A PLEA FOR BETTER CO-ORDINATION OF BOTANICAL WORK IN INDIA*

BY H. CHAUDHURI, D.Sc., LONDON, PH.D., D.I.C.

Head of the Department of University Teaching in Botany, and Director, Kashyap Research Laboratory, Panjab University, Lahore

In his Presidential Address at the Madras meeting last year, Rai Bahadur Professor K. C. Mehta suggested that we should take up without delay "some if not all the line of work that remains untouched so far". Among other things, he suggested the appointment of nine Standing Subject Committees and three Regional Committees. I considered many of these suggestions important and practical and I have tried to give effect to some of these. You know, I have sent resolutions for incorporating new rules which you will be asked to consider to-day. I have proposed the appointment of the following sub-committees for the present, viz.:

(a) Phytosociology and Plant Physiology Sub-committee,
(b) Plant Genetics Sub-committee,
(c) Phytopathology Sub-committee, and
(d) Economic and Industrial Sub-committee.

Each sub-committee is to have its own Secretary and 2-3 members with power to co-opt more whenever necessary. These sub-committees will periodically bring to the notice of the members, through the pages of our Journal, the published work, as well as reports of work in progress by workers in this country. They shall also publish very brief reviews of important literature published abroad, specially on newer lines of research and technique and also establish contact with foreign societies. For instance the Sub-committee on Phytosociology and Plant Physiology will establish contact with the British Ecological Society, American Ecological Society, International Association of Phytosociology, American Society of Plant Physiologists and such other societies in foreign land and supply information to the members on mapping of vegetation and other ecological and physiological matters. The Economic and Industrial Sub-committee, besides other functions, will bring to the notice of the proper authorities, may be Government or State or Private persons or Companies, researches of commercial and industrial importance. The members of this Sub-committee will take note of researches of potential monetary value, and research workers also will bring to their notice any result likely to be useful. When this Sub-committee functions properly, Industrialists will no

---

* Presidential Address, Indian Botanical Society, Twentieth Annual Meeting, Benares, January 3, 1941.
doubt approach them for the solution of any problem requiring the knowledge of any special branch of Botany. Instead of Regional Branches, I have proposed amendment of our rules so as to provide for local branches at different centres of learning and for affiliating societies having similar aims and objects to those of our Society. Holding of meetings of members from different centres of a regional branch even once or twice during the year will not be a feasible one, but if local branches were started with six or more members of the parent society and if these branches were given the right to enroll local student members at a nominal fee to meet the cost of expenses of the local branch, more meetings could be held which would no doubt interest more people in the work of the Society. Activities of these branches will be published in the Journal of our Society.

By affiliating other societies having similar aims and objects to those of ours, we shall be helping each other. We shall bring to the notice of the botanists in different parts of India and abroad through the pages of our Journal the work done by them. We shall have no control over the management of the affiliated societies. I have suggested that they shall pay Rs. 25 as affiliation fee and receive 2 copies of our Journal free, or if you so decide, they shall pay only a nominal fee of Rs. 5 p.a. for affiliation. All activities of these societies will be published in the pages of our Journal.

I have no doubt you will give the best consideration to the above proposals.

For the advancement of Botany not only work on co-operative lines has to be taken up in every field of botanical studies and research but effort has to be made to unite the various Botanical interests. For this purpose, and also to prevent wastage of time and energy, our work has to be properly planned and this could only be done by small sub-committees. In this Address, I intend to lay great emphasis on co-operation, collaboration and co-ordination in scientific work.

Co-operation in the field of scientific work is very important. I have as a researcher felt this lack of co-operation very much. I am not complaining of lack of co-operation between individual workers in a place or between workers in one University and another but between workers in the Government departments and workers outside it, to the great detriment of progress of scientific research in this country. I shall make this point clear by referring to some concrete cases of which I have got personal experience. Many of you are no doubt aware of the existence of a Board of Agriculture and Animal Husbandry, which has a “Crops and Soils Wing”. Meetings of this Wing are arranged in alternate years by the Imperial Council of Agricultural Research and scientific papers are read and discussed; but these meetings are practically confined to the workers in the Government Agricultural Department. Once in a letter to the Agricultural Commissioner, I wrote “I expected the I.C.A.R. to invite workers in the University to take part in these meetings. After all, the research of Agricultural importance is not confined
within the precincts of the Agricultural departments either in this country or abroad. Work of far-reaching agricultural importance has been done by the workers in the Universities and you will agree that even in this country it is desirable to bring our work to the notice of the agriculturist and other agricultural research workers. The I.C.A.R. should give us the same facilities as are given to the workers in the agricultural departments in this respect.” “So far as University workers are concerned,” the Agricultural Commissioner in his reply informed me, “the procedure followed has been to invite to the Crops and Soils Wing,

(i) those workers who are nominated by the Inter-University Board in accordance with the constitution of the Wing as laid down by the Government, and

(ii) particular individuals invited to take the lead in a debate on a particular subject in which they happen to be specialists.” He further added, “When the Crops and Soils Wing meeting is held away from Delhi and in a University town, then workers of the local University are often invited to join the Wing as you were at the Lahore meeting.” Perhaps in many of the aspects discussed at the Crops and Soils meetings, more work is being done in the different Universities in India, and these workers would very much like to bring to the notice of the Crops and Soils Wing their work and also take part in the deliberations; but this is being prevented on account of the narrow outlook of the authorities who cannot realize that they are thereby hampering the progress of the science and the real interest of our country. Not only was my very legitimate request to be present and communicate papers turned down, but even the request for a copy of the draft Proceedings of the Wing with abstracts of the papers read and discussed was refused. The Agricultural Commissioner wrote “As you are not a member of the Crops and Soils Wing of the Board of Agriculture and Animal Husbandry, 1939, it is not possible to send you a copy of the draft proceedings,” but he kindly added “The printed proceedings will of course be available as a priced publication for any one who desires to purchase it”. So even this little co-operation and courtesy to a scientific worker doing similar kind of work are denied. It will be for the benefit of the workers both in the Government Agricultural Department and in the University to know each other’s work and discuss matters on a common platform. It is needless to emphasise that many aspects of the problems discussed at the Wing meetings are receiving particular attention from the University workers. If these workers are asked to bring their points of view to the notice of the Wing, much benefit would accrue to all concerned. A little departure from the official routine would do no harm.

In the 1937 Crops and Soils Wing meeting at Lahore, which I attended by invitation, I sent a notice that I wanted to move a resolution to the effect that the workers in the Universities should have the same opportunity as other workers in the Government
Agricultural Departments to bring their work to the notice of the Conference. I was informed in reply, "I do not think the resolution you mention is necessary. We welcome all speakers and the University representatives or visitors are very welcome to give us the help of their advice," but actually the position seems to have worsened since then.

In the early days of the I.C.A.R., I undertook an investigation of certain Citrus diseases in a scheme financed by them. I think it was one of the very few schemes which were completed within the scheduled time proposed when the scheme was first submitted. When the result of the investigation was published and I returned the equipments purchased with their money, the I.C.A.R. demanded the slides of the sections from which I had made drawings in the publication. This I was loth to do. I maintained that the slides were like the manuscript of my paper, and so must remain with me. I had to get the opinions of scientists from all parts of the world on this point to convince the authorities that those slides should remain with me rather than with anybody else.

Even in the matter of publication of scientific articles my experience of the I.C.A.R. is not a happy one. Several years back I sent a report on samples of soil and water from the paddy fields of Bengal. As the samples had been sent to me by the I.C.A.R., I asked permission to publish the same in some journal as I considered it interesting. The paper, however, was accepted for publication by the I.C.A.R. Several months later, I received a reprint of a paper on the same subject by a chemist who had got quite a different result from mine with an enclosed letter from the I.C.A.R., requesting me that in view of the above paper, I should not press for the publication of my paper. I was in England at that time. When I returned, I searched for my original manuscript, but I could not find the same. Recently, however, I found it, and some of you might have read my note on the Nitrogen fixation in the Rice-field soils of Bengal, in the June issue of 'Nature' last year.

You are no doubt aware of the important investigations on the epiphytotics of rust on wheat in the plains of India carried out by Prof. Mehta of Agra College. In a symposium on rust problems in India led by Prof. Mehta just three years back at the Jubilee session of the Indian Science Congress at Calcutta, Prof. A. H. R. Buller, F.R.S., of Manitoba, who took part said, "All these recommendations seem to me to be wise and practical and I trust the Government will see its way to carry them out particularly No. 2, which would mean the suppression of wheat crop which is grown on only about 2000 acres." The recommendation No. 2 read, "that in the Nilgiri and Palni Hills the first crop of wheat now sown during April-June should not be sown at all, but should be replaced by some other crop." I said in that discussion, "It seems very important to me that Government should as a test-measure carry out Professor Mehta's suggestion for a couple of years in the
Palni and Nilgiri centres. If successful, the amount of saving will amount to several million rupees.” “It should not do to stop with a scientific report.” But I am afraid it is going to be a mere report now. Though loss due to rusts amounts to nearly six crores of rupees annually, it is a pity that some more money could not be provided to test this recommendation under Prof. Mehta’s direction though eminent scientists thought it sound and practical. I cannot help feeling that if on the Advisory Board, a larger number of University representatives were present, they would certainly recommend the testing of this measure. There is no end of such instances of narrow scientific outlook. Last year one of my research students was working on certain aspects of vernalization of linseed plants. It so happened that there was an epiphytotic of rust on linseed that year and it was noticed in our experimental plots that the intensity of the epiphytotics inversely decreased with the length of pre-sowing cold treatment. The plants which had been exposed for the longest period escaped the disease altogether. I published a note on the same and sent it to the Agricultural Commissioner enquiring if the I.C.A.R. would favour a scheme on the effect of vernalization on disease resistance. I considered the investigation was likely to yield very valuable results. But the reply was “We are already financing one scheme which is dealing with vernalization and I do not think the Advisory Board would be willing to consider another at present.” So vernalization was vernalization, it did not matter for them whether it was an investigation on this crop or that crop, whether for the plains or hills, whether stimulating vegetative activity or flowering, whether disease resistance or frost resistance. Their duty was done. One investigation on vernalization had been encouraged! We should see that this kind of attitude is changed.

Regarding schemes submitted by the University workers, I am told, “All schemes receive very careful scrutiny and University schemes are, if anything, treated more tenderly than those coming from Governments or States.” I wish it were so. But I have found that a University scheme passed by the Provincial Research Council after it had been recommended by the special sub-committee of the Council and forwarded to the I.C.A.R., when it came before their relevant sub-committee, the author of the scheme was invited to come up to Simla to explain his scheme at his own cost if he liked. Since the scheme was not to benefit the author personally in anyway, the invitation to attend at his own cost was refused, and there was no one to explain a very technical scheme for the benefit of the members. Government and State-schemes had their representatives, and very often the authors attended at Government expense to explain and advise. I wonder if this was the more tender treatment referred to above.

Many of the schemes, sanctioned and financed by the Government, I think, will not lead to any tangible result and should not have got through but for the present constitution and the procedure followed. I would suggest to the authorities that when schemes
are received by the I.C.A.R. a copy of the same, relating to Botanical matters, may be sent to the Secretary, Indian Botanical Society, who would forward the same to the Secretary of the relevant sub-committee that you are being asked to appoint to-day. The Secretary of the particular sub-committee will circulate the same to its members and forward their recommendation duly. We must also try to get representation on the I.C.A.R. committees for Botany—applied or pure. Happily we have amongst our members, people from all spheres and specialists in different branches. We could easily send representatives by rotation.

Authorities in the Government, who are responsible for selection of subjects for the various competitive examinations conducted by the Federal Public Service Examination, are not favourably disposed towards the biological sciences. Subjects like Botany and Zoology, which were introduced for the first time in the I.A.A.S. and other joint competitive examinations in 1931, were taken out of the list in 1934, because "of difficulty of arranging for such large number of optional subjects," and during the two years these subjects were included in the list, every year one or more of our students successfully competed. Two of them now, I understand, are working as Under-Secretaries in the Government of India. This deletion of the biological sciences from the list has affected our subjects very adversely. The best boys will naturally think of entering for the competitive examinations, and these subjects being ruled out, they do not take up these subjects any more. This callous indifference towards the biological sciences has got to be stopped. We, in the Panjab, have taken up the matter again, and I hope you will also press for the inclusion of these subjects. The importance of these subjects must be recognized. I consider no culture complete without the fundamental knowledge of biology.

I shall now deal briefly with some of the Research institutions relating fully or partly to Botanical Sciences and maintained by the Government of India. Here may be included

(1) the Imperial Agricultural Research Institute at New Delhi with sub-stations at different places,
(2) Indian Forest Research Institute and College, Dehra Dun,
(3) Industrial Section of the Botanical Survey of India, Calcutta,
(4) The Royal Botanical Gardens, Sibpur, Howrah, and
(5) The Imperial Sugarcane Station, Coimbatore.

I think the work, in some of these institutions, is going on in a stereotyped fashion. I realize the limitation of research grant and staff in many cases, making it difficult to enlarge the activities of these establishments in the present order of things, but I am of opinion that if the principle of co-operation and collaboration with the Universities were accepted and established and the research work properly co-ordinated, the output of useful work could be
increased considerably. For this I would suggest the creation of Advisory Committees with each of these posts under the Government of India. For instance at the Imperial Agricultural Research Institute, New Delhi, an advisory committee with the Imperial Botanist as the convener and another with the Imperial Mycologist as the convener may be formed. Not more than 5 or 6 members should be on each committee and the I.B.S. and workers of the Universities will be represented on these committees.

A great deal of valuable research work on Cytology is being done in the Universities, but the time has come to consider seriously whether a little more utilitarian bias would not be all to the good. The Imperial Botanist is breeding new crops and is also in touch with the Government workers in the Provinces doing similar work. The breeder, we know, must have the guidance of the cytologist whose microscopical analysis will indicate the number of chromosomes in the cells of the various parent plants, and the general behaviour between the chromosomes to be mated in the distant crossing. It is not possible either for the Imperial Botanist or the Provincial Agricultural Botanist to study the cytotgenetics of all the plants raised. The advisory committee will see that extra material is distributed to the workers in the Universities and private research institutes. They will advise and arrange for new lines of work and work of All-India importance. Whenever team work is required in which workers from different parts of India will be needed, instead of limiting the choice of workers to the agricultural departments only, they could arrange for such team work by taking workers from every sphere and recommend financial help if necessary. The same may be said about the Imperial Mycologist’s department. Much systematic work on Indian Fungi yet remains to be done. An idea of this may be had if we look at the Supplement I to Fungi of India in which out of a little over 500 species listed, very nearly 300 have been recorded and published by workers in my laboratory, and I cannot say we have touched even the fringe of the work that remains yet to be done from the Panjab. The Committee, if appointed, could easily arrange for working tables for research workers, who could be sent to the Agricultural Research Institute at Delhi to compare and complete this systematic work. Provision for two tables which could be reserved for 15 days at a time could easily be made, so that annually 24 people could work there.* We want more co-operation, and the work has to be co-ordinated.

At one time, there used to be held at Pusa, a conference of mycological workers from all parts of India in which both Government and non-Government people participated. This conference should be revived. At such conferences results of the work done

*I am thankful to Dr. Padwick, the Imperial Mycologist, for the information that this is already in force and that research workers from all parts of the country are given the best available facilities for work there.
at different centres could be correlated and plans for the following
year prepared.

The Botanist and the Mycologist at the Forest Research Insti-
tute at Dehra Dun, could also enlarge their sphere of work by
establishing contact with workers in the Universities. I am not
trying to belittle the very useful and important contributions made
by the Forest Botanist, specially on Forest Ecology and by the
Mycologist, specially in establishing the alternate hosts of rusts of
the forest plants and thereby removing many obscurities. We
are very grateful to them. But their departments are either one
or two-men departments, and certainly much more work could be
done by properly harnessing the resources, both in men and
materials, in the Universities. While talking of the Forest Research
Institute, I must also pay tribute to the Wood Technologist there
for the excellent and important work now being done by him.

The Indian Botanical Survey is now practically defunct, but
I see no reason why survey work should not continue and that
better than before if carried on a regional basis. We have now
in the Universities and Colleges men trained in this country and
abroad, who could take up the systematic study of the higher
plants with credit. A certain amount of financial help will have
to be given in some cases and herbarium sheets will have to be
loaned out; otherwise facilities have to be given to the workers
to work in the Herbarium of the Royal Botanic Garden, without
any interference. This work will be arranged by the Garden
Advisory Committee, who will distribute the work on a regional
basis to trained workers in different parts of the country. If this
is done, we shall have not only a complete revised flora of India
on regional basis but also the Herbarium will be very much
enriched. In this way a National Herbarium for India as
envisaged by Prof. S. P. Agharkar in his opening remarks on a
discussion on this subject in the Science Congress Jubilee Session
could be built up. All this will be done at a very nominal expense
by proper co-operation, collaboration and co-ordination. Our
country is like a vast continent. There are room and need for many
more workers. The Advisory Committee on which the I.B.S. will
be represented will also see that whole-time men in the Herbarium
devote their energy to revision of families and study of new plants
belonging to the higher groups of plants for which the herbarium
is reputed and not dissipate their energy by dabbling in every
branch of plant-life. After all we have a very limited number of
men in these departments, and they must fully utilize the facilities
afforded them. Here I must acknowledge the important work
done by the new Curator of the Herbarium in bringing out "A
Revision of the Labiate of the Indian Empire". This is an important
contribution, and there is need for such revision of other families
and genera. The Royal Botanic Garden Herbarium is primarily
a herbarium for higher plants and the vast material there will
provide work for scores of systematic workers for many years to
come. Any attempt to make it a repository for all kinds of plants
would be futile and should be deprecated. If I have a polypore to name, I shall send the same to Professor S. R. Bose at the Carmaichael Medical College, Calcutta. I suppose others in this country will do the same. Similarly perhaps if any Himalayan Liverwort has to be compared and named, it will be sent to the Panjab University Botanical Herbarium as is done now from all quarters. As long as described plants are kept in properly looked after herbariums, and are available for consultation why should one worry which herbarium it is? If the principle of co-operation, and if necessary, collaboration with University workers which I am advocating had been followed, a new edition of Prain’s Bengal Plants would have seen the light many years back. It is a pity that no up-to-date flora should be available to the Bengal Botanists.

The officer-in-charge of the Industrial Section of the Botanical Survey of India has brought out useful catalogues of Medicinal Plant Exhibits and of Spice and Fodder Plant Exhibits in the Industrial Section of the Indian Museum. He has also published useful handy notes regarding a number of Indian Medicinal plants. But unfortunately his is also practically a one-man department. If there were an advisory committee here too, more work could be arranged on co-operative basis and the whole co-ordinated. The Imperial Sugarcane Research Station at Coimbatore is no doubt doing valuable work, but the same suggestions as I have made in the case of the Imperial Botanist are applicable here. The recent decision to add a sugarcane physiologist on the staff there is a welcome one.

Advisory Committees are very helpful for proper planning and co-ordination. The Indian Botanical Society must press for the appointment of advisory committees. The Director of the newly created Scientific and Industrial Research Bureau has already shown how much more work could be done, if specialist sub-committees were appointed for advisory purposes and for giving directions. The Director has already encouraged many research schemes in collaboration with the University and while making a “Compilation of Annual List of Industrial Researches in India” he is taking into account the researches carried out or in progress at the various University and College laboratories which had not been done before. “The Indian Central Jute Committee in its meeting last September decided on the policy of collaboration with the Universities of Calcutta and Dacca and to co-opt some professors of these Universities on its technological and agricultural sub-committees. The immediate objects of collaboration were stated to be primarily twofold. First the committee thought that the University scientists, many of whom were perhaps working on similar lines, might offer valuable advice on the work that was being done in the Committee’s Research sections. Even if this immediate work might be different from the investigations that were being undertaken by the different technical sections of the committee, they felt that their familiarity with the basic scientific methods and processes might be of considerable help and value to the committee’s
research workers. Secondly, the Committee were inclined to think that the Universities, on their part, could also further their aims and objects by undertaking fundamental research on a number of subjects for which there was not, and indeed could not be, any room in the programmes of work laid down for the different sections of the committee. Such fundamental investigation might lead to results of far-reaching consequence which might be of abiding benefit to the jute industry of this country.” I have quoted the above from a Press report of the meeting, as it appeared to me like a very bright silver lining in the black cloud of mistrust and isolationism. It is very encouraging indeed. I do hope the President of the Central Cotton Committee who is the Vice-Chairman of the I.C.A.R. will bring his liberal and healthy outlook to the affairs of the latter body as well, and give the University workers their rightful place in the work for the good of the country. The same policy should be followed in cotton, wheat and tea research schemes. Among other Government departments, the Indian Geological Survey has been co-operating with Prof. Sahni by sending out Museum specimens and in other ways, and I am happy to find that Prof. Sahni from the University, is co-ordinating the paleo-botanical research in India.

The proposal for starting a Marine Biological Station at Krussadi, I remember, was discussed at a meeting of the I.B.S. Last year the Indian Science Congress took up the matter and a committee has since then been appointed which will discuss the proposals received at the present session of the Science Congress. The proposal is to start the first station at the Krussadi Island. A local committee appointed for this purpose that met at Madras thought that to make a useful start, a non-recurring expenditure of Rs. 40,000 and a recurring one of Rs. 5,000 was required. If these sums are available, well and good, but I think much useful work on many aspects of marine-biology could be done if only facilities for occupying existing accommodation were obtained. For us in the Punjab, the nearest coast is that at Karachi, and we have been fortunate in past years in getting permission to occupy the military huts at Manora Island at Karachi, and much useful work has been done by the Zoologists and Botanists on Marine Fauna and Flora. We have very recently brought out Part I of the Marine Algae from Karachi in which the ecological study of the plants has not been neglected. Similarly for the study of the plants of higher altitude temporary hill-laboratories for a fortnight or three weeks could be arranged in which two or more Universities could participate. We arranged one such hill-laboratory last summer for about a fortnight at Narkanda in the Punjab hills for the special study of forest ecology besides collection of plants and the study of the same on the spot. Lectures and laboratory work were arranged for the students.

A summer hill school with about seven or eight teachers from two or more Universities and some twenty senior students is quite
a practical proposition, and much useful work could be done in a short time.

I shall not tax your patience for long but before I close I shall appeal, specially to the University teachers who are in charge of higher teaching and research, to give an applied bias to our subject. We have to encourage researches of an utilitarian nature. The present world condition demands it. If this is done, our students will then be more familiar with the problems of our country for the solution of which a knowledge of Botany is required. They will also find the study of the subject much more interesting. Our teachers have to study the needs of the various industrial and commercial concerns in which they could make their knowledge useful. Emphasis will have to be laid on the study of drug, and fibre yielding plants and other plants capable of yielding tannins, dyes and other valuable products. In the Punjab, we have a valuable sports goods industry. These concerns carry on quite a decent export trade. Many species of Morus are used for this purpose. Botanists (Breeders and Cytologists) could study the properties most sought for, and could combine these by breeding suitable species. We have in our Botanic Garden at Lahore raised new plants by crossing the local species of Ephedra with the Chinese and Himalayan species of the plant with a view to producing a species for local cultivation, rich in ephedrin. When the plants have grown a little more, analysis for the ephedrin content will be made. Plant poisons are more and more being utilised as insecticides, and our students should be familiar with this aspect. They must know more about the food, spice and fodder plants. Study of diseases and disease control methods should form a part of the higher study of Botany. Micro-biology should have a better recognition. Researches on many aspects of Plant Physiology could be carried on in the University without much difficulty; for example, study of some aspects of vernalization, effect of growth hormones, inducement of polyploidy by colchicine and other chemicals, work on hydroponics with a view to commercial exploitation and so on. Experiments with excised roots to find the effect of various nutrients could be made on a laboratory table. Students have to be taken to the fields, sea-side and hills more often so that they may become familiar with those plants. They should know our forests better, know also the effects of afforestation and deforestation. They must learn how to explore for new plants. Search for the wild species is an extremely important work. “In plant research, we should aim at mobilizing the plant resources of the world for human uses. The Soviet philosophy in no way regards the botanist as an amateur of plants, but as a person whose work is concerned with one of the bases of civilization…. The resources of plant life have to be utilized for the material and intellectual benefit of humanity” (Soviet Science). The methods of utilizing the plant life and energy of tropical and sub-tropical countries have not yet been worked out. We should strive for the same.
I have made a very cursory survey just to illustrate my point. I have emphasized the utilitarian application of Botany. This, however, may only be borne in mind and should not be the motive of research; otherwise fundamental and far-reaching results will never be achieved. The Universities, specially, should be free from narrow commercial motives. "Furthermore, the research worker need have no fear that his theoretical results will not find a useful application, for theoretical science and applied science are inseparable; they are one and the same, as the fruit is to the tree" (Seifriz).

Now I have come to the end of my Address. Many of you perhaps hold views different from mine. I might have offended some of you who are present here to-day, or will perhaps offend more people outside who may read my address later. But believe me, I have said what I felt sincerely and what I considered must be said. I assure you, however, I bear no malice to anyone. I thank you sincerely for giving me this opportunity to express my views. I again thank you for the patient hearing.