

THE DEFENCE OF INDIA

H. M. PATEL

R. R. Kale Memorial Lecture, 1963

GOKHALE INSTITUTE OF POLITICS & ECONOMICS, POONA 4

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THE DEFENCE OF INDIA

I must, first of all, express my deep appreciation of the honour done to me in inviting me to deliver the Kale Memorial lecture this year. I must confess I was in some hesitation about what subject to choose. What finally helped me to make up my mind was the Chinese attack upon our country. Not only did it uncover our amazing state of unpreparedness, but it also showed how ignorant even the best informed of people in India are of matters relating to defence. Our Government apparently considers it expedient to keep us all as ill-informed as used to be the case in the British days. And since for a variety of reasons, even to this day, it has been given to very few to have an opportunity of studying our defence organization and problems, I felt that as one of the fortunate few, it was my duty to assist our people in getting a clearer understanding of what is involved and whether we are now, in the lull that obtains at the moment, doing what lies within our power to see that if there is a resumption of hostilities, we are not only able to meet any attack, but to repulse it firmly and decisively. This explains my choice of the subject for my talk this evening.

The defence policy of a country must necessarily be governed by a realistic assessment of a number of factors: the nature of its frontiers, their vulnerability or otherwise militarily; its neighbours and their attitude towards it; its potential enemy or enemies, their military strength and the possible line their aggression might take; and its own ability militarily to be strong enough to deter any possible enemy from attacking it. The conclusions to which such a realistic assessment leads will determine what the principal objectives of the country's foreign policy must be, for the foreign policy of a country must clearly be determined by what are believed to be the country's real interests and the most basic real interest of the country surely is to see that its independence is maintained and that its frontiers remain inviolate. One aim of the foreign policy thus would be to endeavour through diplomatic efforts to ensure that the country's position is strengthened from the point of view of the defence of its frontiers and independence as against its potential enemy or enemies.

Once an assessment of this nature is made, the Government of the country is in a position to indicate to its Defence Ministry in a precise manner the objective or objectives for which the armed forces of the country are to be organised. With this broad but none

the less precise directive before them, the three Services Chiefs, acting jointly, would be expected to work out the details of their requirements by way of armaments and other equipment, training institutions, the number of men and the kind of training they would need to be given etc., and to ask for appropriate financial provision. If for any reason, adequate finance cannot be made available, the Services Chiefs would be expected to state what additional risk the country would be taking as a consequence, and it would be up to the Government then either to accept the additional risk or to make available the additional finance required, according to its best judgment. If the Government have themselves rejected advice for financial or any other reason and chosen to accept a risk, they should not hesitate to make the fact public, if things go wrong: when that is not done, the armed forces are unfairly made to shoulder responsibility which is not theirs. But once the directive is given, and the necessary funds are provided, the responsibility in terms of that directive is fairly and squarely laid upon the Defence Minister and the three Services Chiefs. The Defence Minister must naturally accept responsibility and be held accountable for any failure. Because he is the civilian head of the defence organization, it becomes his duty to satisfy himself that everything necessary is being done to maintain the defence forces at the requisite pitch of efficiency. Administratively, while he would be unwise to interfere with the discretion and authority of the Services Chiefs, it is open to him if any Service Chief loses his confidence to send him away. But so long as he is there, the Defence Minister must operate through the Service Chief and not go over his head to his subordinate staff. This is absolutely essential and imperative if the Service discipline and morale are to be maintained. Obvious as this is, it needs nevertheless to be specifically emphasised, for the consequences of failure to respect this sound and self-evident principle on the morale of the Services, civilian as military, are grave to the point of being disastrous. Above all, the Defence Minister must resist the temptation to have favourites in the Services. The Services are brought up, and indeed have to be so brought up, to owe unquestioning loyalty to their Chiefs and the latter's position must therefore never be undermined. Nothing is more disastrous for the morale of the defence forces than the creation of cliques and parties within the forces.

The Defence Minister, for his part, must realise that there is one vital role which he is expected to play and that is of the greatest importance. It is for him to interpret, on the one hand, the Services' professional point of view to his colleagues, particularly in the Defence Committee of the Cabinet, and on the other, to interpret the approach and attitude of his colleagues to the Service Chiefs. This

is no simple task and can be performed well only if the Defence Minister is prepared not only to make a detailed and deep study of the defence problems so as to be able to understand the Services' point of view, but also to have a thorough grasp of the economic and political problems of the country as a whole so as to make the Service Chiefs appreciate correctly the reasons why demands which to them appear patently compelling have yet at times to be turned down.

After partition, India had on its frontiers, in the north-west, West Pakistan, in the north, Tibet, Nepal, Sikkim and Bhutan, and on the south-east, East Pakistan and Burma. To some slight extent, we had Soviet Russia also as a border neighbour. The Himalayas extend over some 1500 miles of this long land frontier. The Government of India considered its northern border to be a safe frontier and did not consider that it need apprehend any hostile activity from that direction: on its eastern frontier also, it did not consider that it need apprehend any trouble from Burma. It was only from the west and the east where it had common frontier with Pakistan that it apprehended possible trouble. And this too it did chiefly because of Kashmir. For all practical purposes the Government of India considered that it was unlikely to be attacked by sea. In these circumstances it is understandable that the Government of India should have directed the Defence Ministry to organise itself so as to be able to resist a possible enemy of the size and calibre of Pakistan, that is to say, a second class military power. Our armed forces are also expected to assist the civilian forces of law and order, as and when necessary. These two principal objectives explain the manner in which our forces are trained and deployed. Government realised that it would be impossible for India with its resources to be able to take on a first class military power and, therefore, was reconciled in the event of an attack by such a military power to offering such resistance as it possibly could until assistance from friendly countries could arrive to make the contest more equal. Because of its policy of non-alignment, the Government not unreasonably took the view that the possibility of an attack from a first class military power was negligible, if not nil.

Until 1950 when the Government of India gave formal recognition to the communist Government of China, no question of the possibility of any trouble from China arose because there existed between it and China the buffer State of Tibet.

General watchfulness against infiltration tactics of communists as a group was, of course, enjoined, but this has ordinarily been regarded as a civilian or police responsibility. The Services themselves exercise great care and are most suspicious of Communists. The civilian Government's policy has been and continues to be so

vacillating that it has rarely been possible to act effectively against the Communists. Fortunately, events themselves have developed in such a manner that they have tended to be looked upon with suspicion by the ordinary citizen himself.

Within a few months of its recognition, China launched an attack on East Tibet. A note of protest was lodged immediately by the Government of India, reminding China of its earlier promises to employ only peaceful methods towards Tibet. The Chinese reply, curt to the point of rudeness, declared Tibet to be an integral part of China, and the Tibetan problem to be a domestic problem: no interference by any foreign country would therefore be tolerated. Chinese claims to sovereignty and, that during that period at any look even at the suggestion that a settlement of the Tibetan problem might be possible on the basis of Tibetan autonomy under Chinese suzerainty. In the meantime, the Tibetan Government appealed to the United Nations urging that Tibet was not a part of China and that if the Chinese wanted nevertheless to press their claim, there were other methods than resort to force.

The truth of the Tibetan plea could not be questioned at any rate either by the United Kingdom, who had been treating with Tibet since 1914 as a country enjoying de facto independence, or by its successor, the Indian Government, who had adopted the United Kingdom's policy in this respect. They were both in a position to testify that for close on 40 years, the Tibetans had resisted all Chinese claims to sovereignty and, that during that period at any rate the Chinese had exercised no authority over Tibet: the Indian Government had after independence in terms informed the former Chinese Government that the agreement of 1914 was the basis of its relations with Tibet. In spite of all this, India as well as the United Kingdom flatly refused to support the Tibetan appeal to the United Nations. This entire episode does us little credit, to judge it by standards by which we would judge an individual: it certainly showed that as a State we were curiously myopic.

In May 1951, an agreement was signed between China and Tibet "for the peaceful liberation of Tibet" and the agreement, among other things, provided for the integration of the Tibetan army with the Chinese forces. This agreement was clearly incompatible with the agreement of 1914 between Tibet and India. And yet India saw no reason to protest! India seemed to have made up its mind to give in, and in 1954 in fact signed an agreement with China which virtually conceded that Tibet had ceased to be independent. The agreement dealt with the principles, obligations and regulations of markets, routes and procedure for Indian trade and Indian pilgrims. The Chinese secured the right to open trade agencies at New Delhi,

Calcutta and Kalimpong in return for the continuance of India's right to retain similar agencies at Gyantse, Yatung and Gartok. The treaty further provided for the withdrawal of Indian military escorts and the handing over of Indian Posts and Telegraphs facilities and the Indian rest houses to the Chinese. So far as the status of Tibet was concerned, India acquiesced to Tibet being referred to as a 'region of China' in the agreement. It has been said correctly that "in the circumstances of 1954, this amounted to the counter-signature by India to the death warrant of Tibetan independence." The result was underlined further by that part of the agreement which India particularly welcomed, the acceptance by China of Panch Sheel, or the five principles for ending disputes by peaceful methods! India pledged itself inter alia to respect the territorial integrity and to refrain from interfering in the internal affairs of China in which it now included Tibet: what India secured in return was (a) the right to retain representation in Tibet and (b) "the belief that the five principles guaranteed Chinese good neighbourliness and acceptance of the McMahon line frontier and other existing frontiers between India and Tibet." There was nowhere even a mention of the fact that until the forcible occupation of Tibet by the communists, India had been associated with Tibet by a treaty of obligation to withhold recognition even to Chinese suzerainty over Tibet and had been dealing with the Tibet Government as in practice an independent Government. In the name of the high sounding five principles, India acquiesced in the extinction of Tibetan freedom and territorial integrity. The long standing treaty connection between India and Tibet, which had been officially acknowledged by it only five years earlier, was treated as if it had never existed. In fact, what India had done with open eyes was to acquiesce in its northern frontier becoming an open and vulnerable frontier. It had exchanged a friendly, peaceful and peace-loving Tibet for an expansionist, powerful and unscrupulous China as its neighbour.

The change and what it was going to mean was soon brought home to us. Almost immediately after the signing of the agreement, the Chinese protested against Indian troops crossing the Niti Pass, something we had been doing for years. By 1956, the Government of India were compelled to issue warnings that they would resist aggression! The skilful Chou En-Lai, when on a visit to India in December 1956, took the trouble to allay our apprehensions by assuring us that for practical purposes the Chinese Government would recognise the so-called McMahon line as the frontier in that area.

Thereafter there was general calm along the whole area until the autumn of 1958, when it was discovered that part of a new Chinese road between western Sinkiang and Tibet had been built

across Aksai-Chin in the north-western corner of Ladakh. "Aksai-Chin is a little frequented and an entirely unadministered region. It is a bleak plateau at an elevation of some 16,000 feet which only a rare explorer and an occasional Ladakhi or Kirgiz traveller ever visited." The remoteness of the area from effective Indian control is reflected in the fact that the existence of the road does not appear to have been known to the Indian Government until two years after it was actually built! India protested to the Chinese against this violation of their territory. The Chinese reply was characteristic. They claimed the territory as their own and objected to Indian interference there! The Chinese contended blandly that the frontiers between India and Tibet had never been delimited and that there was no treaty of any kind between the Chinese Central Government and the Government of India about their frontiers.

With regard to the McMahon line, in a letter to Chou En-Lai in March 1959, Prime Minister Nehru expressly referred to the acceptance of that line by the Tibetans in the 1914 agreement at Simla and that the McMahon line was "firm by treaty, by usage, and right, and firm by geography". We evidently forgot in our indignation that we had ourselves forsaken Tibet, and that a right given by Tibet was scarcely likely now to be accepted as valid by the Chinese! The Chinese, moreover, had now made up their mind to force the pace. They were on the war-path. On 26th August 1959, some 200 to 300 Chinese troops crossed the McMahon line in the region of the Upper Valley of Subansiri, and drove out the Indian border police picket manning a forward post at Longju. Prime Minister Nehru declared this to be a clear case of aggression and ordered the Indian Army to take over responsibility for the defence of that part of the frontier. Within a few days, Chinese aggression into Ladakh and hostile concentrations near the Bhutan border were reported.

Then at last a serious clash took place in Ladakh on the 21st of November 1959 and with it there seemed to end all possibility of a peaceful settlement. Nehru himself, though using stern language, still kept talking of conciliation. Lest his desire for conciliation should be misinterpreted to mean he was desirous of yielding, he now put the Indian Army in control of the entire frontier. The Chinese proposal for a limited withdrawal in Ladakh was rejected by India, who put forward a counter proposal for demilitarisation. The possibility of a compromise arrangement under which the Chinese might retain their road in Aksai-chin, on the understanding that they for their part would recognise the McMahon line as well as various other parts of the frontier which they claimed to be unsettled was hinted at in a Chinese communication. It was, however, promptly turned down. Indian public opinion was by now strongly averse to any

concession.

Chou En-Lai visited New Delhi in April 1960, but the visit did not produce any agreement. As if to demonstrate to the world that it was India who was being difficult, and that China was most reasonable, Chou En-Lai went from India to Burma and Nepal, and arrived at agreements with both of them according to which the traditional frontiers were accepted as the frontiers between the two States and China. Wherever the traditional boundary was not clear enough, it was agreed that a joint Commission would go into the issue and make recommendations. Before long, however, the Chinese encroached upon the Nepalese territory without troubling themselves about the joint Commission procedure.

India scarcely required further proof of China's unreliability. No faith could any longer be placed in China's promises. Prime Minister Nehru at long last began to wonder, what others had begun to do sometime earlier, whether the two governments meant the same thing when they used similar words. By sometime during the latter half of 1959 at the latest, it should have become amply clear to the Government of India that the time had come to give a new directive to its Armed Forces Chiefs. Pakistan could no longer be looked upon as the only possible source of trouble. Our Armed Forces had to organise themselves for a possible conflict on yet another and a longer front, the northern and north-eastern front, with China as the possible trouble-maker. Further, since China, though not quite a first class military power, was nevertheless far superior militarily to Pakistan or India, it was essential at that stage for India to consider whether it could envisage a possible conflict with China without any outside assistance. In making such an assessment, it would have had to consider (1) whether India would be able to push back Chinese aggression without weakening itself on the Pakistan borders, or (2) whether India would be able to resist Chinese aggression effectively only if it were possible to come to some arrangement with Pakistan, whereby it would maintain strict neutrality during such a conflict.

Subsequent events would seem to suggest that the military assessment of the position was that India would have no difficulty in pushing back the Chinese. Because of the nature of the terrain, it may well have been felt that the defending forces would be at much greater advantage, sufficient to outweigh any superiority the Chinese may possess. If such a view were taken, however, would it not be reasonable to assume that steps would have been taken forthwith to see that our forces on the Chinese front both in Ladakh and in NEFA would have been trained and equipped for the type of warfare that would have to be waged in the terrains involved? Judging from

what actually took place, it would seem that our forces in NEFA were neither trained for warfare in the kind of terrain in which warfare took place, nor were they equipped for a conflict of any duration. This is also confirmed by the official statements that our troops were not sufficiently conversant with mountain warfare, were ill-equipped, were not even clothed for the kind of weather conditions that could reasonably be expected during the months in question, and were short of small arms and ammunition.

A realistic appreciation would almost certainly have invited attention to a possible source of weakness. Could we say for certain how the people of the NEFA border areas would react? An important and essential arm of defence is 'intelligence' which includes obtaining of reliable information regarding our enemy's forces, their morale, the morale of their people, their supply lines, etc., on the one hand, and the obtaining of similar information regarding the morale of our own people, particularly in the front line areas, the extent of subversive activities, if any, in those areas and other neighbouring areas, etc. How efficient our intelligence organization was, it is not possible to say, but at least in one respect we had shown ourselves to be singularly ill-informed, or gullible and trusting. We seem to have accepted, without question, what the local people confidently maintained, that there were no passes across the high mountain ranges into NEFA territory except over a few well known passes, such as the Se La Pass, with the result that we allowed ourselves to be taken by surprise from the rear. And when thus surprised, our commanding officers showed that they had not learnt one of the most important lessons of the last war, namely, that the only way of getting out of such a situation was to stay together and not to disperse: we did precisely the reverse. There would seem *prima facie* reason to believe that we had very poor information about the build-up of the strength of the enemy.

It is difficult to reconcile any careful military assessment of the implications of a conflict with China with the condition in which our troops found themselves in October/November 1962. It is difficult indeed to resist the conclusion that in fact our Armed Forces Headquarters were neither given a revised directive, nor were they told to prepare for a possible conflict with China until late in 1962. It seems to have been assumed that somehow it would be possible to come to an arrangement with China and that it was impossible to conceive any military conflict with China, despite actual Chinese incursion into Indian territory and despite the Chinese unwillingness to accept the McMahon line as the frontier between India and China.

But this explanation too does not fit all the known facts. We know that the responsibility for our frontiers in Ladakh and NEFA

was placed on to the army towards the end of 1959. From this it would follow that the Services' Chiefs would have jointly studied the entire situation immediately they were called upon to take on the additional responsibility and indicated to the Defence Minister what they would require in order to discharge their new responsibility effectively and with success. If this is not an unreasonable assumption to make, it follows that the Defence Minister in the first instance, and the Defence Committee of the Cabinet later deliberately took a political decision not to take any overt steps to strengthen our armed forces in an effective manner. These are the kind of questions which inevitably arise, and answers to them should have been forthcoming and anticipated.

What could be the political reasons that may have made it difficult for our Government to face facts even at this critical juncture? It is difficult to conceive of any. Was our Government concerned more about adherence to its policy of non-alignment? Our Prime Minister's statement that "I would, rather our country were overrun than accept military assistance to keep out the aggressor" would seem to suggest that that might be the case : but he had also made statements to the contrary. Military assistance to fight a stronger aggressor cannot clearly be a wrong thing to do. Non-alignment means quite simply that we do not join one or the other of the two sides in the so-called Cold War with a view to assisting one side against the other. If, however, one of the two sides chooses to attack us, then, surely we have every right to defend ourselves as best we can : and that 'as best we can' includes seeking help wherever we can obtain it. Naturally, there would arise the question from which country would we seek assistance, or would assistance be forthcoming. The obvious answer would be whichever country is willing to assist. And as has been made clear when we were pushed back and were in desperate straits, only the western countries, the free countries, were prepared to assist us unreservedly in fighting the communist China : Russia quite definitely could not or would not openly oppose China.

What then could have made us desist from taking vigorous and effective action to strengthen ourselves and to safeguard our frontiers? Any military assessment would have required us to undertake all that we are presumably now doing to prevent any recurrence of trouble. Could it be that our Government had been lulled into a false sense of security by some kind of assurance from Russia that it would see to it that the border dispute with China did not blossom into actual military conflict? Some such explanation there must be, coupled with a lurking feeling that China would never go to the length of attacking in a big way. There is really nothing

one can do when one is bitten with the bug of 'wishful thinking'. Our Government, moreover, found it very difficult to admit even to itself that the policy of non-alignment must not be pushed to a point where the security of the country might be endangered. Indeed it has been suggested since the suspension of active hostilities that the policy of non-alignment has justified itself, for if that had not been India's policy, Russia could not have used its good offices to dissuade China from going further and to acquiesce in a cease-fire! I am not concerned here with the merits or otherwise of the policy of non-alignment, except to the extent that it affects the defence policy. It is obvious that if one wants to adopt that policy, one must make sure that one is militarily strong enough to resist aggression whatever quarter it comes from. A policy of non-alignment and a state of unpreparedness or semi-preparedness cannot go together.

Might there not be a simpler explanation, however, of the cease-fire? The readiness with which the western countries came to India's assistance left the Chinese as also the Russians in no doubt whatever that China's military venture might easily develop into a much bigger conflict, and that since China's main object was in any case achieved and India had been taught a lesson, withdrawal, when the initiative still lay with it, that is, China, was clearly to be preferred to pulling out later out of necessity when it would be pressed, on the one hand, by the re-formed forces of India, strengthened by assistance from the western countries, and, on the other, by difficulties created by its own supply lines, lengthening and becoming vulnerable.

However that may be, so far as India is concerned, its army had cut a sorry figure in the first military conflict it was called upon to face since Independence, and this had happened in a type of fight in which it cannot be said that our troops were by any means inept or inexperienced, or despite what has been stated publicly, because we were militarily outnumbered or because our enemy was better equipped. It has to be admitted — and it is better that we face facts — we lost because our intelligence was poor, our planning was poorer, and our leadership military and civil was even poorer. And yet only a few years earlier it could have been stated without any exaggeration that not only were our soldiers well trained and in fine fettle, but our military thinking, planning and leadership was as sound, farsighted and clear as could be desired and our military leaders as skilled in their task and as upto-date in military lore, aware not only of the methods of the last war, but also of the methods of fighting in which communists are particularly expert, as the best that any country could boast of. In fact, at the very time that our troops were being put to flight in the NEFA area, on the Ladakh front they were giving a magnificent account of themselves. There

was nothing wrong with our forces as such and even with our junior officers. Where the commanding officer knew his job, our men fought and fought well even against heavy odds. What appears to have let our men down was the absence of sufficient previous planning, of the necessary strategic and tactical thinking, and the failure by the civil authority to put the most experienced and capable military leaders in charge. In addition there may well have been much interference by high civil authority in spheres of purely military concern. One invariable exercise was probably not done : to put ourselves in the position of the Chinese commandant and work out how we would then set about defeating ourselves, what line of attack we would adopt, etc. There comes to mind immediately a fact which has never been satisfactorily explained, why so many senior officers were allowed to retire or resign during these very years, when every effort, one would have thought, would have been made to retain them. As in other things, but even more in warfare, there is no substitute for experience.

II.

Because of the manner in which we failed to offer effective resistance to the Chinese, an impression has not unnaturally been created that there has been some startling decline in the standards of training, in the organization, in the quality of personnel, etc. It may assist a proper appreciation of the position if I were briefly to recount how, after partition, we proceeded to tackle the task of re-organizing our defence forces, and defence headquarters.

Since the change was to be from an organizational set-up, appropriate to an Imperial Armed Force and our officers and men had been brought up in that atmosphere, it was necessary to impress upon all concerned what major basic changes had taken place with the arrival of independence. In this view our top defence organization was so devised that while the civilian supremacy was maintained and recognized, the Services retained the fullest possible discretion and opportunity to develop themselves and to present their point of view.

The three Services Chiefs meet jointly in a joint Chiefs of Staff Committee regularly, the senior most among them functioning as its Chairman. The Chairman of the Joint Chiefs of Staff has been given the right to see the Defence Minister whenever he desires, and also the Prime Minister in his capacity as the Chairman of the Defence Committee of the Cabinet. Experience in other countries favours a slightly different arrangement : the Chairman of the Chiefs of Staff Committee has no other responsibility and is in addi-

tion to the three Services Chiefs. We may find it useful to adopt this arrangement but it cannot be said that the existing arrangement has so far not functioned satisfactorily.

Ordinarily, the Defence Minister would arrange to have most important matters and every policy issue considered in the Defence Minister's Committee which is composed of the Services Chiefs, the Defence Secretary, the Financial Adviser (Defence), and frequently the Defence Science Adviser. Matters requiring approval of the Government as a whole, and general broad policy decisions are considered in the Defence Committee of the Cabinet. Co-ordinated approach and consistency in all these top Committees is ensured by all of them being served by the Military Wing of the Cabinet Secretariat. The policy-making organization of the Defence Ministry is thus made sufficiently flexible to ensure that every relevant point of view has a chance of being presented at appropriate level, and to have it considered at the highest level if necessary. This organizational machinery, sound and well-conceived though it is, can, however, work satisfactorily only if the Defence Minister respects the rules and conventions and the Cabinet Secretary has the courage to insist upon the rules and conventions being so respected.

A democratic constitution is not an easy constitution to work satisfactorily. The people concerned have themselves to understand fully, critically, and in the true spirit those working rules and conventions. Mere nominal or formal compliance will not help. Why is it that we failed to take heed when the warning signals first became visible and went wrong when the emergency was upon us? How and why that happened can only be guessed since no first hand authentic report has yet seen the light of day. *Au fond*, it may be said to have been due to a lack of moral courage, a certain weakness of character in high places, civil and military. Through unwillingness to cause or face unpleasantness, authority may well have been persuaded into accepting plans of action which presumably might have been considered unsound.

Certain it is that we were badly beaten and humiliated in the very first serious conflict that we had to face. Our defeat may properly be attributed not merely to our being unprepared, for which there was undoubtedly little justification, but also, and chiefly, to our being out-generalled; our leadership was proved to be extremely poor. Why was this the case? Not because we did not have first class leaders of men! They, unfortunately, were not where they ought to have been. How did it come about that men of the type who are now put in key positions, were not given these very responsible duties, then? And yet they are senior, able and enjoy a high reputation, and had the choice been made solely on considera-

tions of merit and ability, they would have undoubtedly been selected. They are also, and this is a matter of no small importance, respected by the men. That our forces could be found at any time in such a state of unpreparedness, as is admitted to have been the case, is in itself a matter for thorough enquiry; that there should be any attempt at defending those responsible without a detailed enquiry is even more strange and indefensible. There was, in fact, no question of a surprise, for we had been given plenty of warning of what the Chinese might conceivably attempt. For us to complain of lack of proper training, of proper equipment, etc. is naive in the extreme. For some reason or other, we showed a singular inability to appreciate that we were about to face a situation of extreme gravity, so that when the situation did arise, we were forced into a dilemma : failure to act effectively must lead to a dangerous loss of prestige, and yet to act without proper preparation may no less decisively bring disaster over our heads and consequent loss of prestige.

It may assist us in our study if we turn back at this stage to August 1947 when we became independent. What we inherited then was an armed force in shambles. This was inevitable, for the division of the forces between India and Pakistan necessitated the giving of option to every Muslim soldier, sailor and airman resident in the areas which constituted India after partition, and every Hindu soldier, sailor and airman resident in areas which formed Pakistan, to remain with the Indian armed forces or to join Pakistan armed forces, and *vice versa*. In spite of the large number of problems which the infant armed forces organization was called upon immediately to tackle, the movement of vast numbers of people across the borders, the riots, and unsettled conditions in Delhi, the necessity for active warfare in Kashmir and incalculable possibilities of trouble in Junagadh and Hyderabad it must remain a matter for congratulations that the reorganization of the Armed Forces Headquarters and of the Defence Ministry was carried through with efficiency and rapidity.

Before the 15th of August 1947, the control of the Armed Forces of the country was for all practical purposes in the hands of a single Commander-in-Chief, who continued to occupy a specially privileged position even during the interim period between September 1947 and October 1947, when a civilian Minister was placed in-charge of the Defence Ministry; the Navy and the Air Force were so small that they could scarcely be described as separate Services; barely a dozen officers in each of these two Services had over ten years' experience to their credit. For the higher technical and staff training, the officers of all the three Services were dependent on the facilities afforded in the United Kingdom, and the training institutions

within the country were so located that on partition not a few of the more important of them were lost by each of the three Services to Pakistan. The ordnance factories were all in India, but practically all the superior technical and administrative staff in them was British, and many of them retired on or immediately after partition. Finally, the division of the Army, the Navy and the Air Force, partly on territorial basis and partly on the basis of option exercised by them, the sharing out of the equipment with the units and in the depots which was commenced a little prior to the 15th of August and was not completed until towards the end of that year, left behind a large number of difficult and complicated problems; and the solution of these was made no easier by the resignation of the vast majority of British Officers who had upto that date held all the important appointments at the Armed Forces Headquarters and in Commands.

Prior to partition, no Indian officer had held a Staff appointment of any importance in the Armed Forces Headquarters. Despite all these handicaps, all the difficulties were surmounted quickly and a new defence organization was created in which the country could reasonably repose its confidence. The question of reorganizing the defence forces on a permanent peace-time basis was thereafter taken in hand and carried through without much delay.

For these purposes, the new Government was called upon to take some far reaching and fundamental decisions. The first of these was the obvious decision for any democratic Government to take, namely, to subordinate the military to civilian control. A machinery was evolved gradually to ensure that the exercise of that civilian control remained both strong and effective. Through the Defence Committee of the Cabinet, of which the Prime Minister is the Chairman, is secured the domination of civilian influence in the formation of national defence policy, while the Defence Minister as the head of the defence organization of the country maintains control over the three Services Headquarters and other ancillary military establishments.

The second no less important decision was that relating to the setting up of three separate Services Headquarters, each under its own Chief of Staff and Commander-in-Chief. This separation was inevitable, for the building up and expansion of the Navy and the Air Force. The Army constitutes so large a unit of the defence organization that it would not have been too easy to ensure in any other way the attention and care that these two Services required in the early stages.

While the Government was convinced of the undoubted importance of allowing the three Services to develop, each in its own way, in matters which are distinctly its own, it was no less convinced

that this necessary separation should not be pushed too far, for matters in which common organization was possible could obviously be dealt with with efficiency and economy if so organized, and what is more important, would in the process assist in building up a feeling of the essential oneness of the defence organization.

In line with this thinking and approach, it was decided to establish the then unique institution of the Indian inter-Services National Defence Academy for the training of young officers of the three Services. Several other inter-Services organizations were also established, the most important of which relate to the integration of the Medical Services and Medical Organization and the establishment of inter-Services Defence Research and Development Organization.

In regard to the ordnance factories also many Indians were sent abroad for specialized training and a number of technical training schemes were instituted. Mindful of our limitations, both in equipment and in resources and in technical man-power, it was wisely decided to hasten slowly, but in such a manner that the progress towards self-sufficiency would be at an ever increasing pace. The expression 'self-sufficiency' in the matter of defence training and defence production was used in the full realization that this was not an objective capable of early realization, if indeed it was realizable at all. Our policy approach was quite simply to ensure as early as possible, firstly, the production within the country of basic items of military equipment which we were likely to require in large enough quantity to make production economically feasible, and secondly, the production of items of which the overall requirement, though small, was essential. It was accepted then that it would be wiser for us to continue to purchase such items of military equipment as were extremely costly, and in which new development was taking place rapidly and unceasingly, items such as fighters, bombers, gunsights, guided missiles, etc.

A couple of new ordnance factories were established, one or two existing ones were expanded, and every one of the several ordnance factories was balanced and brought to a satisfactory pitch of efficiency, and all this was done within a matter of five or six years. A certain amount of civil production was undertaken, but that was done on the clear understanding that only the spare capacity of the factories would be so utilised. Several new factories were planned and were even approved by the Defence Committee of the Cabinet within the first five or six years of independence, but for one reason or the other no progress was made until relatively recently when the proposals were revived. The civilian industrial capacity was throughout visualised as available to the defence in an emergency, and close contact was kept with its growing capacity so that future

planning for defence production could proceed on a realistic basis. That this practice had fallen into desuetude is evident from the fact that after the cease-fire, when it was decided to step up production to meet increased defence requirements, the State Governments (and individual enterprises) had to take the initiative of approaching the procurement organization in Delhi for apprising it of the various types of capacity that existed in their respective States. Even the development wing evidently did not have an upto-date picture, particularly of what the large number of small scale enterprises are capable of.

In the scientific field, we had to start from scratch. It was not necessary before partition for the defence forces of India to have a scientific organization of its own. It could always draw upon the results achieved in the United Kingdom. That source, though still open up to a point to India as a member of the Commonwealth, was not enough and it was obviously essential for us to develop in this country as quickly as possible the necessary scientific tradition and technique. With this object in view, it was decided, after consulting some distinguished British scientists who had wide experience of operational research, to create a Science Research and Development Organization of our own. A Scientific Adviser to the Ministry of Defence was appointed and a number of other scientists were recruited to assist him in giving the new organization a good start. It worked in close collaboration with the Technical Development Organization which had been brought into being during the Second World War and which, despite the loss of experienced personnel, following upon Partition, remained capable of continuing its work with reasonable efficiency. Within less than five years of Partition, a Defence Science Service was also brought into being with the object of attracting promising young scientists to take up scientific research work of value to defence as a career.

The reconstitution of the Armed Forces was quite the most difficult problem that was set to the Armed Forces Headquarters and it had to be faced against the background of the tragic happenings in the West and the East Punjab immediately after Partition and of the operations which became necessary in Kashmir. The reconstitution was not a mere mechanical matter, but called for tremendous exercise of patience, imagination and patriotism. Although a certain number of British officers had still remained to assist, it was the Indian officers who had to shoulder the greater part of this responsibility. Within the shortest possible time, we recreated all the training institutions that were lost to us as they happened to be located in areas that formed part of Pakistan. We did more, we went on to set up some new ones, the necessity for which was felt

only after independence. In certain vital respects India had come off very much the worse in the division of the Armed Forces. We lost, for instance, all the important naval training institutions, such as the Boys Training establishments, the Gunnery School and the Radar School, all in Karachi. The Air Force, likewise, lost its only repair and maintenance workshop in Drigh Road near Karachi. The Air Headquarters built up with the utmost possible rapidity an efficient maintenance and repair workshop, besides creating new institutions such as the Technical Training College, where training is imparted in the higher technical subjects, for which previously no facilities existed in the country. The Army also lost several establishments including its famous Staff College at Quetta. Despite the re-establishment of every type of training institution, it was considered advisable to retain our contact with training imparted in the United Kingdom, and we readily availed ourselves of the facilities offered by that country, and by Canada and the United States of America, to send a number of officers from the three Services for higher training. On one point, we were clear. Our forces must be as well trained as could possibly be ensured; this was as important as it was to see that they were well-equipped for whatever task was to be assigned to them.

And all the time, the Indian officers in the three Services, and particularly the more senior of them had to train themselves to perform tasks of which they had previously no experience whatever. It was indeed most encouraging to see what striking progress each of them made, both in his self-education as well as in the standard of work turned out by him in the high post held by him. The achievement was indeed most striking, and was made possible, if one may venture to say, only by the tremendous creative power released by the glow of patriotism and pride which every one felt in those early years of the country's independence.

A decision of considerable significance for the Army was the replacement of the class composition principle of recruitment by that of recruitment by merit and fitness, irrespective of class or creed. The areas which had previously been ignored by the recruiting organization were surveyed and, despite a measure of somewhat die-hard prejudice, the response from the so-called non-martial classes has been gratifying.

A similar significant change was made in the system of selection of officers. The combination of a qualifying Union Public Service Examination and carefully worked out psychological and other tests by the Services Selection Boards ensure the selection of the best of the available youngsters and eliminates to the extent that human ingenuity can all chances of nepotism and favouritism. There began

an increasing inflow of candidates from relatively poorer families; and quite a high percentage of those selected are found to come from families with incomes which could not have far exceeded Rs. 300 per month. These young men represent first class officer material, keen as mustard, of high intellectual calibre, physically fit, and imbued with a high sense of duty.

It was with deep satisfaction that I heard a very high and most knowledgeable authority state recently what a very fine account these young officers gave of themselves during such active warfare as took place, and what fine spirit moves them. There can thus be no doubt that the Armed Forces organization was given a fine start.

One other far-sighted decision was that relating to the establishment of the National Cadet Corps. Through it, it was felt that the youth of the country would be given an opportunity to get to know something of matters military, and besides receiving a certain minimum of military training, would become associated in some direct way with the Armed Forces. The young men so trained would also, it was hoped, provide worthwhile officers in an emergency.

Now when several thousands of young officers are wanted, a further effort of imagination and boldness is called for. The National Cadet Corps-trained young men constitute perhaps the most promising source. But it will be necessary to overcome the unconscious bias in favour of public school boys and boys from English medium schools that has crept in because of the steadily declining standard of knowledge of English of most others. English can be learnt by intensive coaching methods after selection: selection itself, I suggest, should be based on the assessment of the more basic qualities which do not depend upon the knowledge of English. The heavy rejection, as high as 75% of the candidates who apply, suggests that something is seriously wrong with the method of selection. And I would not be surprised if the biggest single contributory factor is found to be the unrealistic emphasis on English. English can be taught by the Armed Forces Organization to the selected candidates after selection without any loss of efficiency.

It will be seen, thus, that everything necessary to ensure that the country should have a well-trained modern armed force was done within the first five years or so of independence. The foundations were well and truly laid. And the three Services had among their personnel, competent, well-trained and experienced officers, who were determined to see that the right traditions continued to be maintained; and these right traditions concerned such basic matters as discipline, loyalty, toughness and capacity for endurance, and devotion to duty. Both the officers and men readily accepted the principle that in a true democracy, the Armed Forces have no politics,

' must have no truck with politics and political parties. So well ingrained is this basic doctrine that in spite of sedulous attempts by the communists to infiltrate into the Services and to inculcate the view that they have a political role to play, the Armed Forces, men and officers alike, have stood firmly aloof. This is fortunate, for there has been an almost unceasing endeavour to create groups and cliques — a matter of no small importance against an enemy such as China.

III

The period before the Chinese moved into our territories in strength may be said to be the first phase of the episode. The actual period of active hostilities may be said to constitute the second phase. With China's decision to withdraw unilaterally, we entered the third and perhaps the most important phase of this entire episode. What are we doing to ensure that should there be a resumption of hostilities, we would be ready to meet and repel the attack? The tremendous emotional upsurge amongst our people has been the most heartening feature of the entire situation so far. But we appear to have failed to cash in on it, and have all but allowed it to be dissipated. There have been vague general exhortations to the people 'not to relax', to put forth all their best effort, and so on : no one, however, seems to have realised that people have to be told in what way they can make a contribution and be of help in the war effort. Nor is the Government taking the people into its confidence, as it were, and telling them what it is doing so that if the Chinese return to the attack, they are turned back and chased out of our territory. There is quite a lot of information that can be given without in any way endangering the security of the country. And this would itself then serve to keep up the people's interest in the situation.

It is evident that the Government must have applied itself to the task of strengthening itself in spheres in which it was demonstrably proved to be weak; and since its objective is to drive the Chinese out of our territory, it must have further initiated the necessary planning to achieve that objective. Perhaps the most morale-destroying weakness that was discovered was in regard to the inadequacy of warlike equipment, and military stores generally to maintain such forces as we had in the field. It is not always realised how numerous, varied and complicated are the supply problems of the armed forces. The number of items that have to be purchased runs into hundreds of thousands. But what is of significance and what is not always realised is that even the smallest per capita increase

in demand for a store not merely leads to an increase in expenditure on the purchase of that store, but creates also a number of troublesome and in some cases expensive problems of production, of storage and of transport. In ordinary times, the annual expenditure on stores purchases of our defence forces has fluctuated around sixty to seventy crores of rupees, of which some twenty crores are accounted for by foodstuffs. When wartime requirements of a defence organization have to be met, the expenditure increases enormously and the attendant problems also become more complex.

Normally a well-run Defence Ministry has a War Book kept up-to-date which sets down in considerable detail every conceivable measure which needs to be taken when war breaks out or appears likely to break out. Among the steps to be taken, a very important section relates to the procurement of defence stores. Unless some considerable previous planning is made on certain assumptions, the task of organizing procurement of stores in a satisfactory manner when emergency actually is upon us, becomes infinitely more difficult. In the ordinary way certain measures would begin to be taken as soon as it becomes clear that the maintenance of peace may not be possible, however much one may desire it. Procurement of stores can then be done more satisfactorily with greater time at one's disposal, and preliminary action would be taken without any loss of time. Thus for instance, among important items of non-warlike stores which would be required for the use of defence personnel are butter, milk powder, canned vegetables in a dehydrated form, etc. It would be necessary to lay in a considerable stock of such items in packing appropriate and convenient for the kind of terrain in which the warfare is likely to take place. With proper planning it would have been possible to ensure that capacity for meeting the total requirements in respect of a number of such items existed in the country. It would seem, however, that not much thought was given to this aspect until after the Chinese aggression took place. Thus, the capacity in the country for the production of milk powder, though an essential requirement, is limited and perhaps adequate only to meet our peace-time military requirements, and a part of the civilian demand. Steps are only now being taken to expand the capacity by establishing a number of factories for its manufacture. Some equipment will have to be imported and the establishment of the factories must necessarily take a certain amount of time, however great the urgency and however expeditiously we set about it. It is fortunate for us that conditions of ceasefire exist at the moment and, therefore, no serious inconvenience would be caused to our troops. At the same time, it probably will be necessary to import a certain amount of milk powder as an insurance against the possibility of the demand

increasing suddenly as a result of resumption of hostilities before our new plants begin to produce : that is to say, we shall have to incur expenditure of foreign exchange of which we do not have too much.

In the same way, the capacity for the production of dehydrated vegetables would probably need to be substantially increased, and so on with a large number of other essential consumption commodities. In an attempt now to make up for lost time inevitably certain wastage will occur or avoidably wasteful expenditure may be incurred.

Judging from the action taken immediately after aggression occurred to freeze the sale of new cars, new jeeps, new station wagons and new trucks, it is a reasonable inference that in regard to these items also no previous planning had taken place. Had there been any timely planning, there would have been no necessity to put civilian producers and consumers to unnecessary inconvenience resulting from abrupt stoppage. The increase in the production capacity itself could have been planned and set afoot in good time, and in the meantime, only a percentage of the regular production need have been taken over for meeting the anticipated increase in defence requirements. This would have disorganized the civilian economy to a much lesser extent. Likewise, the entire steel production and steel stocks were frozen and the process of unfreezing is even now not quite complete. There is in fact little justification for freezing anything that is in regular production, if the period of such freezing cannot be kept down to a matter of days. In other words, one's plans for the utilization of the commodities frozen should be capable of being completed with great speed, so as to ensure that the dislocation of the economy is no longer than is absolutely unavoidable.

In so far as warlike stores are concerned, the situation seems to have been no less unsatisfactory. The utilization of ordnance factories for civilian production should at the very least have stopped as soon as it was evident that peaceful conditions were likely to be disturbed. The justification for the State maintaining ordnance factories lies in this that the State can at the shortest possible notice, get going with the maximum production of such of the various items of military stores it is capable of producing. Instead of this, the factories continued to produce civilian goods right up to the date of the Chinese aggression and were changed over to full-fledged defence production only when the situation became really grim ! So here again it would seem that there was for some inexplicable reason inactivity in an area in which there should have been really vigorous activity. One other mystery which remains unresolved because our Government has just not chosen to enlighten us relates to the appa-

rent absence of stocks of small arms and ammunitions. An Ordnance factory's maximum capacity is usually less than what is used up in a day's active warfare : it is, therefore, customary to carry large reserves, estimated on quite a scientific basis, to ensure that there is enough of every item for several months' active warfare.

No thought whatever appears to have been given to the role of the Indian Air Force in any possible conflict between China and India on the border issue. For some reason both countries refrained from using their air force during the first round of active hostilities. So far as India was concerned, it used it for certain supply purposes only and it is possible that China might have used their aircraft for similar purposes. There is no reason, however, for us to assume that if and when hostilities are resumed, the Chinese will refrain from using their air force aggressively. Whatever the reasons that may have induced them not to use it so far, it is clear that India has the greater need both for using its air force and for developing the necessary strength to meet any attack from the air. China is reputed to have a fairly big air force, and we, on the other hand, are reputed to have very little with which we would be able to offer effective resistance. By and large, it is probably true to say that we are in no position to defend our cities against a determined air attack. It might be asked why is it that this problem of attack from the air has not unduly worried us in the context of a possible trouble with Pakistan. The answer, of course, is that the fear of retaliation could be regarded as a sufficient deterrent to both the sides. With China, however, the position is very different. Its industrial and population centres are situated too far for any bomber that we possess being able to unload its cargo and return safely.

From India's point of view, however, it would be unwise not to take whatever steps it possibly can to ensure the safety of its industrial and population centres. Once there is assurance on that point, warfare at the border may be conducted with confidence and without having to look over one's shoulder. It is imperative from our point of view, therefore, to explore every possibility of coming to an arrangement with the Western Powers, who are said to be willing to assist us in organizing ourselves efficiently for aerial defence. What have we to lose that there should be any hesitation in accepting so generous an offer? No question of our having to give bases to foreign forces on our soil arises. What would happen is that the air force of the assisting countries would come only when hostilities break out. But in order that they could then come in quickly and be operatively efficient with the least possible delay, clear understanding must be reached on a number of points : which air-fields would be placed at their disposal? what assistance would the

Indian Air Force be in a position to give? when their planes arrive on the fields what kind of maintenance assistance we would be in a position to give? what type and amount of accommodation they would require, etc? Such hostile public criticism as there has been on the subject, has, I would imagine, arisen from a misunderstanding of the nature of the assistance involved, and how it could be made effective in time only if there is detailed previous understanding and preparation to receive it. While there may be some excuse for the public to labour under a misunderstanding, it is difficult to see what excuse there can be for the Government to falter. Once it is agreed that there is imperative need for providing air defence, it is but the path of prudence for us to take suitable steps to see that we have as adequate a system of air defence as possible. Within the time at our disposal, it would not be possible for us, even if we have the resources, to purchase an adequate number of aircraft, and to train the number of additional pilots that would be required, to instal the necessary radar system etc., in order to give ourselves even the minimum that is necessary to defend ourselves against aerial attack.

In modern warfare, moreover, even if one does not wish to be the aggressor, once hostilities begin, unless one is able to be on the offensive at the right time, one merely handicaps oneself unnecessarily and unjustifiably. For purposes of taking the offensive, one must have bombers with the requisite flight range, to be able to carry the war into the enemy's camp and be back having unloaded their cargo of bombs. Such bombers, however, are an extremely expensive proposition and one must possess a fair number of them to be on reasonably equal terms with the enemy. It is evident that, we ourselves cannot unaided strengthen our air arm adequately, to fight China on anything like equal terms. And it needs also to be remembered that for geographical reasons, our vulnerability is far greater. If we wish to adopt a realistic attitude, clearly we should unhesitatingly seek assistance from those who are willing to extend it.

No doubt, during this intervening period steps are being taken for the procurement of armaments which we need and which we cannot yet make. But it is by no means so clear that we are doing so on some planned basis. Thus, there has been a great deal of talk about the purchase of a dozen or so of MIG aircraft from Russia, and also for their manufacture in the country. Presumably, it is for political reasons that it has been decided to go on with the purchase of the relatively small number of MIGs! They are too few to make up even a squadron. And they will merely serve to add to the fantastic problem which has already been set to our small air force in having to operate and maintain at a proper pitch of effi-

ciency close on forty different types of aircraft. One has only to mention this to make clear one of the terrible consequences of non-alignment, as interpreted by us so far.

Why it is considered desirable to go ahead with the project to manufacture them in the existing circumstances has never been made clear, particularly as we should still have to remain dependent upon Russia for the bulk, if not all, of the instruments required, as well as its armament. Moreover, production of the airframe and the engine cannot possibly commence for some considerable time. Does the Government not owe it to the people to explain the reasoning underlying the policy of production of this particular aircraft? No security risk is involved that is worth the name. The balance of advantage surely lies in giving much more information to the people rather than much less.

The expenditure of so much money, between 200 and 300 crores a year would clearly call for a great deal of planning, of forecasting of requirements based on a variety of assumptions, which have to be made, for it is rarely possible to be certain about even the most basic of matters, such as the strength of the force at a given date in future; of gauging the supply position in the country and abroad, both at the moment and at various points of time in the future, having regard to price levels and in so far as the internal purchases are concerned; of appreciating the effect of the purchases on the general price level; of planning and evaluating the availability of storage space of the right type; and finally of providing against transport bottlenecks.

A number of technical and professional questions have to be borne in mind : it is, for instance, not much use buying weapons which are almost certain to be out of date a couple of years hence, (unless, of course, nothing more upto-date is procurable, and the weapons are likely to be put to immediate use); nor is it any advantage possessing equipment which we are unlikely to have to use in any foreseeable contingency. Thought has also to be given to the procurement of spare parts — for most weapons have parts which are quickly used up — of ammunition or of the explosives required for filling the particular type of ammunition. All this is mentioned illustratively to give an idea of the magnitude and the complexity of the task that confronts the Services Headquarters and the Defence Ministry assisted by the associated finance in dealing with the large number and variety of supply problems that they are called upon to resolve. Not merely have they to handle what are after all relatively straightforward problems connected with the laying down of specifications, with the purchase, storage and transport, but also deal with a host of other problems such as the location of sources

of supply, the making of adjustments necessary in demands resulting from the variations in deliveries, protection and preservation of stores in efficient condition, etc.

The size of the Services' demand and the variety of their requirements emphasises the close dependence of the defence organization on the soundness of the economic and industrial health of our country. Military power is much more than weapons of war and men in uniforms; it is also the power to produce, which, in its turn, is dependent upon the strength of the whole basic economy of the country in all its aspects. Every step, therefore, has to be taken with care so as not to weaken in any way that basic economy. The inter-dependence is extraordinarily close. This is a fact which, though obvious, tends often to be forgotten. There ought to be no question of a rivalry between civilian and military interests: the interests of the two are not merely interdependent, but entirely common, and can only be so, particularly during war time.

Until the 15th of August 1947, it was the responsibility of the Services Ministries in the United Kingdom to see that the Indian Defence forces were kept adequately supplied in all respects. The task of the Services Headquarters in India was, therefore, comparatively simple: they had merely to work out, in accordance with certain carefully worked out formulas, what their requirements were expected to be in respect of each different item of store, and to remit the resultant position to the War Office, or the Admiralty, or the Air Ministry as the case may be. Only a limited capacity had been developed in India for the production of war-like equipment, and that was confined, in the main, to small arms and ammunition of certain kinds. In addition, capacity had been created or already existed for the manufacture of certain textile and leather goods. It was only during the Second World War that the value of India as a producing centre was realized and the British Government decided upon the establishment of a number of new Ordnance Factories in the country. In addition, such civilian industrial capacity as already existed in the country, engineering in particular, was fully geared to the war effort. The British Government realized for the first time that given proper guidance, the Indian workman was capable of becoming as skilled a workman as might be necessary for the performance of the most skilled task.

For Independent India, the problem of keeping its Armed Forces equipped with modern weapons is quite one of the most difficult problems among the numerous difficult problems that face the country today. It is desirable to survey briefly what we are in fact able to obtain from our own country. The industrial development of our country is still, in spite of two Plans and half of the third,

only in its early stages. This is true in spite of the fact that in some directions they are able to meet the requirements not merely of the Armed Forces, but of the entire country. Thus, in the matter of cotton textiles, of cement, of leather goods, of rubber products and of certain types of steel, we can be virtually independent of foreign supplies. We have also a fairly highly developed general engineering industry capable of meeting our demand of a large number of miscellaneous ordnance stores. We can assemble and maintain and repair any aircraft, we can build cargo ships of six to seven thousand tons. The fact remains, however, that in the main, we are still dependent very largely on foreign countries for important items of equipment, such as heavy armaments, guns, vehicles, aero engines, signal and electronic equipment, etc. The backwardness of the industrial development in the country is such that the ordnance factories under Government control have necessarily to be self-contained to a far greater extent that is economically advantageous. There is no reason why a far large number of important and essential parts of the requisite quality and standards cannot be produced by civilian industry. As industrialization proceeds forward, undoubtedly many of our problems of obtaining military supplies within the country will become much easier. But there should be no question of self-sufficiency being attained in foreseeable future. Fortunately, self-sufficiency is neither necessary nor to our advantage; nor, of course, if we take a realistic view, for many many years to come is it likely to become anything like a practical proposition. It is not to our advantage, because, until we become capable of such high quality of operational research that we become capable of designing and producing new and more efficient weapons and equipment, we can only produce stores which may be up-to-date, or near up-to-date when we undertake their production, but which will soon become obsolete. It is not irrelevant to refer here to a matter which achieved quite an amount of publicity, the question of producing an up-to-date basic weapon, the self-loading rifle. It was said that it had become a regular item of production, that we had begun to produce a large number of these : in fact, I doubt if we have yet overcome all the teething troubles of large-scale production. Meantime, elsewhere, this type of rifle has been in use for a number of years !

Although we already possess in this country a fairly large number of technically skilled personnel, we are still sadly deficient in the technical know-how over a very wide area and we are particularly short of first-rate design engineers and scientific workers. In order to get over this deficiency as quickly as possible, it was decided fairly soon after Partition to start the Defence Science Organization under the Scientific Adviser to the Defence Ministry. It is only,

however, as it gathers experience that it will be able to help in any significant way in evolving new weapons and new equipment. Meantime, the most important contribution that the Organization has made, and will go on making, is to make available an ever increasing number of men trained in defence research and capable of studying in conjunction with military establishments practical problems and generally of carrying out efficiently what is known as operational research.

A machine-tool-cum-prototype factory was established in 1952 to serve as the foundation of an armaments factory in the country. It was intended to enable the establishments of an organization to design, to adapt existing designs, and to manufacture therefrom in small numbers different types of equipment. It was designed to produce as necessary, highly specialized machine tools and, above all, it was to provide training ground for any promising worker who was keen on developing into a really skilled worker. As part of that factory, an artisan training school was established, capable of training some 300 young men at a time, and it was expected that from the trained men turned out by that school, there would be available for ordnance factories as well as for the industry generally in the country first class tool makers and designers. In addition, training schemes were initiated at a number of other ordnance factories. All these were supplemented by a scheme under which a fair number of technically trained men were sent abroad for further training in specific types of work.

An Armaments Development Centre was established to enable selected officers of the three Services and scientists from the Defence Science Organization to receive training in the important task of appreciating and resolving the numerous problems which attend the work of developing new weapons. This technical and specialized knowledge of weapons is still generally lacking and students have to be sent abroad to learn even the rudiments of the work in this direction. A successful weapon represents a close integration of practical and technical elements. With regard to both these aspects, the soldier and the scientist have something to say. The evolution of a weapon passes through several stages. We are still very much at the stage of forging instruments to do the thing rather than to be able to do the thing itself. That stage will come soon, but has not yet come. How these and similar institutions are developing, how far they have lived up to our expectations, all these are matters on which the country can be kept informed without any damage to the security of the country. The public have a right to such information.

Even if we succeed in establishing new factories and in in-

creasing the trained manpower, we shall find ourselves up against the difficulty of obtaining adequate supplies of raw materials and semi-manufactured goods to keep those factories functioning at the requisite efficiency. We are still dependent on foreign countries for the supply of many critical raw materials and semi-manufactured items such as non-ferrous metals, tool steel, etc.

It is against this background of conditions of supply and production which obtain abroad and in the country that we have to determine our own purchase and procurement policy on the one hand and our policy for the development of indigenous manufacture on the other. We have to recognize that the countries which have to design, develop and manufacture warlike stores in which we are interested, are not particularly desirous of selling them to us. Their order book would ordinarily be full up. In any case their own requirements must necessarily come first; those of the countries whose re-armament they would like to be completed urgently must come next, and only when these two sets of requirements are covered, can the requirements of friendly countries be taken into consideration. This is where non-alignment is not necessarily an advantage.

No country is completely self-sufficient in the matter of armaments and different countries are in the forefront at different times in regard to the production of a given equipment. In the matter of procurement of military equipment, it is a wise policy to have allies. Fortunately, irrespective of our foreign policy in this respect, the attitude of both the United Kingdom and the United States of America, on the whole, has been helpful in regard to the supply of machinery and other capital goods, semi-manufactures of certain types, as well as military equipment. Our handicaps are rooted in ourselves, in our unwillingness to face facts. A dozen MIGs are precious little use if there is active warfare with a country which has several hundreds of them. Moreover, for an air force to be capable of providing adequate air defence, it must have not merely a sufficiency of aircraft of the right type, but also anti-aircraft guns, radar, strategically located airfields, large number of trained pilots, etc. Our aim should be to procure all these.

It had been the declared objective of the Government of India for some years now to establish the production in our own country of every store and item of equipment that was regarded as basic and to the extent possible of critical items. A shift from it to produce the more sophisticated weapons latterly was perhaps premature. One has to realize that our progress must necessarily be slow and it is the path of wisdom to hasten slowly. The establishment of a factory is an expensive proposition at any time. It is particularly so today. Even a small plant for the manufacture of some of the

essential explosives is estimated to cost something in the neighbourhood of 25 to 30 crores. And we need a number of other industrial plants. Quite apart from such factories, it would be necessary to organise the training of a sufficiency of technical manpower. Then again we have to overcome the difficulties inherent in the production of a large number of important and key raw materials, raw materials which include in this context semi-manufactures also. And when we have allowed for all this, we would still have to reckon with the fact that technology is advancing continuously and at an ever accelerating rate. We are in no position to enter the race, much less have a chance of succeeding in it. We would be well advised, therefore, to prepare a long term plan of defence production, and to link it closely with industries engaged in civilian production. We would then give ourselves a broader and more solid base of development.

If the position in regard to production and procurement of warlike equipment and stores is as I have described—and I may assure you I have not exaggerated—ought not our foreign policy to be conducted with an eye to making the task of procuring the necessary and essential equipment and stores somewhat easier? Just as a country's defence policy is determined by its foreign policy, the latter too, has to be conditioned by the obstacles in the way of the fulfilment of its defence policy, and make it its task to remove these.

IV

I shall attempt briefly to bring the various strands of thought together and to state in a summary form my conception of a sound policy for the defence of India.

The preservation of its security must be the first objective of a country's defence policy: that must also be the first objective of its foreign policy. The aim of the latter must, therefore, be to secure for the country such friends and allies and such goodwill that the country's ability to defend itself and to preserve its frontiers inviolate is adequately strengthened. There can be no quarrel with a policy of non-alignment as such: at a given time, that may well be the right policy, if the international situation then is such that only the adoption of such a policy will ensure best the security of the country. In other words, a country's foreign policy is not immutable: it has to adapt itself to the changing pattern and conditions in the international world.

In so far as the policy of non-alignment in the sense of "not taking sides" among the two or more groups of the countries of the world is concerned, it is unexceptionable. To be friends with all and enemy to none is an excellent precept: it is not however an easy one

to follow in practice because, as in individual personal relations, so also in international affairs, one is likely to be more friendly with one country rather than with another for a variety of reasons but usually for the more abiding reason of similarity of outlook on basic issues. But even if you adopt the policy of non-alignment as your foreign policy, you cannot let it over-ride the basic goal of your foreign policy, namely the security of your country. If that is imperilled, you will inevitably be compelled to modify your approach to non-alignment in practice. Indeed even before the stage of actual danger is reached, you should have had the foresight to adjust your policy of non-alignment suitably so that your country's ability to defend itself is strengthened and not weakened in any way.

Had we had sufficient foresight, we would have realised early that maintenance of Tibet's de facto independence was of vital importance to our country's independence, and done everything that lay in our power to assist the Tibetans in preserving that position. Once, however, China had made Tibet one of its regions, we should have realised that China thereafter, as our next door neighbour, had necessarily to be judged not by its professions but by its deeds. Even if we look upon all countries as our friends, it is wiser for us to watch all our frontiers carefully and closely and not take anything for granted: some portions of our frontiers we would watch with greater vigilance than others, but the aim would be not to let ourselves be taken by surprise. Thus, since we have not been certain in our minds about Pakistan's intentions, we have been particularly vigilant along our frontiers with that country. As soon as we found that China may conceivably have intentions other than what they professed in their Panch Sheel Treaty in 1954, we should have begun immediately to re-align our defence and foreign policies suitably. We did not do so and we have paid the first instalment of the price in the humiliating military defeat in November-December 1962. The large encroachments made by China from 1956 onwards, we have chosen to treat as mere momentary mental aberrations on the part of China, which it would withdraw from as soon as it recovered its balance of mind. Its successful military aggression, however, could not be so treated. It is fairly certain that it was the spontaneous manner in which the genuine friends of the country rushed to its assistance that the enemy thought better of proceeding further. The people of the country awoke to the danger threatening its independence even more vigorously than the Government and showed in unmistakable terms that in spite of its failure so far, it would support the Government whole-heartedly in whatever was necessary for driving the Chinese out of our territories. The Government, responding, has stated categorically that there could be no question of non-alignment

with China.

As things are today, we must plan to defend ourselves against two unfriendly countries on our borders, Pakistan and China. We are still exploring the possibility of arriving at an understanding with Pakistan in regard to Kashmir. Judging from the haste with which it has chosen to arrive at an agreement with China at this particular juncture, it looks extremely unlikely that it would adopt an attitude which would make possible some kind of a compromise solution of the Kashmir tangle. Admittedly there would have to be on our part also a definite determination to reach a settlement which would be fair to both sides and would not have in it seeds for a further conflict. If a settlement with Pakistan can be reached and it would agree thereafter to adopt a neutral attitude in our conflict with China, our defence problem would be made appreciably easier. For the present, however, we must proceed on the assumption that we shall have to face both these countries.

We may without hesitation trust our Service Chiefs to evolve with the assistance of their staff and such foreign expert advice as is available to them, a sound military doctrine. They will no doubt insist upon the expansion, reorganisation, and re-equipping of the army and the air force according to that doctrine and a corresponding weapons system: and the necessary equipping will be possible only if we are prepared unreservedly to accept aid in terms of equipment. Standardisation is vital if a satisfactory standard of efficiency is to be achieved and maintained, and should not again be allowed to be sacrificed at the altar of non-alignment, misinterpreted to mean acceptance of all countries as being equally friendly to us. Non-alignment as a positive concept can only mean "look upon all as your friends, but just as all men are not equal, it is necessary to postulate that some friends will be more disinterested than others". The aid which was rushed to us unstintingly and unconditionally when we were face to face with an extremely grim situation should be as convincing and cogent an indicator of the sources we must look to for the re-equipping of our expanded forces.

The additional tax burden which it is proposed to impose will readily be accepted by the western countries as indicative of our determination to resist the Chinese aggression and to drive China out eventually from such portions of Indian territory as it has encroached upon. We should be realistic enough to realise, however, that no matter how great the burden we are prepared to bear, it would not be possible for us in the immediate and near future to cope with China unaided, much less China with Pakistan as its ally. We, for our part, should not therefore have any hesitation in accepting whatever assistance the western powers are prepared to give

us in order that both China and Pakistan realise that the adoption of aggressive and warlike tactics will not enable them to achieve their ends. And when they have come to that conclusion, any discussion across the table would surely be conducted in a realistic manner and on a basis of equality.

In preparing ourselves for a possible conflict with China and Pakistan we have, it should be realised, not only a military problem but also a major internal security problem. The subversive methods of communism can only be contained effectively if there is a clear appreciation of the dangers involved in them. In regard to Pakistan the nature of the security problem raised is somewhat different and calls for a different type of handling. The important thing is to realise that in both cases, and, in particular, in regard to communism if there is insufficient vigilance the consequences to the country could easily be extremely grave.

I have now finished and seek your forgiveness for the length of my talk. I am grateful to you for having borne with me so patiently.

R. B. R. R. KALE MEMORIAL LECTURES

Lecturer	Subject	Year
1. V. G. KALE	<i>Modern Tendencies in Economic Thought and Policy*</i>	1937
2. G. S. GHURYE	<i>The Social Process†</i>	1938
3. B. R. AMBEDKAR	<i>Federation Versus Freedom†</i>	1939
4. K. T. SHAH	<i>The Constituent Assembly*</i>	1940
5. A. V. THAKKAR	<i>The Problem of the Aborigines in India†</i>	1941
6. V. L. MEHTA	<i>A Plea for Planning in Co-operation†</i>	1942
7. S. G. VAZE	<i>The Formation of Federations</i>	1943
8. JOHN MATHAI	<i>Economic Policy*</i>	1944
9. S. R. DESHPANDE	<i>A Statistical Approach to Vital Economic Problems*</i>	1945
10. J. V. JOSHI	<i>India's Sterling Balances*</i>	1946
11. C. D. DESHMUKH	<i>Central Banking in India : A Retrospect†</i>	1948
12. D. G. KARVE	<i>Public Administration in Democracy†</i>	1949
13. H. L. DEY	<i>Policy of Protection in India</i>	1950
14. M. VENKAT-RANGAIYA	<i>Competitive and Co-operative Trends in Federalism</i>	1951
15. A. D. GORWALA	<i>The Role of the Administrator : Past, Policy of Protection in India</i>	1950 ? 2
16. LAXMANSHASTRI JOSHI	<i>Indian Nationalism*</i>	1953
17. W. R. NATU	<i>Public Administration and Economic Development†</i>	1954
18. P. C. MAHALANOBIS	<i>Some Thoughts on Planning in India*</i>	1955
19. S. K. MURANJAN	<i>Reflections on Economic Growth and Progress</i>	1956
20. B. K. MADAN	<i>Financing the Second Five Year Plan</i>	1957
21. V. K. R. V. RAO	<i>Some Reflections on the Rate of Saving in a Development Economy*</i>	1958
22. K. P. CHATTO-PADHYAY	<i>Some Approaches to Study of Social Change</i>	1959
23. B. VENKATAPPIAH	<i>The Role of the Reserve Bank of India in the Development of Credit Institutions</i>	1960
24. B. N. GANGULI	<i>Economic Integration : Regional, National and International</i>	1961
25. A. APPADORAI	<i>Dilemma in Modern Foreign Policy</i>	1962

* Not published.

† Out of print.

N.B. No lecture was delivered in 1947.

Gokhale Institute's recent publication :

WASTAGE IN COLLEGE EDUCATION

by

A. R. KAMAT

A. G. DESHMUKH

THE BOOK consists of two studies regarding students of the Poona University. The first study considers a three-year entry of students to arts and science of the Fergusson College and deals with wastage and stagnation amongst them. The data is also analysed by several important factors such as S.S.C. examination marks, age, caste, and guardian's income and occupation. The second study analyses the failures at the Pre-Degree examination 1961 of the Poona University with a view to indicate broadly the problem areas and possible remedial measures.

Gokhale Institute Publication in press :

NATIONAL INCOME AND PUBLIC EXPENDITURE IN

INDIA : 1900-01-1952-53

by

K. MUKERJI

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