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THE TIMES OF INDIA

A Thought for Today

I do not resent criticism, even when, for the sake of emphasis, it parts for the time with reality.

—Sir Winston Churchill

A LANDMARK

The reaction in the Janata party to Mrs. Gandhi's decisive victory in the Chikmagalur by-election to the Lok Sabha has varied from forebodings of doom to the brave hope that it will make no difference. Either prognosis is a case of over-reaction and untenable. By any rational reckoning, Mrs. Gandhi's return to Parliament within 19 months of her eclipse in the last general election is an important landmark and it cannot possibly be construed as a stepping stone to disaster. On the contrary, if the Janata leaders play their cards realistically, they can turn their party's defeat in Chikmagalur into an opportunity to advance the cause of the country — and their own. This may sound paradoxical but it is not. Disruptive forces of casteism, communalism, linguism and groupism are threatening to tear the nation apart. They cannot be easily contained, much less suppressed, without a good deal of co-operation between the ruling party and the opposition. There is no real reason for the Janata to believe that this co-operation will be withheld by a growing opposition which Mrs. Gandhi is now bound to lead with greater confidence than ever before. She is well aware of the factors which, in her day as prime minister, had, as she is never tired of repeating, "derailed democracy". More recently, she has specifically called for a "broad national consensus" — mainly round the policies evolved and pursued by Mr. Jawaharlal Nehru to fight fissiparous tendencies and push development — to take the country forward. A positive response by the top Janata leaders at this stage will not merely give a powerful boost to the struggle against the resurgent divisive forces. It may also help catalyse the process of integration within the Janata itself by isolating the extremists in its various constituents.

All this is not to say that it will be easy for the Janata leaders to draw the right lessons from the outcome of the by-election and do the obvious. They are, in a sense, hoist with their own petard. For, some of them had turned the electoral battle into a mini-referendum on the emergency when, others had convinced themselves that support for Mrs. Gandhi in the constituency would be confined to the Harijans, Muslims, plantation workers and other deprived classes. But the results of the poll clearly show that, while these communities still form the bedrock of her support, her appeal transcends them and moves a significant section of the so-called dominant castes as well. Else, she could not have won with a handsome margin in all the assembly segments of the Lok Sabha constituency, including those where the Vokkaligas or Lingayats are concentrated in large numbers. As for the attempt to project the so-called democracy-versus-dictatorship issue vigorously to the fore, it has clearly backfired. Nothing has perhaps done more harm to the Janata's image than its tendency to harp constantly on the "emergency excesses" instead of getting on with the pressing tasks of economic development and national integration. It will have to pay a far heavier penalty than it did in Chikmagalur if it fails to see the writing on the wall and change course.

Confusing

No one can be blamed for being confused by reports regarding the Egyptian-Israeli negotiations on the proposed peace treaty. If one day it becomes more or less finalised, the next day, it is said that the talks are deadlocked. Hope gives way to despair which in turn yields place to hope. The Israeli Prime Minister, Mr. Begin, signs the Camp David accords whereby it is understood, though not explicitly stated, that he would not send new Jewish settlers into occupied Arab territories. He follows it with statements that he is entitled to send and would send new settlers into existing settlements on the West Bank. This causes "dismay" in the U.S. administration. Mr. Begin then happens to be visiting New York on a private visit. There he meets President Carter who had earlier said he would not be meeting the Israeli Premier. This is followed by a statement by the U.S. Secretary of State that the substantive issues had more or less been resolved. If this is not confusing, what else is?

In reality, the settlement issue may not be intractable as it appears. For the settlers and would-be settlers do not trust the Israeli authorities to keep them there for long. Hundreds of houses in the settlements are standing empty, according to *The Economist*, which adds: "Not only are new settlers failing to move into the houses built for them, but veteran settlers in the Jordan valley are beginning to drift away, and their villages to break up. In Maale Effrayim, which was to have become an urban centre for the Jordan valley settlements, only 40 of the first 150 houses to be built are occupied. A typical remark from a settler... 'we have stopped investing and developing and when self-rule comes, we'll go.'" Apparently Mr. Begin is keen to ensure that the settlements do not melt away sooner, depriving him of one important card in his negotiation with President Sadat on the future of the West Bank. And if the intention behind his belligerence is, indeed, defensive, it would be logical to conclude that President Sadat's position is stronger than his and that this position would be further strengthened once the Egyptian-Israeli treaty is signed and the Israelis pull out of the Sinai. This view is, of course, subject to a qualification which is that President Sadat's opponents at home and in other Arab countries do not meanwhile manage to undermine his power base — the Egyptian armed forces and bureaucracy. At the moment the odds appear to be weighted in his favour. But who can forecast developments in West Asia with any measure of confidence?

Opium Of The Kids

Jonesmanship and consumerism are bad enough. When the highly addictive TV medium gangs up with them, the result is an entire nation of wanly smiling opium-eaters. That is what appears to have happened to the United States. It is right and proper, therefore, that the American Academy of Paediatrics has called for a ban on TV advertisements aimed at children in programmes for the young. The persuasion, never hidden but always blatant, has led to a new disease of children called the "gimme disease". They watch the commercials (expensive per child: 20,000 a year, which gives an average of 54 a day!), are thoroughly brainwashed and tell their parents "Gimme, gimme!" Once a gold-digger's favourite pastime, it has now become the opium of the children. The advertisers and sponsors know what they are doing: catch em young and teach em greed. Hence the new prescription. But the television companies are fighting back. They have threatened to reduce the programmes for the kids since fewer commercials would mean less revenue. But the doctors are convinced that a child, who sits for as many as five hours a day in front of the idiot box in a state of trance, drinking in every bit of blarney that pours out of it, grows up into a compulsively acquisitive adolescent and later into an increasingly frustrated adult. It is a new breed of TV victims that is growing up there. The paediatricians suggest that parents must have a say in what programmes their children watch and that the TV networks should show more intelligent selectiveness and some restraint in the use of exhortative films. There is cold sanity in this, but who will listen? The jingle of lucre is such an all-powerful sound that nobody in that whole country will be able to hear a thing. TV salesmanship is truly the devil's own handiwork.

RETURN OF INDIRAMMA

Chikmagalur And After

By GIRILAL JAIN

CHIKMAGALUR could have been Mrs. Gandhi's somewhat bigger or somewhat smaller victory. In all probability it would have returned her with a bigger margin if 19-year-old Gayatri Kamath had not been killed in a police firing in Ujire on November 1, just four days before the polling day. But essentially its verdict could not and should not have been different.

The first part of this proposition should have been obvious from the start, except perhaps to those who had managed to convince themselves that Mr. George Fernandes, was, indeed, a giant killer. After all, Chikmagalur was a safe Congress (I) constituency. Its electorate, like that of Karnataka as a whole, had had two opportunities to pronounce on Mrs. Gandhi and her party and they had given her and it a clean bill of health on both occasions. At the time of the Lok Sabha election in March, 1977, it was possible for one to argue without being unduly imaginative that the people in Karnataka, like in Andhra and Kerala, had not heard of the atrocities in the north during the emergency and that the Congress had won sweeping victory in the state because it was still a united party. But the election to the state vidhan sabha took place last February when the media, both independent and government-controlled, and various commissions of inquiry had had ample opportunities to expose fully the misdoings of Mrs. Gandhi's set-up in New Delhi and Mr. Devraj Urs in Bangalore during the emergency and when the Congress had split.

THE SPLIT

By then the whole country knew that Mrs. Snehlata Reddy and Mr. Lawrence Fernandes, the former a friend of Mr. George Fernandes and the latter his brother, had been tortured by the Karnataka police and that Rajan had died in police custody in neighbouring Kerala. The trouble that finally led to the split in the Congress had also begun in Bangalore — between Mr. Urs and Mr. K. H. Patil, the former being supported by Mrs. Gandhi and the latter by Mr. Brahmananda Reddy and his allies like Mr. Y. B. Chavan.

If in spite of all this, the people of Karnataka, including those in Chikmagalur, had given a resounding victory to Mrs. Gandhi's party, what good reason was there for anyone seriously to believe that the Chikmagalur electorate would this time defeat the very person — Indiramma — to most of them — for whose sake they had voted the Congress (I) to power? How could have ghosts of the victims of the emergency overwhelm her when they had apparently been laid last February? Mr. George Fernandes could make some difference but how much? If for one was not a little surprised that the Janata leaders should have been so indiscreet as to have converted the by-election into a mini-referendum. Another instance of poverty of judgment!

Be that as it may, it is the second part of the initial observa-

tion — that by returning Mrs. Gandhi to the Lok Sabha the Chikmagalur electorate has done the right thing by the country as a whole — and not the first — that the victory was reasonably certain — that needs to be argued at some length. For among large sections of the intelligentsia who read this newspaper and other English-language dailies and journals, the distrust of Mrs. Gandhi on account of the emergency continues to be sustained by the belief that if returned to office she will have not only the passionate desire but also the compulsion (as in June 1975 in view of the Allahabad High Court's judgement setting aside her election to the Lok Sabha) and the capacity to overthrow the democratic system and install personal and dynastic rule.

DISTRUST

This distrust poses a serious challenge to Mrs. Gandhi. For, even if her party gains a majority in the Lok Sabha at the next poll on the strength of the support she clearly commands among the poor, the Harijans, the tribals, the Muslims, and other sections of society, she cannot rule the country successfully and peacefully for long. Neither a comparison with the Shah of Iran nor one with Mr. Charan Singh would be in order. But it would be in order to say that the Indian intelligentsia is too large and influential to be humiliated and ignored and that India is already too urbanised to be ruled by the countryside, irrespective of whether those seek to do so speak in the name of middle peasant castes, like Mr. Charan Singh, or in that of the depressed communities, like Mrs. Gandhi. But that is a separate issue. All that need be said here is that Mrs. Gandhi can best overcome this obstacle by reuniting the two Congress parties behind her which, incidentally, will also be some evidence that she is not planning to project Mr. Sanjay Gandhi in a leadership role once again.

As for the original proposition, my case is basically quite simple. It is that the country needs Mrs. Gandhi as a political force because she is among the few leaders it possesses who are capable at once of providing hope to the depressed communities and the minorities and containing their demands, of fudging issues which are threatening to tear Indian society apart and trying to tackle them, and so on. The fact that she is prime minister she did her best to promote the well-being of the Muslims, she deprived the Aligarh university of its status as a minority institution, or that while she diverted enormous resources to agriculture to the benefit of landowners, she managed to deny them political power, which they now display and tend to abuse, that while she hammered away at the question of atrocities on the Harijans day in and day out, she has refrained from saying anything specific in respect of the recent riots in Maharashtra. Mrs. Gandhi is rightly or otherwise, the symbol of hope for the Harijans, the tribals and the Muslims. But she is not their leader in a sectional sense. She will not seek to promote their interests at the cost

of what she regards as the good of the nation as a whole. Similarly, it is difficult to believe that she will easily reconcile herself to a situation where the ruling party at the Centre hardly commands any influence in such key areas as Punjab and Jammu and Kashmir in the West and the north-west and virtually the whole of north-eastern India including West Bengal, or that she would allow her party to adopt so partisan and disruptive a measure as the reservation of 20 per cent jobs in the government for the so-called backward castes or to take so patently disastrous a decision as allowing aspirants to all-India services to answer all papers in the UPSC competitive examinations in any one of the languages listed in the Constitution. For the first cannot but strengthen caste politics and the second cannot but make a mockery of the very concept of all-India services. Indeed, multi-language examinations must inevitably be followed by quotas for states because there cannot be any uniformity of standards in examinations conducted in 14 languages. I am as much at a loss to explain why Mrs. Gandhi possesses these qualities of leadership in a more ample measure than other politicians in this country. But it cannot be denied that she possesses them and that they are valuable in a society which is as fragmented as ours, however serious one's reservations about certain aspects of her personality.

OBJECT LESSON

To say all this is not to deny that Mrs. Gandhi's strength is also her weakness. If she is able to rise above group and regional interests, she is also inclined to centralise too much power in herself and in men around her and to disregard, unlike her father, the object lesson of Indian history that excessive centralisation of authority is as dangerous to the country's unity and well-being as a weak central authority. This weakness was evident long before she imposed the emergency on June 26, 1975, and in the absence of evidence to the contrary, it would not be unfair to assume that it persists. Indeed, the men now around her are even less capable of restraining her than those who sheep-like approved of the emergency in 1975.

Mrs. Gandhi is open to criticism on other grounds as well. She tends to surround herself with 'yes' men and to rely on bureaucrats instead of fellow political workers. But the people of Chikmagalur were not called upon to choose a prime minister. They could only promote or delay Mrs. Gandhi's political rehabilitation and they will be seen to have acted wisely if her return to the Lok Sabha compels the Janata leaders to compose their differences and try and rise above sectional interests and persuades some of the Congress leaders to stop living in a world of make-believe. Indeed, the point regarding her rehabilitation, too, should not be pressed too hard. For defeat in Chikmagalur would not have meant her political eclipse. That would have been possible only if the Janata had managed to provide the country with a more effective and just government than it has.

The Oracle And I

By INDER MALHOTRA

THE oracle was angry, understandably so. Indeed had been for several days. On the night before the polling in Chikmagalur, surrounded by his admirers and acolytes, he had growled at me: "Make no mistake. She is on the run. Publish what you like but you will be damned when the ballot boxes are opened."

I demurred and pleaded that subjective feelings ought not to cloud an analysis of the realities on the ground. He fell on me like a ton of bricks still red-hot from the kiln.

Realities

"What the hell do you know about realities on the ground? Or about what the people are saying or feeling? You sit in your ivory tower and pontificate. Why don't you ask the professor who has just come back from what is called the 'constituency'?"

The learned gentleman was apparently waiting for this cue. For

he let loose a fusillade of irate words. The very press, which "she had suppressed so brutally," he lamented, was now building her up. "And you are doing so with lies, sorry, one-sided stories."

Brushed Aside

I tried to point out that Mrs. Gandhi was as critical of the press as he. But the professor brushed aside the interruption with a contemptuous wave of the hand. He was silenced eventually only because the oracle does not like to be upstaged by anyone, least of all by one of his own hangers-on.

Came the night of reckoning and the former prime minister's initial lead of 20,000 votes. Some malicious streak in me made me ring up the oracle. After a suitable and multiple intervention by intermediaries, he graciously took the call. But he was livid with anger.

"Why are you behaving like a hysterical woman over a small electoral lead? Wait for more results!"

Current Topics

THE minister of state for railways bemoaning the inefficiency of the largest official undertaking in the land is like a shopkeeper complaining to the customers about his own staff and their shortcomings. The railway protection force (RPF) is not functioning effectively, says the minister. Claims on account of thefts continue to be high, not to speak of the involvement of the RPF itself in the pilferage. He is "grieved" by it, but does not realise how much greater is the agony suffered by the public which pays for all this shoddiness.

Why does he not take stern disciplinary action against the erring staff? Asking them to "gear up the machinery" is merely to resort to a tired cliché; sacking the bad lot and employing better supervisory staff, spending a little more in order to save ten times that much, proper maintenance of all trains and compartments, looking after passenger amenities — these are the solutions, not exhortations. Specifics matter here, vague generalisations do not. A little imaginative management and some enforcement of discipline are sure to work a miracle on the railways. It is clear that the middle-level (supervisory) management in the network has failed miserably. Why does not the minister grapple with this basic problem?

Pope's Largesse

ONE of the first acts of Pope John Paul II was to grant all the members of the Vatican staff a "bonus" of around Rs. 3,000, along with a week-long holiday. This is an ancient custom to mark a new reign, but few Popes have resorted to it in recent years. In all, 3,000 people — including prelates and workers — have benefited by his decision and observers feel that it symbolises the atmosphere of goodwill that the new pontiff has ushered in to the Vatican.

They also believe that it is characteristic of Pope John Paul II's vigorous personality — in contrast with the indecisiveness of some of his predecessors.

At the same time, there is some doubt as to whether the Pope's qualities of head and heart will always stand him in good stead in the difficult days ahead. If he decides to take major decisions himself, how can this be reconciled with the idea of sharing responsibility for the administration of the Roman Catholic church, which was the reform advocated at the second Vatican Council? He will soon be faced with the problem of whether to extend the powers of the body that oversees the progress of the church in various corners of the globe or to leave decisions to local churchmen, without having to refer matters to Rome all the time.

Neglected Treasure

THE grave damage caused to the Asiatic Society's library in the recent floods in Calcutta has served to underline the urgency of providing a new repository for thousands of its invaluable books and journals. No less than three thousand of these were soaked when the ground floor which houses the library was inundated and as a result of leaks in the ceiling. They would have been completely destroyed but for the exemplary sense of duty of the library's employees who waded through waist-deep water and removed them to safety. However, the books have not yet been fully dried, thanks to the lack of facilities for this purpose. It has been found, for instance, that just two of the ten ceiling fans in the hall where the books were spread out have been working without interruption. Sadly enough, the Asiatic Society's library and museum have languished in utter neglect for many years. The existing building

Railways' Woes

Noble Gesture

is dilapidated. A proposal for the construction of a new one in its place has made no headway. It is no secret that one of the main reasons for this is that the reluctance of the governing council of the society and its employees have been strained. A fact-finding committee was set up two years ago to go into the affairs of the society with particular reference to serious charges against some members of the council. No one knows how much longer it will take to submit its report.

New And Ancient

ACUPUNCTURE has earned respectability among the once sceptical Western medical practitioners, although exactly how a twisting a needle in the skin cures a disease or causes anaesthesia is not known. Possibly an entirely new physiological concept has to be evolved to understand this ancient technique.

But it works. The needles are so sharp and the penetration into the epidermis so slight that the patient feels practically no pain and there is no bleeding. Some expertise in manipulating the needles is of course necessary. Now the Soviets have made a startling innovation, superimposing a new tool on the ancient one. Instead of metal needles, which may not always be aseptic, they have tried laser beams. These are sharp enough, absolutely harmless at the power level used, since they are after all beams of light, focussable (hence the penetration depth can be precisely predetermined) and twirtable automatically. A report says that Kazakh State University researchers have succeeded in experiments with laser acupuncture in cases of ulcers, arthritis and some gynaecological ailments. The combination of the old and the new thus constitutes a fascinating form of therapy.

LETTERS TO THE EDITOR

Mr. Vajpayee's China Visit

Sir,—Mr. Girilal Jain's article on Mr. A. B. Vajpayee's planned visit to China (October 24 and 25) is both comprehensive and revealing. Mr. Jain has been objective and has avoided getting immersed in the subjective quagmire of "friendship with neighbours."

The policies that are dear to Peking and are clearly unacceptable to India or for that matter to any non-aligned nation with an anti-imperialist, anti-colonial stance, are well known. The banner of anti-Sovietism, held aloft by China's leaders, has made them accommodate the dictatorships in Chile and Nicaragua prop up by corrupt regime in Zaire, hobnob with the South African racist regime and even declare their readiness to form a joint front with U.S. imperialism. Under that banner, Chinese leaders go about preaching the inevitability of war theory. What they preach and profess have nothing in common with the traditionally declared policies of India, committed to working for lasting peace and for the security of the people of the world.

A nation's foreign policy cannot be reduced to acts of gimmicks such as may be played to the gallery. Non-aligned cannot be vulgarised to mean that one should align with everybody.

We should consider most timely Mr. Jain's warning that friendly relations with China "call for a community of interests which is hardly perceptible at least right now."

M. J. JAMES

Madras, October 30.

II

Sir,—Mr. Girilal Jain has reiterated his view that the Indo-Soviet treaty of 1971 must be our perpetual lodestar. In his overenthusiasm he loses sight of the fact that the world is no more what it was in 1961 or 1971 and that gratitude is not an adequate basis of relations amongst sovereign nations.

Without belittling the USSR's contribution to our defence and steel industries, our country now needs sophisticated technology which we can only get from the West or Japan. Also, lack of foreign exchange is no more a constraint to our choice and options. Again, it is in our own interest to befriend our immediate neighbours and meet them more than halfway without too much insistence on immediate *quid pro quo*. Finally, it would be unrealistic to assume that China will not be able to modernise itself shortly. Just because the editor of *The Economist* has said so.

Mr. Jain has rightly pointed out the strategic aspects of the recent road linking to Pak-China borders. But strangely enough he makes no mention in any of his writings of the Sher-Khan Bunder-Kabul road, a military highway designed to give the USSR direct access, by the shortest possible route, to the Indian sub-continent.

M. Y. KAZI

Aligarh, October 28.

Future Of West Asia

Sir,—While agreeing with much of the reasoning in your editorial, "Coming Together" (November 2/3), it is difficult to endorse your conclusion that President Sadat will be rendered vulnerable to pressure by his adversaries and that the fruition of the Camp David accord will be thwarted by the Syrian-Iraqi get-together is more a defensive line-up and an effort to pressurise Saudi Arabia than an effective instrument to frustrate Mr. Sadat's plans. He must have taken this line-up into consideration before embarking on his momentous decisions.

If the Arabs want to forge a united front they will have to convert their economies to war budgets and share all other burdens of confrontation equitably and not offer doles to any one or two countries to continue the crusade for ever. Egypt and Syria need more than mere monetary contributions to keep on at it. Will the Arabs rise to the occasion rather than throw stones at one another?

To start with, let each Arab country with means adopt Egyptian, Syrian and Palestinian armed forces units and assume responsibility for their maintenance, upkeep and financing in the same way as Gurkha units are maintained by the British army. It would be tragic to disband well-trained and battle-worthy Egyptian and Syrian units for economic reasons. Such adoption and absorption would not only promote Arab brotherhood but make every Arab country speak and act with a sense of joint responsibility.

B. K. NARAYAN

New Delhi, November 2.

Skipper Bedi's Action

Sir,—The incident at the third and final one-day international at Sahiwal where Bedi called the players off the field conceding the match to Pakistan and later with the team refused to attend a function in their honour has evoked one view by R. Sriman, your sports writer from Delhi and a totally contradictory one by K.N. Prabhu, your correspondent, covering the tour.

Mr. R. Sriman (November 5) supported action of Bedi and his team in boycotting the reception of the Sahiwal District Cricket Association, stating that an artificial schism of "separatist" would have made a mockery of the righteous indignation displayed on the field of play earlier. The next day (November 6) Mr. K. N. Prabhu deemed the act childish, saying "I do not support the subsequent action of the skipper. Surely it was childish of the team to have refused to attend the reception given by Aga Bashir Ahmed, president of the Sahiwal District Cricket Association. He and the local organisers had spared no pains to make the stay of the visitors comfortable." Surely the man on the spot, Mr. K. N. Prabhu was best qualified to comment on the incident.

J. F. GONSALVES

Bombay, November 7.

SPACE PROGRAMME GOING AHEAD

III—Several Spin-offs

By V. S. P. KURUP

BY Soviet and American standards the Indian space programme is trivial and insignificant. In the past 15 years, for instance, we have invested only about Rs. 200 crores in it. This is the cost of about four Boeing aircraft. In the coming five years the situation is only slightly better, the allocation envisaged for space programme being Rs. 325 crores.

But looking from the point of spin-off benefits, the returns from space are not negligible. It is difficult to quantify these benefits because only some are visible; a large part is invisible. A few of these tangible achievements are noteworthy.

In their attempt to substitute some special petro-chemical based material by castor-oil based one, the engineers at the Vikram Sarabhai Space Centre at Trivandrum came across and developed an efficient catalyst that could convert any non-edible oil into petroleum crude. This opens up the possibility of utilising the vast resources of non-edible oils in the country — estimated at seven million tonnes. At present most of it is going waste. Work is now under way in setting up a 100-tonne pilot plant to find out the economic viability of this discovery.

Cost of product

Scientists of the Indian Space Research Organisation (ISRO) have worked out knowledge for large-scale production of the chemical ammonium perchlorate based on a laboratory scale technique developed by the Electro-Chemical Research Institute, Karakudi. In working out the process they have also been able to substitute a cheaper lead dioxide anode in place of the costly platinum one, thereby reducing the cost of the final product substantially. Ammonium perchlorate is a major component of the solid propellant used in rockets.

Some of the important chemicals and resins hitherto imported by the Hindustan Aeronautics have been designed by ISRO experts. They have also developed some special polymer-based resins, and binders used in making printing rollers, urethane adhesives and so on.

Fibre-reinforced plastics is space-age technology. This new field with enormous potential has been developed by ISRO independently. Used in making light-weight and strong structures, such materials already find extensive applications in electrical, telecommunication and chemical industries apart from space hardware.

In the area of purposeful analyses of the space environment, the scientists and engineers have shown refreshing originality and competence. A number of examples of them can be pointed out to illustrate the point.

Common feature

In one of the agricultural resources inventory and survey experiment conducted jointly by ISRO and the Indian Council of Agricultural Research in the Anantapur district of Andhra Pradesh, for instance, comparison of remote-sensed data with official revenue records showed that the acreage under rice in that area was substantially greater than was believed. The analysts rightly felt that such underestimation was the common feature throughout the country, particularly in areas attracting government levy, "our estimates of rice production, and maybe other levy crops, could be inaccurate enough to affect significantly the basis of the national food policy."

Similarly, in one of the weather studies, observations were conducted over the Arabian Sea near Bombay and Cochin during May-June 1975, and using an infrared scanner sea surface temperature variations were recorded. Preliminary analyses of the data indicated a general warming up of the sea about 15°C off the coast, from the onset of the monsoon. The result puzzled scientists, but the fact was confirmed by subsequent observations. Now meteorologists have an unmistakable indicator of the approaching monsoon, the cause or effect of which

might help solve the mystery of the phenomenon.

There are several more equally noteworthy achievements to the credit of ISRO scientists by way of spin-offs, but one would not rate them as high as the latest gains. These are the invaluable assets of self-confidence and expertise acquired by our young engineers in the various disciplines of this frontier technology and the tremendous push they may give eventually to India's technological leap. There is no standard to measure these gains, but they would become apparent as we move forward and undertake new and more complex ventures. Even the present level of our space technology is something to be proud of.

India's record

According to Prof. Satish Dhawan, chairman of the Space Commission and the ISRO, and secretary to the Department of Space, India and Japan are the only two countries who have all the capabilities for a peaceful space programme. India's record is in fact better than that of Japan which experienced two agonising failures before it succeeded in putting a satellite in earth orbit. India had no disaster or setback in its space programme so far. Aryabhata, which was sent into orbit in April 1975 with a design life of six months is still sending back data indicating that all the technological systems are functioning well. Owing to malfunctioning of a power line on it three planned experiments could not be conducted, but this is not considered a major disaster, especially in a first attempt.

While explaining to a group of newsmen the basic philosophy behind the Indian space programme, and the complexity of a technological system like a satellite in particular, Prof. Dhawan said that our country's intolerance of any failures. But he cautioned that only through failures could we learn many things. Success would make anybody blind and careless. We have to develop these high technological capabilities ourselves, learning the whole process the hard way.

Defence missiles

Prof. Dhawan was categorical in denying that there was anything secret about the Indian space programme. India's aims were completely peaceful and ISRO activities were directed solely to this goal. There was no collaboration with any defence projects, he declared. To a pointed question, however, he said, "Our objective is to build an IRBM is absolute." (IRBM is intermediate range ballistic missile). But then he himself asked the question, "Why do we need an IRBM? What will we use it for?" What he meant was that we have no warhead to carry atop the IRBM. The requirements of defence missiles and scientific rockets were totally different, he explained.

There was no dispute with Prof. Dhawan about the vastly different roles of the missile, but the absence of any kind of collaboration between defence scientists and ISRO counterparts stood unexplained. Since defence science also has a missile development programme, the mutual possible gain in experience, and avoidance of duplicated efforts at least in some areas like propellant development, electronic control and guidance cannot be overlooked. And since we are developing the rocket technology on our own, we need not be apologetic about it.

One great weakness of the Indian space programme was that ISRO appeared to be doing everything by itself. Either it had no faith in the capacity of industry to meet its stringent demands and specifications, or industry was not prepared to lend any cooperation for lack of sufficient incentives. This is not to overlook the fact that about 45 industries and organisations had participated in the SITE project. What is strange here is that there is considerably more scope for industries to cooperate with ISRO so that the space organisation will be left relatively free to concentrate on development of major systems. Mere profit motive in a national endeavour like this is shortsighted.

(Concluded)

Chinese Scientists In Menial Jobs

By FOX BUTTERFIELD

HONG KONG.

MANY of China's small number of scientists have been transferred in recent years to menial jobs or to work unrelated to their specialities, thus hampering the country's ambitious drive for economic modernisation, according to an official survey.

The study, conducted for several months throughout China, found that many scientists are holding down posts as sales clerks, ordinary factory workers or administrators. In other cases, radar specialists are engaged in purchasing pigs, some persons trained in computer science are employed in distilleries and entomologists are working in industrial design.

In Kwangtung province, near Hong Kong, more than a third of the scientists and technicians not employed in scientific work are reduced to being factory workers or sales assistants. In China as a whole, nearly half of all the scientists and technicians trained in agriculture, fisheries and livestock breeding are not doing scientific research.

"This has had serious effects on agricultural development," an article in the Peking paper, *Kwangming Jih Pao*, charged in a report on the survey. The misuse of China's scientific resources "is indeed a great waste," the paper said.

MAO'S SUSPICION

The major reason for this situation lies in the hostility toward scientists generated during the Cultural Revolution. Mao Tse-tung's suspicion of and contempt for all intellectuals and specialists. Teachers, writers and doctors, as well as scientists, frequently were accused of being rightists and were sent off for reform to factories or farms.