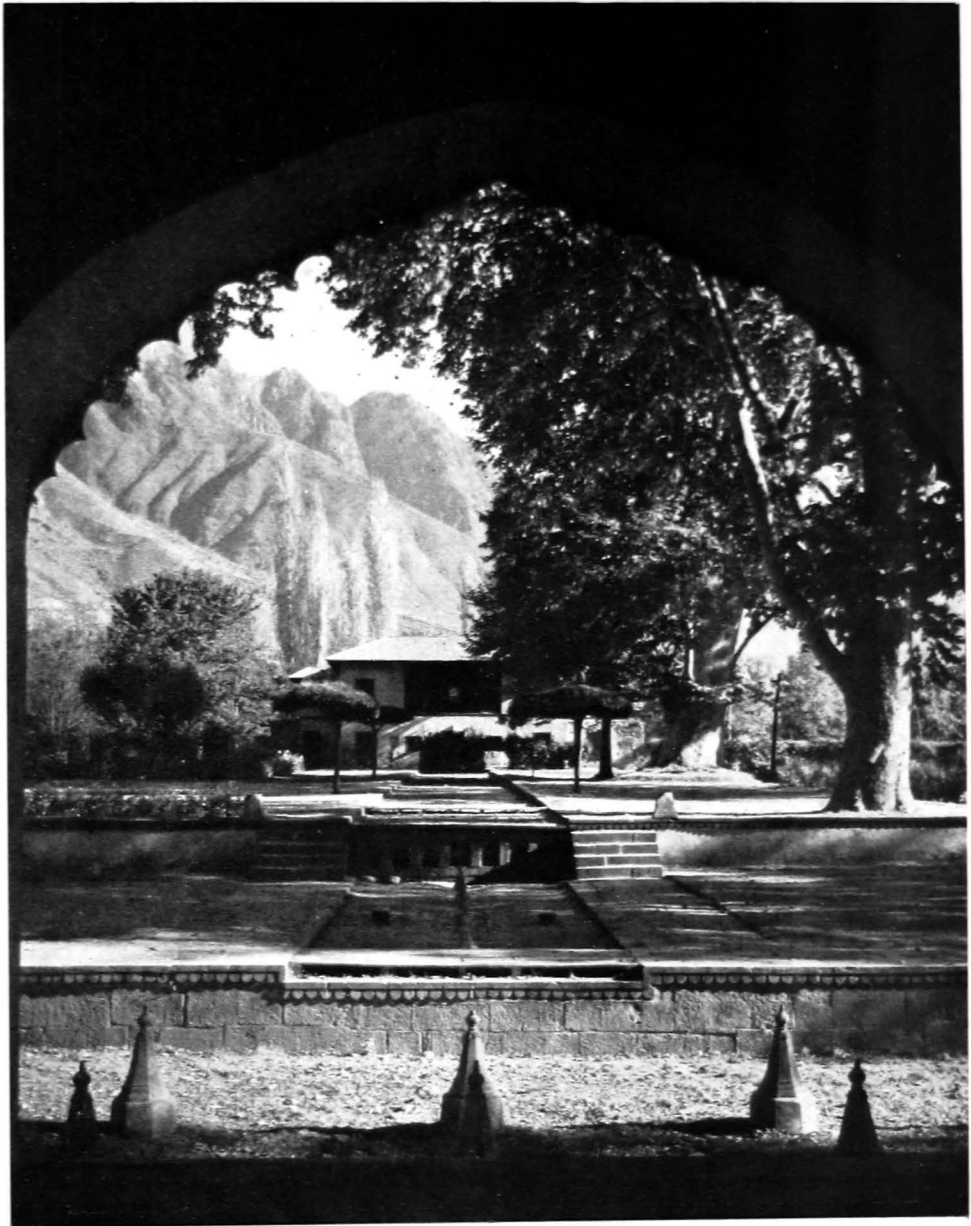


FIG. 52. The Shalimar Garden, Srinagar, was laid out by Jahangir in 1619. The Ladies Section of this garden is shown in this photograph.

of its sweet-scented flowers one may prefer the fragrances of India to those of the flowers of the whole world. It has many such that nothing in the whole world can be compared to them. The first is the *champa* (*Michelia champaca*), which is a flower of exceedingly sweet fragrance; it has the shape of the saffron-flower, but is yellow inclining to white. The tree is very symmetrical and large, full of branches and leaves, and is shady. When in flower one tree will perfume a garden. Surpassing this is the *keora* flower (*Pandanus odoratissimus*). Its shape and appearance are singular, and its scent is so strong and penetrating that it does not yield to the odour of musk. Another is the *rae bel*, which in scent resembles white jasmine. Its flowers are double and treble (?). Another is the *mulsari* (*Mimusops elengi*). This tree, too, is very graceful and symmetrical, and is shady. The scent of its flowers is very pleasant. Another is the *ketaki* (*Pandanus*), which is of the nature of the *keora* but the latter is thorny, whereas the *ketaki* has no thorns. Moreover, the *ketaki* is yellowish, whereas the *keora* is white. From these two flowers and also from the *chambeli* (*Jasminum officinale* forma *grandiflorum*), which is the white jessamine of *wilayat* (Persia or Afghanistan), they extract sweet-scented oils.'

OTTO OF ROSES

The mother of Nur Jahan is credited with the discovery of otto of roses. How this discovery was made by accident is thus described by Jahangir. 'This' *itr* is a discovery which was made during my reign through the efforts of the mother of Nūr-Jahān Begam. When she was making rose-water a scum formed on the surface of the dishes into which the hot rose-water was poured from the jugs. She collected this scum little by little; when much rose-water was obtained a sensible portion of the scum was collected. It is of such strength in perfume that if one drop be rubbed on the palm of the hand it scents a whole assembly, and it appears as if many red rosebuds had bloomed at once. There is no other scent of equal excellence to it. It restores hearts that have gone and brings back withered souls. In reward for that invention I presented a string of pearls to the inventress. Salima Sultan Begam was present, and she gave this oil the name of *itr-i-Jahangiri*.'

NO TAX ON GARDENS

Growing of fruit plants is costly. The upkeep of a garden involves intensive labour and manuring. Fruit plants are also subject to many hazards. Wind storms cause havoc in mango gardens. One day you find mango trees laden with fruit. Next day a wind storm comes and the trees are bare. Rain on flowering peaches, pears, plums and oranges in the month of March will wash away the pollen and fruit would not set. Knowing the problems of gardens and gardeners, Jahangir did not tax them. In the *Tuzk*, he narrates the following anecdote about a king and a gardener.

'A King came to the gate of a garden in the heat of the day. He saw an old gardener standing at the gate, and asked him if there were any pomegranates in the garden. He said: "There are." He told him to bring a cup of pomegranate juice. The gardener had a daughter adorned with grace of person and beauty of disposition. He made a sign to her to bring the pomegranate juice. The girl went and at once brought a cup full of pomegranate juice, and placed some leaves upon it. The King took it from her hand and drank it. Then he asked the girl what was her reason for placing leaves on the top of the juice. She, with an eloquent tongue and a sweet voice, represented that it was not wise at once to drink off a quantity of liquid when he was bathed in perspiration, and in such a hot air. On this account she had placed the leaves on the liquid by way of precaution, so that he might drink it slowly. The King was greatly pleased with her sweet ways, and it crossed his mind to admit the girl into his Palace. After this he asked the gardener: "How much profit do you derive from this garden every year?" He answered: "Three hundred *dinārs*." The King asked: "What do you pay the Diwan (tax-collector)?" He answered: "The King takes nothing from the trees, but takes a tenth of the cultivated crops." It came into the King's mind that there were in his dominions many gardens and countless trees. If he were to get a tenth of the garden produce as well, it would amount to a large sum, and there would be no great loss to the cultivator. Hereafter he would order a tax to be levied on garden produce. He said then: "Bring me a little more pomegranate juice." The girl went, and after a long time brought small quantity. The King said: "The first time thou camest quickly, and broughtest more. This time thou didst stay a long time, and broughtest less." The girl said: "The first time I had filled the cup with the juice of one pomegranate, and brought it; this time I pressed out five or six pomegranates and did not get as much juice." The astonishment of the King increased. The gardener represented: "The blessing of produce depends on the goodwill of the King. It occurs to me that you must be a king. At the time when you inquired of me the income from the garden, your disposition must have changed. Consequently the blessing passed away from the fruit." The Sultan was impressed, and drove that idea out of his heart. He then said: "Bring me once more a cup of pomegranate juice." The girl went again, and quickly bringing a cup full to the brim, gave it, smiling and gladly, into the Sultan's hand. He praised the intelligence of the gardener, and explained the actual state of affairs, and begged the girl of him in marriage, and married her.

"This true tale of that truth-preserving King has remained as a memento on the page of time. In truth, the manifestation of such spiritual (?) results is the mark of good intentions, and the fruit of justice. Whenever all the energies and purposes of justice-observing Kings are devoted to the comfort of the people and the contentment of their subjects, the manifestations of

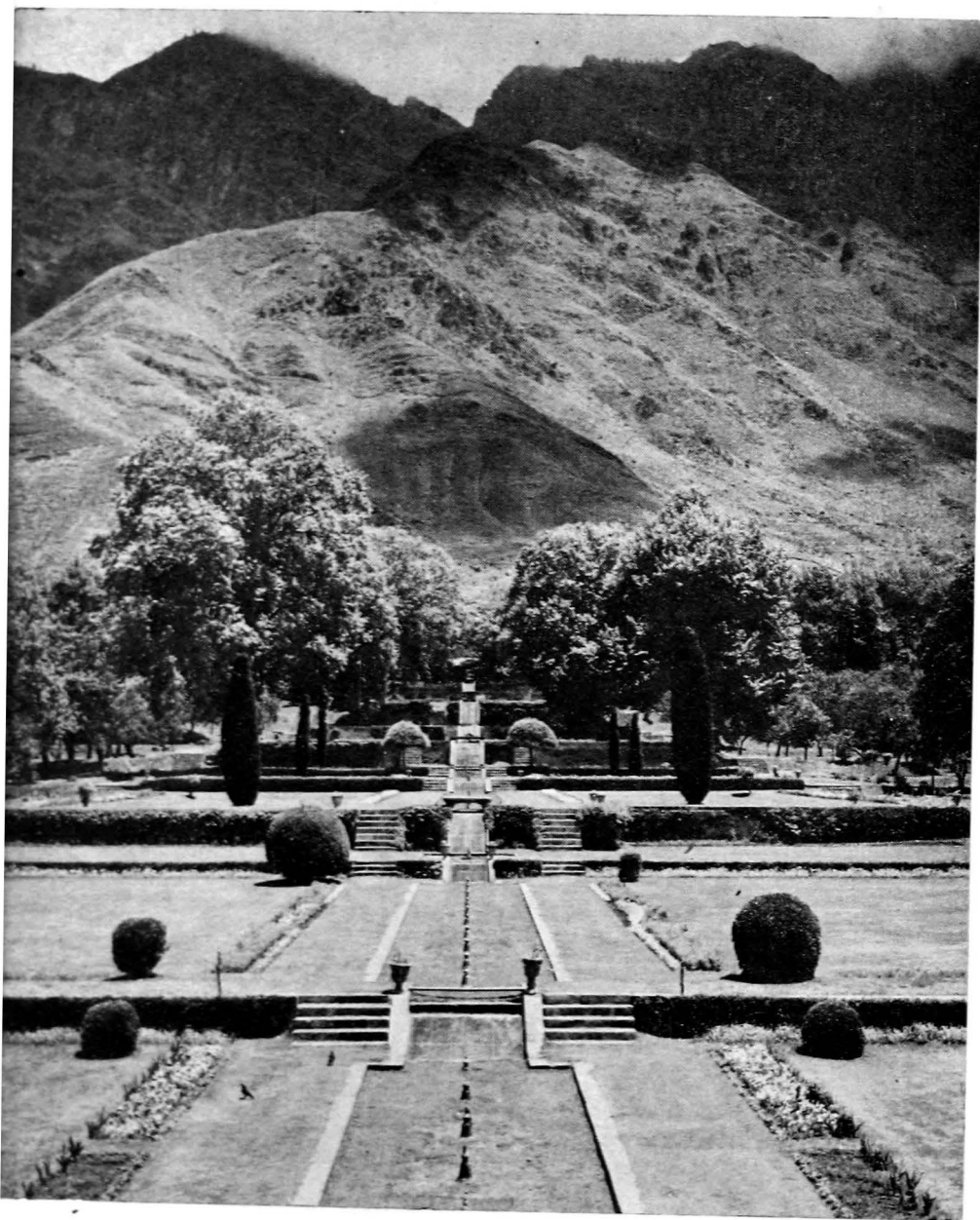


FIG. 53. The Nishat Garden was laid out by Asaf Khan, brother of Nur Jahan, on the shores of the Dal Lake, Srinagar. Its twelve terraces rise dramatically higher and higher to the mountain-side.



FIG. 54. Shah Jahan in a garden. Late seventeenth century.

(Courtesy: Indian Museum, Calcutta)

well-being and the productions of fields and gardens are not far off. God be praised that in this age-enduring State no tax has ever been levied on the fruit of trees, and is not levied now. In the whole of the dominion not a *dam* on this account enters the public treasury, or is collected by the State. Moreover, there is an order that who ever makes a garden on arable land, its produce is exempted.⁴

FLOWERS AND FRUITS OF KASHMIR

Jahangir was fond of natural scenery and was enchanted by Kashmir Valley. 'Kashmir is a garden of eternal spring,' he observes, 'a delightful flower-bed, and a heart-expanding heritage for dervishes. Its pleasant meads and enchanting cascades are beyond all description. There are running streams and fountains beyond count. Wherever the eye reaches, there are verdure and running water. The red rose, the violet, and the narcissus grow of themselves; in the fields, there are all kinds of flowers and all sorts of sweet-scented herbs more than can be calculated. In the soul-enchanting spring the hills and plains are filled with blossoms; the gates, the walls, the courts, the roofs, are lighted up by the torches of banquet-adorning tulips. What shall we say of these things or of the wide meadows and the fragrant trefoil?

'The finest inflorescence is that of the almond and the peach. Outside the hill-country the commencement of blossoming is the 1st Isfandārmuz (10 February). In the territory of Kashmir it is the 1st Farwardin (10 March), and in the city gardens it is the 9th and 10th of that month, and the end of their blooming joins on to the commencement of that of the blue jasmine. In attendance on my revered father I frequently went round the saffron fields, and beheld the spectacle of autumn. Thank God that on this occasion I beheld the beauties of spring. The beauties of autumn shall be described in their place. The buildings of Kashmir are all of wood; they make them two-, three-, and four-storied, and covering the roofs with earth, they plant bulbs of the *chaughashi* tulip, which blooms year after year in the spring season, and is exceedingly beautiful. This custom is peculiar to the people of Kashmir. This year, in the little garden of the palace and on the roof of the chief mosque, the tulips blossomed luxuriantly. There are many blue jasmines in the gardens, and the white jasmines. I saw several sorts of red roses; one is specially sweet-scented, and another is a flower of the colour of sandal (light yellow), with an exceedingly delicate scent. It is of the nature of the red rose, and its stem is like that of the red rose. There are two kinds of lilies. That which is grown in gardens is vigorous (*balida*) and fresh-coloured (lit. green); the other is a wild kind. Although

⁴Rogers, Alexander (tr.), Beveridge, Henry (ed.), *The Tuzuk-i-Jahangiri or Memoirs of Jahangir*, pp. 52, 53

the latter has less colour it is very sweet-scented. The flowers that are seen in the territories of Kashmir are beyond all calculation. Those that Nadiru-'asri Ustad Mansur has painted are more than 100. Before my father's time there were no *shāhālu* (cherries). Muhammad Quli Afshar brought them from Kabul and planted them, and there are now ten or fifteen fruit-bearing trees. There were also some apricot-trees. The aforesaid made them known in this country, and now there are many of them. In fact, the apricot of Kashmir is good. There was a tree in the Shahr-ara garden at Kabul, called Mirza'i, better fruit than which I had not eaten, but in Kashmir there are trees equal to this in the gardens. There are pears (*nashpati*) of the best kind, better than those of Kabul, or Badakhshan, and nearly equal to those of Samarkand. The apples of Kashmir are celebrated for their goodness. Grapes are plentiful, but most of them are harsh and inferior, and the pomegranates are not worth much. Water-melons of the best kind can be obtained. The melons are very sweet and creased, but for the most part when they become ripe a worm is found in them that spoils them.'

PRODUCE OF KISHTWAR

Apart from Kashmir valley, Jahangir also made observations on the produce of Kishtwar.

'In Kishtwar there are produced much wheat, barley, lentils, millet, and pulse. Differing from Kashmir, it produces little rice. Its saffron is finer than that of Kashmir. About a hundred hawks and falcons are caught there annually. Oranges, citrons, and water-meons of the finest kind are obtained. Its melons are of the same kind as those of Kashmir, and other fruits, such as grapes, apricots, peaches, and sour pears, are grown. If they were cultivated, it is possible they would improve.'

CHAR-CHENARS

Apart from planting gardens, Jahangir with his scientific mind also popularized the device of *char-chenars* or planting four *chenars* at the corners of a square, so that there may always be shade at the centre. Such green rooms are found on the caravan routes in Kashmir Valley, and provided shade and shelter to travellers and merchants.

Jahangir was fond of cherries, grapes and musk-melons which were brought to him from far-off Kabul. Like a true gardener he felt special pleasure in tasting home-grown fruits. 'There was a young plant in the little garden of *Ishrat-afza* (joy-enhancing),' he remarks 'and this I called *Nau-bar* (new fruit). Every day I plucked with my own hand sufficient to give a flavour to my cups. Although they sent them by runners from Kabul as well, yet to pick them oneself from one's home garden gave additional sweetness.

GARDENS OF JAHANGIR

Jahangir laid out the Shalimar garden at the site of the villa of Pravar-sena II (79-139 A.D.), the founder of the city of Srinagar, in 1619. Connecting the garden with the water of the Dal lake is a canal about twelve yards (11 m) broad. On each side are green paths shaded by giant *chenars*. Fields of narcissus and tulip provided an enchanting feast of colours. The garden is divided into three parts, the outer garden, the central or Emperor's garden, and the inner ladies' garden (Fig. 52). The outer garden was open to the public and terminates at the large pavilion, the Diwan-i-am. The Emperor's garden consists of two shallow terraces with the Hall of Private Audience at the centre. This building has suffered the ravages of time and no longer exists. The snows of Mahadeo provide a sublime and grand background to the pavilion in the ladies' garden. Mrs Villiers Stuart comments that 'a subtle air of leisure and repose, a romantic indefinable spell, pervades the Shalimar with its dim vistas, smooth sheets of falling water and canals with calm reflections.' This garden bears an eloquent testimony to Jahangir's sense of landscape and good taste. Shalimar, or the Abode of Love as it means in Sanskrit, draws large numbers of Kashmiris who rest under the *chenars* drinking tea from samovars.

Nishat, the Garden of Delight, was laid out by Asaf Khan, brother of Nur Jahan. From the shore of the lake its twelve terraces rise dramatically higher and higher to the mountain side (Fig. 53). Each terrace represents a sign of the zodiac. At the head of every waterfall is a stone or marble seat. At the sides are cypresses and *chenars*. Iris, narcissus, daffodils and roses were grown in profusion. Nishat provides a grand view of the lake and mountains.

Another garden associated with Jahangir is Achhabal near Anantnag. Gushing out of a lime-stone mountain on which a forest of deodars is growing is a spring of clear water which is the life and soul of Achhabal garden. The garden is laid out in terraces and is planted with apple, pear, plum, apricot and cherry. There are also stately *chenars* for shade. A pavilion with rich cedar wood-work presides over the canal, which takes its birth in the mountain-side spring. Near the road-side is a rest house with streams of water flowing through its lawns.

Verinag, a deep spring, the source of Jhelum, also attracted Jahangir. In 1609 he built an octagonal tank round the spring flanked by twenty-four arched recesses. The emerald-green spring swarms with carps which are regarded as sacred. The water from the spring flows into a canal and at its sides a garden was laid.

Wah garden at Hasan Abdal near Rawalpindi was built around the springs by Jahangir. This garden palace was used as an Imperial camping ground on the way to Kashmir. Jahangir and Nur Jahan loved the mountains, and every year in summer the whole Court moved to Kashmir from Lahore.

GARDEN AT SARHIND

One of Jahangir's gardens was at Sarhind in Punjab. Now it is called Am Khas garden and it is being developed as a tourist centre. Finch, who saw this garden, describes it as follows. 'At Sarhind there was a fair tank, with a bridge of fifteen stones, to connect the summer house built in the middle of it. From it a small canal was cut for the garden of the Emperor, which was situated at some distance. The way leading to the royal garden was planted on both sides with trees and the garden itself was enclosed with a brick wall. It was planted with all sorts of fruit-trees and flowers, and was rented yearly for Rs 50,000. It was divided into four squares, each a *kos* in length. It was crossed by two main walks, forty feet broad and eight feet high (12.19 m × 2.44 m), with running water in stone channels in the middle of them, and both sides of them were planted thick with fair cypresses. One of these causeways is also paved with pebbles, curiously linter-wrought. At the crossings of the two stood a *mahal* curiously wrought in stone, with fair paintings and rich carvings.'⁵

Jahangir was the greatest garden builder in India. The romantic beauty of his Kashmir gardens has contributed enormously to the aesthetic reputation of the Mughals. Wherever he stayed in his tours for any length of time, he left a garden for posterity to admire.

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⁵Ansari, Mohammad Azhar. *European Travellers under the Mughals, 1580-1627*, p. 35

CHAPTER 30

SHAH JAHAN

A.D. 1628-1658

THE AGE OF GRANDEUR

CONSTRUCTION OF RED FORT, JAMA MASJID AND THE CITY OF SHAHJAHANABAD GARDENS IN KASHMIR AND PUNJAB DIGGING OF WEST JAMUNA AND HASLI CANALS

SHAH JAHAN succeeded Jahangir as the Emperor of India in January 1628. He was a handsome man with sharp features and a pointed trimmed beard. In a contemporary portrait he is depicted standing on a marble throne amidst flowering shrubs (Fig. 54). Shah Jahan was fond of good life and delighted in gardens, palaces and women. The Mughal empire had become stable and prosperous. Shah Jahan raised a number of monumental buildings. Describing some of the buildings Mufazzal Khan states, 'Such a magnificent and beautiful fort of red stone was built on the banks of the Jamuna that no building like it was ever constructed by any of the kings who had ruled in India. Besides other magnificent works, the Peacock throne was made by this monarch, which was set with all kinds of precious stones. It was prepared at the expense of nine *krors*, nine *lacs* and one thousand rupees. The Mosque of Jama Jahan-numa was built near the fort under the superintendence of Sadu-lla Khan, at the expense of ten *lacs* of rupees.'¹ Shahi mosque, as it is known, is a work of elegance and grandeur.

Shah Jahan's expensive tastes in buildings demanded so much money that there was a severe pressure on the tax-payers.

SHAHJAHANABAD

The present city of Old Delhi owes its existence to Shah Jahan and was named Shahjahanabad after him. It was built on a regular plan, far surpassing the earlier one in magnificence. There were three wide streets. One, known as Chandni Chowk, was of great length. It was ornamented by a canal and rows of trees, and was composed of houses rising over a line of shops under arcades. On the Jamuna stood the Red Fort, a fortified palace with spacious courts, marble halls, golden domes and a magnificent garden irrigated by a canal. Water flowed through a channel lined by marble. Over the channel is a carved marble screen of great beauty bearing a representation of scales of justice.

¹Mufazzal Khan, *Tarikh-i Mufazzali*, in Elliot and Dowson, *The History of India...*, Vol. VII, p. 142

The city of Shahjahanabad was more like a camp, as the vast majority of the population consisted of officials, soldiers and their hangers-on, who followed the Emperor when he was travelling to different parts of the Empire. On such occasions, the city appeared empty, and very much like New Delhi during summer under the British rule, when the Secretariat moved to Simla.

The French traveller, Francois Bernier, a doctor by profession, who lived in Delhi as an employee of a Mughal noble, Danishmand Khan, has left a vivid description of the city. He writes, 'There are five streets, not so long nor so straight as the two principal ones, but resembling them in every other respect. Of the numberless streets which cross each other, many have arcades; but having been built at different periods by individuals who paid no regard to symmetry, very few are so well built, so wide, or so straight as those I have described.

'Amid these streets are dispersed the habitations of Mansebdars, or petty Omrahs, officers of justice, rich merchants, and others, many of which have a tolerable appearance. Very few are built entirely of brick or stone, and several are made only of clay and straw, yet they are airy and pleasant, most of them having courts and gardens, being commodious inside and containing good furniture. The thatched roof is supported by a layer of long, handsome and strong canes, and the clay walls are covered with a fine white lime.

'Intermixed with these different houses is an immense number of small ones, built of mud and thatched with straw, in which lodge the common troopers, and all that vast multitude of servants and camp-followers who follow the court and the army. It is owing to these thatched cottages that Delhi is subject to such frequent conflagrations. More than sixty thousand roofs were consumed this last year by three fires, during the prevalence of certain impetuous winds which blow generally in summer.

'It is because of these wretched mud and thatch houses that I always represent to myself Delhi as a collection of many villages, or as a military encampment with a few more conveniences than are usually found in such places.'²

GARDENS IN KASHMIR AND PUNJAB

Like his father, Shah Jahan paid several visits to Kashmir and admired its lakes, rivers and mountains. He added a beautiful black marble pavilion to the top-most terrace of the Shalimar garden. Surrounded with cascades and lamps twinkling in the recesses behind the waterfalls, the pavilion appeared charming at night.

Zafar Khan, his Governor of Kashmir, introduced improved varieties of cherry, peach, plum and grapes from Persia and Afghanistan. His next

²Bernier, F. *Travels in the Mughal Empire*, p. 346

Governor, Ali Mardan Khan, a Persian, had great engineering skill. He built a network of roads in the valley and planted avenues of poplars along them. It was he who built the small but elegant garden of Chashma Shahi overlooking the Dal lake. The architecture of the garden pavilion is in harmony with the pyramidal peaks of the rugged mountains which provide the background. Its roof repeats the conical beauty of the mountain in a striking manner. The pavilion enshrines the spring, whose water is relished for its purity and digestive qualities. The garden in front of the building is divided into two terraces and a chute leads the water to the second terrace. In the centre of the second terrace is a tank with five jet fountains. The entrance gate and the boundary walls are green with a thick cover of the tenacious creeper *Ficus pumila* (*F. repens*). Chashma Shahi garden, though built on a small scale, has all the elements in its design which lend charm to a Mughal garden.

SHALIMAR, LAHORE

The most delightful creation of Shah Jahan was the Shalimar garden of Lahore. It was built in 1634 under the direction of Ali Mardan Khan, who was responsible for the Chashma Shahi garden. It was laid out in seven divisions, symbolic of seven stages of paradise according to Islamic concept. Of these, four have been destroyed and only three remain, which cover about 39 acres (15.78 ha). In the second terrace towards the east are the royal bathrooms which consist of four arched chambers with beautiful reservoirs which were heated by firewood from outside.

Shalimar is a garden of great beauty characterized by balance and symmetry. The central terrace consists of a large raised tank with marble pavilions on three sides. In the centre is a platform reached by narrow stone cause-ways (Fig. 55). A canal discharges in the middle terrace into a large marble basin. From the basin and the canal rise four hundred and fifty jet fountains which fill the air with gentle spray. Pavilions and summer houses of marble and red stone are scattered about in the garden. In summer the garden is delightful. The green foliage, white marble and flowing water create coolness.

Mulla Abdul Hamid Lahori, in his excellent work, *Badshah-nama*, gives the following account of the first state visit of the Emperor to these gardens. 'It having been represented to His Majesty that the gardens, the management of which had been entrusted to Khalilullah Khan, had been finished, the royal astrologers were ordered to fix an auspicious hour for the visit of the august sovereign. Accordingly the 7th of Shaban 1052 A.H. was fixed as the date of the royal visit. His Majesty honored the gardens with a visit on that day, and was highly pleased with the scene he witnessed. The omerahs and grandees of State offered their congratulations, while all joined in prayers for the duration of the Imperial grandeur. Multitudes of

intelligent and wise men who were present before His Imperial Majesty and who had seen Rum, Irak and Mawar-un-Nahar, represented to him that a garden such as this had never to this date been constructed, or seen or even talked of by anybody.' 'So many edifices,' adds Abdul Hamid, 'were constructed in this garden that, whenever it pleases the Emperor to pay a visit to it with the Royal Harem, who remain with him at Lahore, the capital, the necessity of pitching tents is avoided.' Shalimar suffered considerable damage in the last quarter of the eighteenth century when the Mughal power collapsed.

TAJ MAHAL

In 1631, Shah Jahan suffered the greatest sorrow of his life, when his beloved wife Mumtaz Mahal died in childbirth. In the following year he started work on the world's noblest mausoleum in her memory, the Taj Mahal at Agra. It was completed in 1647 at a cost of 41 million rupees. Shah Jahan created a great garden around the Taj Mahal. The garden is a *Char-bagh*, a four-fold field plot, with a tank of white marble in the centre. The irrigation canal which contains fountains is flanked by cypresses whose columns harmonise with the four minarets.

RESTORATION OF FIROZ SHAH'S CANAL

Though his primary interest was in architecture and buildings, Shah Jahan also improved irrigation facilities in northern India. He restored the West Jamuna Canal, which had been dug by Firoz Shah, and brought a channel from it to Shahjahanabad. 'Inayat Khan, author of *Shah Jahan-nama*, thus describes how it happened.

'The canal that Sultan Firoz Shah Khilji, during the time he reigned at Dehli, had made to branch off from the river Jamuna, in the vicinity of *pargana* Khizrabad, whence he brought it in a channel 30 Imperial *kos* long to the confines of *pargana* Safidun, which was his hunting-seat, and had only a scanty supply of water, had, after the Sultan's death, become in the course of time ruinous. Whilst Shahabu-d din Ahmad Khan held the government of Dehli, during the reign of the Emperor Akbar, he put it in repair and set it flowing again, . . . to fertilize the places in his *jagir*, and hence it was called Nahr-i Shahab; but for want of repairs, however, it again stopped flowing. At the time when the sublime attention was turned to the building of this fort and palace, it was commanded that the aforesaid canal from Khizrabad to Safidun should be repaired, and a new channel excavated from the latter spot to the regal residence, which also is a distance of 30 Imperial *kos*. After it was thus prolonged, it was designated the Nahr-i Bihisht.'³

³Inayat Khan, *Shah Jahan-nama*, in Elliot and Dowson, *The History of India...*, Vol. VII, p. 86

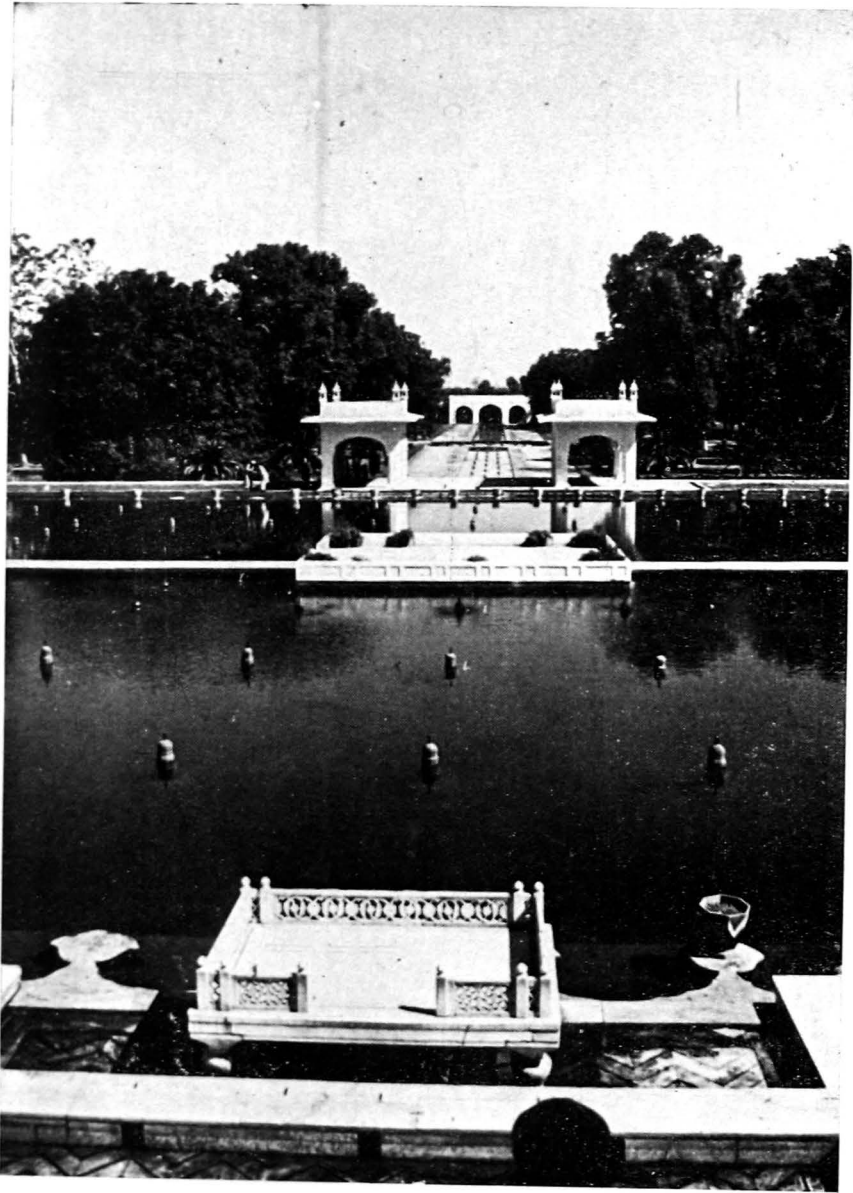


FIG. 55. The Shalimar Garden, Lahore.



FIG. 56. Tobacco crop was introduced into Andhra before 1600 and had become a significant crop in that region by 1620.



FIG. 57. By the middle of the eighteenth century pineapple cultivation spread in Bengal.

HASLI OR LAHORE CANAL (BARI DOAB CANAL)

Another canal for which credit goes to Shah Jahan is the Hasli or Lahore canal. It was dug at the initiative of Ali Mardan Khan, who was Governor of Lahore from 1637 to 1644. According to Abdu-l-Hamid Lahori, 'Ali Mardan Khan represented to His Majesty that one of his followers was an adept in the forming of canals, and would undertake to construct a canal from the place where the river Ravi descends from the hills into the plains, and to conduct the waters to Lahore, benefiting the cultivation of the country through which it should pass. The Emperor gave to the Khan one *lac* of rupees, a sum at which experts estimated the expense, and the Khan then entrusted its formation to one of his trusted servants.⁴ The canal was 110 miles (177 km) in length and came to be known as the Hasli Canal. It was about 30 ft (9.1 m) wide and carried a discharge of nearly 500 cusec. A small branch of this canal was later dug to carry water to the Golden Temple, the sacred shrine of the Sikhs, at Amritsar.

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⁴Abdu-l-Hamid Lahori, *Badshah-nama*, in Elliot and Dowson, *The History of India...*, Vol. VII, pp. 67, 68

CHAPTER 31

CROPS IN INDIA IN THE SEVENTEENTH CENTURY

CULTIVATION OF JUTE

SPREAD OF TOBACCO CULTIVATION

OBSERVATIONS OF FRANCISCO PELSEAERT, FRANCOIS BERNIER AND NICCOLAO MANUCCI ON CROPS AND FRUIT PLANTS

JUTE fibre is obtained from the bark of the two cultivated species of the genus *Corchorus*, viz. *C. capsularis* and *C. oliivorus*, of the family Tiliaceae. There is evidence of trade in jute cloth in the sixteenth century in Bengal. In the *Ain-i-Akbari* there is mention of sack-cloth (*lat*), which Jarret identifies with jute from the district of Rangpur. Poor people used sack-cloth for clothing. In contemporary Bengal literature, *Kavikankan Chandi* by Mukundaram Chakravarty, dated to c. 1575, there are references to gunny bags made of jute. In Bengali poetical works of the seventeenth century, sack-cloth made out of jute is mentioned as an article of trade.

SPREAD OF TOBACCO CULTIVATION

Tobacco crop was introduced into India during the last years of the reign of Akbar. It seems that this crop was introduced before 1600 into two separate areas of India, viz. the present state of Gujarat (Surat-Broach area) and the state of Andhra Pradesh (Masulipatam and interior). Even now these are the principal tobacco-growing areas in India. The earliest mention of a significant crop of tobacco in western coastal areas of India is dated in 1604-1605. William Methwold, who was an agent of the English East India Company in the kingdom of Golkonda from 1618 to 1622, observes: "They have within few years planted store of tobacco, and much of it is exported to Mocha and Arakan, and not a little smoked amongst themselves. It is but weak, yet sure more care in curing and making it up would help that fault; they only dry the leaves in the sun, and use it so, without further sophistication." According to Methwold, "the cultivation of tobacco on the Coromandel coast was established long enough to produce a crop sufficient for local demand and export to the Red Sea-Persian Gulf area and to coastal Burma before 1622."¹ The tobacco crop which was introduced into Andhra before 1600, became an important crop in that region by 1620 (Fig. 56).

The records of the East India Company for 1602-18 published in six

¹Gokhale, B.G. Tobacco in Seventeenth-Century India, *Agriculture History*, Vol. 48, Oct. 1971

volumes, entitled *Letters Received by East India Company From Its Servants in the East*, contain references to crops. One of the earliest English records of tobacco cultivation in India is by William Biddulph. In his letter dated 23 October 1613 from Surat to the East India Company, he mentions widespread cultivation of tobacco in that area. The first record of export of tobacco from India is also to be found in one of these volumes. On 9 February 1619, 155 maunds of tobacco valued at 707 *mahmudis* and 6 *p* was sent in the ship *Lion* to Persia.²

Tobacco-smoking rapidly became popular in India during the reign of Jahangir. Realizing its harmful effect on the health of the people, Jahangir forbade smoking in 1617. Similar ban was imposed in Iran by Shah Abbas. In spite of the ban, smoking of tobacco spread in India and Iran.

During the reign of Aurangzeb tobacco cultivation spread widely, and excise duty on this crop became a principal source of State revenue. The Italian traveller, Niccolao Manucci, who was in Delhi during the reign of Aurangzeb, observed, 'The Mahomedans consume a great deal of this article in smoking. This is why the chief tax-farmer paid five thousand rupees a day at this city (Delhi) only. From this the reader can understand what would be the revenue from tobacco paid to the King of Hindustan throughout such a great empire.' Cultivation of tobacco soon became popular in Bengal, Bihar and Orissa. By the end of the seventeenth century, the consumption of tobacco through smoking and chewing with leaf of betel-vine spread throughout India.

Mughal emperors from Akbar to Farrukhsiyar (1605-1719) did not smoke. There is no portrait in which they are seen smoking. On the other hand there is a portrait of Muhammed Shah (1719-1748) in which he is shown smoking a hookah (Fig. 58). Even among ladies, both Mughal and Rajput, smoking became a popular pastime in the middle of the eighteenth century. In miniature paintings, Rajput ladies of the Punjab Hill States are depicted smoking hookah (Fig. 59).

PELSAERT'S OBSERVATIONS ON THE CROPS OF AGRA

Francisco Pelsaert, a Dutch man, was the Senior Factor of the Dutch East India Company at Agra. He travelled by land from Masulipatam to Surat and from Surat to Agra, where he remained from 1621 to 1627. He was posted at Agra by the Dutch to develop indigo trade. The Dutch sold their spices to the Mughal Court to finance their indigo trade at Agra. The *Remonstrantie*, his report, essentially a commercial document, was written in 1626 and sums up his seven years' experience in Agra. Apart from details about Dutch trade in northern India, he describes the city of Agra, adminis-

²Panikar, S.N. Landmarks in the Development of Tobacco in India, *Science and Culture*, Vol. 42, 1976

tration of the country, the manner of life of the people, their religions and customs. Pelsaert's report is objective and shows keen sense of observation and knowledge of agriculture in the Agra region of India.

Describing the agriculture of Agra province, Pelsaert observes, 'From April to June the fields lie hard and dry, unfit for ploughing or sowing owing to the heat. When the ground has been moistened by a few days' rain, they begin to sow indigo, rice, various kinds of food-grains eaten by the poor, such as *jowar*, *bajra*, *kangni*, various pulses for cattlefood, such as *moth*, *mung*, *orb*, *urd*, and a seed from which oil is extracted. Large numbers of wells have to be dug in order to irrigate the soil, for at this time it is beginning to lose its productive power. Provided the rains are seasonable, and the cold is not excessive, there is a year of plenty, not merely of food, but in the trade in all sorts of commodities. The poor burn cow-dung, mixed with straw and dried in the sun, which is also sold, as peat is sold in Holland.

'Fruit-trees are still scarcer, because the ground is salty, and all fruit comes from Kandahar or Kabul—no apples, pears, quinces, pomegranates, melons, almonds, dates, raisins, filberts, pistachios, and many other kinds. Great and wealthy amateurs have planted in their gardens Persian vines which bear seedless grapes, but the fruit does not ripen properly in one year out of three. Oranges are plentiful in December, January and February, and are obtainable also in June and July; they are very large, especially in the neighbourhood of Bayana. Lemons can be had in large quantities.

'The supply of meat, such as we have in Holland, is ample, but it is cheaper than with us. There are sheep, goats, fowls, geese, ducks, deer and other game; and the supply is so large that it is little valued, and prices are low. Oxen and cows are not slaughtered, as they have to work while they are young, doing everything that is done by horses in Holland, and, besides, their slaughter is strictly forbidden by the King on pain of death, though buffaloes may be freely killed.'

INDIGO

As indigo was the principal commodity with which Pelsaert was concerned, he gives details about its cultivation and extraction of the dye.

'Indigo is sown in June, when the first rain has fallen, at the rate of 14 or 15 lb (6.25 to 6.8 kg) of seed to the *bigha*,' states Pelsaert. He continues, 'If the rains are moderate, the crop grows an *ell* high in the course of four months, and is usually cut at the end of September or early in October, when it is fully ripe. The leaves of indigo are round (Fig. 60). The cold weather sometimes sets in so suddenly that, if the cutting is postponed too long, the indigo loses its colour in the course of manufacture, and comes out brown without gloss, for it cannot stand cold. It is a good sign of a heavy yield if in the first crop grass comes up plentifully, though expensive weeding is then required to prevent injury to the indigo roots, or delay in growth. At

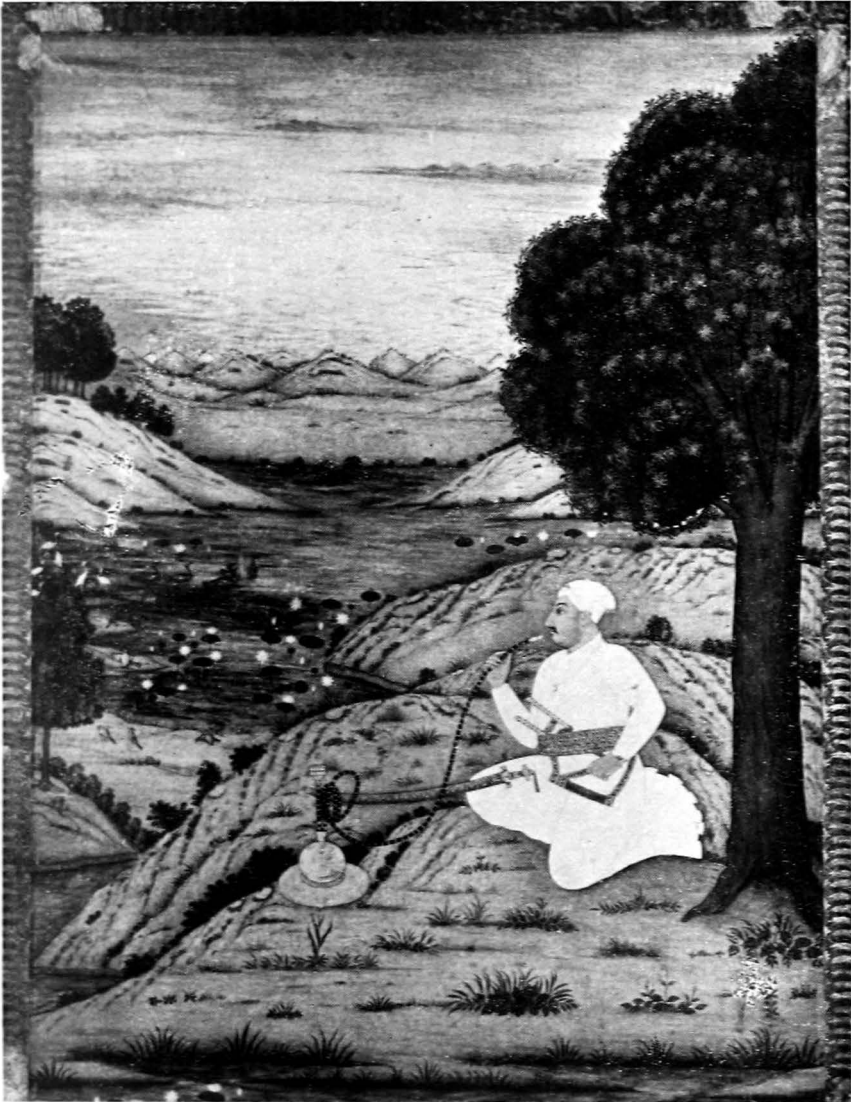


FIG. 58. Mohammad Shah smoking a hookah by a lotus pond. Mughal, c. 1740.
(Courtesy: Salar Jang Museum, Hyderabad)



FIG. 59. In the eighteenth century the habit of smoking spread in India. Even ladies smoked. In this painting from Guler, c. 1760, a Rajput princess is shown smoking a hookah.

(J.K. Galbraith Collection. Courtesy: Fogg Art Museum, Harvard University, Boston.)



FIG. 60. A flowering branch of indigo (*Indigofera tinctoria*). A flower is on the left and pods on the right.

harvest the plants are cut a handbreadth from the ground, and next year the second, or ratoon, crop grows from the stumps. The yield of one *bight* is usually put into each *put*, and allowed to steep for 16 or 17 hours, the *put* being about 38 ft (11.58 m) in perimeter, and its depth the height of an ordinary man; the water is then run off into a round *put*, constructed at a somewhat lower level, 32 ft (9.75 m) in circumference and 6 ft (1.83 m) deep.

Two or three men standing in the *put* work the indigo back and forward with their arms, and owing to the continuous motion the water absorbs the dark-blue colour. It is then allowed to stand again for 16 hours, during which the matter, or substance, settles in a bowl-shaped receptacle at the bottom of the round *put*. The water is then run off through an outlet at the level of the bottom; the indigo which has sunk down is taken out, and laid on cotton cloths until it becomes as firm as soap, when it is made into balls.³

BERNIER'S OBSERVATIONS ON THE CROPS OF KASHMIR AND BENGAL

Of the European travellers who came to India during the Mughal rule, the most intelligent and learned was Francois Bernier, a frenchman. He was born at Joue, near Gonnord, in Anjou on 25 September 1620. His parents, cultivators of the soil, were leaseholders, in the Barony of Etiau, of land belonging to the Canonry of St Maurice at Angers. His peasant origin explains his interest in farmers and agriculture. In 1652 he took his degree as Doctor of Medicine at the University of Montpellier. His guide was the philosopher Gassendi, and he owed his great powers of accurate observation to his training under him. Bernier reached Surat early in 1659. At Ahmedabad, he met Prince Dara Shikoh and accompanied him as his physician. After the defeat of Dara Shikoh by Aurangzeb, he proceeded to Delhi, where he attached himself to a Mughal noble, Danishmand Khan, and remained there till July 1663. In a contemporary Mughal portrait he is shown bare-headed, seated under a tree in a contemplative mood (Fig. 61). In 1665 he travelled in Kashmir and Bengal. In 1666 he travelled from Masulipatam to Golkonda and returned to France, and died in Paris on 22 September 1688.

CROPS OF KASHMIR

Describing the crops of Kashmir, Bernier, states 'Meadows and vineyards, fields of rice, wheat, hemp, saffron, and many sorts of vegetables, among which are intermingled trenches filled with water, rivulets, canals, and several small lakes, vary the enchanting scene. The whole ground is enamelled with our European flowers and plants, and covered with our apple, pear, plum, apricot, and walnut trees, all bearing fruit in great abundance. The private gardens are full of melons, pateques or water-melons, water-parsnips, red beet, radishes, most of our potherbs, and others with which we are unacquainted.'

BENGAL—THE COUNTRY, PEOPLE AND CROPS

Bernier gives a vivid description of Bengal, its landscape, people, and

³Moreland, W.H. and Geyl, P. (tr). *Jahangir's India—the Remonstrantie of Francisco Pelsaert*, pp. 10, 11, 48, 49

its plant and animal products. 'It is important to observe,' states Bernier, 'that of this vast tract of country, a large portion is extremely fertile, the large kingdom of Bengal, for instance, surpassing Egypt itself, not only in the production of rice, corn, and other necessaries of life, but of innumerable articles of commerce which are not cultivated in Egypt, such as silks, cotton, and indigo. There are also many parts of the Indies where the population is sufficiently abundant and the land pretty well tilled.

'In describing the beauty of Bengal,' states Bernier, 'it should be remarked that throughout a country extending nearly an hundred leagues in length, on both banks of the Ganges, from Raje-Mahale to the sea, is an endless number of channels, cut, in bygone ages, from that river with immense labour, for the conveyance of merchandise and of the water itself, which is reputed by the Indians to be superior to any in the world. These channels are lined on both sides with towns and villages, thickly peopled with Gentiles; and with extensive fields of rice, sugar, corn, three or four sorts of vegetables, mustard, sesame for oil, and small mulberry-trees, two or three feet (61 to 91 cm) in height, for the food of silk-worms. But the most striking and peculiar beauty of Bengal is the innumerable islands filling the vast space between the two banks of the Ganges, in some places six or seven days' journey asunder. These islands vary in size, but are all extremely fertile, surrounded with wood, and abounding in fruit-trees and pine-apples, and covered with verdure.

'The three or four sorts of vegetables which, together with rice and butter, form the chief food of the common people, are purchased for the merest trifle, and for a single roupie twenty or more good fowls may be bought. Geese and ducks are cheap. There are also goats and sheep in abundance; and pigs are obtained at so low a price that the Portuguese settled in the country live almost entirely upon pork. This meat is salted at a cheap rate by the Dutch and English, for the supply of their vessels. Fish of every species, whether fresh or salt, is in the same profusion. In a word, Bengal abounds with every necessary of life; and it is this abundance that has induced so many Portuguese, half-castes, and other Christians, driven from their different settlements by the Dutch, to seek an asylum in this fertile kingdom. The rich exuberance of the country, together with the beauty and amiable disposition of the native women, has given rise to a proverb in common use among the Portuguese, English, and Dutch, that the Kingdom of Bengal has a hundred gates open for entrance, but not one for departure.

'Besides the sugar I have spoken of, and which may be placed in the list of valuable commodities, there is in Bengal such a quantity of cotton and silks that the kingdom may be called the common storehouse for those two kinds of merchandise, not of Hindustan or the Empire of the Great Mogol only, but of all the neighbouring kingdoms, and even of Europe.

'Lastly, it is from this fruitful kingdom that the best lac, opium, max, civet, long pepper, and various drugs are obtained; and butter, which may appear to you an inconsiderable article, is in such plenty that, although it be a bulky article to export, yet it is sent by sea to numberless places.'

OBSERVATION OF NICCOLAO MANUCCI ON FRUITS OF INDIA

Niccolao Manucci, an Italian, left Venice in 1653 at the age of fourteen as a stowaway, and reached India in 1656 during the reign of Shah Jahan. He took service under Prince Dara Shikoh, the eldest son of Shah Jahan. In his travelogue, *Storia Do Mogor*, Manucci has made some interesting observations on the fruits of India, viz. the mangoes of Goa, jack-fruit, the pine-apple, the coconut palm and the palmyra palm. Being a physician, he laid special stress on the medicinal qualities of different fruits. Manucci's account of fruits is given below.

MANGOES

'As I have promised to speak of the fruits of India, chiefly of the mango and jack-fruit, I may mention that the best mangoes grow in the island of Goa,' says Manucci. 'They have special names, which are as follows: mangoes at *Niculao Affonso*, *Malaiasses* (? of Malacca), *Carreira branca* (white Carreira), *Carreira vermehla* (red Carreira) of *Conde*, of *Joani Parreira*, *Babia* (large and round), of *Araup*, of *Porta*, of *Secreta*, of *Mainato*, of *Our Lady*, of *Agua de Lupe*. These are again divided into varieties, with special colour, scent, and flavour. I have eaten many that had the taste of the peaches, plums, pears, and apples of Europe. The mango is a little bit heating and laxative, and however many you eat of them, with or without bread, you still desire to eat more, and they do you no harm. While still unripe they are added to dishes, to pasties, *et cetera*. The juice of the ripe fruit mixed with milk is drunk, and is sustaining. They also make the fruit into preserves, which are exported to various places; various kinds of pickles are also made, which keep good for two years, and the stones are employed in medicine. The tree on which the mango is grown is the size of a walnut-tree; the fruit grows in clusters, like plums in Europe.

THE JACK-FRUIT

'The jack-fruit I spoke of is of three kinds—*barca*, *papa*, and *pacheri* jack-fruit. These fruits are very large; some weigh eighty pounds (36.3 kg) or thereabouts. The tree is of the size of a walnut-tree. The fruit referred to grows on the trunk and on the larger branches; some grow from the roots, and these are discovered by the earth being pushed up, also by the smell which the spot emits. This fruit has a green rind an inch (2.5 cm) in thick-

¹Francois Bernier. *Travels in the Mughal Empire*, pp. 439-442



FIG. 61. A portrait of Francois Bernier in a contemplative mood. Mughal, c. 1662.

(Courtesy: Raza Library, Rampore)

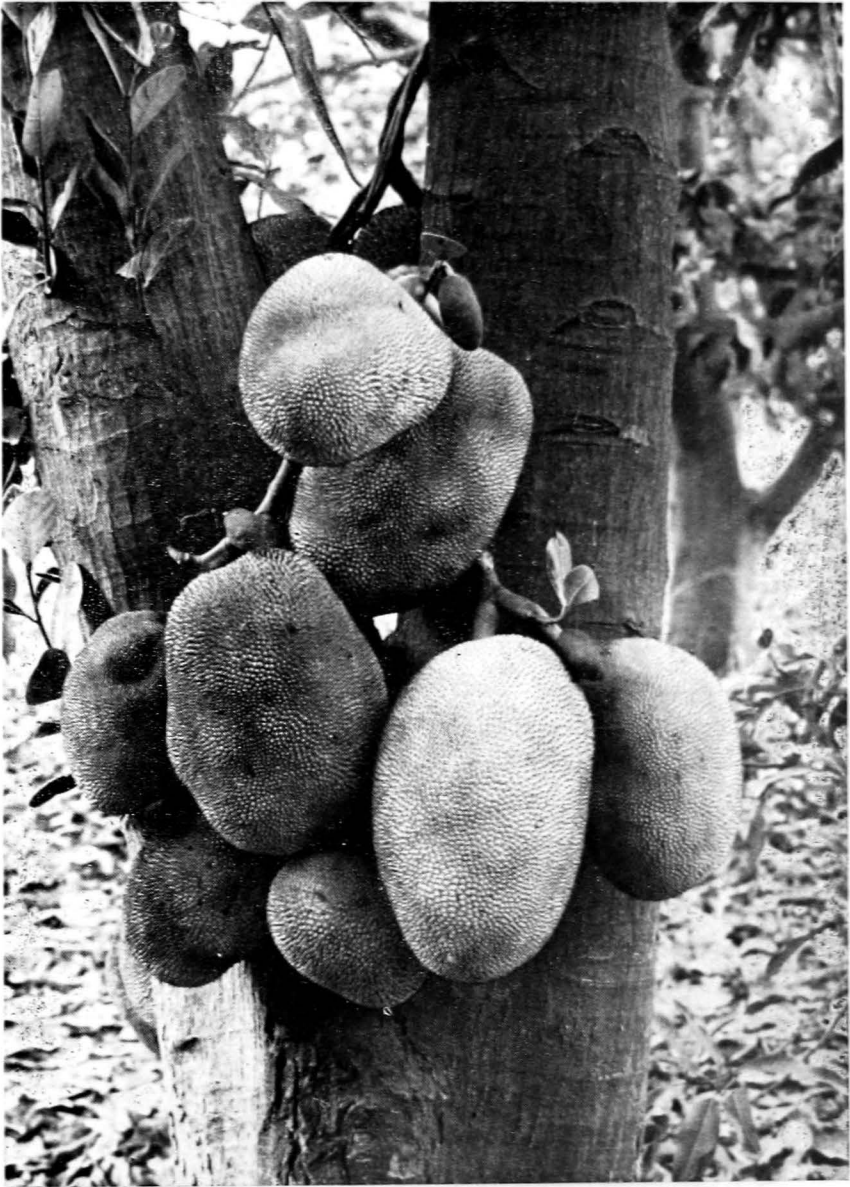


FIG. 62. The fruits of jack-fruit (*Artocarpus heterophyllus*) are borne in clusters on the stem.

ness with projections in the nature of thorns (Fig. 62). It is known to be ripe by the smell it emits. Inside it is full of seeds, somewhat about the size of pears; these are very sweet, and on opening them a juice issues sweet as honey, and in the middle are stones like the chestnuts of Europe. In these jack-fruit the seeds are sometimes white and sometimes red; some are hard, some are soft, and each variety has its special flavour.

'Of these seeds mixed with rice-flour they make a kind of fritters, which in India are called *paniara*. These, too, have their own flavour. When this fruit (the jack) is cut, a white liquid like bird-lime oozes from the rind, and sticking to the hand, it cannot be removed till it is anointed with oil.

THE PINE-APPLE

'I must mention another fruit found in India called *ananas* (the pineapple), which looks like a large pine-cone of Europe, and it has a corrugated rind. It is necessary to slice off this rind somewhat thickly to get rid of some natural depressions it has in it. The centre, when eaten, has a sweet, slightly acid, but very pleasant flavour. This fruit is heating and, if you leave a knife in it all night, the next day you will find it bitten into as if it had remained in *aqua fortis*. The distilled juice of this fruit is useful for dissolving stones in the kidneys and bladder, as I have found by experiment. The plant on which the fruit forms is a cubit in height; it grows up like an ear of corn, each plant yielding no more than one fruit. The leaves are a cubit in length and two fingers in breadth, with prickly edges. In no part of India have I seen them in such quantities as in Bengal, where they were large and fine (Fig. 57). The reason for this is that it is a low-lying and humid country.

THE COCONUT PALM

'There can be no doubt that something curious can be written about a tree which generally grows in India near the sea. It is called palm-tree or coco-tree. This tree has many roots about the thickness of the little finger, and it grows to a great height but increases very slowly. When seven years have passed it begins to yield fruit; ordinarily it occupies a circumference of two cubits and three-quarters, there or therabouts, and it lives for a hundred years. At that age it grows to as much as ten arms' length; the stem is straight like the mast of a ship, with the branches or palm-leaves at the summit about two arms in length. The leaves are two cubits long, lying close to one another like organ-pipes, three inches in breadth. In the middle of the leaf is a rib, of which they make brooms, *et cetera*. They also make mats from the branches, and these serve as carpets to the natives of the country. They thatch houses with the leaves, and they are also used as decorations at festivals. Every month a new branch appears in the middle of the palm-tree, and the oldest one falls off. Each tree has about thirty branches, and amidst them comes out the flower, enclosed by nature in a shield about a cubit

long, nearly ten inches (25.4 cm) in circumference, and coming to a sharp point (Fig. 63). When it has reached its proper size, the covering opens and the flower shows in the shape of brooms (Fig. 64). On each branch of the flower you see its fruit tuck on like buttons, and these, swelling until they are like nuts, are then called *coquinhos* (little coconut); they are used for many infantile complaints, such as diarrhoea and mouth-sores. When grown to the size of twenty-eight up to thirty inches (71 to 76 cm) round, and as much in length, they are called *lanha*. The nut is then full of a sweet water, a drink of which is very refreshing. It is used in inflammation of the liver, the kidneys, and the bladder, and increases urination. It is also good for excessive heat of the liver, pains in the bowels, or discharges of mucus or of blood; it also refreshes in the season of great heat.

THE PALMYRA PALM

‘There is another class of palm-tree which is called *palmeira brava* (the wild palm), which takes many years to grow. This tree produces fruit in the month of March, and the yield lasts up to August. Inside each fruit there are ordinarily three lumps of soft pith which are very refreshing. Eating them is useful in clearing the sight of those unable to see at night. In the same season it yields a liquid called *sura*, and it has the same effects as, and some resemblance to, the palm-tree juice already described. The spirits distilled from this palm-juice are the best. From the leaves they make fans, mats, sunshades, small baskets, and other curiosities. After the fruit has ripened the pith hardens, and the juice is drawn from the shell; leaving this for a few days in the sun, it becomes a sort of marmalade, eaten by many of the natives in place of bread. From all these palm-trees good returns are obtained.’⁵

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⁵Manucci, Niccolao. *Storia De Mogor or Mogul India*, Vol. III, pp. 180-187

TRADE, COMMERCE AND INDUSTRY

IMPORTS AND EXPORTS, PILGRIMAGES

MODES OF TRAVEL AND SARAI

IN THE SEVENTEENTH CENTURY

AGRA, the capital of the Empire, and Ahmadabad, the capital of Gujarat, were great centres of trade in the seventeenth century. Mandelslo, a native of Mecklenburg, who came to India in 1638, describes Agra in his day as the noblest city of Hindustan, and the one in which the Mughal most delighted. He says it was as much as a horseman could do to ride round the city in a day. 'Its streets are fair and spacious, and there are some of them vaulted, which are above a quarter of a league in length, where the merchants and tradesmen have their shops, distinguished by their trades and the merchandises which are there sold, every trade and every merchant having a particular street and quarter assigned him.' There were eighty caravanserais for foreign merchants, 'most of them three stories high, with very noble lodgings, store-houses, vaults, and stables belonging to them.' He counted seventy great mosques, and estimates the number of public baths 'or hot-houses' at above 800, the tax on which brought in a considerable revenue to the State. In and outside the city he saw numerous palaces of the rajas and lords, and, chiefest of all, the imperial palace, fortified with a moat and drawbridge.¹

Describing the trade of Agra and the East Country, Pelsaert states, 'All goods must pass this way, as from Gujarat, Tatta (or Sind); from Kabul, Kandhar, or Multan, to the Deccan; from the Deccan or Burhanpur to those places, or to Lahore; and from Bengal and the whole East country; there are no practicable alternative routes, and the roads carry indescribable quantities of merchandise, especially cotton goods.

'All these countries are very fertile, and yield immense quantities of grain, such as wheat or rice, sugar, and butter, large quantities of which are brought up the river Jumna, or carried by oxen overland, to provision this country (that is, Agra) and the King's army. In the other direction shallow-draught vessels carry from here much Sambhar salt, also opium, asafoetida, 'painted' cloth called *chits* (chintz), red *salu* from Burhanpur, ormesines from Lahore, horses, and large quantities of cotton, which is grown largely between Surat and Burhanpur, and supports an extensive trade to Agra.'²

¹Lane-Poole, Stanley. *Mediaeval India—Under Mohammedan Rule, A.D. 1712-1764*, Vol. II, pp. 223

²Moreland, W.H. and Geyl, P. (tr). *Jahangir's India—the Remonstrantie of Francisco Pelsaert*, pp. 6, 9.

GUJARAT TRADE

'Ahmadabad is the capital of Gujarat, and receives annually from Agra large quantities of goods, for example, much Patna silk, to be manufactured there into ormesines, satins, velvets, and various kinds of curious stuffs,' states Pelsaert. 'Carpets are also woven there with an intermixture of silk and gold thread; while the imports include spikenard, *tzierila*, asafoetida, pipel and numerous such drugs, . . . and clothing for Hindu women from Bengal and the Eastern provinces, *panris* from Kashmir and Lahore, and Bengal *kand* or white sugar. In the other direction are brought hither turbans, girdles, *orhnis* or women's head-coverings, worked very cleverly and ingeniously with gold thread; also velvets, satin of various kinds, striped, flowered, or plain; coconuts from Malabar; European woollen goods; lead, tin, quick-silver, vermilion; large quantities of spice, viz. cloves, nutmeg and mace, and sandalwood.'³

Travelling was full of hazards in Guarat in 1638. The Rajputs—a kind of 'Highwaymen or Tories', Mandelslo calls them—infested the roads, and he had to journey in company with large caravans, and even then had occasion to fight for his life.

TRANSPORT OF FOODGRAINS, SUGAR, GHEE AND SALT

Transport of goods on land was by means of camels, pack-oxen, and goats. In the mountains the transport of commodities like foodgrains and salt was by sheep and goats. Even now the Gaddi shepherds of Himachal and Bhotiyas of Kumaon use their goats for the purpose. Camels on account of their endurance were used for transport of commodities over long distances. In a painting of the *Babur-nama* relating to the reign of Akbar, traders are depicted weighing almonds, and loading them on camels at Kand-i-Badam in Afghanistan (Fig.65).

Transport of foodgrains, sugar, salt and *ghee* was the monopoly of a nomadic trading community known as *banjaras*. They drove enormous herds of pack-laden bullocks. They lived with their families in camps or *tandas*. A large *tanda* might contain as many as 600 or 700 souls and up to 20,000 bullocks, which would have carried something like 2,700 tonnes. On occasions such as when a large army had to be supplied, the *banjaras* could collect a hundred thousand bullocks or more.⁴

RIVER TRANSPORT AND EXPORTS

The rivers offered the cheapest means of transport. Barges of 300-500 tonnes sailed from Agra to Patna and Bengal. The downward journey

³Moreland, W.H. and Geyl, P. (tr). *Jahangir's India—the Remonstrantie of Francisco Pelsaert*, p. 19

⁴Habib, I. *The Agrarian System of Mughal India*, p.62



FIG. 64. The coconut sheath opens and the flowers appear like a bundle of brooms.

FIG. 63. The flowers of coconut are enclosed in a sheath about a cubit long.



FIG. 65. Weighing and transport of almonds at Kand-i-Badam, from the *Babur-nama*. Mughal, 1597.

(Courtesy : National Museum, New Delhi)

was performed during the monsoons when the rivers were in flood, and upward journey during the rest of the year. Rice and sugar were exported from Bengal to Patna and Agra. Agra had flourishing trade in indigo. Bengal silk was exported to Japan and Holland by the Dutch. Lahore and Multan were important river ports in the Punjab with traffic down to Sindh. From Lahore and Multan sugar and ginger were sent down on boats to Thatta, whence they returned laden with pepper and dates. Butter for export was brought down by the river to Thatta from Bhakkar. Indigo was carried in the same way from Sehwan for shipment to Basra and, occasionally, via Surat to Europe.

IMPORTS

Briefly mentioning imports of India, Bernier states, 'Hindustan is in want of copper, cloves, nutmegs, cinnamon, elephants, and other things, with which she is supplied by the Dutch from Japan, the Moluccas, Ceylon, and Europe;—that she obtains lead from abroad, in part from England; broad-cloths and other articles from France;—that she is in need of a considerable number of foreign horses, receiving annually more than five and twenty thousand from Usbec, a great many from Persia by way of Kandahar, and several from Ethiopia, Arabia, and Persia, by sea, through the ports of Moka, Basra, and Bander Abas. It may also be observed that Hindostan consumes an immense quantity of fresh fruit from Samarkand, Bukhara, and Persia; such as melons, apples, pears and grapes, eaten in Delhi and purchased at a very high price nearly the whole winter;—and likewise dried fruit, such as almonds, pistachio and various other small nuts, plums, apricots, and raisins, which may be procured the whole year round;—that she imports a small sea-shell from the Maldives, used in Bengal, and other places, as a species of small money; ambergris from the Maldives and Mozambique, rhinoceros' horns, elephants' teeth, and slaves from Ethiopia; musk and porcelain from China, and pearls from Beharein, and Tutucourin, near Ceylon.⁵ Woollens, silks, and velvets were also imported from Europe and elsewhere, but their use was confined to the upper classes.

INDUSTRY

The chief industry of India was handloom textiles, and its aggregate production was impressive. Its magnitude certainly impressed the Portuguese, as may be seen from the statement quoted by Pyrard, that 'every one from the Cape of Good Hope to China, man and woman, is clothed from head to foot' in the products of Indian looms. Fine muslins were manufactured in royal *karkhanas*. These muslins were used for turbans,

⁵Francois Bernier. *Travels in the Mughal Empire*, pp. 203, 204

and also for drawers worn by females, so delicately fine as frequently to wear out in one night. 'This article of dress, which lasts only a few hours,' says Bernier, 'may cost ten or twelve crowns, and even more, when beautifully embroidered with needle-work.'

PAPER

Paper, which was required for official work on a large scale, was manufactured from wood-pulp obtained from trees. A good deal of paper was manufactured from wood-pulp in Lahore, and Rajgir, in Bihar. There was a considerable progress in the production of paper in the seventeenth century. During the reign of Aurangzeb paper was manufactured in Awadh also.

LAC

Lac was extracted from the trees, and, besides being used for manufacturing women's bangles, it was also utilized in varnishing furniture, doors, windows and toys. The Dutch exported it to Persia. The lac bangle and toy industry flourished most in Gujarat especially at Surat.

IRON

Iron was smelted in comparatively small quantities. Hence only essential hand-tools for agriculture were manufactured from iron. Moreland states, 'At the Imperial Court 1 lb. of iron in this form was worth 10 lb. of wheat, while about the year 1914 the value was just over 3 lb., and on this basis Akbar's peasants had to pay more than three times as much grain as their modern successors for the iron they required for tools and implements.'⁶

PILGRIMAGES

Here a mention may be made to pilgrimages and mode of travel in the seventeenth century. Pilgrimages to Jagannath Puri and Hardwar were popular with the Hindus during the Mughal rule. 'These pilgrimages are not made, as in Europe, one by one, or two by two,' states Bernier, 'but the population of a town or of several villages assemble in order to travel together in company. The poor who come from afar, sometimes 300 or 400 leagues, and who, with all the savings which they have accumulated for that purpose during their lives, are unable to sustain the expenses of the journey, are assisted by the rich, who expend very great sums in such alms. Each one travels according to his station and means, some in pallankeens or litters, others in carriages; and the poor, some on foot and others on oxen, the mother carrying her child, and the father the cooking utensils.' The

⁶Moreland, W.H. *India at the Death of Akbar...*, p. 150

pilgrims carried their idols in litters covered with gold brocade with silver fringes.

A fair idea of the modes of transport used by the pilgrims is provided by a Mewar painting. The chief is seated in a palanquin carried by his servants. His wives are riding a bullock cart, which is screened by curtains to ensure *pardah*. Goods are being carried on backs of camels and bullocks. The servants and retainers are walking, or riding on horses, mules and bullocks (Fig.66).

SARAI

The pilgrims and other travellers rested in *sarais* during their journeys. From Sher Shah onwards *sarais* were built for the use of travellers along the Grand Trunk Road. Some of these *sarais* have crumbled, but a few are still in good condition. The *sarai* at Shambhu about eight kilometres from Sarhind is typical (Fig. 64). Inside are the cells in which the travellers rested along with their goods (Figs. 67, 68). Food was cooked by women of *jhiwar* caste. A Mughal painting provides us a glimpse of a cooking scene in a *sarai*. The woman is making *chapatis*. Scattered around her are cooking implements and utensils. One of the travellers is kneading flour. Their leader is resting on a charpoy, which is surrounded by chickens. The expression on the faces of men shows that they are more interested in the charms of the cook than in food (Fig. 69).

How the *sarais* functioned, and what was life like in these *sarais*? An answer is provided by Niccolao Manucci, who states, 'For the use of wayfarers there are throughout the realms of the Mogul on every route many *sarais*. They are like fortified places with their bastions and strong gates; most of them are built of stone or of brick. In every one is an official whose duty it is to close the gates at the going down of the sun. After he has shut the gates, he calls out that everyone must look after his belongings, picket his horses by their fore- and hind-legs; above all, that he must look out for dogs, for the dogs of Hindustan are very cunning and great thieves.

'At six o'clock in the morning, before opening the gates, the watchman gives three warnings to the travellers, crying in a loud voice that everyone must look after his own things. After these warnings, if anyone suspects that any of his property is missing, the doors are not opened until the lost thing is found. By this means they make sure of having the thief, and he is strung up opposite the *sarais*. Thus the thieves, when they hear a complaint made, drop the goods somewhere, so as not to be discovered.

'These *sarais* are only intended for travellers. Each one of them might hold, more or less, from 800 to 1,000 persons, with their horses, camels, carriages; and some of them are even larger. They contain different rooms, halls, and verandas, with trees inside the courtyard, and many provision

shops; also separate abodes for the women and men who arrange the rooms and the beds for travellers.

'In these *sarais* travellers are pestered by dealers, who offer for sale different kinds of cloth, not only white, but coloured; also by musicians, dancing-boys, women dancers, barbers, tailors, washermen, farriers with horse-shoes, endless cheating physicians, and many sellers of grass and straw for the horses. All these things are cheap; but there are no longer dainty morsels for the foot-travellers to be eaten at the cost of the king, or any supply of bedsteads with mattresses and sheets. Still there is never any dearth of women of pleasure.'



FIG. 66. A chief travelling on a pilgrimage accompanied by retainers. Note different modes of transport. Mewar, c. 1750.

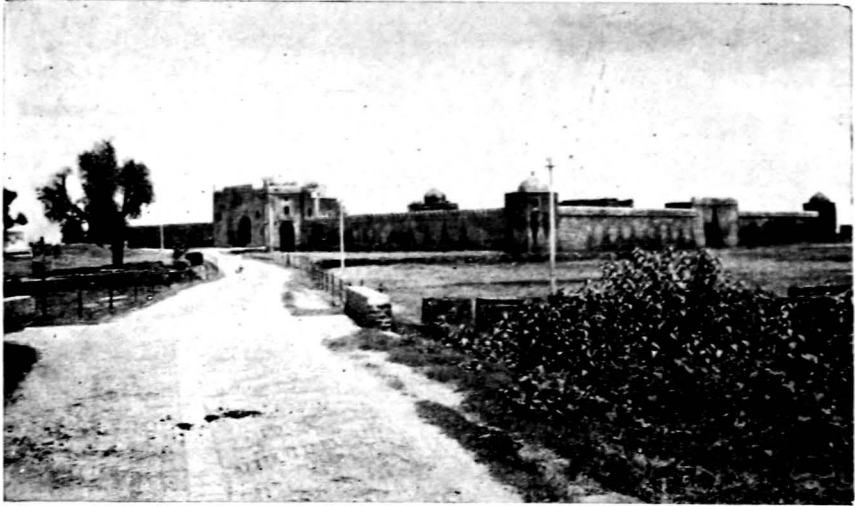


FIG. 67. A *sarai* at Shambhu near Sarhind, Punjab, possibly built by Sher Shah (16th century). It is like a fortress with crenellated walls and towers at the corners. At the entrance and exit are two massive gates.



FIG. 68. The eastern entrance gate of *sarai* at Shambhu. At the sides are cells in which the travellers rested at night time.

CHAPTER 33

THE RULE OF AURANGZEB AND SUCCESSORS

A.D. 1658-1748

MURSHID QULI KHAN'S REVENUE SYSTEM IN DECCAN.
FAMINE IN NORTHERN INDIA, PLAGUE IN DECCAN, EARTHQUAKE IN
DELHI
CONSTRUCTION OF EASTERN JAMUNA CANAL BY MUHAMMED SHAH

DARA SHIKOH, the eldest son of Shah Jahan, was a free-thinker, and was inclined towards Sufism. He got the *Upanishads* translated into Persian. Muhammad Kazim, the author of *Alamgir-nama*, mentions that 'Instead of the sacred name of God, he adopted the Hindu name Prabhu, which the Hindus consider holy, and he had this name engraved in Hindi letters upon rings of diamond, ruby, emerald, etc. Through these perverted opinions he had given up the prayers, fasting and other obligations imposed by the law. It became manifest that if Dara Shikoh obtained the throne and established his power, the foundations of the faith would be in danger.¹ The fears of Muhammad Kazim proved groundless. Aurangzeb, the youngest son, was shrewd, unscrupulous and resourceful. In the fratricidal struggle which followed in 1658, Aurangzeb liquidated Dara, imprisoned his father Shah Jahan in Agra fort, and emerged as the successful claimant for the Mughal throne.

MURSHID QULI KHAN'S REVENUE SYSTEM IN DECCAN, 1653

Aurangzeb had acquired considerable administrative experience as viceroy of Deccan. In 1653 he started the reorganization of the finances of Deccan. He also showed concern for the welfare of the peasantry. 'As soon as the financial situation was well in hand Aurangzeb devoted himself with his wonted energy to the amelioration of the condition of the peasantry and the extension of cultivation,' states Ishwari Prasad. He continues, 'Shah Jahan, who did not appreciate the difficulties of the task, charged him with slackness, and at one time even threatened to reduce his allowance. But the prince persevered in his attempt, and in this work he was assisted by Murshid Quli Khan, an officer of rare administrative genius.

'The Deccan province was divided into two parts for the purposes of revenue administration—the Painghat and the Balaghat. In the former were included the whole of Khandesh and one-half of Berar, while the rest of the territories were comprised in the latter. Both divisions had their

¹Muhammad Kazim. *Alamgir-nama*, in Elliot and Dowson, *The History of India...*, Vol. VII, p. 179

own Diwans who collected the revenue and looked after their finances. Murshid Quli Khan, the Diwan of Balaghat, was not merely a financial genius, but a great administrator endowed with the highest capacity for organization and zeal for reform.

'Murshid Quli Khan introduced Todarmal's revenue system in the Deccan. Amins and Amils were appointed to measure the land, to ascertain the area under cultivation, and to mark out the arable from waste lands. Muqaddams were appointed in the villages who helped in the collection of revenue, and looked after the interests of the peasantry. Loans were advanced to poor cultivators to purchase seed and cattle, and they were permitted to repay them by instalments. So anxious was the Diwan for justice that he did not grudge the meanest labour and often dragged the measuring chain with his own hands. The chaotic revenue system that was in vogue rested on no principle and put the state to a heavy loss. The whole thing was reorganized with the necessary modifications which were suggested by local conditions. Altogether there were three systems which were adopted by Murshid Quli. The old practice of fixing the share of the state per plough was retained in certain backward areas with due allowance for difference in soil and the yield thereof. It was a rough-and-ready system involving risks both to the state and the peasant. The other system was the *batai*, which was determined in the following manner:

'The share of the State was one-half where the crops depended entirely on rainfall.

'In places where irrigation was done by wells, the State took one-third both for the *kharif* and *rabi* crops. But in the case of grapes, sugarcane, and other high-class crops the share of the state varied from one-ninth to one-fourth with full regard to the facilities or difficulties of irrigation and the length of time taken by the crops to mature.

'In lands irrigated from canals, tanks, or river channels, the share of the State was fixed sometimes at a higher rate and sometimes at a lower rate than in lands irrigated otherwise.

'The third method of assessment was that which prevailed in northern India. This was called *jarib*. The land was surveyed, and the State demand was fixed per *bigha* according to the nature of the crop sown.

This carefully organized system worked well and resulted in the improvement of agriculture. The peasantry lived a happy and contented life and were no longer at the mercy of the revenue department. Much high-handedness and oppression came to an end, and the Deccan provinces attained a high level of prosperity.² It is unfortunate that the concern

²Prasad, Ishwari. *A Short History of Muslim Rule in India—From the Conquest of Islam to the Death of Aurangzeb*, pp. 410, 411

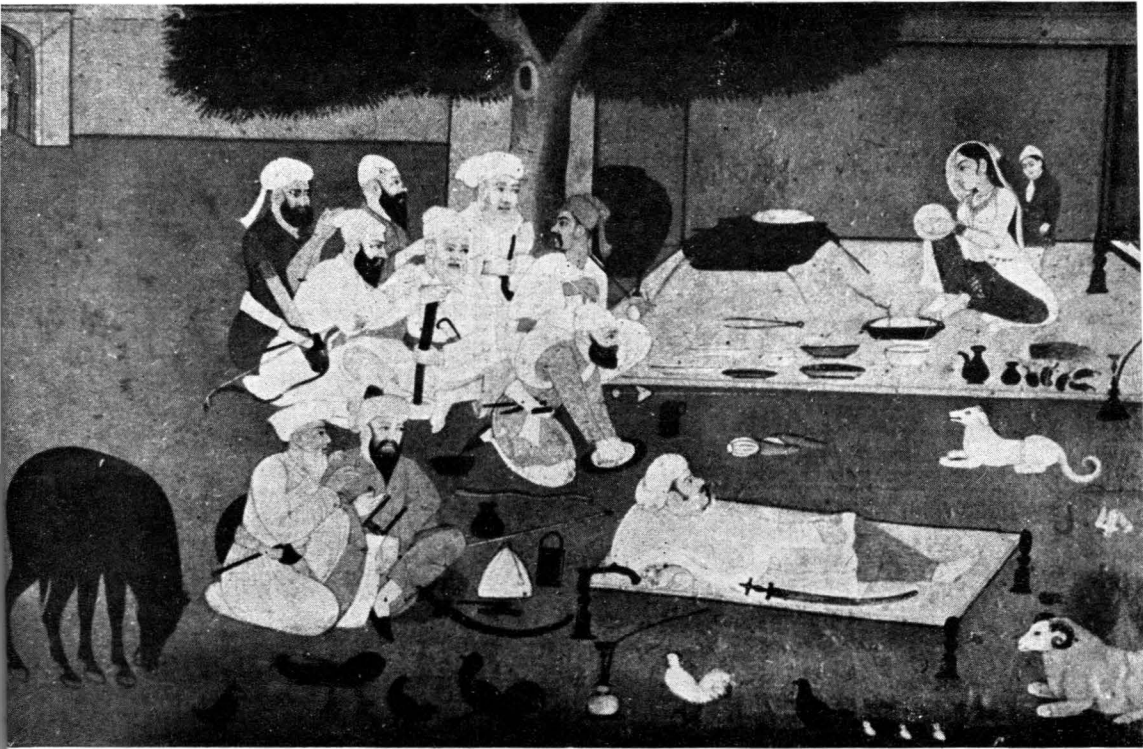


FIG. 69. A woman making *chapaties* for travellers in a *sarai*. Mughal, c. 1750.



FIG. 70. Aurangzeb receiving the sword of Alamgir, Mughal, c. 1658.

(Courtesy: National Museum, New Delhi)

which Aurangzeb showed for the peasantry as a prince was no longer there when he became the Emperor.

FAMINE IN NORTHERN INDIA, 1660

Famines occur in India from time to time. Hardly two years had passed since Aurangzeb's accession when a famine devastated northern India. Unfavourable seasons and want of rain, combined with war and movements of armies, had made grain very scarce and dear,' states Khafi Khan. 'Many districts lay entirely waste, and crowds of people from all parts made their way to the capital. Every street and *bazar* of the city was choked with poor helpless people, so that it was difficult for the inhabitants to move about. An Imperial order was issued that in addition to the regular *bulghur-khanas*, where raw and cooked grain was given away, ten more *langer-khanas* (houses of free food) should be opened in the city, and twelve *bulghur-khanas* in the suburbs and among the tombs, and careful men were appointed to superintend them. Instructions were also issued for the *amirs* to make provision for *langer* distributions, and orders were given for the remission of taxes on the transport of grain, with the view of favouring the gathering of stores.'³

FAMINE IN BIHAR, 1670

'In 1670 the *kharif* crop failed completely in Bihar from want of rain and during the succeeding year an acute famine ravaged the territory extending from the west of Benares to Rajmahal. Multitudes perished on the routes and in the city of Patna and parents sold their children. Ninety thousand were estimated to have died in Patna alone.'⁴

OUTBREAK OF PLAGUE IN DECCAN, 1689

Plague had become endemic in Deccan and Gujarat for several years. 'It now broke out with violence in Bijapur, and in the royal camp,' states Khafi Khan. 'It was so virulent that when an individual was attacked with it, he gave up all hope, and thought only about his nursing and mourning. The black-pated guest-slayer of the sky sought to pick out the seed of the human race from the field of the world, and the cold blast of destruction tried to cut down the tree of life in every living being, and to remove every shoot and sign of life from the surface of the world. The visible marks of the plague were swellings as big as a grape or banana under the arms, behind the ears, and in the groin, and a redness was perceptible round the pupils of the eyes, as in fever or pestilence. It was the business of heirs

³Khafi Khan. *Muntakhabu-l Lubab*, in Elliot and Dowson, *The History of India...*, Vol. VII, pp. 263, 264

⁴Irfan Habib. *Agrarian System of Mughal India*, p. 107

to provide for the internment of the dead, but thousands of obscure and friendless persons of no property died in the towns and markets, and very few of them had the means of burial. It began in the twenty-seventh year of the reign, and lasted for seven or eight years.⁵

ABOLITION OF TRANSIT DUTIES

All rulers, to start with, try to please their subjects by some type of tax remission. Bakhtawar Khan states, 'Among the greatest liberalities of this king of the faithful is this, that he has ordered a remission of the transit duties upon all sorts of grain, cloth, and other goods, as well as on tobacco, the duties on which alone amounted to an immense sum, and to prevent the smuggling of which the Government officers committed many outrages, especially in regard to the exposure of females. He exempted the Muhammadans from taxes, and all people from certain public demands, the income of which exceeded thirty *lacs* of rupees every year.'⁶

JIZYA REIMPOSED, 1679

When finances became lean due to these concessions, Aurangzeb had to explore other avenues of taxation. The discriminatory poll-tax *Jizya*, abolished by Akbar, was reimposed upon the Hindus in all the provinces in April 1679. This evoked a protest from the Hindus of Delhi. 'Upon the publication of this order, the Hindus all round Delhi assembled in vast numbers under the *jharokha* of the Emperor on the river front of the palace, to represent their inability to pay, and to pray for the recall of the edict,' states Khafi Khan. 'But the Emperor would not listen to their complaints. One day, when he went to public prayer in the great mosque on the Sabbath, a vast multitude of Hindus thronged the road from the palace to the mosque, with the object of seeking relief. Money-changers and drapers, all kinds of shopkeepers from the Urdu *Bazar*, mechanics, and workmen of all kinds, left off work and business, and pressed into the way. Notwithstanding, orders were given to force a way through; it was impossible for the Emperor to reach the mosque. Every moment the crowd increased and the Emperor's equipage was brought to a stand-still. At length an order was given to bring out the elephants and direct them against the mob. Many fell trodden to death under the feet of the elephants and horses. For some days the Hindus continued to assemble in great numbers and complain, but at length they submitted to pay the *jizya*.'⁷

⁵Khafi Khan. *Muntakhabu-l Lubab*, in Elliot and Dowson, *The History of India...*, Vol. VII, p. 337

⁶Bakhtawar Khan. *Mir-at-i Alam*, in Elliot and Dowson, *The History of India...*, Vol. VII, p. 160

⁷Khafi Khan. *Muntakhabu-l Lubab*, in Elliot and Dowson, *The History of India...*, Vol. VII, p. 296

INTOLERANCE AND ORTHODOXY OF AURANGZEB

From 1669, Aurangzeb started a campaign for destruction of Hindu temples in Benares, Mathura and Rajastahan. Bakhtawar Khan mentions in *Mir-at-i Alam* that this difficult work was done in such a thorough manner which excites astonishment. These feats of iconoclasm resulted in the alienation of the Hindus who were denied freedom of worship. The Rajputs, who were firm supporters of the Mughal rule under Shah Jahan, Jahangir and Akbar, became hostile. Apart from ban on propagation of non-Muslim religions, even art and music were discouraged and writing of histories was forbidden.

At the death of Aurangzeb, the Mughal empire extended to the whole of India excepting the southern tip, which was under the rule of Hindu Polygars. However, it was a hollow structure and after some time started disintegrating under the impact of peasant revolts which appeared under the garb of movements of religious reforms.

Aurangzeb's government was a system of continual mistrust; every man's character was secretly investigated, and colleagues were so selected that each may be a check on the other. 'Yet there never was a king so much cheated and so ill-served', observes Elephinston.

In his last days Aurangzeb became ineffective. Khafi Khan mentions: 'From reverence for the injunctions of the law he did not make use of punishment, and without punishment the administration of a country cannot be maintained. Dissensions had arisen among his nobles through rivalry. So every plan and project that he formed came to little good; and every enterprise which he undertook was long in execution, and failed of its object.'

As in the case of most tyrants, realization of his guilt came to him when he was nearing his end. 'My back is bent with weakness, and my feet have lost the power of motion,' he lamented. 'The breath which rose is gone, and has left not even hope behind it. I have committed numerous crimes, and know not with what punishments I may be seized.'⁸

SUCCESSORS, BAHADUR SHAH AND OTHERS

Bahadur Shah succeeded in the war of succession and became Emperor of India in 1707. He was followed by a worthless person Jahandar Shah in 1712. In 1712 Farrukhsiyar ascended the throne. Power was, however, in the hands of Sayyids of Barah, Abdullah and Hussain Ali, who murdered Farrukhsiyar in 1719.

MUHAMMAD SHAH (1719-1748)

In 1719 Muhammad Shah, commonly known as *Rangila*, became the

⁸Khafi Khan. *Muntakhab-i Lubab*, in Elliot and Dowson, *The History of India...*, Vol. VII, p. 563

Emperor of India. Feeling insecure, he sought solace in the company of concubines and buffoons. Next year a disastrous earthquake shook Delhi.

EARTHQUAKE, 1720

'On the 2nd of Ramzan, 1132 A.H. (27 June 1720), on Friday, during prayers at the mosques, a fearful earthquake was felt,' reports Khafi Khan. He continues, 'A noise under the earth was heard, doors and walls shook and roofs rattled. During the day and night nine shocks were felt. It was reported that parts of the fort and many houses were thrown down, and that great numbers of persons were killed in Shahjahanabad and old Delhi. The writer of these leaves went out on horseback to see and ascertain for himself.... He found houses destroyed here and there, parts of the ramparts thrown down and damaged, two gates of the city injured, the parapets of the Fatehpuri mosque damaged, and ten or twelve persons killed and wounded. It was very amazing that for a month and two days the shocks continued, and were felt four or five times in the twenty-four hours. Many persons were so alarmed that they would not sleep under a roof. After this time the force of the shocks decreased; but for four or five months the earth and the houses were found to shake occasionally, until the arrival of the blessed feet of His Majesty, when the shocks gradually ceased.'⁹ In 1739 followed another disaster, the invasion of Nadir Shah, the Persian marauder.

THE EASTERN JAMUNA CANAL

The official history of irrigation in India mentions that the Eastern Jamuna Canal taking off from the River Jamuna on the eastern bank of the river near Naushehra in Uttar Pradesh, was constructed probably during the reign of Mohammed Shah. Little is known of its early history, but it seems to have been abandoned not long after its construction, due to the declining power of the Mughals. An attempt was made by the Rohilla Chiefs, about 1780, to restore water supply into the canal, but it proved a failure and was abandoned. The canal was later realigned and remodelled by the British, early in the nineteenth century, and is now known as the Eastern Jamuna Canal.¹⁰

⁹Khafi Khan. *Muntakhabu-l Lubab*, in Elliot and Dowson, *The History of India...*, Vol. VII, pp. 496, 497

¹⁰Development of Irrigation in India, p. 42

CHAPTER 34

INCREASED BURDEN OF TAXATION ON PEASANTS

MISERABLE CONDITION OF PEASANTS, PEASANT REVOLTS, JATS AND SATNAMIS

UNDER the Mughal system of government, at the top was the Emperor and his court comprising ministers, *omrahs* and *mansabdars*. The offices of trust and dignity were held by foreigners, Persians, Arabs and Turks. The *mansabdars* had to maintain a fixed quota of horses. They derived their income from *jagirs* or land revenue assignments or in cash from the treasury. Bernier, who watched them at close range, states that in spite of their pomp and show, most of them were in embarrassed circumstances and deeply in debt. This was on account of the fact that they maintained large establishments of wives, servants, camels and horses. Besides, they had to make costly presents to the Emperor at certain annual festivals.

To maintain the splendour of the court and to pay a large army whose sole function was to keep the people in subjection, an enormous expenditure was incurred. The source of finance was land revenue, which increased sharply from Akbar's time onwards. The increasing land revenue of the Mughal government from Akbar to Aurangzeb is evident in the following table compiled by Lane Poole.

Akbar	1594	—	£18,650,000
Shah Jahan	1655	—	£30,000,000
Aurangzeb	1697	—	£43,500,000

The burden, ultimately, fell on the peasantry.

MODE OF LEASING LAND AND TAX-GATHERING

The method of leasing land and tax-gathering is thus described by Niccolao Manucci: 'At the beginning of their year, which is in June, the officials come from the court to the villages and compel the peasants to take up the land at a certain rate. This bargain made, they must give notice at harvest-time to the king's officers, for without their permission the peasants may not harvest the grain. As soon as notice is received the officials proceed to the spot, and before allowing the crop to be cut, they ask the cultivators whether they are willing to give a half or a third more than they have contracted for at the beginning of the year. Should the cultivators agree to this, writings are drawn up and security taken; but after having made the bargain, they usually find that what they gather in does not suffice to meet the king's rent. It thus happens, more often than not, that they find themselves ruined by this revenue payment.

'It is for this reason that many of them, when the royal officials try to

increase the demand, reply that they can pay no more than they agreed to before signing the papers. But this way, too, they find themselves equally ruined, for the officials then remain present during the harvest, and inspect the cutting of all the crops, the cultivator also being present.

'When all is ready, they first place on one side the cultivator's share; next they compel him, then and there, to buy the king's share. When in the country-side one measure is selling for six *sols*, they force the peasants to give them nine. In this way, whatever be the method employed, the poor cultivator finds himself ruined. Nothing is left to him to maintain his family, seeing that they are obliged to enter every year into new engagements in order to get a subsistence for their family and obtain fresh supplies.'¹

The *omrahs* also enjoyed no security of property. There was a system of escheat, the Emperor constituting himself as the sole heir of the property of those who died in his service. The most astonishing thing was that the avarice of the nobles had no solid basis, though they devoted themselves entirely to gathering their treasures, without a thought of the cruelty or injustice involved, observed Pelsaert. 'Immediately on the death of a lord who has enjoyed the king's *jagir*, be he great or small, without any exception—even before the breath is out of his body—the king's officers are ready on the spot, and make an inventory of the entire estate, recording everything down to the value of a single pice, even to the dresses and jewels of the ladies, provided they have not concealed them. The king takes back the whole estate absolutely for himself, except in a case where the deceased has done good service in his lifetime, when the women and children are given enough to live on, but no more.'²

WRETCHED CONDITION OF PEASANTS

As regards the peasantry and their condition, we have reliable evidence in the observations of the European travellers who travelled in India in the seventeenth century. Peter Mundy tells us that the peasants near Agra were treated 'as Turks treat Christians', 'taking from them all they can get by their labour, leaving them nothing but their bad, mud-walled, ill-thatched houses and a few cattle to till the ground, besides other miseries.'

Pelsaert, who was in Agra during the rule of Jahangir, observed: 'The land would give a plentiful, or even an extraordinary, yield if the peasants were not so cruelly and pitilessly oppressed; for villages which, owing to some small shortage of produce, are unable to pay the full amount of the revenue-farm, are made prize, so to speak, by their masters or governors, and wives and children sold on the pretext of a charge of rebellion. Some

¹Manucci, Niccolao. *Storia Do Mogor or Mogul India*, Vol. III, pp. 46, 47

²Moreland, W.H. and Geyl, P. (tr). *Jahangir's India—the Remonstrantie of Francisco Pelsaert*, pp. 54, 55, p. 47

peasants abscond to escape their tyranny, and take refuge with rajas who are in rebellion, and consequently the fields lie empty and unsown, and grow into wildernesses. Such oppression is exceedingly prevalent in this country.²

Bernier, commenting on the state of the northern part of the country, its agriculture and peasantry, states: 'Of the vast tracts of country constituting the empire of Hindustan, many are little more than sand, or barren mountains, badly cultivated, and thinly peopled; and even a considerable portion of the good land remains untilled from want of labourers, many of whom perish in consequence of the bad treatment they experience from the Governors. These poor people, when incapable of discharging the demands of their rapacious lords, are not only often deprived of the means of subsistence, but are bereft of their children, who are carried away as slaves. Thus it happens that many of the peasantry, driven to despair by so execrable a tyranny, abandon the country and seek a more tolerable mode of existence, either in the towns or camps, as bearers of burdens, carriers of water, or servants to horsemen. Sometimes, they fly to the territories of a Raja, because there they find less oppression, and are allowed a greater degree of comfort.'³

Jeane-Baptiste Tavernier, a French jeweller and merchant, visited India six times, between the years 1638 and 1688. He corroborates the account given by Bernier. He states: 'The peasants have for their sole garment a scrap of cloth to cover those parts which natural modesty requires should be concealed; and that they are reduced to great poverty, because if the Governors become aware that they possess any property they seize it straightaway by right or by force. You may see in India whole provinces like deserts from whence the peasants have fled on account of the oppression of the Governors.'⁴

The flight of peasants from the land intensified during the reign of Aurangzeb. With the decrease in the number of peasants, the income of the assignees, the *jagirdars*, was reduced. The *jagirdars*, to make good their loss, put increased pressure on the working peasants. Moreover, the practice developed of selling governments of provinces for immense sums in hard cash. Hence, it naturally became the principal object of the individual thus appointed Governor, to obtain repayment of the purchase-money, which he had borrowed at a ruinous rate of interest. This in turn resulted in more repression on the cultivators.

Due to uncertainty created among *jagirdars* owing to the constant and unpredictable transfers of *jagirs*, the agents of the *jagirdars* had given up the practice of helping the peasantry of making firm arrangements, states Bhim-sen. 'Moreover, the *amils* of the *jagirdars* were not sure of their own tenures

²Bernier, F. *Travels in the Mughal Empire*, p. 205

⁴Tavernier, J.B. *Travels in India*, p. 392

of employment and so "proceeding tyrannically" were unrelenting in the collection of revenue. When the *jagirdar*, instead of appointing his own agents to collect the revenue, farmed out the *jagir*, the evil was worse still. The land was being laid waste, says Sadiq Khan, writing of Shahjahan's reign, through bribery and revenue-farming, as a result of which the peasantry was being robbed and plundered.⁵

To sum up, the Mughal system of Government and the Mughal society was predatory. There were lots of little fleas with lesser fleas on their backs to bite them. The English ambassador at the court of Jahangir's, Sir Thomas Roe, aptly observed, 'The people of India live as fishes do in the sea—the great ones eat up the little. For first the farmer robs the peasant, the gentleman robs the farmer, the greater robs the lesser, and the King robs all.' By the term farmer, he means the *jagirdars*, and his gentlemen were *omrahs* and *mansabdars*. The upper classes, the *omrahs*, *mansabdars* and *jagirdars* spent their incomes on objects of luxury and display. They did not invest money on improvement of land or on welfare of the peasantry and as a result the misery of the peasantry deepened, and their burden became insufferable in the reign of Aurangzeb and his successors.

PEASANT REVOLTS

The bottled-up discontent of the peasantry erupted in a series of revolts, which were essentially of the nature of class-warfare. Irfan Habib is the first historian to identify their true nature.

Many peasants during the Mughal rule found a new basis for a community opposed to the caste-divisions. This was created by the sects formed as part of the great religious movement that had begun in the latter half of the fifteenth century. The leading ideas of these sects were identical: monotheism, the abandonment of ritualistic forms of worship, the denial of caste-barriers and of communal differences. As important as the content of their ideas was the mode of their preaching, which was directed towards the masses. The new teaching was communicated in vernacular dialect, and the prophets, the preachers and the followers belonged mostly to the deprived lower classes. The teachers of these sects preached humility and resignation. But when radical ideas, such as the contempt for caste and the sense of unity under a new faith, established themselves in the minds and hearts of the masses, the sects could not remain confined to religion. They provided the inspiration for two of the most powerful revolts against the Mughals, viz. those of the Satnamis and the Sikhs.

The ties of caste and religion, however, helped to enlarge the scale of peasant uprisings. The real transformation was brought about by the intervention of elements from the *zamindar* class that had their own motives in

⁵Irfan Habib. *The Agrarian System of Mughal India*, p. 321

opposing the Mughal ruling class. Leadership to the peasant rebellions was provided by their own leaders who were *zamindars*, as in the case of the Hindu Jats.

REVOLT OF HINDU JAT PEASANTS, 1669-1707

Hindu Jats inhabit the areas now included in Agra Division of Uttar Pradesh and Haryana. They are known for their courage, bravery and spirit of independence. For patient industry and endurance as agriculturists they have few equals. Women actively co-operate with their husbands in every kind of field labour. They cook food, manage the household affairs and carry food for the menfolk working in the fields. They make embankments of the fields, follow the plough, dropping seed in the soil during the sowing season, and carry heavy loads of green fodder on their heads for the buffaloes.

Though living so close to Delhi, the Mughal capital, the Jats preserved their independence and were known to the Mughals as troublesome rebels. The leader of the jat rebellion in the time of Aurangzeb was Gokul, the *zamindar* of Talpat near Mathura. The imperial *faujdar* who had carried out Aurangzeb's repressive policy with unusual zeal was killed. In the battle which ensued, the imperialists lost 4,000 men, and the rebels 5,000. Never before did the Mughal army suffer such heavy losses.

When Gokul was killed in 1669, leadership passed to Raja Ram. Raja Ram was followed by Churaman, under whose leadership the peasants refused to pay revenue and took to arms. They sacked and plundered all the *parganas* under Agra and Delhi, and blocked the highways. In 1681, the rebellious peasants killed Multafat Khan, the *faujdar* of Agra, who was leading an attack on a village whose peasants had refused to pay the revenue. The trouble was renewed in 1688, and continued to the end of Aurangzeb's reign.

There were two social forces working among the peasantry, which helped to extend the scale of such peasant uprising. These are caste and religion. The community of caste brought the peasants living in a village into contact with their peers in distant villages, through ties of blood. If they took to arms, their caste brethren could not stand aloof. In the Jat revolt we have the clearest instance of an essentially peasant rebellion which proceeded along caste lines.

SATNAMI REVOLT, 1672

Who were the Satnamis? Why did they come in conflict with the Mughal government? How was their revolt crushed? Khafi Khan answers these questions as follows. 'One of the remarkable occurrences of this year was the outburst of the Hindu devotees called Satnamis. There were four or five thousand of these, who were householders in the *parganas*

of Narnaul and Mewat. These men dress like devotees, but they nevertheless carry on agriculture and trade, though their trade is on a small scale. In the way of their religion they have dignified themselves with the title of "good name", this being the meaning of *Satnam*. They are not allowed to acquire wealth in any but a lawful calling. If any one attempts to wrong or oppress them by force, or by exercise of authority, they will not endure it. Many of them have weapons and arms.

'At the time Aurangzeb was returning from Hasan Abdal, a strong altercation arose one day near Narnaul between a man of this sect, who was engaged in agricultural work, and a man who was keeping watch over the harvest. The latter broke the Satnami's head with his staff. A number of Satnamis then collected and beat the watchman, so that they left him for dead. When intelligence reached the *shikkdar*, he assembled his men and sent them to arrest those Satnamis. Meantime numbers of the Satnamis assembled. They attacked the *shikkdar's* men, overpowered them, wounded several, and took away their arms. Their numbers went on increasing, and information was carried to Kar-talab Khan, *faujdar* of Narnaul.

'After several fights the *faujdar* was killed, and the town of Narnaul fell into the hands of the Satnamis. They proceeded to collect the taxes from the villages, and established posts of their own. When the Emperor reached Dehli, he was informed of this outbreak, and he sent force after force to quell it, but they were all defeated and dispersed. It was said that swords, arrows, and musket-balls had no effect upon these men, and that every arrow and ball which they discharged against the royal army brought down two or three men. Thus they were credited with magic and witchcraft, and stories were currently reported about them which were utterly incredible. They were said to have magic wooden horses like live ones, on which their women rode as an advanced guard.

'Great *rajas* and veteran *amirs* were sent against them with powerful armies. But the revolters were eager for the fight, and advanced to about sixteen or seventeen *kos* from Dehli. The royal army went forth boldly to attack them; but the *zamindars* of the neighbourhood, and some cowardly Rajputs, seized the opportunity to throw off their obedience, and to withhold the government dues. They even broke out into open violence, and the flames daily increased. The King ordered his tents to be brought out. He then wrote some prayers and devices with his own hands, which he ordered to be sewn on the banners and standards, and carried against the rebels. At length, by the exertions of Raja Bishan Singh, Hamid Khan, and others, several thousands of them were killed, and the rest were put to flight, so that the outbreak was quelled.'⁶

⁶Khafi Khan. *Muntakhab-ul Lubab*, in Elliot and Dowson, *The History of India...*, Vol. VII, pp. 294-296

According to Saki Musta'idd Khan⁷, apart from cultivators and small shop-keepers, there were other 'ignoble' beings, such as carpenters, goldsmiths, sweepers and tanners, among the Satnamis. In modern terms they were of the working classes, and their revolt was essentially a revolt of peasants, artisans, small traders and shop-keepers against the ruling classes.

⁷Saki Musta'idd Khan. *Ma-asir-i 'Alangivi*, in Elliot and Dowson, *The History of India . . .*, Vol. VII p. 185

MAHARASHTRA, THE MARATHA COUNTRY

THE MARATHAS, SIVAJI, AN OUTSTANDING LEADER

THE MARATHA REVOLT, ITS CULTURAL AND ECONOMIC CAUSES

FAILURE DUE TO A POOR AGRICULTURAL BASE

MAHARASHTRA, the Maratha country, is coterminous with the Deccan lavas, which gave the black cotton soil. On its western side are the Ghats, the flat-topped mountains. Below the Ghats is the coastal strip known as the Konkan. To the eastern side is the Deccan plateau, rising to an average elevation of about 610 metres above the sea level. While there are luxuriant tropical forests on the Konkan side of the Ghats, on their eastern side vegetation is sparse. The monsoon currents deposit most of their moisture in the Western Ghats, and there is very little rain in the middle strip of the Deccan plateau, the rain-shadow area. The main crops are *jowar* and *bajra*, which form the staple diet of the people.

Describing the Ghats and the Konkan, Mountstuart Elphinstone observes: "The great feature of the country is the range of Siadri, more commonly called the Ghats, which runs along the western part of it thirty to forty miles (48 to 64 km) from the sea; and, though only from 3,000 to 5,000 feet (944 to 1,524 m) high, is made very remarkable by its own peculiarities, and by the difference between the tracts which it divides. On the west, it rises abruptly, nearly from the level of the sea, and on that side presents an almost inaccessible barrier; but on the east, it supports a table-land 1,500 to 2,000 feet (457 to 609 m) high, extending eastward, with a gradual slope to the Bay of Bengal.

"The strip of land between the Ghats and the sea is called the Konkan, and is, in general, very rugged. Towards the coast are small rich plains, producing rice; the rest is almost impervious from rocks and forests, cut by numerous torrents, which change, when near the sea, into muddy creeks, among thickets of mangrove. The summits of the ridge itself are bare rocks; its sides are thickly covered with tall trees mixed with underwood. The forest spreads over the contiguous part of the table-land to the east, a tract broken by deep winding valleys and ravines, forming fit haunts for the wild beasts. Fifteen or twenty miles (24 to 32 km) from the ridge, the valleys become wide and fertile, and by degrees are lost in open plains, which stretch away to the eastward, covered with cultivation, but bare of trees, and rarely crossed by ranges of moderate hills. The great chain of the Ghats receives the whole fury of the south-west monsoon, the force of which is thus broken before it reaches the plains. For several months the high points are wrapped in clouds, and beaten by rains and tempests.

The moisture soon runs off from the upper tracts, but renders the Konkan damp and insalubrious throughout the year.

'The whole of the Ghats and neighbouring mountains often terminate towards the top in a wall of smooth rock, the highest points of which, as well as detached portions on insulated hills, form natural fortresses, where the only labour required is to get access to the level space, which generally lies on the summit. Various princes, at different times, have profited by these positions. They have cut flights of steps or winding roads up the rocks, fortified the entrance with a succession of gateways, and erected towers to command the approaches; and thus studded the whole of the region about the Ghats and their branches with forts.'¹ This was ideal country for guerilla warfare in which the Marathas specialized. This was the environment in which Sivaji, the great leader of the Marathas, lived as a boy.

THE MARATHAS

The bulk of the Marathas were Shudras with an infusion of Rajput blood in certain castes. No other historian had better insight into the character of the Marathas than Elphinstone, who was the British Resident at Poona in 1811 and Governor of Bombay from 1819 to 1827. 'Though the Marathas had never appeared in history as a nation, they had as strong marked a character as if they had always formed a united commonwealth,' observed Elphinstone. 'They are small sturdy men, well made, though not handsome. They are all active, laborious, hardy, and persevering. If they have none of the pride and dignity of the Rajputs, they have none of their indolence or their want of worldly wisdom. A Rajput warrior, as long as he does not dishonour his race, seems almost indifferent to the result of any contest he is engaged in. A Maratha thinks of nothing but the result, and cares little for the means, if he can attain his object. For this purpose he will strain his wits, renounce his pleasures, and hazard his person; but he has not a conception of sacrificing his life, or even his interest, for a point of honour. The Rajput is the most worthy antagonist—the Maratha, the most formidable enemy; for he will not fail in boldness and enterprise when they are indispensable, and will always support them, or supply their place, by stratagem, activity, and perseverance. All this applies chiefly to the soldiery. The mere husbandmen are sober, frugal, and industrious.'²

Sardesai, the Maratha historian, observes: 'The Marathas as a people doubtless possessed in their vein high blood and noble tradition derived through ages from their royal ancestors such as the Mauryas, the Rashtrakutas, the Chalukyas and the Yadavas, not to mention the more recent

¹Elphinstone, Hon. M. *The History of India—the Hindu and Mahometan Periods*, p. 615

²Elphinstone, Hon. M. *The History of India—the Hindu and Mahometan Periods*, pp. 616, 617

additions to the original stock by the arrivals from time to time of north Indian Rajput tribes such as the Paramarsa (the present day Pawars), the Solankis, the Bhosles, the Ghorpades, the Mohites, the Mahadiks, the Gujars, the Shirkes, the Sawants, the Ghatges, the Manes, the Dafles, the various Deshmukhs of the Mawals, several of who adopted new surnames, in some cases from the places they occupied in the Deccan and from other sources. The Nimbalkars of Phaltan, for instance, are indeed the Paramars of Dhar, who after being expelled by Muslim conquerors from their habitation in Malwa, at first took their residence at Nimbalk in the Deccan and received their present name from that village. The Bhosles similarly are believed to have migrated from Rajputana and settled near Verul in the vicinity of Daulatabad. Sivaji's mother came from the Jadhao family, doubtless descendants of the ruling Yadavas of Deogiri, who continued to drag on a subdued existence in the region once ruled by their royal ancestors. The Ghorpades are indeed a branch of the Bhosles who acquired that surname from one of their ancestors capturing a fort by climbing up a rampart on a rope tied to an aguana (i.e. ghorpad). 'The several Deshmukhs of the Mawal valleys such as the Jedhes, the Bandals, the Khopdes, the Pasalkars, the Silimkars and so on, acquired their present surnames when they came into and colonized those regions west of Poona, and figured prominently as early associates of Sivaji.'³

The intellectual elite of the Marathas were Chitpawan Brahmans of the Konkan. The Peshwas, the Prime Ministers of Maratha rulers, were Chitpawan Brahmans. The first Peshwa was Balaji Viswanath. On his death in 1720, he was succeeded by his son Baji Rao, who in 1737 made an incursion into Delhi to intimidate the Mughal Emperor Muhammad Shah.

Apart from providing Peshwas, the Brahmans also provided accountants. The accounts work was kept so intricate, that other castes could not penetrate their special preserve.

Describing the food, dress, arms and method of warfare of the Marathas, Elphinstone states: 'Their usual food was a cake of millet, with perhaps an onion; their dress a small turban, tight breeches covering their thighs, and a scarf or sash rolled round their middle. When their body was not bare, it was covered by a light cotton tunic.

'Their arms were a sword and a matchlock, but oftener a bamboo spear, thirteen or fourteen feet (4 to 4.3 m) long, the national weapon, which they used with extraordinary skill. Their horses were those of their own country, small, strong, and active, capable of enduring great fatigue, and taught to bound forward, or stop, or to wheel round when at full speed

³Sardesai, Govind Sakharam. *New History of the Marathas*, Vol. I, *Shivaji and His Line*, 1600-1707, pp. 35-37

on the slightest pressure from their rider's leg. They had a pad for a saddle, with a blanket folded over it. When stationary, few except the chiefs had tents; and on their inroads, each man slept on the ground, with his spear struck by him and his bridle tied to his arm, ready to leap on horseback.

'They would then form a compact body, to protect those which were carrying treasure; but with such a prize before them, the Marathas were irresistible: the party were generally obliged to take post; the Marathas cut off the communications, and perhaps even the water; and, at the end of a day or two, the Mughals were obliged to surrender; the men were stripped of their horses and their valuables, and the chiefs detained for a ransom.'⁴

SIVAJI (1627-1680)

Leadership to the revolt was provided by the chiefs who were men of families who had for generations filled the offices of heads of villages or functionaries of districts, and had often been employed as partisans under the governments of Ahmadnagar and Bijapur. One such chief was Maloji Bhosla, who rose to a command of 5,000 horses in the service of Sultan of Ahmadnagar. His son was Shahji, the father of Sivaji.

At the age of fifteen Sivaji freed his *jagir* of Poona. His constant companions were the Mawalis, the hillmen, who taught him to ride and shoot, and to find his way in the pathless jungle, which covered a great part of the country. Like Akbar, he was unable to read and write, and his education was oral. He avidly listened to epics, like the *Mahabharata*.

Sivaji built a great reputation for skill in reducing forts. He conquered the fort of Torna, some twenty miles (32 km) from Poona. 'By fraud and stratagem, and by his marvellous skill in the conduct of sieges, every fort that he approached fell into his hands after a few days investment,' states Khafi Khan. 'He reduced Sattara, Pannala and ten other forts belonging to Bijapur. He rebuilt the forts which had formerly stood on the sea-shore, and he constructed also vessels of war, which were kept under the guns of the fortress. With these vessels he attacked and plundered ships which were proceeding to Europe and to Mecca. The inaccessible forts of Rajgarh and Chakna were his abodes, and he had secured several islands in the sea by means of a fleet which he had formed. He built several forts also in those parts. Altogether, he had forty forts, all of which were well supplied with provisions and munitions of war.'

In 1648 Sivaji occupied the whole of the northern Konkan. His rule extended on the sea-coast from Kaliani in the north to the neighbourhood of Goa, a distance of over 250 miles (402 km); east of the Ghats, it reached to Mirich on River Krishna; and its breadth in some parts was as much as 100 miles (161 km). It was not a vast dominion, but it supported an army

⁴Elphinstone, Hon. M. *The History of India—the Hindu and Mahometan Periods*, pp. 660, 661

of over 40,000, and had been built with incredible patience and daring.

His return to the Deccan from Delhi was followed by a series of triumphs. Surat was again sacked (1671), and the Maratha swarms spread southerly past Madras to Tanjore, levying blackmail wherever they went. In June 1674, he was enthroned at Raigarh. As he was meditating still greater aggrandizement, a sudden illness put an end to his career in 1680, when he was not quite fifty-three years of age.

Sivaji was a man with an extraordinary personality. According to Ramchandra Nilakanth Amatya, 'He overcame every enemy, some he openly attacked, some he compelled to accept a fight, some he surprised by means of ingenious contrivance, others he weakened by involving them in mutual dissensions, sometimes secretly fomenting quarrels; others he confounded by sudden raids upon their camps and habitations. Some he boldly met in open combat, some he won over through tempting offers, some he boldly went to visit personally, some were scattered through curious stratagem.'⁵

CHAUTH AS SOURCE OF REVENUE

The Marathas derived their finances from *chauth*, a tribute of twenty-five per cent of the revenue of a province. How the *chauth* was collected is thus described by Khafi Khan (1718 A.D.). 'With large armies the Marathas invaded the *subas* of the Dakhin, and Ahmadabad, and Malwa, for the purpose of collecting the *chauth*, and they plundered and ravaged wherever they went. To cities and large towns they sent messengers and letters, demanding payment of the *chauth* from the governor or *zamindar*. Or the *mukkaddams* and *zamindars* of the towns and villages hastened out to meet the Maratha army, undertaking to pay the *chauth*, and begged for protection. Taking back with them a messenger (*harkara*) and a horseman, to protect the village and the cultivation, instead of showing their total rent to be one or two thousand rupees, they made it out to be four or five hundred. But whatever sum was settled, they promised payment, and gave sureties, called *ol* in the language of India. They thus saved themselves from violence and plunder.

'When the *faujdar*s or *zamindars* of a place refused to pay the *chauth*, and made no propositions, the Marathas attacked the place and thoroughly ravaged it.

'The Marathas treated carvans just in the same way, and many were plundered. The commanders of their bands did their best to settle the amount of *chauth* to be paid, and were not willing to pillage. Their men, on the contrary, strove to prevent any arrangement of the *chauth*, so that they

⁵Sardesai, Govind Sakharam. *New History of the Marathas*, Vol. I, *Shivaji and His Line*, 1600-1707, p. 262

might be free to plunder. For, if an agreement was arrived at, and the *chauth* was settled without plundering, it belonged to the chiefs, and the men got nothing. But, if it came to plundering, each man kept what he could lay hands upon, and the chiefs did not gain so much.

'Through Balaji Bishwanath and Jamnaji, Brahmans, and most intelligent generals of Raja Sahu, a proposal of peace was made on these terms. There was to be paid to the officers of Faja Sahu a fourth part of what the *amins*, *kroris*, and *shikkdars* collected as land revenue, and as *sair* from the government lands and from the *jagirdars*. It was also settled that, in addition to the fourth share which they were to get from the receipts of the *jagirdars*, they were to receive from the *raiya*t's ten per cent as *sar-deshmukhi*. Altogether they were to receive thirty-five per cent, upon the total collections, and also upon the cesses (*abwabs*) called *faujdari*, *shikkdari*, *ziyafat*, and other charges, as shown in the gross account of the collections. According to this account they were to receive nearly half the total revenue recorded in the Government rent-roll, and the collections were thus shared by the domineering collectors of Raja Sahu. This arrangement, by which they were to collect all taxes, fell very hard upon the *raiya*t's, and the government officers and *jagirdars*; for in every district there were two collectors: one called the *kamaishdar*, the other the *gumashta* of the *sar-deshmukhi*. On the roll of the collections the signature of the *sarrishtadar* of the *sar-deshmukhi* was first placed, and what was required by the rules on that account was to be taken separately. The position and life of the officers of Government and of the *jagirdars* became irksome.

'Besides these, there were two separate collectors of the *rahdari* (road duties) in each district. In consequence of the negligence of the *faujdars* and the dominance of the enemy, these had for some time taken their positions in different places, and exacted half a rupee, or one rupee, for each bullock and cart from merchants, and whatever they pleased from other persons. They exacted twice or three times more than the most tyrannical *faujdars*. Now also, since the days of the peace, the former grievance remained, but it was aggravated by more taking part in it. In the present state of things there were in each district three regular collectors of Raja Sahu, with parties of horsemen and footmen stationed at the office, the guard-house where the land-revenue, the *sair* and the tolls were collected.

'Besides this there were in many places villages which had been laid waste by the Marathas, and which had been again brought into cultivation under special agreements, such as the districts about Nandurbar, in Khandesh, in Berar, and in other places. They paid no heed to the special contracts made by Husain 'Ali Khan; but, conceding the third share belonging to the *jagirdar*, they made the following arrangement. They recognized three shares; one was for the *jagirdar*, one they took themselves, and the third they left to the *raiya*t's. In revenue and civil matters the orders and the action

of the enemy prevailed over the authority of the *faujdar*s and *jagirdar*s. At the time of the peace Husain 'Ali Khan determined and issued strict injunctions that the *rahdari* should not be exacted, as in the days before the peace, from merchants and travellers at the rate of three rupees or four upon each bullock and cart, as if *faujdar*s and harsh officials were acting. But it was not good. In several districts there was no longer any plundering of villages and caravans; but, as in former days, travellers and wanderers paid the *rahdari*, and went on in peace without interruption. Villages which had been ravaged by plunderers, or made completely desolate by the tyranny of rapacious managers, were now restored to cultivation.

'Husain 'Ali delivered a *sanad* containing the conditions of peace, under his seal, to the *vakils* of Raja Sahu, and made no delay in writing for a royal *farman* confirmatory of this document. He introduced the agents of Raja Sahu everywhere, and he settled that Balaji Bishwanath and Jamnaji, two of the highest officers of Raja Sahu, should stay with a suitable escort in Aurangabad as deputy and *vakil* of the Raja, so that all civil and revenue matters might be settled through them.⁶

MARATHA REVOLT—ITS CULTURAL AND ECONOMIC CAUSES

According to Bhimsen, who was writing his memoirs in 1700, there was an intimate connection between the rise of the Maratha power and the oppression of the peasants. The peasants of the Deccan had suffered for decades before Sivaji's rise to eminence from wars brought about by the steady pressure of the Mughals against the Deccan kingdoms. Vast areas were ravaged by the invading armies; the grain was seized, the people slaughtered or enslaved. Some of the peasants rendered aid to Sivaji. Aurangzeb ordered his officials to give capital punishment to peasants, *desh-mukhs* and *patels* of the *parganas* of Imperial territories, who had gone over to the side of Sivaji. "The oppressed peasants, who were unable to carry on their avocation peacefully joined the army of Sivaji. They were the "naked starved rascals", who formed the core of his army. The military operations of the Marathas did not offer any relief to the cultivating peasants. On the contrary, they suffered grievously from their ravages. As the range of operation of the "Robber State" grew, so too the number of its victims increased. But this seems to have created a still larger number of "naked starved rascals", who themselves plundered, had no alternative left but to join the plunderers in order to survive; and so the unending circle went on.⁷ As the Mughal armies decayed, the Marathas multiplied. Elphinstone observes: 'After reducing the Deccan to a desert, they spread over Malwa,

⁶Khafi Khan. *Muntakhabu-l Lubab*, in Elliot and Dowson, *The History of India* . . . , Vol. VII, pp. 465-468

⁷Habib, I. *The Agrarian System of Mughal India*, p. 350

and made a powerful inroad into Gujarat, leaving their traces everywhere in pillaged towns, ravaged fields, and smoking villages.'

The main causes of Maratha rebellion against the Mughals were cultural and social. Ramdas, the spiritual preceptor of Sivaji, pointed out to him that the protection of gods, cows, Brahmans and the Faith was his primary duty. 'When the Faith is dead, death is better than life. Gather the Marathas together, make religion live again.' Thus the main object before Sivaji was to win freedom of worship and revival of Hinduism, which could only be achieved through military and political power.

A POOR AGRICULTURAL BASE

The Marathas had their power base in the Deccan, an infertile rocky area with scanty water resources. It depended upon an uncertain monsoon, which, when it failed, converted the Deccan into a land of famine and hunger. This was a decisive handicap in the race for supremacy in India, whose main contenders on the collapse of the Mughal empire were the Marathas and the British. The British occupied the most fertile areas of India with rich alluvial soil and high rainfall, viz. Bengal, Bihar and the coastal area of Andhra and Tamil Nadu. This explains, why the Marathas who had conquered Delhi in 1737, occupied the Punjab in 1758 and almost fulfilled their dream of flying their saffron flag from the Krishna to the Indus, ultimately failed to consolidate their gains. On account of a poor agricultural base, the Marathas resorted to the plunder of fertile provinces of Mughal India, and thus antagonized the inhabitants of these provinces. Moreover, their guerilla tactics of warfare, which served them so well in the Deccan terrain, were entirely unsuitable for the flat Indo-Gangetic plain.

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CHAPTER 36

RISE OF SIKHISM

MARTYRDOM OF GURU ARJAN, SIKHS BECOME MILITANT
ROLE OF KHATRIS AND JATS IN SIKHISM, MARTYRDOM OF GURU
TEGH BAHADUR
GURU GOBIND SINGH AND THE CREATION OF THE KHALSA
REVOLT OF BANDA BAHADUR AND HIS LAND REFORMS IN THE
EAST PUNJAB
GUERRILLA WARFARE AND THE *RAKHI* SYSTEM

GURU NANAK's religion was not a system of philosophy, but a way of life. According to Guru Nanak, meditation should be combined with manual work. He condemned idleness and exhorted his followers to engage themselves in productive work. Apart from this, he gave women a new status and dignity as mothers, and equal partners in life with their husbands. Guru Angad (1539-1552), the second Guru, earned his living by rope-making. The third Guru, Amar Das (1552-1574), ordered that the *Udasis*, the celibate ascetics, who did not follow a productive avocation, were to be excluded from the new faith. He himself earned his living as a small tradesman. Guru Ram Das (1574-1581), the fourth Guru, on a site granted by Akbar, restored an old tank which he called Amritsar. He made Amritsar the centre of the new faith. Guru Arjan (1581-1606) constructed the temple of Hari Mandir in the middle of the tank. He also founded the towns of Kartarpur and Tarn Taran, and built temples at these places. A characteristic of these temples is that they have doors on all sides, indicating that they are open to members of all castes and creeds. He also compiled the *Adi Granth*, the scripture of the Sikhs, which included the hymns of his predecessors and himself as well as of the *bhaktas*.

Guru Arjan was a poet and mystic and also a great organizer. He fostered trade and industry among the Sikhs. He encouraged his followers to trade in horses from Central Asia. He also set up a machinery for collecting tithes from his followers by appointing *masands*. The *masands* collected contributions from the Sikhs in areas assigned to them. The funds collected were deposited in the Guru's treasury and spent in providing free meals to all who came to hear the discourses of the Guru.

With the death of Akbar on 17 October 1605, the liberal phase of the Mughal Empire came to a close. In April 1606, Khusru, the elder son of Jahangir, rebelled against his father and fled to the Punjab. He met Guru Arjan at Tarn Taran and sought his help. The Guru gave him 5,000 rupees out of compassion. When the news reached Jahangir, he summoned the Guru, and after hearing his dignified reply, fined him two lacs of rupees.

The Guru refused to pay the fine which was unjustly imposed. The Mughals savagely tortured the Guru for five days at Lahore until he died. This was the first martyrdom in the history of Sikhism.

GURU HARGOBIND (1595-1644)

Guru Hargobind, the sixth Guru, was only eleven years old when his father was martyred. He realized that military power alone could provide protection to the Sikhs against the Mughal tyranny. When he was installed as Guru he wore two swords, representing his spiritual and temporal leadership. In front of the Hari Mandir, the Sikh temple at Amritsar, he raised another building, the Akal Takht, the seat of temporal power. He also asked every Sikh to keep a sword and maintain a horse. He also raised a small army. In the plains of the Punjab, he fought successfully six battles against the Mughals.

ROLE OF KHATRIS AND JATS IN SIKHISM

In the growth of Sikhism, two castes have played an important role, viz. the Khatri and Jats. The Khatri were a mercantile community and trade and shop-keeping was their occupation. Some of them were also employed as clerks and accountants by the Mughal Government. They were the intellectual elite of the period in the Punjab. All the Sikh Gurus were Khatri belonging to Bedi, Bhalla, Trehan and Sodhi subcastes (*gotras*). On the other hand, the followers were mostly Jats, the cultivators. The Jats, who are known for their democratic and egalitarian traditions, were drawn in large numbers by the new faith which denounced the caste system and gave equality to all its followers. Majha, the central Punjab, the cradle of Sikhism, had a high proportion of Jat population. Farming is their traditional occupation and fighting their popular pastime. When they have a common enemy they are united and fight him with unparalleled courage. Thus it was not merely the martyrdom of Guru Arjan, which spurred Guru Hargobind towards militancy. McLeod believes, 'The growth of militancy within the Panth must be traced primarily to the impact of Jat cultural patterns and to economic problems which prompted a militant response.'¹

SANCTUARY IN THE SIWALIK HILLS

Below the outer Himalayas are the Siwalik Hills, covered with scrub forest, the haunt of the leopards and the wild boar. While Majha was the cradle of Sikhism, its further growth took place in the Siwaliks. In 1634 Guru Hargobind settled at Kiratpur. His successor Guru Har Rai (1644-1661), the seventh guru, also lived at Kiratpur, where he maintained a small army.

¹McLeod, W.H. *The Evolution of the Sikh Community*, p. 12

GURU TEGH BAHADUR (1621-1675)

The ninth Guru, Tegn Bahadur, shifted from Baba Bakala to Kiratpur and from there he moved on to a site near the village of Makhawal and laid the foundation of a new town, which he named Anandpur. Harassed by his jealous kinsmen, he left Anandpur and travelled east, visiting Agra, Allahabad, Benares and Gaya. He settled for a while at Patna, where his son Gobind Rai was born. After touring Bengal and Assam, he returned to Anandpur. At that time Aurangzeb was at the peak of his power, and proselytism to Islam was taking place on a massive scale in the Kashmir valley and other places. A deputation of Kashmiri Brahmans approached the Guru for advice and help. The Guru advised them to inform the Mughal authorities at Delhi that if he, their Guru, accepted Islam, they would follow suit. The Guru was summoned up to Delhi and on his refusal to embrace Islam he was beheaded.

GURU GOBIND SINGH (1666-1708)

Gobind Rai, as he was known in his early years, was nine years old when his father, Tegn Bahadur, was martyred at Chandni Chowk, Delhi. He spent his early years at Paunta on the Jumna, learning Sanskrit and Persian, riding and hunting and practising the use of arms. He also pondered deeply on the contemporary problems, the tyranny of the Mughals who denied freedom of worship to the Hindus, and the malaise of Hinduism, its caste system and empty rituals, taboos and superstitions.

In 1686 came his first test when he fought the Hindu Hill Rajas at Bhangani, six miles (9.6 km) from Paunta, and defeated them. This victory gave him confidence to return to Anandpur. Anandpur was fortified, and he taught his Sikhs the techniques of warfare. The Guru was also a poet and scholar. He had fifty-two bards at his court, and heroic poetry was encouraged to enthuse his followers.

When the Guru was organizing the Sikhs to fight the Mughal oppression, he was advised by Kesho Das, a Brahman priest, who had come from Benares, to perform a *yajna* to Nainadevi, the goddess of power. The *yajna* was carried on for many days but the goddess did not appear. The Guru realized that the main weakness of the Hindus was their belief in supernatural powers rather than in their own strength. In utter disgust, he threw the ghee, incense, and other paraphernalia into the sacrificial fire, and there was an enormous blaze visible for miles. The credulous believed that the goddess had appeared. When asked whether he had seen the goddess, the Guru unsheathed his sword and said, 'This is the goddess.' He told them that the goddess is the power which is always in us. It is the conscience of man which refuses to bow before evil. It is the anger which the righteous and truthful men feel when faced with oppression and falsehood. The Guru asked his followers to take up the sword and fight evil.

On the Baisakhi of 1699 he convened an assembly of his followers at Anandpur and created the Khalsa. He declared at a congregation that he wanted to sacrifice a man. At his call five men volunteered. They belonged to different castes and were from different parts of India, viz. Daya Ram, a Khatri from Lahore; Dharam Das, a Jat from Rohtak; Mohkam Chand, a washerman from Dwaraka in Gujarat; Himmat, a water-carrier from Jagannath Puri in Orissa; and Sahib Chand, a barber from Bidar in Deccan. The Guru baptised them with water stirred with a sword. They were told to renounce their ancestral occupations, family ties, old religious beliefs, rituals and customs. Thus a casteless society, the Khalsa, was created. As Cunningham observed, "through his baptism of the sword, Gobind roused the dormant energies of a vanquished people and filled them with a lofty, although fitful, longing for social freedom and national ascendancy, the proper adjuncts of that purity of worship which had been preached by Nanak. Gobind saw what was yet vital and he relumed it with Promethean fire."² It was thus that the timid Hindus riven by caste dissensions were transformed into warriors who suffered fearsome persecutions and ultimately overthrew the tyrannical government of the Mughals.

Guru Gobind Singh gave a distinctive form to his Singhs by prescribing five symbols, viz. unshorn hair, a sword, a steel bangle on the right wrist, a comb to keep the hair clean, and a knee-length *kachh* or shorts. Smoking ✓ of tobacco was forbidden. This ban promoted physical fitness, as tobacco is an insidious poison, which contributed significantly to the deterioration of the physique and stamina of the Mughal soldiers, the adversaries of the ✓ Singhs. As the bulk of the converts were the Jats of the Punjab, this ban added to their efficiency as farmers and soldiers.

Apprehensive of the rising power of the Guru, Aurangzeb ordered the governors of Sarhind and Lahore to invest Anandpur. The Guru, confronted by a force vastly superior in numbers, was forced to leave Anandpur. At Chamkaur, his two elder sons—Ajit Singh and Jujhar Singh—died fighting the Mughals. His remaining two sons—Zorawar Singh, aged nine, and Fateh Singh, aged seven—were walled alive at Sarhind. The Guru's mother who had accompanied them, unable to bear the shock, also died at Sarhind. The Guru took shelter in the scrub jungle of Malwa and at the village of Talwandi Sabo, now called Damdama Sahib. He collected his writings, and compiled the *Dasam Granth*.

Guru Gobind Singh abolished the institution of Gurudom. He vested the spiritual leadership in the *Guru Granth*, and temporal leadership of the community in Khalsa Brotherhood. He placed a revolutionary ideal before his followers, viz. of the Raj Khalsa or the people's democracy. This ideal opened the prospects of worldly power and prosperity to the men of the lowest

²Cunningham, J.D. *A history of the Sikhs*, p. 75

castes of the Hindu society, who hitherto were doomed to poverty and perpetual subjugation.

Passing through Rajasthan, the Guru came to Agra. In the mean time Aurangzeb died and Bahadur Shah succeeded him. The Guru ultimately settled for a while at Nander on the Godavari in the Deccan. Here he was assassinated in 1708 by two Pathans, who had been deputed by Wazir Khan, Governor of Sarhind.

The sacrifices of Guru Gobind Singh are unparalleled in history. He exhorted his father to sacrifice his life for freedom of worship. He lost his mother and four sons. His courage and sacrifices thrilled the peasantry of East Punjab and they embraced Sikhism in large numbers.

BANDA BAHADUR (1708-1716)—HIS LAND REFORMS

Lachhman Das, who came to be known as Banda Bahadur, was a Dogra Rajput. He was born on 27 October 1670 at Rajori, a village in the Poonch District of Jammu and Kashmir. His father, Ram Dev, was a cultivator. Stricken with remorse on the death of a pregnant doe he had shot, he became a Bairagi, assumed the name of Madho Das, and wandered about in the Deccan. After a stay at Nasik, he shifted to Nander. It was here that he met Guru Gobind Singh in 1708. He was so impressed by the Guru's personality that he declared himself as his *banda* or slave. The Guru gave him a sword and five arrows, a drum and a banner. The Guru also gave him *hukamnamas*, letters of authority, addressed to the Sikhs of the Punjab, exhorting them to rally round his banner and avenge the death of his father and his innocent children.

As Banda Bahadur entered Haryana, the Sikhs joined him in large numbers. He looted Sonapat, Kaithal, Samana, Ghuram, Shahabad, Mustafabad, Kapuri and Sadhaura. In the mean time, the armed peasants from the central districts of the Punjab converged towards Sarhind. On 24 May 1710 Sarhind was sacked and thus the murder of Guru Gobind Singh's sons avenged. By the autumn of 1710 the whole of Jalandhar Doab was liberated by Banda's followers. The peasant revolt then spread from Doaba to Majha, the central Punjab.

One of the greatest achievements of Banda Bahadur was the abolition of the *zamindari* system in East Punjab. The *zamindars* (landlords) were mostly government officials responsible for paying to the Mughal Government fixed land revenue of the villages entrusted to them. They had arrogated to themselves the position of absolute proprietors who could turn out the actual cultivators at their sweet will. The Mughal authorities did not interfere in their internal arrangements so long as they paid their dues. They were free to extort any amount from the peasants who were practically reduced to the position of serfs. 'Once, says a local tradition, people from the neighbourhood of Sadhaura came to Banda complaining of the iniquities

practised by their landlords. He ordered Baj Singh to open fire on them. They were astonished at the strange reply to their representation, and asked him what it meant. He told them that they deserved no better treatment when being thousands in number they still allowed themselves to be cowed down by a handful of *zamindars*. "Why should not the Khalsa of the Guru feel strong enough to redress his own wrongs?" The remedy suggested was successfully applied.³

'The revolt spread across the Sutlej over the whole of the Majha country,' states Khushwant Singh. 'Starting from Amritsar, the peasant armies marched northwards towards the hills, taking Kalanaur, Batala, and Pathankot. Then they overran the tract between the Sutlej and the Ravi. The Punjab became like a surging sea of free peasantry with only two small islands of Mughal authority in its midst—the capital city of Lahore and the Afghan town of Kasur. From the Jumna to the Ravi and beyond, the only person who mattered was Banda, and the only power that commanded respect was that of the peasant armies.'⁴

It was a true peasant revolt led by Banda Bahadur, who himself came from a poor peasant family. His army was mostly composed of cultivators. This revolt had a far-reaching impact on the socio-economic life of East Punjab. It became a land of yeomen who owned their lands and became the best farmers of India.

GUERRILLA WARFARE

Banda was captured by the Mughals and executed in Delhi in 1716. The period 1716-1768 was a period of life-and-death struggle for the Sikhs. The Mughal Emperor's edict was to arrest every Sikh, wherever found, and if he did not accept Islam to kill him. For every Sikh head a reward was given. Faced by an organized government with a standing army, the Sikhs adopted guerilla tactics. They were expert in handling the matchlock and the sabre. They would attack the Mughal army, inflict losses on them and retreat, then attack them again. They took shelter in jungles. The Lakhi jungle situated between the Sutlej and the Beas was their base. The Siwalik hills of Jammu and Kangra, and the desert area of Malwa were their other two bases and places of refuge. Their horses were so expertly trained that they responded to their voice, touch of the hand and stroke of the heel. On receiving a stroke of the hand they would stop in full gallop. They could also swim across swollen rivers with perfect ease.

The Sikhs deprived the Persian marauder Nadir Shah of some of his loot when he was returning to Iran through Punjab in May 1739. "Where do they live?" asked Nadir Shah of Zakriya Khan, the Governor of the

³Teja Singh and Ganda Singh: *A Short History of the Sikhs*, Vol. I, 1469-1765, pp. 87, 88
⁴Khushwant Singh. *A History of the Sikhs*, Vol. I, 1469-1839, p. 109

Punjab. "On the saddles of their horses," replied Zakriya Khan. "Be warned, therefore," said Nadir perceptively, "for they seem to smack of sovereignty. They might occupy your lands before long."

RAKHI SYSTEM

Chaos prevailed in the Punjab in the middle of the eighteenth century. Trade was disrupted by the plundering bands, and life and property were unsafe. The Khalsa were the only organized force in this chaos. As a price for protection against robbers, the villagers, who accepted the protection of the Dal Khalsa, paid one-fifth of their income twice a year, at the end of each harvest, in May and October. This system was called *Rakhi* or price for protection. In a short time large slices of the territory in four Doabs of the Punjab were taken under their protection by the Dal Khalsa.

In the areas under the *Rakhi* system, raids of bandits were prevented, disputes settled and rough and ready justice meted out. Thus the Sikhs took over the police functions of the State. "The people got relief and respite, and the Sikhs got an opportunity to prove that they meant to rule. Politically, the *Rakhi* system made them saviours of the people; economically it assured them of regular legal income; and militarily, it put their organization on sound footing. In terms of guerilla strategy, it meant an onslaught on the stable image of the Mughal empire and the staying power of the Afghan occupation forces."⁵

CONSOLIDATION OF GUERRILLA BANDS INTO MISALS

On the Baisakhi of 1748 the Sikhs passed their first historic *Gurmata* at the Akal Takht at Amritsar. The sixty-five bands of guerillas were consolidated into twelve *misals*. During this period the Punjab was ravaged by Ahmed Shah Abadali, who slaughtered a large number of the Sikh warriors. However, he could not crush the Sikhs. He failed to consolidate his hold on the Punjab. From 1764 to 1798, the *misals* practically ruled the Punjab. Ultimately, Ranjit Singh of Sakerchakia *misal* emerged as an outstanding leader of the Sikhs. He occupied Lahore on 6 July 1799, and founded a kingdom which lasted for half a century. After a fierce struggle, it succumbed to the British, whose power was based on industrial and agricultural revolution, which were the result of the discoveries of the laws of science and their practical applications.

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APPENDIX

CHRONOLOGY OF DYNASTIES, KINGS AND CHIEF EVENTS IN THE MEDIAEVAL PERIOD

The Early Muhammedan Invaders

A.D.

SULTAN MAHMUD OF GHAZNI (998-1030)

1001	Mahmud defeats Jaipal, ruler of the Punjab
1026	Sack of Somnath
1192	Muhammad of Ghor defeats Prithvi Raj at Tarain
1199	Bakhtiyar ravages Bihar
1199-1200	Conquest of Bengal
1206	Death of Muhammad Ghori

The Sultans of Delhi (1200-1556 A.D.)

I. TURKS

SLAVE KINGS (1206-1265)

1206-1210	Qutb-ud-din Aibak
1210-1236	Shams-ud-din Iltutmish
1231	Foundation of Qutb-Minar
1235-1236	Rukn-ud-din Firuz Shah I
1236-1239	Raziya
1239-1241	Mu'izz-ud-din Bahram Shah
1241-1246	'Ala-ud-din Mas'ud Shah
1246-1265	Nasir-ud-din Mahmud

HOUSE OF BALBAN (1265-1290)

1265-1287	Ghiyas-ud-din Balban
1287-1290	Mu'zz-ud-din Kaikubad

KHALJIS (1290-1320)

1290-1295	Jalal-ud-din (Firoz Shah II)
1295-1315	Ala-ud-din (Muhammad Shahi)
1299	Mongol invasion
1300	Price control measures
	Revenue administrative measures
1315-1316	Shihab-ud-din Umar Shah
1316-1320	Qutb-ud-din Mubarak
1320	Nasir-ud-din Khusru Khan
1325	Death of Amir Khusrau, poet and historian

TUGHLAKS (1320-1388)

- 1320-1324 Ghias-ud-din
 Encouragement of agriculture
 Postal system
 Muhammed-bin-Tughlak (1325-1351)
 Transfer of capital from Delhi to Deogir
 Issue of copper money as substitute for silver money
 A scheme for reclamation of waste-lands

1342 Ibn Battuta in India. His stay at Delhi

VIJAYANAGAR

- 1336 Vijayanagar founded by Harihara I
FIROZ SHAH (1351-1388)
 1355 Digging of Western Jamuna Canal
 Founding of Jaunpur and Hissar
 1367 Construction of Anantaraja Sagar Tank by Bukka I at
 Vijayanagar
 Mahmud Shah Tughlak II (1392-1394)
 Nusrat Shah (1394-1399)
 1398 Timur invades India
 Ramanand born
 Daulat Khan Lodi (1412-1414)

SAYYIDS (1414-1451)

- 1414-1421 Khizr Khan
 1421-1433 Mu'zz-ud-din Mubarak Shah II
 1433-1443 Muhammad Shah IV
 1443-1451 'Ala-ud-din 'Alam Shah
 1443 Abdur Razzak visits Vijayanagar

Afghans**LODIS (1451-1526)****BUHLOL (1451-1488)**

- 1453 Fall of Constantinople to the Turks
 1469 Guru Nanak born
 1478 Vallabhacharya born
 1486 Chaitanya born

SIKANDAR (1489-1517)

- 1498 Vasco da Gama at Calicut
 1500 *Argar-maha-bedak*, a Sanskrit treatise on science of medicine
 translated into Persian and named as *Tibb-i-Sikandri*
 1500 Cabral discovers Brazil
 1501 10 Jan. The Portuguese fleet leaves Cochin, touching at
 Cannanor on 15 Jan. and reaching Lisbon on 21 July.
 Bihari Lal, a Hindi poet, author of *Satsai*, flourished at Amber

- 1502 Pope Alexander VI grants to the Portuguese king a bull constituting him "Lord of the Navigation, Conquest, and Trade of Ethiopia, Arabia, Persia, and India"
- 1503 Sultan Sikandar II transfers the capital of the Empire from Delhi to Agra
- 1506 Albuquerque conquers Malacca
- 1508 7 March. Humayun born at Kabul
- 1509 Reign of Krishna Raya at Vijayanagar
Albuquerque, Portuguese Governor in India
- 1510 Portuguese capture Goa
- 1513 The Krishnasvami temple at Vijayanagar built by Krishna Deva. The temple of Hazara Ramasvami is begun
- 1515 Duarte Barbosa travels in India—visits Vijayanagar, 1504–15

IBRAHIM (1517–1526)

LOW PRICE OF FOOD-GRAINS

- 1518 Albuquerque is recalled, and the Portuguese power in the East from this time begins to decline
- 1520 Visit of Domingo Paes to Vijayanagar
A pair of spectacles presented to Vyasaraya, guru of Krishna-devaraya by the Portuguese
- 1521 Krishna Deva of Vijayanagar constructs the great dam and channel at Korragal, also the Basavanna channel

THE MUGHALS

BABUR (1526–1530)

- 1526 First battle of Panipat, 19 April at Panipat. Babur defeats Ibrahim, who was slain, and founds the Mughal dynasty in Hindustan
- 1527 Chaitanya, prophet and mystic, dies
- 1528 19 Sep. Babur receives the historian Khondamir, who henceforth accompanies the Emperor on his journeys
- 1530 Babur completes the dictation of *Babur-nama*, which he started in 1528 at Agra

HUMAYUN (1530–1556)

- 1530 26 Dec. Babur dies near Agra, and Humayun, his son, succeeds at the age of twenty-two, till 1539
- 1533 Aug. Humayun repairs the old fort of Indraprastha; and calls it Dinpanah, making it his royal residence
- 1534 Farid Khan, an Afghan chief, separates from Humayun, and begins an anti-Mughal movement, assuming the title of Sher Khan
The *Humayun-nama*, the last work of Khondamir, written
- 1535 Fernao Nuniz visits Vijayanagar
- 1536 The imperial troops in Bihar defeat a Bengal army at Bihar

fort. The young king, Jalal, flees to Gaur. Chunar fort captured by Sher Khan, who makes himself master of Bihar
 1538 Oct. Guru Nanak dies at Kartarpur. Angad, his disciple, succeeds as second Guru

SHER SHAH AFGHAN (1540-1545)

1540 Sher Shah ascends the throne of Delhi, and seizes all Humayun's possessions. He subdivides Bengal into provinces. His revenue, administrative measures, and construction of *sarais*, roads

Inquisition established at Goa

1541 The *Lubbu-t Tawarikh* of Yahya bin 'Abd-ul Latif written

1542 A Portuguese expedition to China discovers Japan

23 Nov. Birth of Akbar at Amarkot

1544 Humayun is hospitably received by Shah Safawi Tahmasp of Persia, and, though forced to profess the Shiah religion, he obtains an army to reconquer Hindustan

ISLAM SHAH (1545-1554)

1545 24 May. Sher Khan killed by an explosion at Kalinjar. Salim or Jalal Khan supplants his brother in the succession, and assumes the title of Islam Shah

1550 Technique of grafting introduced by the Portuguese into Indian horticulture ✓

1551 14 Jan. Shaikh Abu-l Fazl, the historian, born Kashmir is divided into three principalities, Nazak being pageant king over all

1552 4 March. Angad, the second Sikh Guru, dies, having nominated as his successor his disciple Guru Amardas

1552 Luiz de Camoens, the poet, arrives at Goa and becomes a soldier

MUHAMMAD SHAH ADIL (1554-1555)

1554 A great earthquake in Kashmir destroys the town of Jadra with most of its inhabitants, and changes the course of the Jhelum at Dampor

The Mughals

AKBAR (1556-1605)

1556 28 Jan. Humayun dies, the result of a fall on the palace stairs

14 Feb. Akbar, at the age of fourteen, succeeds

14 Feb. Akbar introduces the *Fasli* or "harvest" year—a solar year for revenue and other civil purposes, instead of the usual Muhammadan lunar year, but dating from the Hijri year 963. It corresponds with the Hindu solar years of the

- Saka reckoning, but beginning with Aswin
- 1559 The Portuguese become stringent in the enforcement of their pass rules, confiscating all ships and massacring crews not producing the pass. The rice trade falls into their hands
- 1563 Publication of Garcia da Orta's *Coloquios*, a description of Indian medicinal plants
- Introduction of new plants from the New World
- 1564 *Hamza-nama*, painted for Akbar. Completed in 1569
- 1565 Akbar abolishes *Jazia*
- 25 Jan. The Muhammadan kings of the Deccan unite and overthrow the Hindu monarchy of Vijayanagar in the battle of Talikota
- 1569 Building of Fatehpur Sikri starts. Continues till 1576
- 1574 Abu-l Fazl comes to Akbar's court
- 14 May. Amardas, the third Sikh Guru, dies, having appointed his son-in-law, Ramdas, to the Guruship. On a site granted by Akbar, Ramdas restores an old tank which he calls Amritsar, in the middle of which he builds the temple of Harmandar
- Tulsi Das, the poet, begins his poem, the *Ramacharita Manas*, founded on the *Ramayana*
- 1575 Akbar starts an enquiry into religions
- 1577 The Muslim creed (*Kalimah*) disappears from the national coinage and liturgy
- 1578 First mention of cashewnut and pine-apple by Acosta
- 1582 Akbar promulgates *Din-i-Ilahi*
- The rent-roll of Todar Mal divides Bengal into 19 Sarkars and 682 Mahals
- 1583 Ralph Fitch comes to India and stays on till 1591
- 1585 Akbar shifts his capital to Lahore
- Ralph Fitch at Agra
- 1586 Annexation of Kashmir
- 1591 Akbar orders a compilation of Muhammadan history up to the year 1000. The *Tarikh-i-Alfi* is thereupon begun, the chief labour devolving upon Maulana Ahmad, son of the Qazi of Thatta
- Akbar conquers Sind
- 1592 Annexation of Orissa
- 1593 Cornelius Houtman makes inquiries in Portugal as to Indian trade
- Todar Mal's land revenue regulations
- 1594 Birth of Shahji Bhonsla, son of Molaji Bhonsla, a *silahdar* in the Ahmadnagar service, and father of Sivaji

- A great meeting held at Amsterdam, when it is resolved to send a fleet to India at an early date
- 1595 *Babur-nama* illustrated by Akbar's artists
2 April. Four ships under Cornelius Houtman leave from the Texel, Holland, for India via the Cape
- 1600 31 Dec. Queen Elizabeth grants the first Charter to a Corporation of "Governor and Company of Merchants of London trading to the East Indies"—enabling them to trade for fifteen years
- 1602 The Dutch East India Company formed out of a number of small companies
- 1603 John Mildenhall comes to India and stays on for two years. He reached Agra in 1603
- 1603 6 Jan. The Dutch, with a large fleet, attempt to oust the Portuguese from Mozambique and blockade Goa. The struggle between the two nations begins and the Dutch gradually acquire most of the Portuguese possessions
- JAHANGIR (1605–1627)**
- 1605 25 Oct. The Emperor Akbar dies after a reign of 51 lunar years, 9 months, aged 64. Prince Salim assumes the government as Nur-ud-din Muhammad Jahangir
- 1606 Arjun, the fifth Sikh Guru, charged with aiding in Khusro's rebellion, suffers death. He nominates his son, Hargobind, as sixth Guru. He arms the Sikhs
- 1609 William Hawkins arrives at Agra and stays for five years
- 1611 Jahangir marries Nur Jahan
- 1612 12 March. Jahangir grants a *farman* permitting the English to establish factories at Surat, Gogha, Ahmadabad, and Khambay; thus Surat forms the first established settlement of the English in India
The Danish East India Company formed at Copenhagen
- 1614 The History of the Muhammadan dynasties by Muhammad Qasim Firishta is written and called *Gulshan-i-Ibrahimi* and also *Nauras-nama*
Thomas Coryat comes to India and stays for three years
- 1615 7 Feb. Mr Edwardes, the English Company's agent, presented to Jahangir. He obtains a general and perpetual *farman* for trade in the Mughal dominions
- 1616 Bubonic plague begins. It lasts for eight years
10 Jan. Sir Thomas Roe, received by Jahangir in "Darbar", 26 March, presents to Jahangir his nineteen articles of Amity, Commerce, and Intercourse, regarding which some concessions are granted in September

- Edward Terry comes to India and stays for three years
- 1618 Jan. English factories in the Mughal's dominions now number five: Agra, Ahmadabad, Burhanpur, Bharoch, and Surat. Those in East India were Masulipatam and Peddapoli (Nizampatam)
- 1620 Francisco Palsaert comes to Agra and stays for seven years
- 1622 Death of Khusro
- 1623 Pietro della Valle, a Roman patrician of literary attainments, visits Surat, and proceeds to Ikkeri, in Vijayanagar. He wrote sketches of his travels, published at Rome, 1650
- 1625 John De Laet comes to India
- 1627 6 May. Sivaji, son of Shahji Bhonsla, born at Sivaner, Junnar
- SHAHJAHAN (1627-1658)
- 1628 14 Feb. Shahjahan arrives at Agra, and ascends the throne
Peter Mundy comes to India and stays till 1634
- 1630 The rains in 1629 having failed in the Deccan, famine and pestilence break out
- 1631 Death of Mumtaz Mahal
- 1634 The peacock throne of Delhi finished; it costed seven years' work and 100 lakhs of rupees
- 1636 Shahjahan endeavours to introduce the revenue system of Todar Mall into Maharashtra, and with it the revenue or Fasli year
- 1638 10 March. Guru Hargobind dies, having nominated his grandson, Har Rai, as seventh Sikh Guru; he died in 1660
John Albert de Mandelslo comes to India
1 Dec. 'Ali Mardan Khan received at Lahore and appointed Governor of Kashmir
- 1639 29 April. The foundations of the fort at the metropolis of Shahjahanabad are laid; completed 13 May 1643
- 1640 Sebestian Manrique comes to India
Jean Baptiste Tavernier comes to India
- 1644 Death of Guru Hargobind, the sixth Sikh Guru
- 1645 The Taj Mahal at Agra completed by Shahjahan, as the tomb of Arjumand Banu Begam Mumtaz Mahal, who died in 1631
Sivaji Bhonsla obtains possession of the strong fort of Torna
- 1646 Jan. A great famine in Madras
- 1648 Sivaji revolts openly against the Bijapur government, and takes possession of the northern Konkan, making Kalyan his capital
- 1649 The Venetian physician Manucci arrives at Agra and resides at the court for forty-eight years, compiling *Storia Do Mogor*, memoirs of the Mughal sovereigns

- 1652 Dara Shikoh, Governor of Gujarat since 1648, is succeeded by Shaista Khan
- 1655 Job Charnock arrives in India, and obtains employment under the East India Company in Bengal
- 1656 M. Francois Bernier comes to India and stays till 1668
The Koh-i-nur diamond found at Kolhapur on the Krishna and presented by Mir Jumla to Shahjahan
Murshid Quli Khan appointed Diwan of Deccan
Monsieur de Thevenot comes to India
- AURANGZEB 'ALAMGIR (1658-1707)
- 1658 30 July. Aurangzeb assumes the government at Delhi and is proclaimed as 'Alamgir
- 1661 3 April. Charles II grants a new charter "for ever", confirming former privileges and authorizing the East India Company to make peace or war with any non-Christian prince or poeple, to erect fortifications, maintain armies, administer justice, and to have the right of sending unlicensed persons to England
- 1662 15 Jan. Cranganor is assaulted and taken by the Dutch; churches and other buildings destroyed; and the Portuguese soldiers taken back to Europe
Feb. The Dutch take Kollam and attack Cochin, put the Nayars to flight and capture the queen
- 1664 Sivaji assumes the title of Raja. With his reign begins the *Raj-abhishek* era of the Marathas
- 1666 Sivaji's visit to Agra and escape
- 1668 The Court of Directors orders the agent at Bantam to send home by their ships 100 lb. weight of the best tea: the first mention of it in their accounts
- 1669 Jat rebellion
- 1670 The King of Golkonda grants a *Kaul*, by which the Company agrees to pay 1,200 pagodas (4,200 rupees) as rent for Chennapatnam (Madras) town and fort
- 1671 Sivaji sacks Surat
- 1672 Satnami rebellion
- 1674 Sivaji enthroned at Raigarh
- 1675 12 July. The English Court of Directors regulate the status and pay of their servants, with the successive titles of writers, factors, merchants, and senior merchants. The civil servants are recommended to acquire some knowledge of military duties
13 Nov. Tegh Bahadur, ninth Sikh Guru, tortured by the Mughals to convert him to Islam. His son, Gobind,

- becomes tenth Guru, and begins a religious war against the Mughals
- 1679 March-April. Aurangzeb re-enacts the imposition of the *jizya* or capitation tax on non-Muslims
- 1680 Death of Sivaji
- 1686 Shuja'at Khan, Kartalab Khan, thirty-ninth Viceroy of Gujarat, till 1703. A great famine prevails in Gujarat
- 1686 Aurangzeb annexes Bijapur
- 1687 Jan. The Danish fleet appears off Bombay
Pondicheri is established by the French
- 1688 Aurangzeb annexes Golkonda
- 1690 Calcutta founded
- 1691 The Jats rebel near Agra and plunder a caravan
- 1694 Khafi Khan, the Muhammadan historian, visits the English residency at Bombay
- 1695 Sujan Rai writes the *Khulasatu-t Tawarikh*
- 1699 Guru Gobind Singh creates the Khalsa
- 1706 Retreat of Mughal armies from the Deccan
- 1707 3 March. Aurangzeb dies at Ahmadnagar in his eighty-ninth year

BAHADUR SHAH I (1707-1712)

- 1708 Guru Gobind Singh assassinated at Nander in Deccan
The Sikhs rise in rebellion in the Panjab and plunder extensively. Shams Khan, faujdar of the Jalandhar Doab, defeats them with a volunteer army at Rahun
- 1710 Peasant revolt in East Punjab led by Banda Bahadur

JAHANDAR SHAH (1712)**FARRUKH-SIYAR (1713-1719)**

- 1714 Charles VI. Emperor of Germany grants commissions for ships to trade to the East Indies. This association makes several successful experimental voyages. He afterwards founded the Ostend Company
- 1718 Great famine in Gujarat

MUHAMMAD SHAH (1719-1748)

- 1720 8 July. A great earthquake at Delhi, nine shocks felt, and for a month afterwards there were lesser shocks; buildings thrown down, and people killed
Accession of Baji Rao Peshwa
- 1726 24 Sep. A Charter granted by George I, enabling the Company to establish Courts of Record for the discharge of both civil and criminal justice, at Madras, Calcutta, and Bombay. English law extended to India
- 1728 Jaisingh's Jaipur Astronomical tables completed, constructed

- from his own observations for seven years
- 1732 The *Muntakhib-ul Lubab* of Muhammad Hashim, Khafi Khan, a history of Hindustan from 1519 to 1718, is published
- 1735 East Jamuna canal dug by Muhammad Shah
- 1737 11-12 Oct. Great hurricane and earthquake at Calcutta and up the Ganges; 300,000 lives were lost and 20,000 vessels of all sizes were cast away
- 1739 26 Jan. Nadir Shah defeats the Mughal armies at Shah-daula
- 24 Feb. Muhammad Shah's army under Burhan-ul-Mulk is defeated. Deputations to the Persian camp result in a complete capitulation.
- 19 March. Muhammad Shah enters Delhi, followed next day by Nadir Shāh
- 1744 21 May. War declared between France and England
- 1747 A great famine prevails in Gujarat
- 1748 Jan.-Feb. Ahmad Khan Durani captures Lahore
- AHMAD SHAH (1748-1754)
- 1750 Warren Hastings arrives at Calcutta as a civil servant of the East India Company
- 1751 Ahmad Shah Durani again invades the Panjab, defeats Mu'in-ul-Mulk and demands the cession of the Panjab, which is yielded
- ALAMGIR II (1754-1759)
- 1760 24 July. The Maratha army, under Vishvasrav, the son of Balaji Bajirav, and Sadashiv Bhau, invests Delhi, which capitulates in ten days
- SHAH 'ALAM II (1759-1806)
- 1761 The Sikhs assume greater power, and elect a certain Chintia as their Emperor at Lahore, they are defeated by a Durani invasion
- 1763 Surajmal Jat of Bharatpur, now master of Agra, makes an attempt to capture Delhi
- 1765 A dak (postal service) established between Calcutta and Murshidabad
- 1767 Ahmad Shah Durani again invades the Punjab. He overran several Sikh districts towards Delhi, and returned to his own country

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