

INDIA – LAND AND PEOPLE

FROM STONE AGE TILL 13TH CENTURY

THE UNIVERSE, SOLAR SYSTEM AND THE EARTH

In the beginning, all matter in the universe was confined in a huge sized super massive ball composed of Hydrogen. Then, the ball exploded, with a Big Bang, some 13.7 Billion Years Ago (BYA). The explosion material spread in all directions – Galaxies were formed. Our own Galaxy is called milky way. Galaxy consist of stars and interstellar clouds of dust and gases.

SOLAR SYSTEM

Sun is one of the stars which consist of 74% hydrogen & 24% helium; there are other elements also. Sun is not alone, there are family members. This is called solar system.

Earth is one of them. Apart from them, asteroids, meteorites, comets and dust revolve around the sun.

MOON

Some 4.5 BYA, a planet about the size of mars collided with the early earth. 70% crust was ripped apart and thrown in the open space. It coalesced and became moon. The huge crater was filled with water in due course of time. It is Pacific Ocean. The revolving mass got loosened; was set free in the midst of water bodies which gave birth to continents.

Sun energizes, Moon stabilizes

EVOLUTION OF LIFE

Revolution of Earth causes Earth Seasons.
Several forces, shape earth's surface.

Formation of Cell (3.5 BYA), Archean Era

1.5 BYA, earth cools, Age of Reptiles

144 MYA - 66 MYA, Cretaceous period

Dinosaurs appear, peak and become extinct due to K.T. Extinction around 66 MYA.

BIPEDALISM

66 MYA – 5 MYA, Age of Mammals

60 MYA – Primates

35-15 – Monkeys, Apes

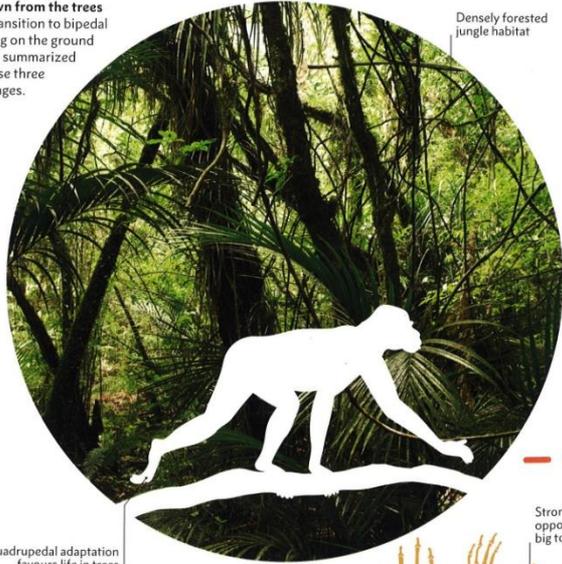
5 MYA Human like beings appeared

4.4 MYA – Bipedalism

Male & Female anatomy evolve differently

EVOLUTION OF HOMO ERECTUS

Transition from the trees
to bipedal walking on the ground
is summarized in three stages.

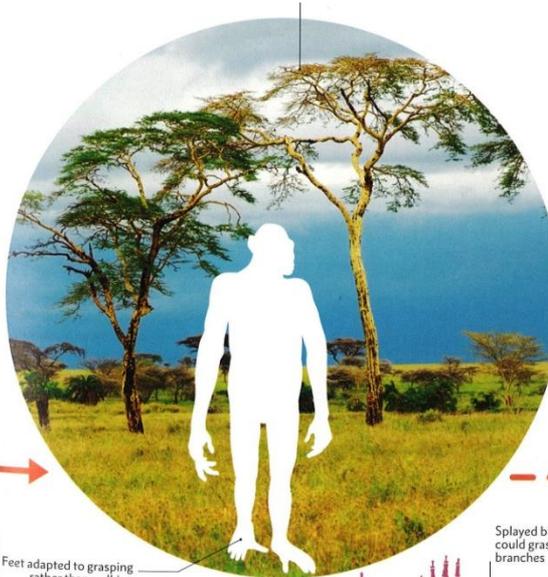


Densely forested
jungle habitat

Quadrupedal adaptation
favours life in trees



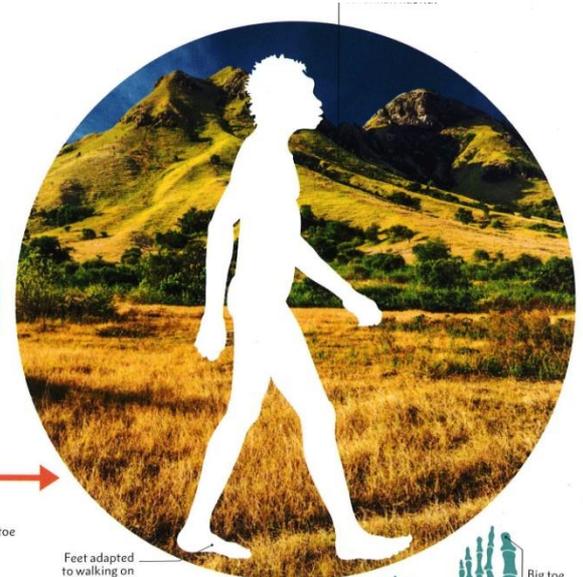
Strong,
opposable
big toe



Feet adapted to grasping
rather than walking



Splayed big toe
could grasp
branches



Feet adapted
to walking on
open ground



Big toe
aligned

FIRE

1.5 MYA & 1 MYA – There was a certain population of around 50,000

1 MYA – Discovery of fire

1 lakh years, population is around 5,00,000

Population starts moving around

Homo erectus evolves into homo sapiens

There are two theories -

1) Inbreeding theory.

Attraction, sex, intermingling

2) Replacement theory

Incompatibility, revulsion & genocide

South Asian DNA is 92.7%. Asian – 6.5%
African and rest is from middle east
Neanderthals.

A great majority of Indians are basically
Bhumi putras (sons of the soil).

INDIAN SUB-CONTINENT

Peninsular land mass – the original Gondwana plate

Himalayan ranges – due to tectonic shift

Shaivalik - poor cousins

Indo gangetic Brahmaputra basin – due to glacial and monsoonic precipitation

COGNITIVE REVOLUTION

Toolkits, Brain start growing resulting in
cognigence

Cognitive Revolution

70,000 YA – started

Communication - Vak – Shruti – Smrithi

Information Revolution

MESOLITHIC TIMES

MESOLITHIC HUNTERS AND FOOD-GATHERERS

87



Fig. 35. A mesolithic scene. A man is shooting an arrow tipped with a sharp microlith at an antelope. The other is throwing on a deer a spear tipped with a sharpened stone (Reconstruction from the Museum of Evolution of Life, Chandigarh)

AGRICULTURAL REVOLUTION

Last Glacial Maximum - LGM – 20,000 years BP

Around 15,000 years ago, Dog was domesticated

Microliths sharpened human capabilities

10,000 years ago, sapiens were everywhere.

Domestication of animals and plants

Population 2 M – 4 M

10,000 BP to 5,000 BP, Population grew 20 times

Art of writing, Metals also came along

NEOLITHIC TIMES



Fig. 48. A Neolithic rural scene, depicting the harvesting of wheat and barley with stone sickles, with clusters of huts in the background
(Reconstruction from the Museum of Evolution of Life, Chandigarh)

THE HARAPAN CIVILIZATION

(C 2600 - 1900 BCE)

In 1826 – Charles Mason, a deserter of EIC Army stood on the mounds of Harappa and thought that it is the site where Alexander defeated Porus.

In 1872 – Cunningham discovered a seal and thought. It to a foreign one.

In 1924 – John Marshall discovered an elaborate urban settlement. That pushed the sub-continental antiquity even prior to Roman empire.

POST INDEPENDENCE DISCOURSE

In 1950 – Aryan Invasion theory

Aryan Migration Theory

Aryan Tourism Theory

Aryan Dogma

1991 – Intl sat of USA established the antiquity of Saraswathi river.

DISCOURSE CONTINUES

In 21st century – No invasion

Bhairranna – 9500 BP

Presently, it is known as Saraswathi Sindu Civilisation

It is essentially an indigenous sub-continental cultural outfit.

Genetists are providing new insights

Biological continuity from Preharappa to Harappa runs well into recent times.

PRE BUDDHA TIMES

(2000 BCE- 550 BCE)

There were sixteen Mahajanapadas like Kasis, Kosala, Magadha, Kuru & Panchal. Gandhara, Kashmir Taxila and Avanti.

Asmaka Mahajanapad was located in middle Godavari basin.

There were seventy-seven Janapadas.

All these polities were located in river valleys or deltaic geographies.

SOCIO ECONOMIC GLIMPSE

People lived in villages and towns/cities. Population ranged from 30 to 10,000. Joint family system prevailed. Adequate fodder & firewood was available round the year. There were laws of governance. Village was practically self-sufficient. Taxation on land was $1/6^{\text{th}}$ (SHATABHAGA). Coinage was there.

BIRTH OF BUDDHISM AND JAINISM

6th Century BCE was a socio-cultural watershed across the globe. Profound philosophers, namely Zoroaster in Persia, Mahavira & Buddha in India closely followed by Confucius and Lao Tse in China were born. Buddhism spread all over the country. Vegetarian became dominant. Chandragupta and Ashoka of Mauryan fame & Nagarjuna in Deccan are prominent names. Prakrit replaced Sanskrit. Idea of Renunciation prevailed.

MAURYAN PERIOD

(325 BC – 185 BCE)

Saw the establishment of the first sub-continental empire. New strategies, a new narrative for the governance was needed. Arthshastra by Kautilya was the outcome of those times.

ESSENTIAL INGREDIENTS

Headman, Rural Administration

Cultivation & Revenue, Social Security

Animal husbandry, the holy cow has appeared

Asses, Horses and Elephants, Veterinary services

Arboriculture & horticulture

Agrarian expansion, Urbanisation & Trade Grew hand in hand.

POST MAURYAN SCENARIO

Kalinga became free under Kharavelas.

Shungas and Kanvas were ruling in the gangetic valley

North-west witnessed Invaders. Pahalvas, Sakas, Kushanas

Northern half of Peninsular India witnessed Satavahanas, Vakataks, Vishnukundis, Ikshvakus

Southern half witnessed Cholas, Pandyas & Cheras

Krishna Tungabhadra doab was the dividing boundary

IMPORTANT CHARACTERISTICS

Technology pushed boats to carry heavy cargo

A wide network of roads. A booming trade

Sudarshan lake in Junagadh in Gujrat, Udaygiri and Khandgiri in Orissa, Amraoti in Andhra were important Buddhist centres.

Sophisticated sculptural and architectural style reflects the cultural vitality and versatility of those times.

GUPTAS & VAKATAKAS

(300 CE – 500 CE)

Royal land grants (Brahmadeyas) became a dominant theme.

Hindu law books – Dharma, Artha, Kama, Moksha

Visiting prostitutes was not neither a secret nor a guilt.

Surplus economy pushed trade and urbanisation – Craft production – guild

A settled economy, prosperous society

By 550 CE, all three empires, namely Roman, Gupta and Vakataks declined. Incessant invasions of Attila the Hun.

REGIONAL CONFIGURATIONS

(550 CE – 1200 CE)

Vardhans, Chalukyas and Pallavas (550 CE to 750 CE)

Rashtrakutas, Gurujara Pratiharas and Palas (750 CE to 950 CE)

Western Chalukyas, Kakatiyas, Yadavas and Hoyasalas (950 CE onwards)

The land between Tirupati Hills and the southernmost tip of the Peninsula is called Tamilakam. It was ruled by Pallavas, Cholas (around Kaveri) and Pandyas (around Vaigai)

Tomers of Delhi constructed Anangapur dam at Surai kund near Delhi.

Tanks, wells, stepwells were constructed by all rulers. Persian wheel in Rajasthan was there.

CULTURAL EFFERVESCENCE

Durga temple at Aihole. Khajuraho cluster of temples. Lingaraj temple, Jagannath temple and Konark sun temple in Orissa. Kailashnath temple in Ajanta, Ellora. Hoyesalashwara temple in Helebid. Brihadishawarain Tanjavur. Chola – Natraj statue. Stupa at Borobundur in Java Vishnu temple. Angkor wat in Combodia, Gomateeshwara in Shravanbelegola in Karnataka. Dilwara temple in Mount Abu.

Classics like Ramayana and Mahabharat were either written or translated in regional languages.

The developments at the political, social, economic and cultural trends crystalised in the distinct regional formations and patterns.

A BROAD PICTURE

Regional assertion, regional expansion and regional languages were the dominant themes.

Tanks, temples, towns and trade were important similarities. It was like the present-day Indian states revelling in their self-expression, without any Pan India political authority to control against invasion.

Per capita income was perhaps highest in the world. But inner conflicts were there.

POPULATION (In Crores)

Year	0 CE	1000 CE	1200 CE
INDIA	7.5	7.5	8.9
WORLD	23.8	26.76	33.59

PER CAPITA INCOME (In Dollars at 1990 Rate)

India was at the apex of the Global Economic order.

Year	0 CE	1000 CE	1200 CE
INDIA	450	450	490
WORLD	445	436	488

THANK YOU