

# BEHAR HERALD

SECULARISM  
AND  
DEMOCRACY  
OUR MOTTO

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## C. P. I. and the Congress

There is one great speciality in Prime Minister Mrs. Indira Gandhi that she never speaks anything in public or private without deep thinking. All her life she has been a good listener. She listens to all and sundry without interrupting the speakers. She decides only when she has heard fully to her satisfaction all the points of view. Therefore, her recent speech at a training camp of senior Congressmen in New Delhi (on Dec. 23, 1976) in which she made a frontal attack on the Communist Party of India and its leadership, cannot be taken as a minor incident. The speech itself should dispel any thought that Congress was gradually being swallowed up by the ideologies of C P I, or Congress leaders were too soft with CPI leaders. Congress and Congressmen certainly are grateful to the CPI for the help and assistance the CPI gave to Mrs. Gandhi and the new Congress immediately after the great split in the Congress in 1969. In those dark days the CPI stood by the Congress and fought back the forces of reaction. But for their support Mrs. Gandhi's central government might have collapsed when the Organisation Congress MPs and other reactionary rightists like the Jana Sangh, the Swatantra, the Rajnarainite Socialists joined hands together to oust Mrs. Gandhi. Congress won the 1971 election to the Lok Sabha with unprecedented majority under the inspiring leadership of Mrs. Indira Gandhi. Not only the old guards of the Organization Congress but many others of other opposition parties went into oblivion after their defeats in the election of 1971. In spite of her great and total victory, Mrs. Indira Gandhi maintained the sweet relationship with the CPI. Then came the Bangladesh war of 1971 and the burden of one crore of Bangladesh refugees on India. Here also the CPI gave unstinted support to Mrs. Gandhi. Soviet Russia also gave great help and assistance to India in those days. Again in 1974, when Mr. Jayaprakash Narain with other reactionary parties like Jana Sangha, the Swatantra and Rajnarainite Socialists launched the "total revolution" movement—when Police, magistracy and Legislators in Bihar and Gujarat were completely demoralised, and one by one many legislators were forced to resign their seats in Bihar and Gujarat, and Congressmen lost their spirit and confidence even to take out a procession to counter "the total revolution" campaign, it was the Communist Party of India which brought out massive processions in Patna and elsewhere to expose the falsity of the J. P.-led movement. In fact, this proved to be the turning point to rally the people on the democratic norm once again. Congressmen felt that they were not alone in the battle against the totalitarian movement of Jayaprakash Narayan. The culmination came with the promulga-

tion of emergency in 1975, and the rapid improvement in the situation on all fronts.

The CPI made the fatal mistake in thinking that Mrs. Indira Gandhi can be pushed to any corner because of the support they extended to her in all the above crises. For some time they even dreamt of forcing her to allow the formation of Kerala type of CPI.—Congress coalition Ministries in Bihar, West Bengal and even in the Centre, little realising the strength of the great lady. She listened to the overtures but did not open her mouth till the Gauhati session of the AICC in November last. She did not take the name of CPI at Gauhati but CPI and others must have been convinced that their entire hope was based on absolutely wrong calculations and wrong understanding of the character of the Prime Minister. Yet, the CPI tried to play one more trick by indulging in irresponsible talks like the existence of a "reactionary caucus" within the Congress Party which worked against the progressive policies of the Prime Minister. They thought perhaps that the Prime Minister would fall a victim to this new trick and try to hound out the "reactionary caucus" within the Congress Party, and thus there might be again a division of the Congress. It was Sitaram Kesari, the BPC President, who had the courage to expose this game of the CPI by issuing a timely rebuttal of the CPI allegation of "reactionary caucus" and progressives within the Congress Party. Other Congressmen also vehemently challenged the CPI's mischievous allegations that the so called "reactionary caucus" was secretly trying to sabotage the 20-point programme of the Prime Minister. The apparent motive of the CPI was to create a division within the Congress Party and thereby make the Prime Minister dependent once again to the support of the CPI. If we go back to the political situation of 1972, we will know that CPI tried to create such a rift within the congress Party even in those days with the so-called "Progressives" within the Congress Party, which led to the formation of Nehru Forum within the Party to counter this move. CPI felt that with the proclamation of emergency they would force the hands of the Prime Minister to go ahead with the so-called radical programme which CPI was advocating for long like nationalisation of all productive industries and to liquidate all the propertied classes in the country. Mrs Indira Gandhi is too astute and too matured a statesman to fall in the trap of the CPI. It is tragic that CPI failed to understand that after 1971 general elections, Mrs Gandhi acquired so much power that she became not only the only leader of the Congress Party but also of the whole country. Jayaprakash

Narayan also failed to realise this truth and tried to create a division in Congress with his slogan of "total revolution".

It is too early to suggest that the Congress-CPI entente or friendly relationship is at a dead end. The relationship can yet survive if CPI gives second thought over its action of the past few years and wholeheartedly support the progressive 20-Point programme of Mrs Indira Gandhi and also the five-point programme of Sanjoy Gandhi. Both the programmes are

supplementary and complementary to each other, and one cannot say that the 20-Point Programme is progressive and 5-Point programme is reactionary. History records that on crucial matters concerning the national urges of the people, the CPI has always bungled. In 1942 they opposed the liberation movement of India and supported the British imperialism and had the audacity to call Netaji a "Quisling". Again in 1947, the CPI would not recognise that India had achieved real indepen-

dence free from British control by proclaiming that it was a false independence. The CPI even maligned Indian leaders, including Jawaharlal Nehru about it in Soviet Russia during the fifties of the present century. Again the CPI blundered by trying to divide the Congress during the recent months. Of all the countries the Soviet Union must be extremely sorry over the whole episode, because the CPI is very close to that country and gets its inspiration on Marxian ideology from there.

## Frustration Among B C S Members

The different branches of the government have their own Associations or Unions to represent the grievances of its members to the government. Most of these organisations don't believe in confrontation. The Bihar Civil Service Association is perhaps the most sober and highly respected organisation of Civil Servants, who practically run the machinery of the government at all levels. The Civil Servants are the backbone of the administration in all countries excepting perhaps in totalitarian States where police and military powers are supreme. The head of such a State remains at the apex so long the military and police are under his control. But in real democratic countries such unfortunate coups do not occur because tradition, civilised conduct and matured political considerations, prevent it.

The Bihar Civil Service Association, in the past drew attention of the government several times about their grievances. Some of them were met and promises were made by successive Chief Ministers to redress the rest of the grievances. As per the assurance, the government merged both the senior and junior branches of the Bihar Civil Service, and thus a long standing grievance of civil servants was removed. But what causes surprise is that even after the amalgamation of two cadres of the Bihar Civil Service, the government have

decided to create 200 posts of Sub-deputy Collectors. Perhaps the recruitment also will follow soon. The zonal conference of the Bihar Civil Service Association which met at Rajgir the other day voiced its concern over this issue. Government's assurances are sacred, and it should never be violated by any one in authority. The British government, in spite of its many drawbacks, had at least the virtue of never trifling with its orders, assurances or promises. If people still recall those days of administrative efficiency of Britishers it is only because of the firmness of the orders of the government. Once a decision is made after matured consideration, the decision must stand in spite of pressures and pulls. The Civil Service Association in its exasperation urged the government to stop fresh recruitment of Sub-Deputy Collectors. If at all government needs the services of 200 officers they should be recruited in the rank of Deputy Collectors and not Sub-Deputy Collectors.

Another sore point with the State Civil Servants is the inequitable distinction that is being perpetuated between the B. C. S. and the I. A. S. It is true, the I. A. S. men belong to the central cadre and are entitled to certain privileges, being members of a superior service. But that does not mean that the State Civil Servants with the same academic and social

backgrounds should be treated as outcasts so far as certain privileges are concerned. As for instance, the medical reimbursements—the I.A.S. personnel enjoy unlimited medical facilities and all the expenses for the treatment of his own self or the family members are paid by the government. The BCS men get a paltry sum of rupees one hundred only per year for his own treatment or for the treatment of his family members. In the same family one brother may be in the IAS and another in the BCS, and because of this offensively discriminating treatment to the two service cadres one may be on the verge of ruin to pay the medical bills and the other may as well just pity the less fortunate one. Officers of both the cadres do the same work and perhaps the state Civil Service men do it better because of their experience. But the treatment of the two service cadres by the government is creating a wide gulf between the members of two services. It is true that a racket was flourishing in the state over the medical reimbursement bills. But not one member of the State Civil Service or any other gazetted services was charged with fabrication of medical bills. This racket was mainly confined to the lower non-gazetted cadres of different services. The Association urged the government to revise the order and fix a graded ceiling for

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Our knowledge of ourselves and of the universe within which we live comes not from a single source but, instead, from two sources—from our capacity to explore human responses to events in which we and others participate through introspection and empathy, as well as from our capacity to make objective observations on physical and animate nature.

The inappropriate extension into the physical world of human beings' understanding of themselves harms rather than enhances the development of the kind of objective understanding that we call science. Equally the extension into the human world of the methods of the physical sciences can be stultifying and dangerous. It is only when we do recognize that there are two distinct complementary—rather than antagonistic—sources of knowledge that we can fully develop methods appropriate to each and consider how such methods can serve to support and reinforce each other.

Within this wider context, introspection is a vice when the problem has to do with the nature of the relationship between the sun and the moon, and is decreasingly useful in studies of the behavior of other primates, mammals, invertebrates, and finally, viruses. But disciplined introspection and empathy are essential to the study of the unique characteristics of humankind.

### Complex Social Units

The capacity of human beings to observe and understand and systematize their knowledge of the behavior of other human beings has proceeded as human beings have organized themselves into larger, more complex social units and have included a larger portion of humankind within their definition of humanity. But as long as the understanding of human behavior was not arrived at by methods that included systematic recording in ways that can be shared and tested, I would not speak of a human science. In the past, each great integrator of knowledge had to rely chiefly on his own capacity as a whole human

## TOWARDS A HUMAN SCIENCE

Dr. Margaret Mead

The writer of this highly interesting article about the new researches of human nature, Dr. Margaret Mead, the President of the American Association for the Advancement of Science at Columbia University says that the basic techniques of observation of Physical and human sciences are complimentary. She says what "we need now is to develop systems of education that are consonant with human development to foster the growing child's undistorted sense of its own body".

being to observe the behavior and speculate about the past of members of his own species in ways that were—and are—unique to the human mind and dependent on the development of human culture. In more complex cultures, sharing the same traditions and education opened the way to an understanding of the insights of a philosopher, a historian, or an ethical leader who reported his observations in a shared language or demonstrated his ideas through artifacts or great works of art familiar to everyone involved. But just as in communication among physical scientists, more than a shared natural language is essential.

As long as we lacked photographic and accoustical techniques of recording, we were dependent for a scientific approach to the whole domain of human behavior on fragmenting methods of quantification of evoked behavior (evoked, for example, by questionnaires) or of records of partial observations coded in ways that give the results an illusory appearance of science. In some types of studies human individuals were—and still are—treated like parts of an aggregate and in others like entities that can be understood only through culturebound tests of isolated traits like speed or accuracy of response.

### Time Consuming Shared Experience

Today, certain of the most important concepts of the human sciences have failed to enter constructively into the thinking of

many scientists and lay persons principally because full understanding depends on the completion of an apprenticeship training of a peculiarly intense kind, such as the experience of a tedious and time-consuming procedure like psychoanalysis or the experience of prolonged actual immersion in the life of more than one unfamiliar culture. Formerly, anthropologists were trained in techniques of what was rather vaguely known as "participant observation." For unlike the data of physical sciences which are required to be of a kind that can be replicated and reexamined, the data of the human sciences are in great part derived from time-consuming shared experiences that cannot be replicated.

True, many of the findings of physical science are accepted uncritically by those who do not have any real comprehension of the nature of the scientific enterprise. But there is still a tremendous difference between the very precise techniques of communication—and of sharing experience—which have been developed in the physical science and the inevitably imprecise communication by the human scientist who has been dependent on words alone for communicating his observations, while he is studying an individual or the members of a culture, the human scientist observes thousands—or more likely hundreds of thousands—of items of behavior; the greatest difficulty

comes when he must condense his observation into words alone—words that may very well convey meanings alien to the experience described.

There is the added difficulty that pencil-and-paper recording was at best selective and depended not only on the trained awareness of the observer but also on the speed with which he could record what he experienced and, to a large extent, on his having highly developed verbal skills, including the ability to translate from the various types of linguistic and nonverbal communications of one culture into the accepted literary language of another.

### Progress In physical Science

In the physical sciences, great advances have come about through the development of reliable instruments that permit observations of the very small and the very distant, instruments that can record in accurate codes various forms of sensory experience and instruments that make possible various kinds of measurement that are independent of the human observer. In the human sciences the principal emphasis in training has been on teaching the human scientist how to function as a very complex instrument, to use his body's own sensory equipment as a multifaceted recording device. The next advances have come as we have acquired forms of instrumentation that record and later allow for the replication of the observation without the intervention of verbal description. Instrumentation which makes possible various kinds of measurement that are independent of the human observer. Instrumentation which makes possible the recording in full detail of auditory and visual aspects of events by means of tapes, still photographs, and films can provide us with records of nonrecurrent phenomena so that we can juxtapose events separated in time and space and provide material for later comparison and analysis by others who did not share in making the original observations.

### Complimentary In Nature

In effect, the basic techniques of observation and recording in the physical and the human sciences are complementary. The human scientist has had to learn how to relate self-knowledge of him or herself as a multisensory being with a unique personal history as a member of a specific culture at a specific period to on going experience and how to include as far as possible this disciplined self-awareness in observations on other lives and in other cultures.

In contrast, the physical scientist has had to learn how to exclude as far as possible the effects of temperament, individual life experience, and culture on his observations and interpretations of data. Without appropriate instrumentation neither can go beyond certain limits or communicate to others what has been observed.

It is in the sciences of living things that we find the greatest confusion but also the clearest demonstrations of the ways in which the two kinds of observation—the observation of human beings by human beings and of physical nature by human beings—meet. One group of students of living beings have attempted to adopt as far as possible the methods of the physical sciences through the use of controlled experiments, the deliberate limitation of the number of variables to be considered, and the construction of theories based on the findings arrived at by these means. The other group, taking their cues from our human capacity to understand through the observation of natural situations, have developed their methods from a natural history approach in which the principal reliance is on the experiments that are provided by history and by animals living in a particular ecological setting.

### Ingenious Puzzle Boxes

Students of human behavior who derive their methods of obtaining data from the physical sciences have constructed ingenious puzzle boxes and mazes and artificial stimulus situations. In research carried out by means of

these techniques, the behavior of experimental animals and, even more, the behavior of human subjects has been fragmented in increasingly refined ways in order that aspects of behavior may be studied "bit by bit, two or three variables at a time, and treating these bits as isolated"—that is, by using in their investigations methods which were eminently successful in studies of physical nature.

In research carried out by the other group of human scientists, the basic methods of observing whole events as whole human beings have now been supplemented by vastly improved techniques of recording and preserving recordings of whole events, techniques of keeping intact whole archeological sites or the full record of elicited materials—first in the form of verbatim linguistic and folklore texts and finally, within the last quarter-century, through the use of actual visual and sound recordings.

I would argue that it is not by rejecting one or another but by appropriately combining the several methods evolved from these different types of search for knowledge that we are most likely in the long run to achieve a kind of scientific activity that is dominated neither by the arrogance of physical scientists nor by the arrogance of humanists who claim that the activities which concerned them cannot meaningfully be subjected to scientific inquiry.

### New System

In conclusion I wish to touch briefly on certain more general social implications of our advances in the human sciences.

There are, I believe, important implications for education, which today oscillates uneasily between emphasizing mastery and freedom from restraint, discipline and spontaneity, conformity and originality of the kind usually associated with the arts and religious inspiration. These dichotomies are expressions of older, culturally limited conceptions of the human

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Dr. Mazumdar said :

"In course of the last sixty years many critical works on ancient Indian history have been published. Political history of most of the dynasties covered by H. C. Ray in his *Dynastic History of Northern India* now forms the subject-matter of independent monographs. Political history of South India is also nearing completion. The period earlier than the seventh century A. D., which had been comprehensively studied for the first time by H. C. Raychaudhuri, has also been examined afresh by a host of scholars like R. C. Majumdar, V. V. Mirashi, D. C. Sircar, S. Chattopadhyaya, A. K. Narain and B. N. Mukherjee. At present it seems that one interested in choosing a topic of research in political history of Northern India may have to look to the fringe areas of pre-partition India, for example, North-Western India, Punjab, Rohilkhand, North Bihar and Assam roughly between the third and seventh century A. D.

"With a fairly settled knowledge of political history, it is but natural for historians to give more attention to the socio-economic history of ancient India. Some historians believe that the economic factor is of utmost importance in any study of history. Economics has its bearing on society, art and literature. Political moves and expansions are determined by economic necessities. This outlook has changed the concept and method of studying history during the last forty years or so. Such a situation has impelled me to choose the subject-matter of my address.

"We are fast approaching a stage when mere descriptive history will be derided by scholars. Critical readers will not be satisfied with catalogues of agricultural and mineral products, industrial arts and crafts, enumeration of taxes, professions and occupations, trade routes, imports and exports, and devices of coins etc. At present we look for continuity and change, tradition and modernity in each period of Indian history. Even

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## INDIAN HISTORY CONGRESS

# INTENSIVE RESEARCH NEEDED TO EXPLORE MISSING LINKS OF ANCIENT INDIA

Some Important Questions Raised By  
Dr. B. P. Mazumdar

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Dr. Bhakat Prasad Mazumdar, Professor of History in the Post-Graduate department of the Patna University delivered an illuminating address while presiding over the Ancient Indian history section of the Indian History Congress held at the Calicut University campus on Dec. 31 last. Dr. Mazumdar, wellknown for his erudition and scholasticity spoke on the "Changing Profile of Ancient Indian Economic History", and urged the necessity of finding out the reasons why there could not be much of capital formation in ancient India. He asked "why did ancient Indians fail to transfer the resources engaged in production of consumption goods to the production of capital goods"? Was it due to the lack of technology or due to some other factors? These and many other subjects of ancient India need more researches, and Dr. Mazumdar urged historians to give particular thoughts to unravel the truth of unknown periods of ancient Indian history.

when a writer points out some change, the readers enquire whether he can ascribe a cause to the elements of change. This questioning spirit has largely reoriented the perspective of economic history.

"Since the third decade of the present century historians have been giving attention to the development and application of technology in ancient India. At the beginning the focal point was Mohenjodaro and Harappa. But even in this small area Marshall and his contemporaries were little concerned with the technical aspect of cultivation and irrigation. How the fields were cultivated was beyond their comprehension. Recent scholars are divided in their opinion about the use of copper hoes and chert blades and not ox-driven ploughs in cultivating the fields of the Harappan age. This much is

certain that no implement of iron was fixed on the plough in this period.

### Irrigation in ancient India

"The role of technology in irrigation of fields is being pursued in recent years. How the canals were dug up in the Harappan period is still unknown. By 300 B. C. brick walls for canals began. Archaeological excavations at Besnagar reveal a storage canal which was made strong by this method. During the time of the Ikshvakus of Deccan further improvements seem to have occurred. The embankments of the old canal at Nagarjunikonda were made strong by use of hard lime, gravel and stones. Construction of dams and diversion of water were the other steps taken to facilitate better irrigation. Probably by the age of Kautilya and definitely of

Narada, sluice gates and dams became popular. Kautilya (III. 9.44) directs that persons letting out water at any place other than the sluice gate must be fined. The construction of barriers on the course of the Kaveri river is described in the *Silappadikaram*. Minutu details of the regulation of the Vitasta river in Kashmir in between 855 and 883 A. D. have been given by Kalhana.

"It has been possible to mark the stages in the methods of lifting water for irrigation. The *Silappadikaram* describes that when the river Kaveri passes out of the anicut, she noisily leaps beyond it in sportive mood and consequently 'we can hear there neither the sound of the bucket, nor of the water-lift, neither the usually loud peccottah, nor the palm-leaf basket used in irrigation'. (Transl. V. R. R. Dikshitar, p. 161). How old are these devices? The *Kasika* explains *udanca* as a large leather bucket for lifting water. As the *Ganapatha* alludes to the drawing of water with the help of ropes drawn by bullocks, it is likely that leather buckets were fastened to the rope in the time of Panini. Better methods of irrigation came to be known by the age of Kautilya. He refers to wind-power as the *Sroto-yantra*. *Sroto-yantra* is vaguely described by modern scholars as a mechanical contrivance. In the Nasik cave inscription of Abhira Isvarasena dated 259 A. D., there is a reference to a guild of *odayantrikas*, which has been explained as hydraulic machine. Was the *Sroto-yantra* of Kautilya identical with the *araghatta* or *udghati-yantra*, the latter two being such contrivances by which there could be successive discharge of water from a series of pots or buckets fixed to the wheel? Possibly not, because the former (*Sroto-yantra*) must have been used where there was current in water and the latter, on the *Amarakosha* and the *Abhidhanacintamani* fitted to a well or tank, where the water is obviously placid. It seems that during this long period, since the early century of the Christian era, this contrivance had not undergone any change. If Kautilya's reference is brushed aside, we will

have to conclude that Indian engineers failed to introduce an exact Persian wheel. Irfan Habib then rightly points out that the Persian wheel in India is not earlier than the fifteenth century A. D.

#### Iron tools and technology

"Many scholars have reviewed the developments in iron technology and their effects on economy. Excavations at Atranjikhera, Hastinapur and Noh reveal that iron tools began to appear first in India in Western U. P. in between 900 and 800 B. C. But when were the blow pipes replaced by bellows in the later Vedic period? However, with the help of bellows it became possible to make varied uses of different qualities of iron during the next 200 years. The implications of iron technology in the expansion of the Aryans towards Eastern India, growth of cities, specialization in crafts, abundance of the NBP potsherds and the rise of Magadha as a political power are familiar to all. It has been argued that the iron technology which triggered off urbanization, metallic currency, trade and commerce, declined appreciably in the middle Gangetic basin by the sixth century A. D. But to me it appears that further technological developments continued in the successive centuries. The use of beams at Mathura and Orissa temples, production of excellent swords, references to removal of impurities of iron by Kashmiri Vrinda and Bhoja, the author of the *Yuktikalpataru*, point to greater advancement in technology in between the eighth and the twelfth century. These developments helped the growth of more towns, more buildings, employment and greater material comfort. The proliferation of independent dynasties of North India since the eighth century A. D. undoubtedly added to the number of towns.

"Very few scholars have paid attention to the technological developments in production of textiles. The changing techniques in dyeing of cloths are somewhat familiar to us. But little is known about the processes involved in production of cotton goods. Numerous scholars have referred to the

use of spindles and whorls since the Harappan age. As these are rotated by hand, the quantity of production by a single person must have been poor. If one accepts the argument of Irfan Habib (PIHG 1969, Varanasi session, Patna 1970 p. 143 f.), the spinning wheel, which quickens spinning, and the bowstring device, which cleanses the cotton and makes it fine, came to India not earlier than the thirteenth century A. D. This argument is valid at least upto the age of the *Milindapanho* (IV. 6.10), which refers to Mahapajapati Gotami herself carding, pressing, beating, cutting and finally weaving a wrapper for the Buddha for use in the rainy season (SBE. XXXVI, p. 52).

#### Cotton cardings weaving

"To me it seems that much before 1200 A. D., at least Western India was familiar with a bow-like device for cleaning cotton. Hemacandra not only refers to *pinjanam* or carding but also to *tulasphotanakarmukam*. According to the *Amarakosha* *Karmukam* means *dhanuh* or bow. Possibly on account of this device there was greater production of textile goods in the Paramara kingdom sometime before 1080 A. D., the date of the Arthuna inscription. It relates that traders were asked to pay one *rupaka* on each *bharaka* of thread and cotton and one and a half *rupakas* on each *Kotika* of clothing fabric (EI. XIV, p. 300, verses 69-72.) This is the first instance of levy on cotton, thread and its finished product at varying rates. Kautilya and Manu recommended one type of tax on cotton.

"We have little information regarding the process of making jaggeries and sugar. How old is the device of pressing the sugarcane and extracting its juice? The earliest reference seems to be a verse of Vacaspati quoted in the *Subhasitaratnakosa* by Vidyakara, who flourished in the latter half of the eleventh century. The *Desinamamala* of Hemacandra mentions *iksu-nipidana-yantram* or a device made of bamboo for pressing sugarcane. A. K. Majumdar, on the basis of the *Jambudvipaprajnapti*

suggests that it was handled by a guild of *jantapilaga* (*Chaulukyas of Gujarat*, p. 264.) How far this invention resulted in giving impetus to sugar industry in Eastern and Western India is a matter of conjecture. But there is no doubt that a new occupational group appeared in Western India positively before the twelfth century.

"A new horizon has opened, particularly during the last ten years, with the enquiry into the economic aspects of religious cults and institutions. The material background of Buddhism, Jainism and Tantricism as well as the economic basis of South Indian Jainism and Virasaivism has been investigated. Considerable amount of research work has been done on the economic activities of South Indian temples and monasteries, specially regarding extension of agriculture, distribution of livestock, employment, money-lending and landlordism.

"In contrast to South India, the financial aspects of temples and monasteries of Northern India have been neglected by scholars. With abundance of epigraphic materials, it should now be possible to prepare a list of endowments to these establishments and comment. As in the south, so in North India, the temples not only received donations from but were also often managed by merchants. In South India, particularly the Great Temple of Tanjore invested a fragmentary portion of their money received as gift with the merchants in the time of Rajaraja I and Rajendra Chola I. But no inscription refers to such an investment by temples of North India with merchants. Here merchants do not include craft or industrial guilds. Apart from literature, there is no reference to gift of livestock to North Indian temples. The universal economic character of the temples and monasteries of North India, therefore, is that the liquid assets were neither utilised in accepting deposits for paying interest to creditors, giving loans to private persons, nor in purchase of lands for extension of cultivation, nor in production of consumer or luxury goods.

"In recent years scholars have devoted themselves mostly to agrarian history of the post-Gupta period. Possibly it is the result of search for the characteristics of feudalism or mediaeval factor in Indian history. Most of the topics deal with the intermediaries in the land system, emergence of serfdom or semi-serfdom, subjection and immobility of peasants, all of which are related to the investigation in the pattern of Indian feudalism.

"In spite of fresh outlook on old problems like ownership of land, revenue and currency systems, search for significant changes in economic life and new methods of study, we have yet to strive for a better picture of the economic history of ancient India. The task is beset with difficulties. It has been correctly pointed out by historians that dates of many of the extant literary texts are not yet known with any degree of certitude. This is particularly true of the epics, *Jatakas* and a few *Avadanas*, *Kalpasutras* and *Smritis* and Jaina texts in *Ardhamagadhi*. Archaeology has largely helped our study on a more reliable basis. But it itself has posed variety of problems. The general complaint is that excavation is mostly vertical and not horizontal.

#### Problems with inscriptions

"Inscriptions raise two foremost problems. These are identification of place names and meaning of technical terms. Unless one is sure about the identity of localities mentioned in inscriptions, it will not be possible to discuss all the aspects of gift-lands, causes and trends of migration, extension of cultivation; determine the locale of agricultural products and industrial goods and fix the areas of the then circulation of coins. It has not yet been possible to explain all the technical terms. A cursory glance at the monumental work of D. C. Sircar entitled *Indian Epigraphical Glossary* will show how large is its number. In measurement of land, apart from unexplained ones like *lava* in a plate of Paramarddin Chandella, dated 1191 A. D., of *amsa* in the Depalpur grant of the time of Paramara Bhoja, there is

the problem of finding out the relationship between varied forms of measurements even in one kingdom, as for example, *bhumi* and *bhumasaka* in Chamba inscriptions. The general problem of correlation of the various forms of land measurement in different parts of India may perhaps be never solved. Nowhere in ancient Indian literature or inscriptions is mentioned the exact area which could be ploughed by an ox or a pair of oxen. Similarly, the relative value of all types of coins has eluded solution till now.

"It is difficult to find out the cause as to why we have longer lists of officials and taxes in small kingdoms than the bigger ones in inscriptions. If the prefix *maha* before officials is counted, one finds that they are far more numerous under the feudatories, Mahamandalika Isvaraghosa of Dhekkari (probably in Burdwan district) in West Bengal and Mahamandalika Samgramagupta in North Bihar than under the Pala and Sena kings. Similarly, in some cases, the number of enumerated taxes increases as the extent of territory becomes smaller in the twelfth century. For example, in the Later Somavamsi dynasty, while Uddyotakesarin levied 12 types of taxes, Karnakesarin did as many as 19.

#### Area-wise statistical data needed

"So far I have tried to mark out some of the areas where mature historians of the last forty years have conducted intensive research than their predecessors. Well-nourished by the fruits of archaeology and publication of literary texts and help from other social sciences, these modern scholars have been studying social and economic history from the angle of tradition and change to a far greater extent. It is needless to point out that the essential duty of a historian is to study continuity and change in each successive stage of economic growth. In contrast with the past, never before were historians concerned with the study of growth of landed magnates and intermediaries, distribution of social surplus, rise and decline of towns, mode of

production, economic relationship between villages and towns etc. as has been done since 1940. It is now necessary to enquire into area-wise statistical data on the distribution of donated lands, extent of fragmentation and sub-division of holdings, rise or decay of urban settlements, movement of population, varieties, number and volume of circulation of metallic currencies etc. Rich epigraphical material can be utilised in determining the history of price and rate of interest in South India.

"Some of us think that in the post-Harsha period in North India, production was only for local needs and markets were limited in character, both of which are characteristics of feudal economy. It is a hasty conclusion. At least, some inscriptions of Kathiawar and of Chahamana and Paramara dynasties (e.g. Mangrol inscr. dated VS. 1202, Arthuna inscription dated VS. 1136) show that goods were brought for sale from outside to the towns by different types of conveyance at least in the 11th-12th century. Further, we have yet to prove that all commodities were sold in the area of their production.

"A few words of caution are necessary for those who believe in the above-mentioned approach to ancient Indian economic studies. One must explain the use of terms like 'money economy', 'self-sufficient village economy', 'partial feudalization', 'semi-serfdom' etc. The use of the broad and all-comprehensive term 'feudalism' for different stages of post-Maurya period must be discouraged. It is necessary to determine the characteristics of feudalism in each stage. In mediaeval Europe there was no uniform type of feudalism in the then states. In India, too, there were regional variations in the pattern of feudalism even in one particular age. Secondly, too much of economic motivation should not be ascribed to the trends in literature, religion, art and architecture. Though economic change has political and cultural significance, it is not necessarily the dominant one in all sectors of society. Thirdly, it is desirable that, as far

as practicable, dialectics of every economic change should be emphasised. Kautily's recommendations on the new settlements by the government should lead us to conclude that the consequences must have been redistribution of population, more avenues of employment and fresh agrarian relationship. The changing pattern and role of guilds in between the sixth century B. C. and twelfth century A. D. can best be studied if we also look at their impact on general economy. If the guilds of Northern India in the eleventh and twelfth century A. D. ceased to function as banks, its causes as consequences should be looked into.

#### Salt levy

"In spite of lack of copious statistical data, application of economic theory should be pursued in understanding the process of changes in early Indian economy in a better way. Concepts of demand and supply, shifting and incidence of taxation, quantity theory of money, market, rent, diminishing and increasing returns, etc. can enable us to determine not only particular but also the over-all aspects of economy. One should not only study increase or decrease in taxation or its links with growing feudalization but also review the relationship between taxation structure and production, consumption, demand and supply, shifting and incidence. In most of the landgrants the donees were given the right of levy on salt. Unless the right relating to salt meant the right to realise royalty on salt mines or something like an income-tax on salt-producers, it is likely that the incidence of salt duty fell chiefly on consumers due to the inelastic nature of its demand. Similarly, it can be easily inferred that the incidence of imposition of taxes on wheat and barley in Rajputana, Gwalior and Malwa in the eleventh-twelfth century, whose demand was inelastic, must have fallen on the consumers. Where demands are inelastic, prices tend to rise by the full amount of the tax.

"A critical study of the tax items and land transactions can

yield a fairly good idea of the history of prices in India. It is not difficult to work out an outline of the relative extent of rise in prices of agricultural, mineral or textile products, fruits etc. The Paramara and Chandella kings and Bhima II Chaulukya levied duties on cotton and sugarcane in their respective areas for the first time. The effect must have resulted in a rise in the prices of these items. It would be pertinent to enquire how far did the rise affect the trade in these articles outside the borders of those levying countries. The inscriptions of Bengal give a positive hint to prices of different categories of land. The Damodar-pur copper plates reveal that the price of fallow lands remained practically constant in Kotivarshavisaya in North Bengal in between 443-44 and 533-34 A. D. Sena inscriptions refer to cash rents as well as the price of lands. It is noteworthy that exact prices of commodities like rice, silk, camphor, emeralds, pearls, diamond, aloe-wood, sandal-wood, of slaves and bullocks and even transport charges are stated in the *Lilavati* of Bhaskaracarya who flourished in the twelfth century. All of you know the price of rice given by Kalhana in different periods in Kashmir.

"Land system may be studied in view of the concept of rent. One has to distinguish, as far as possible, between the king's private land and the state land. Theoretically, if we accept that the king was the owner of all land, all land-taxes, except on the marginal land, may be regarded as rent and not revenue. Consequently, it leads us to conclude that when a king donated land, he was just sharing out his income from land rent. If this is true, we will have to think afresh about notions of serfdom, 'semi-serfdom', immobility of peasants in connection with implications of landgrants in the post-Gupta period. Investigations on what were the obligations in the donee in respect of payments, if any, after receiving the grant, would be important in this context.

#### Capital formation

"Recent historians frequently



talk of capital formation and commodity production. In spite of some types of capital accumulation, there could not be much of capital formation in ancient India. Why : Modern economists think that any discussion of capital formation should take note of the national income, investments, savings, consumption and production of capital goods. We have yet to work out the national income, rate of real savings, find out causes of inability to mobilise the savings of the public and allow investors to claim them. Why did ancient Indians fail to transfer the resources engaged in the production of consumption goods to production of capital goods? Was it because the level of technology in this period did not offer any scope for the invention or production of capital goods or did the reason lie somewhere else? Till now only skeleton references to production and distribution aspect of commodities have been made. The market for the commodities in each age has to be investigated. Was there a wider market in the age of Buddha and Kushanas than the Gupta and post-Gupta period? Were the commodities consumed in the areas of their production in the post-Gupta phase? The general trend of thinking among some modern historians is that there was petty commodity production in the so-called feudal age. But was there ever in the whole period of ancient India a largescale production by any guild? Perhaps not. The relationship between the craft and industrial guilds and merchants has to be investigated. Wherefrom did the craft guilds get the capital for expansion of business? And was there really any capital?

"I have tried to spot out the new trends in the study of economic history. By referring to some of the unexplored areas in this field, I solicit your kind attention to devote more thought on the subject. Did not Shankaracharya tell us that truth is to be learnt by enquiry? Let there be more of fruitful discussion and of perceptive dissertations.

## Ambedkar's Militant Scheduled Caste Youth

### Rise And Fall Of Bhim Sena

V. T. Rajsekhar Shetty

If Dr. B. R. Ambedkar was recognised as the leader of the Indian untouchables, the credit for translating many of his revolutionary ideas into an action-packed programme goes to Shyam Sunder and his formidable Bhim Sena, a 200,000-strong self-defence force of militant, scheduled-caste youth, which created a tremendous impact in Karnataka, Andhra Pradesh and Maharashtra.

Shyam Sunder became a legend in his lifetime. He was a scholar, orator, philosopher, poet, writer and a parliamentarian. Born at Aurangabad on December 18, 1908, in an untouchable family, he passed his B. A. from Osmania University and, soon after doing law, jumped into youth and trade union movements. From then onwards his life was a stormy, endless battle. After his death last year, all the top leaders of the Bhim Sena soon deserted it, leaving the movement in disarray.

A friend and a close follower of Dr. Ambedkar's, Shyam Sander went a step forward and gave a practical shape to the Dalit movement. He gave Dr. Bhimrao Ambedkar's name to his Bhim Sena, which can be considered the forerunner of the Dalit Panthers of Maharashtra.

In his book, *Mool Bharatis*, Shyam Sunder bluntly told the untouchables; 'We were the rulers of this country before the advent of the uncultured Aryans.... We Mool Bharatis are not and never have been Hindus and are not prepared to help them establish a Hindu Raj in India.'

The upper castes may dub the Bhim Sena as a band of antisocial

elements often indulging in violence. Violence was there, but purely for self-defence. During my recent tour of Karnataka, Hyderabad and other parts of Andhra Pradesh to study the Bhim Sena movement, many leaders of the Congress, Muslims and opposition parties admitted that they were considerably influenced by Shyam Sunder.

The untouchables of Nanded and Aurangabad and three districts of Andhra Pradesh and Karnataka owe their awareness to Shyam Sunder. They might have remained poor and discriminated like their counterparts in the rest of the country, but a tremendous ideological awareness and awakening has come among the Dalits. The Bhim Sena has succeeded in striking terror in the hearts of the caste Hindus, particularly the landed gentry. The politically powerful landed gentry will now have to think twice before committing atrocities on the untouchables, says Shreyeskar, the Bhim Sena leader at Gulbarga.

How forcefully the Bhim Sena repulsed the atrocities of caste Hindus on the untouchables could be proved from the following incident that invited nation-wide attention in 1974. An untouchable maid servant called Ningamma, employed by a rich landlord who was a former MLA, died at Kamalpur under suspicious circumstances and the doctor gave the verdict of suicide. The Bhim Sena men rushed to the spot and started an agitation and Shyam Sunder later addressed a huge meeting at Gulbarga. The government was forced to exhume Ningamma's body and the

doctor certified it as a case of murder. On hearing this news, an irate 1,000-strong mob of Dalits attacked the house of the MLA's son at Gulbarga, dragged him out and assaulted him publicly. The incident unnerved the caste Hindus.

The concept of a "Harijan-Muslim axis" was novel in India and Shyam Sunder propounded this theory after making a deep sociological research into the problems of both these communities. It is in the united front of these two oppressed communities that he found a solution to the country's social ills, including the caste system.

If he loved Muslims more than the caste Hindus, perhaps he had strong grounds to do so. After all, the entire Dalit population of Hyderabad State had to be grateful to the Nizam for constituting a Rs. 1-core fund for its welfare. And Dr. Ambedkar too appreciated his pro-Muslim stand as did many fair-minded caste Hindus.

Shyam Sunder, an atheist, equally hated all religions and merely sympathised with the plight of the Muslims. Nothing more. He even opposed the conversion of Dalits to Islam or Buddhism. He said Mool Bharatis had no religion and hence there was no question of conversion. By changing a religion, the social and economic condition of the untouchables would not change.

He merely wanted a joint front of these "two largest minority communities" — untouchables and tribals forming 30 per cent of the country's population and Muslims comprising another 13 per cent. Both had identical problems of discrimination, deprivation, exploitation and Brahminical tyranny.

Unfortunately, his dream of a Harijan-Muslim axis was not fulfilled because there was no progressive leadership among the Muslims to do the follow-up work.

Shyam Sunder died at the age of 68 at Hyderabad on May 19, 1975. Perhaps, no Dalit leader

had risen to such intellectual heights after Ambedkar. Born in Maharashtra, he lived in Andhra Pradesh (Hyderabad) and worked mostly in Karnataka while his influence had spread practically over the whole country.

Despite his lucrative practice at the bar, he died penniless, spending everything he had for the cause of Dalits. Widely travelled all over India and abroad, he even represented the Hyderabad State at the UN Security Council. He was an MLA (1957-61) in the Mysore assembly. He was also a deputy speaker in the Hyderabad assembly. He had intimate contact with Harold Laski and Jean Paul Sartre and made the best use of his visits to apprise world leaders of the worst form of apartheid practised against the Indian untouchables.

He had charted clear-cut roads for the liberation of Dalits. In his

book, *The Four Immediate Needs* he placed the following four demands of the Dalits: Surrender 25 per cent of the villages in every taluka a separate electorate, a separate Dalit university in each state and a strong political party for the Dalits.

He wrote eight books of which, his magnum opus, *They Buru*, is yet to be published.

Inaugurated at Gulbarga on April 29 1968, the Bhim Sena quickly grew in strength. He toured the country establishing branches in Uttar Pradesh, Maharashtra, Punjab, West Bengal, Karnataka, Andhra Pradesh and Delhi. It had 10,000 members in Andhra Pradesh alone. The whole movement might have lasted just six or seven years but it virtually created a revolution in the minds of the Dalit to whom it gave new courage and confidence to retaliate against caste Hindus.

## 'King Coal' & Its Future

Prof. Siddheshwar Prasad

Union Dy. Minister of Energy

October 17 is a historic day in the country's coal mining industry. It was on this day in 1971 when coking coal mines were nationalised. This was followed by the nationalization of all non-coking coal mines in January 1975. The nationalization proved a blessing to the country when the energy crisis overtook the world in late 1973. The 'King Coal' once again came to the fore front in the domain of energy.

India with her vast reserves of coal has also taken this challenge earnestly and once again coal has proved its worth. The production of coal in the country has progressively increased from 77.8 million tonnes during 1973-74 to 88.4 million tonnes during 1974-75 and to nearly 100 million tonnes in 1975-76. The Coal industry is well poised to achieve targets of production according to the needs of the country.

### Increased production

The increase in production is

the result of improvement in rail transport, continuity of power supply and above all the dedication of the management and workers of the Coal Industry. This has enabled the industry to change the situation of crisis in coal to that of confidence.

The stock of coking coal at the steel plants has improved enormously from 3 days' consumption in December, 1974 to 21 days. Similarly the stock of coal with power stations and cement industry is 36/37 days and 21 days

respectively. This is a significant improvement and the coal industry can be well commended for its achievement in meeting the consumer demand.

utilisation of non-coking coal for steel making. The use of sinters, pellets, improved methods of coking, development of formed coke, coal dust injection are some of the

Railways use large quantities of coal for steam locomotives. For efficient use of coal and for overall operational efficiency, most of the railway tracks are being electrified. In West Germany, the last steam locomotive was given a send off during 1975. In India use of steam locomotive may continue for some time, as the coal in India is much cheaper, compared to Europe.

Sectorwise Coal Consumption & Demand 1975-76/1978-79

	Consumption		Demand	
	1975-76 (mill. tonnes)	% of total	1978-79 (mill. tonnes)	% of total
1. Coking Coal including Blendable Coal for metallurgical industry-Steel, washery and coke oven)	20.96	22.60	28.70	23.16
2. Power	23.04 ( 1.42)	24.84	35.50 ( 3.10)	28.65
3. Railways	14.30	15.42	13.50	10.90
4. Cement	4.44	4.78	5.10	4.11
5. Brick	3.34 ( 0.44)	3.60	4.50 ( 1.00)	3.64
6. Fertilizer	0.93	1.00	3.10	2.50
7. Soft coke	3.64	3.92	5.00 ( 0.60)	4.04
8. Export	0.44	0.47	2.50	2.02
9. Other industries	18.77 ( 0.82)	20.14	23.00 ( 0.80)	18.56
10. Colliery consumption	3.00	3.23	3.00	2.42
	92.72 ( 2.68)	100.00	123.90 ( 5.50)	100.00

Note : Figs. in brackets represent middlings consumed in addition to the raw coal.

Cement Industry is using coal in the cement kilns. With the improvement in the cement manufacturing technique from wet to dry clinkers, it is expected that requirement of coal per unit of production may come down. This is an important field where imported petroleum based feed-stock may be replaced by abundant indigenous coal. Already efforts are under way to instal coal-based fertilizer plants at Talcher, Korba and Ramagundam. The installation of more-coal-based fertilizer plants will depend on the availability or otherwise of petroleum crude and gas from indigenous sources.

The use of coal in the domestic sector will increase gradually. Of course, the use of commercial fuel in the domestic sector may first start with cities and large towns where non-commercial fuel is not available and the purchasing capacity is available.

**Coal gas production at Dankuni**

Apart from the manufacture of soft coke in open bhatta, low temperature carbonisation plants are under installation at Ramakrishnapur in Singareni coalfield (Andhra Pradesh) and Dankuni near Calcutta. Both these plants are based on the technology developed indigenously at RRI-Hyderabad and CFRI-Dhanbad respectively. There is a possibility of developing this process in other areas wherever feasibility study may indicate economic viability. Coal gas of Dankuni project, will be used at Calcutta where the pipe line network already exists. For the use of gas in the cities, the development of distribution system may be necessary which is capital

It will be seen from the above table that major increase as a percentage of total consumption is in power sector, fertilizer and export.

steps worth mentioning in the field of reducing the usage of coking coal for steel making. 'Direct reduction' of iron ore with the use of non-coking coal is also under consideration.

**Consumption in power sector**

Another major consumer of coal is the power sector. The modern pulverised fuel boilers are capable of high efficiency. However as a large reserve of Indian coal is of inferior quality because of high as content, research in the field of fluidised bed combustion is necessary to gainfully utilise our vast resources of inferior coal. BHEL have already taken steps in this direction.

The use of coal in steel sector is mostly in the form of coke for charging the blast furnaces. Most of the steel plants have modern bye-product coke ovens with facilities for recovering bye-products. A part of the coke oven gas is also melting shops wherever necessary. Rourkela fertilizer complex and Durgapur complex dispose off surplus to alloy steel plants. The limited reserves of coking coal have necessitated the conservation of coking coal and

intensive. However, the economic viability of the coal gas supply depends upon the availability and price of other fuels.

The use of coal in other industries is mostly for its thermal value. In most of these cases fuel efficiency wing of CIL renders consumer service in suggesting ways to improve the efficiency of utilisation of coal. In view of the steep rise in price of oil and easy availability of coal many industrial units are switching over to coal. In 1975-76 foreign exchange worth Rs. 27 crores was thus saved. The saving is expected to be Rs. 43 crores this year.

The development of a fuel from coal either in its own form or in the form of prepared fuel at a reasonable price is necessary so that the common man in the country may feel the impact of nationalisation of coal industry. U. K. has developed 'smoke eaters' where coal in its normal form can be used without polluting the atmosphere with black smoke.

### Clean Fuel

The drive for clean fuel against the environmental pollution will mean development of smokeless fuel as well as development of such 'Chullhas' which may utilise coal with maximum efficiency and minimum smoke.

Indian coal being low in sulphur has attracted the attention of the E. E. C. and other countries. There are fair chances of improving the export of coal in the near future. The development of ship-loading facilities at Haldia will go a long way to boost export of Indian coal.

The development of the process for large scale gassification of coal is yet to cut ground in the country. Research work in the use of coal by developing process to produce briquettes, pellets and improving the quality of coal by reduction of ash by solvent refined process is in progress. Some of the processes like oil agglomeration and coal pallets are being tried at demonstration scale at the subsidiaries of CIL.

## Assam's Breakthrough On The Agricultural Front

Jadu Kakaty

Mr. Surendra Nath Dwivedy, Adviser to the Union Ministry of Agriculture, paid a visit to Assam during March of 1976. He came here for an on the spot examination of the working of the State Government in respect of land reform and agricultural development measures. On conclusion of this tour, Mr. Dwivedy addressed a press conference at Gauhati and expressed his satisfaction and happiness at the progress made by Assam in this direction.

According to Mr. Dwivedy, Assam has done pioneering work by trying to revolutionise the very concept of ownership of land through its Land Policy of 1972. Mr. Dwivedy expressed his willingness to recommend similar measures to other states also and said that Assam's example here should be emulated by other states also.

What was this revolutionary measure and pioneering work that Assam has done to attract appreciation of a senior leader and dignitary of Mr. Dwivedy's status?

Assam Government's Land Policy Resolution of July 1972 had stipulated that: (1) land is a means of livelihood and not property. (2) available agricultural land would not henceforth be settled on individual level or with agricultural cooperative societies, but would be allotted to Agricultural Farming Corporations formed with genuine landless cultivators, and (3) those who have other means of livelihood would not be given agricultural land. Government of Assam went about implementing this policy by constituting a dozen of Agricultural Farming Corporations to give

a fair trial to this progressive conception. It must be said in all fairness to the authors of this policy that despite some hindrances mostly offered by vested interests and arising out of deep-seated attachment to property, the Farming Corporation concept has come to stay in Assam and has a better prospect today than ever before because of the priority attached to the problem of distribution of land among the landless and also because of the trend and thrust of things obtaining on the wake of the new era of discipline in the country as a whole.

Precisely, it is here that Assam achieves a major breakthrough by seeking to replace the current set of land relations with a revolutionary one. It may look like a deep-sea diving, but it is indeed a significant dive.

This prompts us to recall yet another comment on Assam's progress in implementation of the 20-Point Economic Programme enunciated by Prime Minister Mrs. Indira Gandhi. Mr. R. K. Sinha MP and AICC observer on Assam told a press conference, after visiting Assam for a number of times, in the month of June 1976 that Assam "a State considered for long as backward, and lying in a remote corner far away from the national scene, has in the meantime come to the forefront. The down-trodden and the dumb, the poor and the pitiable have woken up to a day of confidence and dignity hitherto unknown to them. All efforts of the political leadership in the State have been focussed on them. The political will and the dynamism of the Chief Minister, Shri S. C. Sinha, has infused a new life into the State."

The AICC observer continued, 'A new climate of hope has dawned for the poor and the landless and it goes to the credit of the Chief Minister who is working under the inspiring leadership of the Prime Minister.'

This rather long quotation is reproduced here to indicate the deep appreciation that Assam has rightly merited and received from many distinguished visitors because of very good work done on some basic issues affecting the basic class of people, the poor and the landless.

### Novel and Far-Reaching Strategy

In Assam 90 per cent of farm holdings are less than 3 hectares in size and 80 per cent are less than 2 hectares. Thus undeniably the strategy for agricultural development in Assam must be a strategy of coming to the direct aid and assistance of the small farmer, who because he is a small farmer, is invariably a poor farmer also. While the necessity of increasing farm productivity, agricultural yield and cropping intensity by employing improved methods cannot be denied, another strategy, that of supplementing the income of the poor farmers and agriculturists including the small rural artisans, is also being vigorously employed in Assam. The philosophy behind this strategy is both novel and far-reaching.

Assam has set up in October of 1975, a Rural Development Agency under Assam Government Planning and Development Department. The main features of the Agency's approach are.

- (i) to concentrate on the bottom 20% of rural population;
- (ii) to identify needs and capabilities of select groups through socio-economic surveys at village level;
- (iii) to identify commercially viable investment opportunities for the poor through commercial banks and without any bankable security and without govern-

- (iv) to offer them model schemes to implement through proper evaluation and control.

The authors of this Agency has one significant end in view; it is to force out, by force of circumstances from villages all except these who are real tillers of the land. They also force that this strategy, when successful on a large scale, would make the democratic set up free from the present distortions and would also make the economic revolution complete. Needless to say, here also Assam can undeniably claim to be pioneering in the whole of the country. The rural development project has in the meantime made much headway and has brought relief to many poor cultivators and artisans in the selected areas where this Agency has been working now.

### Economic Democracy At Grassroots

Assam seeks to achieve another breakthrough on the agricultural front which may, in the long run, prove to be a major economic breakthrough. Assam has set up a vast network of cooperative societies -- 664 in the rural area as to be precise -- and vested with them the responsibility of procurement, distribution and supply of paddy and other essential items of consumption to consumers at fair price.

These Gaon Panchayat level cooperative societies have enrolled each and every family as their members. These cooperatives have not only mobilised rural savings, but also started giving consumption credits to poor, needy villagers. By establishing this network, Assam wants to establish real economic democracy at the grassroots.

Needless to say, that here too Assam is pioneer in the whole of the country.

Earlier Assam had shaken the whole of the country by taking over wholesale trade in rice and many more essential items of consumption and by channelising them through these cooperative

Nowhere in India and never before was such a fruitful integration between Panchayati Raj and cooperative movement brought about. This is not all. By involving the people at various states through popular committees to manage and run the whole job, Assam has been making a very serious attempt to give real economic content to democracy on the one hand and real democratic meaning to economic management. This by itself is a superb thing and for an economy like that of Assam which is mainly an agricultural economy, it is definitely a major breakthrough -- by all standards.

### Let us Co-exist with floods

Floods in Assam have been a never-failing phenomenon damaging Assam's economy to a great extent. The annual damage done to crops by floods has averaged above 2 lakh hectares over the last six years and it is estimated that some 4 lakh hectares of land area are flooded each year. These flood prone areas have to adopt such cropping patterns as can avoid period of peak risks. Although total avoidance of flood or its risks is not possible, its minimisation is definitely possible. As Assam Chief Minister, Mr. S. C. Sinha has said time and again, we must not quarrel with flood, but must learn to coexist with it. Due stress has, therefore, been laid in evolving a suitable cropping pattern by taking to bigger Rabi crops and quick maturing crops which can be harvested before the onset of the monsoon. In fact, Assam has achieved a considerable breakthrough here as is evident from the fact that Assam has been annually increasing both cropping area and production of wheat which is a Rabi crop. People of Assam who were not used to taking wheat products as a staple, are now accepting wheat and wheat and wheat products as an alternative to rice.

### Other Measures

Assam has taken some vigorous steps to provide medium and minor irrigation facilities to her

The involvement of the Assam Agricultural University on the task of providing adequate agricultural research and training and the institution of such specialised agencies as the Assam Plantation Crops Development Corporation which is engaged in rubber and coffee productions in Assam's hill areas and also the institution of Assam Tea Corporation to own and run as many as seventeen tea gardens, thus bringing about a qualitative change in the ownership pattern of tea gardens from predominantly private and foreign-private to public sector and also by encouraging such bodies as the Assam Tea Employees' Industrial Cooperative Limited, a cooperative society where tea workers are shareholders to buy tea gardens and to run them, and last but not the least, by instituting such bodies as Assam Seeds Corporation, Assam Scheduled Castes' and Scheduled Tribes' Development Corporation, Assam's other Backward Classes Development Corporation, to work in particular for the benefit of these poorer sections mainly in agricultural aspect, Assam has been rightly at war with Assam's agricultural problems. Provision of sub-plans for weaker sections with more stress on agricultural front and special hill plans for the hill districts of Assam constitute two other prongs in Assam's armoury to fight poverty and underdevelopment.

### Chaibasa Boy's Brilliant Success

Chaibasa : Mrinal Kanti Ghose of Tata College, Chaibasa has secured First Class First position in Mathematics Honours in B. A. Final examination of the Ranchi University this year. He is the third son of Late Sudhir Kumar Ghose, who died in harness while working as an Assistant Teacher (Mathematics) in Rungta School, Chaibasa. Mrinal Kanti as well as all his three other brothers, including the eldest (who died of drowning) acquired a special aptitude in mathematics and the distinction achieved by him was quite in keeping with his mastery over the subject.

## Economic Independence Of Third World

### Creation Of CMEA Forges New Hope

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The creation of the Council for Mutual Economic Assistance (CMEA) led to a new international division of labour. The CMEA became a source of capital goods for developing countries which has helped the rapid attainment of economic independence by the Third World.

It is in this context that in the Report of the CPSU Central Committee to the 25th Congress of the CPSU, its General Secretary, L. I. Brezhnev, said: In the past five years the industry of its member-countries grew four times as swiftly as that of the developed capitalist states. In 1975 the industrial output of the countries of our community was more than double that

of the Common Market countries.

#### Socialist Division of Labour

The economic development of the CMEA countries has been accelerated because of the intensification of the socialist division of labour. As a result the CMEA has become a major economic unit, as is evident from the production figures.

TABLE—I

#### Total output of some of the Important Products in the CMEA Countries

Nature of the Product	1950	1970	1973	1974
Power (Billion K. W. H.)	135.3	992.0	1,222.2	1,300.7
Petroleum (Million Tonnes)	43.7	365.3	438.6	468.0
Steel (Million Tonnes)	35.8	155.8	178.5	185.0
Synthetic Fibre (Million Tonnes)	0.2	1.2	1.6	1.7
Plastic and Synthetic Resin (Thousand Tonnes)	107.1	2,671.1	3,704.0	4,000.0
Cement (Million Tonnes)	18.5	138.2	162.3	172.0
Cloth (Billion Sq. Metres)	5.4	13.1	14.3	—
Animal Fat (Thousand Tonnes)	490.7	1,472.4	1,872.4	—
Sugar (Million Tonnes)	5.1	21.6	20.5	—
Gross Grain Harvested (Million Tonnes)	118.3	243.5	296.5	297.0 (estimated)

Source : Annual Statistical Books of the CMEA Countries for 1970, 1971, 1972, 1973, 1974 and 1975, Moscow.

The growth of the CMEA countries, in various sectors of the national economy, has helped India in a significant manner. The *National Herald* (India) wrote in its issue of 8 October 1971: "Participation of the USSR and other CMEA countries in India's foreign economic ties is in itself a great help as it facilitates its economic growth. Without this help the rate of growth in India would have been significantly lower than it is at present".

India and CMEA countries, too, has steadily risen. It increased from Rs. 157.0 million in 1955-56 to nearly Rs. 8,400 million in 1973-74. This is an increase by over 50 times. This shows the trend for future as well.

The foreign trade turnover of India with CMEA countries of Europe are given (in million Rupees at constant prices) in the following table for the period 1955-56 to 1973-74.

TABLE—II  
Foreign Trade Turnover of India with the CMEA Countries of Europe (Million Rupees)

Country	1955/56	1960/61	1970/71	1971/72	1973/74
Total Trade Turnover	157.3	860.9	5,408.1	6,810.0	8,394.0
Bulgaria	0.5	7.3	250.3	284.0	334.0
Czechoslovakia	42.2	160.6	496.6	620.0	681.0
GDR	3.9	66.0	430.2	343.0	464.0
Hungary	4.8	33.9	281.8	272.0	346.0
Poland	7.6	82.9	501.1	804.0	947.0
Rumania	3.3	63.4	302.8	295.0	286.0
USSR	94.7	446.8	3,145.3	4,192.0	5,336.0

Source : Foreign Trade Review, October-December, 1975, New Delhi.

\* in current prices.

The cooperation between India and the CMEA countries aims at strengthening India's basic and heavy industries. It is also aimed at developing natural resources and converting the constants given by economic geography into dynamic factors, for example the growth of the oil industry in India. Jawahrlal Nehru had said: "...to a very large extent oil exerted an influence on world politics." It was natural that with the growth of the oil industry in the developing countries western influence is declining in the Third World. We know it from our own experience in India.

#### Fast Growth of Trade

The trade turnover between

As the years pass, the mutually advantageous trade between India and CMEA countries increases, with growing diversification. Recognising this trend on the world economic scene the Report of the International Bank of Reconstruction and Development for the year 1974 on the economic situation in India observed: "...for India, economic relations with both the groups of countries are essential since these are sources of imports... The imports of India from the Socialist countries are constantly growing, while from the western countries they remained at the same level as in the period of the Fourth Five Year Plan".

### TOWARDS A HUMAN SCIENCE

(Contd. from page 4)

person. What we need now is to develop systems of education that are consonant with human development — in which precision is cultivated in relation to spontaneous multisensory involvement and the disciplined use both of the mind in the usual sense and of the

whole body in the light of our new knowledge about the participation of the whole body in thinking as well as in overt action and in fostering the growing child's undistorted sense of its own body.

The advances in the human sciences also make possible a far

more integrated picture of evolutionary and historical human development and of our place in the cosmos. And finally, the necessity of including the whole of humankind in planetary socio-economic arrangements is underwritten by our definitive knowledge that all branches of the human race have comparable capacities for cultural growth.

The recently recognized need to shift away from a concentration on land and water boundaries that must be jealously maintained and defended at all costs toward a concern for the earth's atmosphere that must be protected, has created a situation in which it is very desirable—and, indeed, very urgent—to invent new, more appropriate political forms. We shall have to draw on the resources of all the sciences in order to deal constructively with the chaotic but irreversibly interdependent planetary community. And we shall need still newer kinds of instrumentation—macroscopes that can simplify without distorting the complexity of our knowledge of the biosphere and the cosmos within which a recognition of all disciplined human endeavor must now take place.—Courtesy of "Science" (*The American Association for the Advancement of Science*)

Purnea Notes

## Family Planning Performance

Ashish De

The family planning wing of Health Dept Organised a colourful function on Dec. 18 last in Purnea District Hospital Campus under the presidentship of Mr. Kamal Nath Jha MP (Cong). In this function prizes in the shape of shields, cups, medals and other Valuable articles were awarded by Mr. B. K. Singh, District Magistrate to some civil officers and various medical officers and staff in recognition to their hard labour and sincerity in making family planning movement a grand success in Purnea district. Kishanganj Sub-division and Forbesganj block received trophies for their best performances.

Dr. Kedarnath Jha, Medical Officer of Kursakanta Block bagged a gold medal for performing 756 Vasectomy and tubectomy operations during the past three months. Dr. (Mrs.) S. Sahay and Dr. (Miss) S. De Cruz, Lady Doctors of Purnea hospital were also recipient of medals for conducting 54 and 45 tubectomy operations respectively in one day.

Mr. B. K. Singh, District Magistrate addressing the distinguished gathering said that the total numbers of sterilisation operations in his district upto date were 20,110 against a target of 29,750 which was to be completed during the current financial year.

Dr. J. P. Karan, Civil Surgeon welcomed the guests and appealed to his subordinate medical officers to fulfill the target by January.

Md. Qadir, Circle Inspector of Kasba Anchal in Purnea district was arrested on Dec. 16 last while accepting bribe of Rs. 200/- in a land settlement case from one party. The raid was organised by the vigilance dept. consisting of Mr. P. N. Singh, magistrate and Mr. R. C. Singh, Dy S. P. Muzaffarpur. The accused was remanded to jail custody.

#### P & T Week At Purnea

The Post and Telegraph week was concluded on Dec. 19 at Purnea Head Post Office and other post offices in Purnea district with great pomp and grandeur. All sections of the P and T Dept. were kept neat and clean presenting an impressive look. Staff were found following the motto in their work; Promptness, Progress and Politeness. On this occasion all the Purnea employees volunteered to open "recurring deposits" accounts under the Pay Roll scheme.

#### 35,411 Acres Surplus Land Acquired

35,411 acres of surplus lands were already acquired in Purnea district under the provisions of the Land Ceiling Act, according to Mr. Braj Kishore Singh, District Magistrate. Mr. Singh told this correspondent that 23,500 acres of land

were already distributed to the entitled categories of persons.

Dharmendra, the Celebrated Bombay film actor reached Forbesganj in Purnea District on Dec. 12 to participate in the shooting of a Hindi film "Dagdar Babu" based on the story written by Mr. Phanishwar Nath Renu of Purnea District. Innumerable cine fans had been pouring in Forbesganj

areas last week to have glimpse of other famous film stars like Asit Sen, Padma Khanna, Nazir Husain, Kanhaiyalal, Mookri and others. The unit for shooting comprised of about 150 members, including the cameramen. Noted film actress Jaya Bhaduri could not turn up because of sudden indisposition. This was the first time when shooting was organised in this Kosi belt.

### FRUSTRATION.....

( Contd. from front page )

all classes of services on the basis of pay which sounds reasonable. Government should always concede the reasonable demands of all its employees. Such attitude creates a better relationship and ultimately helps in improving the administrative machinery.

The promotional avenues of the senior members of the B. C. S. must be widened so that the present day frustration among those class of officers may not grow. It is shocking to know that many officers of the Senior Selection grade are obliged to be satisfied with the posts of Sub-divisional Officers. The Association also discussed at length these frustrating developments and urged upon the Government to streamline the postings of officers on the basis of seniority. It is undoubtedly a fact that there is stagnation in the prospects of promotions to many officers. In the Commercial Taxes department, the government has rightly decided to create two posts of Additional Commissioners to create promotional avenue and job satisfaction to the members of the Bihar Finance Service. Same principle should apply to the Bihar Civil Service and commensurate openings for promotion should be created according to the total strength of the Service. In the P. W. D., Irrigation, Minor Irrigation and such other allied departments any number of posts of

Chief Engineers have been created according to the special need to suit the development programme. But the hub of the administration is the Civil Service, and taking into consideration the tremendous developmental programme, adequate number of superior posts to gear up the administrative machinery, is needed. If this is done soon it will surely allay the misgivings and the frustration of a large number of civil servants of the B. C. S. Cadre.

### Jimmy Carter named Man of Year

New Delhi, ; Jimmy Carter has been named as "Time" magazine's Man of the Year for 1976 because his rise to the presidency was "one of the most astonishing events in the history of the republic."

"Time" said that Mr. Carter was cited "because of his impressive rise to power, because of the new phase he marks in American life and because of the great anticipations that surround him"

Mr. Carter is the third President elect in the 50-year history of the designation to be named "Time's" man of the year. Preceding him were Mr. Franklin D. Roosevelt in 1932 and Mr. John F. Kennedy in 1960.

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