Dhananjayarao Gadgil Library

The Economic History

Ancient India

BY

SANTOSH KUMAR DAS, M.A., (Hist. & Econ.)

Professor of History and Economics, Tribhuban-Chandra College, Nepal; formerly Professor of History and Economics, Bagerhat College, Khulna.

January 1925.

Published by 'Santosh Kumar Das,

5/2, Ananda Dutt Lanc, Howrah.

2.B

First Edition-500 Copies.

4564

Printed by G. B. Manna
Mitra Press
45, Grey Street, Calcutta.

Dedicated
To
the sacred memory
of
the late Sir Ashu Tosh Mukherji
in humble appreciation
of
all that he has done
for
the cause of
Ancient Indian History and Culture.

PREFACE.

At the beginning of the session 1922-23 I delivered a series of lectures on the "Economic History of Ancient India" to the students of the Kalikata Vidyapith. The Vidyapith is now no more and therefore as a token of my humble connection with that noble institution I now publish these lectures.

In doing so, I have necessarily to make some additions and alterations but these have not modified the general scope and plan of the lectures. I have avoided on principle all theoretical disquisitions throughout this work. It has been my aim rather simply to present the facts in a connected manner with a view to illustrate, as far as possible, the gradual development of the economic conditions from the earliest times. I have always indicated the sources of my information in order that my conclusions may be tested with reference to the authorities on which they are based.

A few words must be said regarding the dates of the various literary authorities which

have supplied the materials for this work. I have avoided, as far as possible, all discussions about them in the body of the book, as that would have disturbed \mathbf{the} harmony of the matter dealt therein. As will be noticed I have principally relied upon two classes of works. Brahmanical and Buddhist. The principal Brahmanical texts, besides the Samhitas and the Brahmanas are the Dharma-sūtras and the Dharmaśāstras. Of the Samhitas the Rig-Veda is undoubtedly the oldest and marks an epoch by itself. age was subjected to a searching and exhaustive scrutiny by Prof. Winternitz whose views have nowadays to be accepted. Says he "It seems more probable that the initial date falls in the third rather than in the \mathbf{second} millenium" (Geschichte Indischen Litteratur, Part I. p. 258). Definitely later in date are the rest of the Vedas, the Brahmanas and the Upanishads for which also no specific dates can be proposed which command general acceptance but they may be roughly placed in a period beginning from the middle of the second millenium down to the 7th century B. C. As regards the relative chronology of the Dharma-sūtras and Dharma-sastras, I have been guided by the opinions of Jolly. I differ from him only about the date of Manusmriti, the composition of which I have placed on the authority of Buhler between second century B. C. and second century A.D. (S. B. E. Vol. XXV.

p. OXVII.). Jolly's views may be summed up in the following tabular form:—

	Texts arranged in alphabetical order.	Probale date.	Reference to "Recht und Sitte."
Dharma-sūtras.	Ápasthamba	4th or 5th Cent. B.C.	page 3
	Baudhy a yana	5th or 6th Cent. B.C.	page 4
	Gautama	Do.	pages 5-6
	Vaśistha	4th or 5th Cent. B.C.	page 7
Dharma-śāstras.	Bṛihaṣpati	6th or 7th Cent. A.D.	page 27
	Katyayana	Do.	page 28
	Manu-Smṛiti	Not later than 2nd or 3rd Cent. A.D.	maga 1 <i>0</i>
	Narada	C. 500 A.D.	page 16
			page 32
	Viṣhnu-Sm̞ṛiti 	Nor earlier than 3rd Cent. A.D.	page 7
	Yajnabalkya	4th Cent. A.D.	page 21

Of the other Brahmanical texts, the kernel of the Ramayana was composed before 500 B.C. although the most recent portions were not probably added till the 2nd cent. B.C. and later (Macdonell, Hist. of Sans. Lit. p. 309) while the

Mahābhārata, very much in its present form existed at about 350 A.D. [Macdonell, Hist. of Sans. Lit p. 207; Buhler places it between 300-500 A.D. (Buhler and Kriste, Contribution to the History of the Mahābhārata]. As regards the date of Pāninī I accept the views of Dr. R. G. Bhāndārkar who places him in the 7th century B. C. (Bombay Gazetteer 1896, Vol. I. Part II. p. 141). The Arthaśāstra has been referred by competent critics to the time of Chandragupta Maurya (320 B. C.) [Jolly's article in Z. D. M. G. Vol. 67, pp. 49-96; R. Shyām Sāstrī's Arthaśāstra pp. V.—XXV.]

The allusions which the jātaka stories in Buddhist literature contain to social and economic conditions have been referred by Fick to the time of Buddha and by Rhys Davids even to an anterior period [Fick, pp. VI-VII; Buddhist India, p. 207.] On the authority of these two scholars I have assumed 7th and 6th centuries B.C. to be the period represented by the jātakas. The canonical Buddhist texts like the Vinaya and the Sutta Pitakas have been referred by Oldenburg and Rhys Davids to about 4th century B.C. (S. B. E. vol. XIII. p. XIII; *Ibid.* Vol. XI. p. X.)

I beg to point out that I have utilised the researches of Professors Zimmer, Macdonell and Keith, Drs. Fick and Rhys Davids and Professor Hopkins who have dealt with the economic data on the basis respectively of the Vedas, the

Jātakas and the Epics. I am no less indebted to the researches of Mrs. Rhys Davids and Drs. Rādhā Kumud Mukerji, Ramesh Chandra Mazumdar and D. R. Bhāndārkar.

My thanks are due to my friend Babu Rākhohari Chatterji, M. A. who has taken infinite pains in supplying me with books and journals whenever required and to His Honour Lieutenant-general Sir Kaiser Shum Shere Jung Bāhādur Rānā K. B. E. and Major Shivaprotāp Thāpa B. Sc., Asst. Director of Public Instruction, Nepal, for their kind encouragement and sympathy which it is alike my pleasure and duty to gratefully acknowledge.

The method of transliteration followed in this work is substantially that of the Indian Antiquary.

Tribhuban-Chandra College, Nepal, The 18th October 1924.

SANTOSH KUMAR DAS.

List of Authorities Consulted.

A Comparative Grammar of the Dravidian Languages—Dr. Caldwell.

Aitareya Brahmana.

Amarkosha.

Ancient India as Described by Megasthenes and Arrian—McCrindle.

Ancient India as Described by Ktesias—McCrindle.

Ancient India as Described by Ptolemy—McCrindle.

Ancient India as Described in Classical Literature—McCrindle.

Ancient Ceylon-H. Parker.

Ancient Khotan-Dr. Stein.

Ancient and Mediæval India—Mrs. Manning.

Ancient Geography of India—Cunningham.

Ancient Egyptians-Wilkinson.

Antiquity of Hindu Medicine-Dr. Royle:

Antiquities of India—Barnett (1913).

Ancient India—Professor S. Krishnaswami Iyengar (1911).

An Account of Buddhist Regions—Tao-sün.

Ancient Indian Numismatics—Professor D. R. Bhandarkar.

Anglo-Indian Studies—S. M. Mitra.

Arthasastra, Kautilya's—Eng. Trans. by Dr. R Shyam Sastri. Asiatic Researches—Heeren.

Aśoka-V. A. Smith (Rulers of India Series).

Atharva Veda—Eng. Trans. by Whitney in the H. O. Series.

Atthakatha.

Altindischen Leben-Zimmer.

B. M. Catalogue of the Coins of the Gupta Dynasty, The—John Allan (1914).

Baudhyayana—Eng. Trans. in the S. B. E. series.

Beginnings of South Indian History—Professor S. Krishnawami Iyer (1918).

Bhilsa Topes - Cunningham.

Bodhisattībadāna Kalpalatā—Kshemendra.

Bombay Gazetteer.

B. ihaspati Samhita—Eng. Trans. in the S. B. E. series.

Brihat Samhitā—Dr. Kern.

Buddhist India-Rhys Davids (1903).

Buddhist Records of the Western World-Beal.

Cambridge History of India Vol. I—Edited by Rapson.

Caste in India—V. A. Smith in the "East and West" June, 1913.

Catalogue of Gupta Inscriptions-Dr. Fleet.

Cathay and the Way Thither-Yule.

Catalogue of Coins in the Indian Museum-V. A. Smith.

Chanakya's Land Revenue Policy—Dr. R. Shyam Sastii in Indian Antiquary, 1905.

Characteristics of Ancient Indian Trade—A pamphlet by Professor J. C. Coyajee.

Chinese Buddhism-J. Edkin.

Chips from a German Workshop-Max Müller.

Chinese Topography—Cosmos Indicopleustes.

China and the Roman Orient-G. Hirth.

Citizen of India-Lee Warner.

Coins of Ancient India—Cunningham.

Commerce and Navigation of the Ancients-Dr. Vincent

Coins of Southern India-Sir W. Elliot.

Corporate life in Ancient India—Dr. R. C. Mazumdar (second edition).

Ctesias-Indica.

Da Alte Indien Vol. I.—Von Bohlen.

Disquisitions concerning Ancient India—Dr. Robertson (1792).

Early History of the Deccan—Dr R. G. Bhandarkar.

Early History of India-V. A. Smith.

Eastern and Indian Architecture—Ferguesson.

Economic and Political conditions in Ancient India—N. S. Subharao, Mysore, 1917.

Economic Geology of India-Dr. Ball.

Economic Review.

Economic Condition in Ancient India—J. N. Samaddar.

Epitome of Roman History—Florus.

· Epic India-C. V. Vaidya.

Epigraphia Indica.

Evolution of Caste, The—a pamphlet by Dr. R. Shyam Shastri,

Fine Arts in India and Ceylon-V. A. Smith.

Gautama-Eng. Trans. in the S. B. E. series.

Geography-Ptolemy.

Gabila Grihya Sūtra.

Growth and Vicissitudes of Commerce—Dr. Yeats.

Great Epic of India, The—Hopkins (1901).

Gujrat-Bird.

Gujrat-Sir C. Bayley.

Harshacharit-Bana.

Hindu Architecture—E. B. Havell (1913).

Hindu Positive Sciences —Professor Benoy Kumar Sarkar.

Hindu Superiority—Harabilas Sarda.

Historians History of the World.

History of Antiquity-Max Dunker.

Burma—Sir A. Phayre.

History of India-Mill.

_____Civilisation in Ancient India—R. C. Dutt.

History of Hindu Chemistry-Dr. P. C Roy.

History of India-Sir H. Elliott.

Indian Shipping and Maritime Activity from the earliest times—Dr. Radha Kumud Mukerji.

History of Mediæval Hindu India-C. V. Vaidya.

History of Indian Literature—Weber (Eng. Trans.).

History of Java—Raffles.

History of Pegu-Sir A. Phayre.

History of Sanskrit Literature--Macdonell.

Imperial Gazetteer (New edition) Vol. II.

Imperial and Asiatic Quarterly Review.

Inscriptions of Aśoka—Professor D. R. Bhāṇ-dārkar and S. N. Mazumdar.

Indian Coins—E. J. Rapson.

Indian Antiquary.

India and the Western World-Rawlinson.

India as known to the Ancient World—Dr. G. N. Banerji.

Indian Pre-historic and Protohistoric Antiquities (Foote Collection, Madras, 1906) 2 Vols.

Industrial Arts of India, The—Sir George Birdwood.

Indian Craftsman, The.—Dr. Coomarswami.

Indian Arts and Crafts—Dr. Coomarswami.

Indian Architecture - Cunningham.

Invasion of India by Alexander the Great McCrindle.

India and What it can teach us-Max Muller.

Indo-Chinese Relations—H. C. Chāklādār in the Dawn Magazine.

India as known to Ancient and Mediæval Europe—P. C. Ghosh.

India in Greece-Pococke.

Indica-Arrian.

India Old and New-Hopkins.

Industrial Competition of Asia—E. Daniell.

Indian Sculpure and Painting—E. B. Havell.
Introduction to the History of Religion-Jevons.
Indische Studien-Weber.
Ideals of the East-Kakasu Okakura.
Jatakas, The-Eng. Trans. by Cowell and Rouse
6 Vols. 1898 (Cambridge University Pub-
lication).
Journal Asiatique.
of the Asiatic Society of Bengal.
of the Bangiya Sahitya Parishad.
of the Department of Letters, Calcutta
University.
of the Royal Economic Soceity
of the Royal Asiatic Soceity.
of the Indo-Japanese Association.
of the Bombay Branch of the Royal
Society.
Kwai-Yuen Catalogue of the Chinese Tripitaka.
Life in Ancient India—Mrs. Spier.
Life of Godama—Bishop Bigandet.
Life of Hiuen Tsang—Beal.
Little Clay Cart, The—Ryder.
Local Government in Ancient India-Dr. Radha
Kumud Mukerji.
Mahābhārata (Eng. Trans.)—M. N. Dutt.
Wheeler.
Pratap Chandra
Roy.
Mahawanso—Turnour.
Maitrāyani Samhitā.

Manu—Eng. Trans. by Bühler in the Sacred Books of the East Series.

Medhatithi.

Mitramiśra.

Mythology of the Hindus-Coleman.

Narada-Eng. Trans, in the S. B. E. Series.

Natural History—Pliny.

Original Sanskrit Texts-Muir.

Origin of the Brahmi Alphabet-Buhler.

Orissa-Hunter.

Oxford History of India-V. A. Smith.

Paintings in the Buddhist Cave temples of Ajanta—Griffiths.

Panchabimsha Brahmana.

Parthia-Rawlinson.

Periplus of the Erythrean Sea (Eng. Trans.)—Schoff.

Positive Back ground of Hindu Sociology— Professor Benoy Kumar Sarkar (Pāṇinī Office Publication).

Positive Sciences of the Hindus—Dr. Brojendra Nath Seal.

Provinces of the Roman Empire-Mommsen.

Pre-historic India—Panchanon Mitra.

Puranas.

Raghubamsha-Kalidas.

Rājtarangini-Kalhana (Edited by Dr. Stein).					
Rāmāyana—Eng. Trans. by Griffith.					
R. C. Dutt.					
J. Wheeler.					
M. N. Dutt,					
Ratnābalī — Śrī Harsha.					
Rig-Veda, The-Kaegi (Trans. by Arrowsmith,					
Boston, 1886).					
Rig-Veda, The—Eng. Trans. by H. H. Wilson.					
E. B. Cowell.					
W. F. Webster.					
Sacred Books of Ceylon-Upham.					
Śakuntala—Kalidas.					
Sanchi and its remains—Maisley.					
Śatapatha—Brāhmana.					
Shipbuilding and Commerce in Ancient Bengal-					
a pamphlet by Tamonāsh Dās Gupta.					
Sir Ashu Tosh Mukerji Jubilee Commemoration					
Volumes, Vols. I. and III.					
Social Organisation in North-East India in					
Buddha's time—Richard Fick (Eng. Trans.					
by Dr. Śiśir Kumar Maitra).					
Studies in Ancient Hindu Polity, Vol. I-Dr. N.					
N. Law.					
Sukranitisāra—Eng. Trans. by Professor B. K.					
Sarkar (Panini Office Publication).					
Suttas, Buddhist-Eng. Trans. in the S. B. E.					
Series.					
Sand-buried Ruins of Khotan-Sir M. A. Stein.					
Taittirīya Saṃhitā.					

Tamil Studies—Srinivasa Iyengar (1914).

Tamils Eighteen Hundred Years Ago—V. K Pillay.

Technical History of Commerce-Dr. J. Yeats.

Town-planning of Ancient Deccan—C. P. Venkatarāma Iyer, Madras, 1916.

Travels of Hiuen Tsang—Eng. Trans. by Watters.

Upanishads, Chief—(Eng. Trans. by Rājā Rām Mohan Roy.

Upanishads, Chief—(Eng. Trans. by Professor Max Muller.

Vasistha—Eng. Trans. in the S. B. E. Series.

Vedic Index-Macdonell and Keith.

Vedic India—Ragozin (Story of the Nations Series).

Vinaya Texts—Eng. Trans. in the S. B. E. Series.

Viramitrodaya—Edited by Jivananda Vidyasagar.

Vishnu Samhita-Eng. Trans. by Dr. Jolly.

Vishnu Purana—Eng. Trans. by Wilson.

Vedische Studien-Geldner.

Vivadratnakar—Biblotheca Indica Series.

Western Origin of Chinese Civilisation— Lacouperie.

Yaska.

Yajnabalkya.

Z. D. M. G.

CONTENTS.

				Page No.
I.	The Palæolithic Age	•••	•••	1
II.	The Neolithic Age	•••	•••	2
III.	The Copper Age	•••	•••	3
IV.	The Rig Vedic Age	•••	•••	8
v.	The Brāhmana Period	•••	•••	46
VI.	The Age of Gautama	Buddha	•••	76
VII.	The Maurya Period	•••	***	133
VIII.	The Andhra-Kushāna	Period	•••	178
IX.	The Gupta Period	•••	•••	231
X.	The Age of Harsha	•••	•••	272
	Subject Index	•••	•••	309
	• •			

SUBJECT INDEX.

[The references are to the pages of this work]

Agriculture, 11-13, 50-52, 91-92, 138-140, 181, 231-32; 274.

Agriculture, the products of 11-12; 50-51; 91, 138, 274, irrigation for 15, 50, 139-140; 232-33, position of women in relation to 66-67.

Agriculturist, status of the 28,65,111-13,115; 181;254,289-90.

Alchemy, 60

Applied Chemistry, achievements in 277-78.

Art of ship building, a treatise on 240-42.

Articles of trade, 33, 35. 36; 69-71, 123, 164; 216, 217-19; 263-64, 301-02.

Architecture, 60, 99-100 149-50; 183, 244-46, 279-80

Barter, 5-6; 42-43; 129. Bonus, 254-55.

Carpentry, 21; 97; 148-49;

Caste system, in relation to mobility of labour 22-28, 61-63; 106-112; 155-56; 188-91; 254, 289-90.

Cement, 100; 277.

Cheap living, 133.

Cities, 7, 10-11, 47, 81-82; 137-38, 232; 273.

Clasification of ships, 219-20, 241-42.

Coins, various kinds of 6-7, 43-45, 72-75; 130, 173, 225-26; 269, 306.

Collective action among villagers, 78, 92, 136-37.

Commercial education, 127-28.

Copper industry, 4; 240; 276.

Cornering, 128, 173; 266. Correspondents, 123.

Craftguilds, their charactesistics, organisation and functions 63-65; 100-06; 154-55; 186-88; 247-54; 281-89.

Dairy farming, 52; 80; 134-35.

Dealing in futures, 128.

Drain of gold into India, 307.

Dress, various kinds of 17-18; 55.

Dried fish, 154

Dried meat, 154

Duties levied by the King 129, 164-69, 195-96, 228-29, 232-33, 303

Dyeing industry, 96, 154, 234, 277-78.

Engineering 153

Excavations, at Harappa and Mobenzo Daro 7-8.

Famines, precautions and preventive measures 15-16, 51-52, 95, 177-78.

Fauna and Flora, of India 94-95

Flower scents, artificial imitation of 278.

Forests, their preservation and products 13-15, 52, 92, 140-41, 233, 275

Guilds as banks, 174, 226-28, 270, 506

Gungeria hoard, 4.

Haggling over prices, 42,72,128

Horse-brush, 235.

Horticulture, 92-93, 233.

Indian Commerce, with Annam 259, Arabia 31-33, 38, 200, 216, 302, Assyria 70-71, Babylon 38-40, 68-71; 120, 259, Burma 117-118; 120, 212-13, 215, Ceylon 117, 160, 300-01, China 68, 165, 208-211; 262-64, 293-297, East Africa 36-37; 215, Eastern Turkishthan 211-

12, Egypt 35-36, 161, 197-202, Elam 38, Judæa 33-35, Japan 298-99; Java 292-93, 260-61, 298, Malaya Malacca 260, Archipelago 213-215, 260, 297-98. Pegu 293. Phœnicia and Asia Minor 31-33, Persia 70, 118-119; 257; 258, 299, Rome 202-208, 258; Socotra 216, Sumatra 261, 298

Indigotin, extraction of 277-78

Instruments of credit, 131, 174, 226-28; 270, 806

Iron Industry, 20-21; 56, 143-144; 237-40.

Ivory work, 97, 107, 185, 237, 281.

Jewellery, 19-20, 58-59, 98, 143-144, 184-85, 236-37, 280-81.

Joint Stock Company, 172, 267-69; 504-06.

Labourers, their status and wages, 27-28, 65-67, 112-115, 155-59, 189-93, 194, 254-57, 289-91.

Land ownership and Land Tenure, 9-10, 47-50, 77-86, 135-36, 179-80, 273-74

Law of Inheritance,

Leather industry, 22, 96, 153; 234, 288.

Light houses for ships, 219.

Liquor industry, 13-15, 21-22, 146; 234; 235.

Localisation of Crafts, 102-03, 155, 254, 290.

Low Castes and low trades, 109-111; 189-91; 254; 290.

Metal and mining industries, 19-21, 56-60, 143-144; 235; 276-77.

Merchants, organisation of, 41-42, 65, 125-127; 171-73, 224-25, 266, 267-69; 304-36.

Mixed metal industry, 59; 96; 144.

Monsoon, discovery of 41.

Number of passengers,
in old Indian ships 116-17.

Paper industry, 98; 23%.

Painting, 60; 99; 153, 183-184, 247; 279.

Partnership, 126; 267-69; 304-06.

Pearl-fishery, 3; 8, 98-99; 142; 154; 236, 278

Pearls, artificial imitation of 236.

Poor, state helf to the, 177. Ports, 34, 35; 71; 124, 216-17; 263; 301-03.

Prices, state regulation of 128-29, 170, 171; 266.

Provident Fund, 255.

Purusha Sukta hymn, 26-27.

Salt industry, 168, 170, 171, 278-79.

Scents, artificial imitation of 278.

Sculpture, 150 53, 182, 246, 279.

Shipbuilding industry, 147-48, 219-20, 240-42.

Silk industry, 18, 54-55, 145-46, 182, 235, 275-76.

Silent barter, 226.

Slaves, status of 114-15; 156-57, 192-93.

State regulation of industry and trade, 128-29, 169-71, 266-67.

Town planning, 60, 99; 155, 243, 281.

Trade routes, 40-41, 121-23; 161, 162-64; 220-24; 297-98.

Usury and the rate of interest, 45, 131-32; 174-175, 229-30, 270-71.

Wealth of India, 45-46; 75-76, 132-33, 175-76; 228, 271-72, 306-08.

Weaving, of cotton, silk and fibres of bark 16-18; 53-55; 92, 96, 141, 144-46; 181-82; 235-36; 275-76,

By the same author.

The League of Nations (in the Press).